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Section I
International Affairs
&
Section II
Regional Development,
Integration and Globalization

The Dynamics of the Degree of Investment at the Level of Economic Agents whose Main Activity is Agriculture, Forestry and Fishing in the Context of the Concerns regarding Coastal Development

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Abstract

Maritime spatial planning is one of the most important interventions for protecting the biodiversity of coastal areas against the threat of human activities, the traditional agricultural activities having a considerable impact on the economy of Constanța County. Based on these considerations, the share of a country's agricultural sector is closely linked to the share of its protected areas, even if the trend in the share of agriculture in the general economy is also due to the "natural" evolution of the characteristics of agricultural systems. This study examines the effect of investment development and equity on turnover in the field of Agriculture, Forestry and Fishing in Constanța County. Starting from the premise that investments support the increase in agricultural productivity and favor job creation, the estimated results show that fixed assets and equity positively affect the turnover.

Key words: degree of investment, agriculture forestry and fishing, Constanta County, coastal area, Maritime Spatial Planning (MSP)

J.E.L. classification: Q10, Q14, Q56

1. Introduction

Coastal areas have always been a fulcrum for trade, where diversified and intensive economic activities take place, therefore being attractive to the human habitat. Moreover, they are also areas of great ecological importance, as some of the most productive habitats are concentrated in this area (Ariel, Feitelson and Marinov, 2021).

Maritime spatial planning aims to integrate the maritime dimension of certain coastal uses or activities, taking into account their impact on the environment, as well as to ultimately allow the development of an integrated vision with strategic objectives (Directive 2014 / 89 / EU). In this context, stakeholder engagement is a key element for MSP (Ehler and Dover, 2009). There are certain studies that bring together experiences and specialized literature on MSP, introducing elements related to food issues, agricultural practices, and ways of managing natural resources (van Ewijk and Ros-Tonen, 2021). There are many cases where the environmental and management policy of agriculture, forestry (Šebesta et al., 2021) and fishing (Psuty, Kulikowski and Szymanek, 2020) are often in conflict.

It is well-known that agriculture has a significant contribution to economic growth and serves as a driving force for the sustainable economic development (Li and Zheng, 2021). However, the Agriculture, Forestry and Fishing sector is unusual in many ways, comprising a wide variety of companies engaged in growing crops, raising animals, timber harvesting and capturing of fish and other animals in a hatchery, farm or in their natural habitat (Chapman and Husberg, 2008).

The development of agriculture generates the transformation of urban, natural areas, wetlands or lands covered by water in agricultural areas, thus producing transformations of the agricultural areas (Petrișor and Petrișor, 2018). Thus, we are witnessing an increase in the pressure on natural resources and global warming with profound implications for the field tackled in this study.

2. Theoretical background

The importance of coastal areas in the context of maritime planning is justified by the multitude of their resources, the complexity of ecosystem services and the key role played in the socio-economic development, these areas being subjected to increasing demands and pressures (Petrișor et al., 2020; Nguyen et al., 2020), such as the fact that agricultural land has undergone an extensive transformation for residential and commercial uses, being vulnerable to coastal hazards and other natural disasters (Li, Nadolnyak and Hartarska, 2019).

Recent research (Psuty, Kulikowski and Szymanek, 2020) states that MSP has the role and capacity to create the tools needed to coordinate a variety of functional and territorial spatial activities, especially in order to implement investment projects in a lasting and sustainable way.

Maritime spatial planning (MSP) is one of the most important interventions for protecting the biodiversity of the coastal areas from the threat of human activities, traditional agricultural activities having a considerable impact on the economy of Constanta County. Agriculture has often been defined as a unique sector capable of changing the environment and reorganizing the resources at its disposal. Therefore, not infrequently, local communities have generally perceived protected areas as an obstacle to agricultural and forestry practices necessary for their livelihood (Donia et al., 2017).

This kind of activities have sparked a heated debate in the specialized literature, on the one hand, being those who claim that they hinder socio-economic development and, on the other hand, those who claim that they are able to increase social welfare. Based on these considerations, the share of a country's agricultural sector is closely linked to the surface of the protected areas, even if the trend of the share of agriculture in the general economy is also due to the natural evolution of the characteristics of agricultural systems. Indeed, findings in the literature indicate that the relative share of the agricultural sector tends to decline due to the growth recorded in other emerging sectors, such as industry and services.

However, at the community level, a comprehensive agricultural development alleviates food shortages, contributing to the improvement of agricultural productivity and the increase in incomes (Li and Zheng, 2021), ensuring socio-economic stability and relative autonomy of certain social categories, such as the farmers. Therefore, all these aspects must be taken into account in the development of coastal communities in order to successfully, sustainably and efficiently materialize these induced secondary benefits (Filip, Stan and Vintilă, 2016a).

When discussing agriculture, a thorny issue is the ownership of agricultural land, and it is necessary to take into account several aspects related to this area: the liberalization of the agricultural land market, the financial resources and the inefficient exploitation of fragmented plots, the multitude of uncultivated land. These issues are of crucial importance in the interest to introduce changes in land use, components of global changes, taking into account their negative influence on ecosystem services, biodiversity and human welfare (Petrișor, Sirodoev, and Ianoș, 2020).

Economic activities in the field of Agriculture, Forestry and Fishing are mostly carried out by private organizational entities, but public investment can be a stimulus in generating indirect benefits in terms of healthy sustainable development on the Black Sea coast (Filip, Stan and Vintilă, 2016b).

3. Research methodology

The objectives of this research have been to carry out both a dynamic and structural analysis of fixed assets and equity, and the analysis of the correlation between them and the turnover of economic agents operating in the field of Agriculture, Forestry and Fishing in Constanța County in the maritime spatial planning context.

The statistical observation was performed in a comprehensive manner, using the data provided by the Ministry of Public Finance National Agency for Fiscal Administration for the 2010-2019 period. In order to obtain quantitative data, with a generalizing character, allowing us to know what is essential in the manifestation form of the analyzed phenomena, we have resorted to the method of combined statistical grouping by subgroups of activities according to NACE (CAEN) classification, using SPSS software.

The generalization of the values was achieved through absolute, relative, and mean indicators, by measuring their deviations and bringing them to the level of the average indicator. The study of deviations and variations, together with the use of mean and relative values, have a special importance, characterizing the degree of homogeneity of the statistical aggregation in the desired base. The variation indicators also determine the degree and limits of the variation. The correlation analysis has used the coefficient proposed by Pearson, the multiple simple regression being a statistically significant model for the links between the chosen indicators.

4. Findings

The first part of the study conducted a dynamic financial analysis of companies within the category of Agriculture, Forestry and Fishing activities, according to the NACE classification in Constanța County, in the 2010-2019 period. In order to see the size and structure of the investments, the fixed assets and equity reported by the companies in their annual financial statements were analyzed.

The subgroups of activities included in this NACE group are shown in Table 1.

Table no. 1 Subgroups of activities in the field of Agriculture, Forestry and Fishing

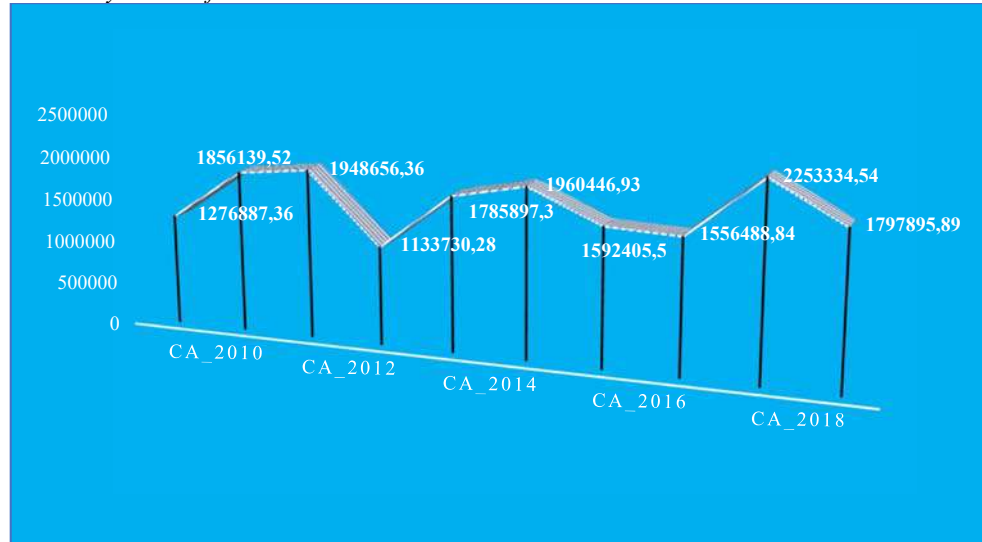
111	Growing of cereals (except rice), leguminous crops and oil seeds
113	Growing of vegetables and melons, roots and tubers
114	Growing of sugar cane
115	Growing of tobacco
119	Growing of other non-perennial plants
121	Growing of grapes
124	Growing of pome fruits and stone fruits
125	Growing of fruit bushes, strawberries, walnuts and other fruit trees
127	Growing of beverage crops
128	Growing of spices, aromatic, drug and pharmaceutical crops
129	Growing of other perennial crops
130	Plant propagation
141	Raising of dairy cattle
142	Raising of other cattle and buffaloes
145	Raising of sheep and goats
146	Raising of swine/pigs
147	Raising of poultry
149	Raising of other animals
150	Mixed farming (growing crops combined with raising animals)
161	Support activities for crop production
162	Support activities for animal production
163	Post-harvest activities
170	Hunting, trapping and related service activities
210	Silviculture and other forestry activities
220	Logging
240	Support services to forestry
311	Marine fishing
312	Freshwater fishing
321	Marine aquaculture
322	Freshwater aquaculture

Seen as a whole, figure 1 indicates that although this sector had a fluctuating evolution, the trend of the CA (turnover) mean level in the analyzed decade was in a slight expansion, from 1,276,887.36 lei in 2010 to 1,797,895.89 in 2019.

As can be seen in Figure 2, on sub-activities, the dynamics is extremely heterogeneous, with support activities for animal production (162) being significantly different in terms of CA from other activities. There is an increased interest of economic agents for animal raising activities, activities related to artificial insemination, for herd and flocks expertise and control services (expertise for issuing breeding authorizations for the breeding males, issuance of individual certificates of origin and productivity, expertise and control of semen), pig castration services, services for studs, shearing of sheep, moving of herds services, activities to support / promote the spread of animal raising,

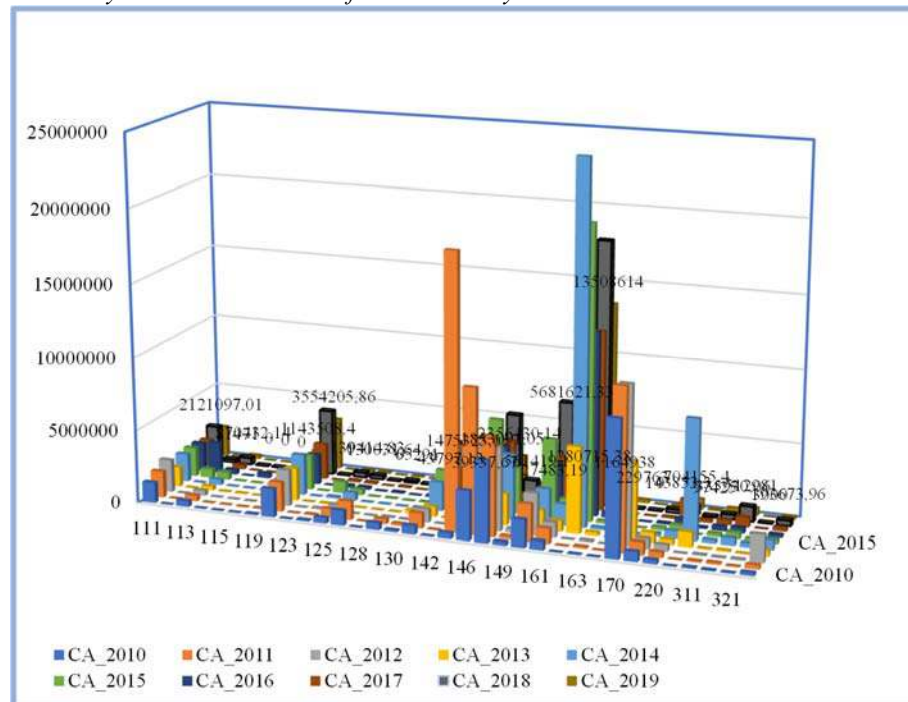
grazing services, sanitation services of coops and shelters, etc. This group of activities is the one that brings high and safe profits, unlike plant crops which still largely depend on the climatic conditions. Moreover, in addition to the internal market, which shows a constant demand for these products, the external market, through exports, was an extremely profitable way of capitalization through its added value contribution.

Figure no. 1 The dynamics of turnover



Source: Author's processing

Figure no. 2 The dynamics and structure of the turnover by sub-activities



Source: Author's processing

Table 2 shows the R-squared values, also known as the coefficient of determination, a statistic frequently used to evaluate the appropriateness of the regression equation model. The results indicate that throughout the analyzed period the chosen independent variables, fixed assets and equity, can predict the variation of the dependent variable, the turnover.

The global analysis of the relationship, for all the regression coefficients as a whole was carried out using the ANOVA test, the results indicating the existence of a linear relationship between the criterion variable, the turnover and the two predictor variables, fixed assets and equity.

Table no. 2 Multiple regression

Year	R	R-square	F	Sig.
2010	0.471	0.222	85.556	<.001
2011	0.519	0.270	117.337	<.001
2012	0.488	0.238	103.739	<.001
2013	0.579	0.335	211.276	<.001
2014	0.582	0.339	170.611	<.001
2015	0.733	0.538	404.655	<.001
2016	0.631	0.399	251.189	<.001
2017	0.580	0.377	201.436	<.001
2018	0.626	0.391	264.634	<.001
2019	0.498	0.248	168.400	<.001

Source: Author's processing

As is well-known, the closer the value of the Pearson correlation coefficient is to 1, in absolute value, the higher the intensity of the linear relationship between the 2 variables. Table 3 shows for each year the intensity of the connection between turnover and fixed assets, respectively between turnover and equity. The dynamics emphasizes the year 2015, marked by large correlations, a year that indicates the companies' interest for business development, this being a year in which they have invested more than in the previous or in the next years.

Table no. 3 Simple correlations

Year	$R_{CA(\text{turnover})/Aimob}$ (fixed assets)	$R_{CA(\text{turnover})/Cpropiu}$ (equity)	N
2010	0.398	0.382	610
2011	0.448	0.484	638
2012	0.422	0.426	668
2013	0.372	0.564	840
2014	0.468	0.576	668
2015	0.640	0.725	699
2016	0.537	0.610	761
2017	0.430	0.561	796
2018	0.478	0.605	826
2019	0.399	0.475	1026

Source: Author's processing

The arguments for the investment differ from company to company. Regarding the specific mechanisms through which they aim to increase agricultural productivity, the investment process can contribute to structural changes in the economy. It has long been theorized, but not confirmed, that advances in agriculture can promote changes in the workforce towards higher productivity sectors that offer a higher real income (McArthur and McCord, 2017). Given the long-term nature of investments, such as those in forestry, with the usually over 25 years' time from planting to harvest, the decisions taken by forest administrators today will shape the future of their business in the coming decades (West et al., 2021).

Within the analyzed echelon, some activities, such as fishing and aquaculture, are less privileged, exerting less influence on MSP (Piwowarczyk et al., 2019).

5. Conclusions

The multiple regression analysis conducted was aimed at assessing the ability of fixed assets and equity to predict the turnover. The research has identified a linear relationship between the criterion variable and the predictors (sig <0.001) throughout the analyzed period. The multiple correlation coefficient recorded values between 0.222 and 0.538, approximately 22%, respectively 53.8% of the turnover variance being explained by the simultaneous contribution of the two variables, fixed assets and equity. These results show that companies with a predilection for investment can significantly influence turnover.

The role of the business community in MSP processes is worthy of additional attention (Luhtala et al., 2021), the competent planning authorities being able to include in the elaboration of an integrated vision the category of activities in the field of Agriculture, Forestry and Fishing in Constanța County. This happens because the role of agriculture as a potential threat to terrestrial biodiversity is particularly difficult to assess, as agriculture can have both positive and negative effects on biodiversity, depending on the practices and the spatial configuration used (Hervé, Albert and Bondeau, 2016). Forest management also plays an important role in maintaining the ecosystem processes, some of them further stressing the importance of applying appropriate treatments through sustainable forest management (Šebesta et al., 2021).

Although MSP is considered a process, one of its defined objectives is to seek compromise, as in the case of fishing, which often presents more risks than opportunities (Piwowarczyk et al., 2019).

Given the huge regional potential for economic and industrial exploitation, which is generated by the specificity of the coastal area (Filip, Stan and Vintilă, 2016b), for the development of an integrated vision, the maritime spatial planning process should also take into account the effect of investment development of economic agents in the field of Agriculture, Forestry and Fishing for a sustainable development in the Black Sea coastal area.

6. Acknowledgements

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The Dynamics and Challenges related to the Sustainable Development of Marine Fishing and Aquaculture Activities. Spatial Maritime Planning and Solutions in the Coastal Region of Romania

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Abstract

In the context of maritime spatial planning, it is necessary to carry out an assessment of the contribution of fishing and aquaculture sector's total economic value. The purpose of this research has been to conduct a dynamic analysis and a structural analysis of turnover and fixed assets reported by the economic agents/entities operating in the Fishing and Aquaculture field in Constanța County, so as to get a clear picture of how companies in this area achieve their intended purpose and contribute to the area's economic benefit. Despite national support, the dynamics of turnover and fixed assets for each sub-activity is very heterogeneous, the main causes being: the overestimation of demand and inadequate dimensioning of production, the failure to obtain the planned production, the emergence of substitute products, the decreasing solvent demand of the potential buyers, the quality of the manufactured products, the intensification of competition.

Key words: turnover, fixed assets, marine fishing and aquaculture, coastal area, Maritime Spatial Planning (MSP)

J.E.L. classification: Q20, Q22, Q50, Q57

1. Introduction

According to the information presented in 2018 on the United Nations' Sustainable Development Knowledge Platform, the development of maritime areas' economies must be based both on the sustainable development objectives and principles and on the blue economy concept. European Parliament's 8 September 2015 Resolution states that this type of economy covers a wide range of interconnected economic activity sectors, which rely on their position in the vicinity of seas and oceans, including even traditional or emerging sectors, such as: fishing, aquaculture, maritime and inland waterways transport, port activities with their entire logistical side, coastal tourism, recreational and cruising nautical activities, shipbuilding and ship repair, maritime and coastal protection works, exploration and exploitation of mineral resources, exploitation of wind and marine energy and biotechnology.

Coastal areas bear the imprint of the interaction between land and water and, furthermore, they are areas with an intense human activity, being a fulcrum of regional, national and international trade (Ariel, Feitelson and Marinov, 2021). In this context, given the many activities carried out in this area, it is necessary to assess their vital role, firstly within the local economy and secondly within the ongoing concern about raising living standards.

In his research paper, Petrișor (2017) showed that the sustainable development of the coastal area must be seen as a multifaceted concept which must combine four coordinates: economic, social, environmental, and cultural, taking into account the fact that sustainability depends on the non-replaceability of economic, social or ecological capital (Petrișor, Susa and Petrișor, 2020).

Given that MSP adopts scientifically based management practices which allow the sustainable socio-economic and ecological development of the coastal and marine areas (Ehler, 2014), the development of the maritime spatial plan in the Black Sea is meant to contribute on the one hand to the sustainable development of sea energy sectors, maritime transport, fishing and aquaculture sector,

and on the other hand to the conservation, protection and improvement of the environment, including the increasing resilience to the impact of climate change (2014 / 89 / EU Directive, Article 5).

In the coastal communities, fishing and aquaculture activities are closely linked to the local economy, with a strong correlation between these activities and the social structure, the localities' culture and traditions, which is why the stakeholders' experience is a very valuable tool in building an inclusive and reliable maritime spatial planning (Salas-Leiton, Vieira and Guilhermino, 2021).

2. Theoretical background

Maritime spatial planning is a process and a tool which not only makes considerable efforts to protect the marine environment, but also promotes the sustainable development of maritime economic activities in this area (Ullah et al., 2021). In order to effectively support and promote a sustainable development, it is essential for the stakeholders - authorities, residents, economic entities - to be consulted when drawing up the maritime spatial plan, all of these concerns being introduced and explicitly stated in the European Union's Directive 89 of 2014.

In Romania, according to the *2014-2020 National Fishing Sector Strategy*, the sustainable development of fishing and aquaculture is a socio-economic need in the medium and long term, which entails, among others, promoting competitive fisheries and aquaculture, supporting producer organizations and bodies and economically viable and socially and environmentally sustainable fish farms.

In the context of the sustainable development of activities in the maritime and coastal area of the Black Sea, it is necessary to know the multiple benefits (Filip, Stan and Vintilă, 2016a) offered by the maritime economic activities given that the nature and extent of economic activities in the coastal area can also influence the costs and the benefits of management (Ariel, Feitelson and Marinov, 2021).

It is well-known that coastal areas can be subjected to intense levels of activity, and many of them face issues related to the deterioration of natural, socio-economic, and cultural resources. The exploitation and use of coastal areas directly affect the sustainable development of the coastal localities, which have a complex economy and face a multitude of problems specific to their geographical location. Therefore, it is necessary to take into account the opportunity cost when choosing the most cost-effective use (Petrișor, Susa and Petrișor, 2020). For a sustainable development of the Romanian coastal area, fishing activities can provide the opportunity of developing the local economy, providing a permanent source of income for the locals and they can support associated activities (Loizou et al., 2014), while aquaculture offers not only an alternative source of income for the fishing sector, but also an alternative source of sustainable supply (Conejo-Watt et al., 2021). It is therefore essential that the latest information on fishing and aquaculture activities be used in integrated approaches to maritime spatial planning, from a holistic perspective.

The Black Sea coastal area poses quite different social, economic and environmental problems (Filip, Stan and Vintilă, 2016b), which is why it was necessary to involve the stakeholders in the resource management' decision-making process (Pomeroy and Rivera-Guieb, 2006) and to integrate them into the “equation” of the coastal area development through the efficient dialogue between government, companies, NGOs and local communities (Nguyen et al., 2020), being known that they have a considerable economic influence.

MSP's stakeholders are individuals or groups of people who have an interest in or are affected by MSP's outcomes (Luhtala et al., 2021) providing an opportunity to understand their specific problems, explore and integrate their concerns, generate mutually beneficial solutions (Pomeroy and Douvère, 2008). Since the recommendations addressed to the authorities in terms of planning focus on tackling economic, social, and environmental issues within an integrated approach, assigning to them equal priority in the process of the sustainable development of the area (Petrișor, Petre and Meita, 2016), multiple study approaches have emerged from the perspective of the business sectors. They often focus specifically on a certain business sector in the MSP area, such as: the fishing industry (Luhtala et al., 2021), the relationship between MSP and fishing, the involvement of fishermen in MSP and tools that can help integrate fishing into MSP (Psuty et al., 2021), aquaculture (Salas-Leiton, Vieira and Guilhermino, 2021).

3. Research methodology

The purpose of this research has been to perform a dynamic analysis and a structural analysis of the turnover and fixed assets reported by the economic agents operating in the field of Fishing and Aquaculture in Constanța County, in the context of maritime spatial planning.

The statistical observation was conducted in a comprehensive manner, using the data provided by the Ministry of Public Finance - the National Agency for Fiscal Administration for the 2010-2019 period. In order to obtain generalizing data, which would allow us to know what is typical in the form of manifestation of the analyzed companies, we have used the statistical grouping method, in which the financial indicators used were presented both by subgroups of activities according to NACE/CAEN classification and by year, while the classes' formation and the indicators' calculation were done with the help of the SPSS computer program. The generalization of the values was achieved with the help of absolute, relative, and average indicators.

4. Findings

The analyzed database, comprising all the companies in Constanța County whose main activity is the "Fishing and Aquaculture field" (03), includes fishing and aquaculture activities, covering the exploitation of fishery resources in the marine and freshwater environments, for catching or gathering fish, crustaceans, mollusks, and other marine organisms, as well as marine products - aquatic plants, pearls, sponges, etc. Also included in this category are the activities that are normally integrated into the production process, such as seeding oysters for pearl production.

The *'Fishing'* class of activities (031) includes fish catching activities, respectively capturing and collecting of aquatic organisms, predominantly fish, mollusks and crustaceans, including plants, from ocean waters, coastal waters or inland waters, for human consumption or for other purposes, by hand or with various tools. This type of activities can be carried out along the intertidal shoreline, such as collecting mollusks - mussels and oysters, with fishing nets based on the shore, from boats or, usually, using specialized vessels. This group includes the following sub-activities: (0311) *'Marine fishing'*, which includes: commercial fishing, in ocean and coastal waters; collecting of crustaceans and marine mollusks; whale hunting; harvesting of marine aquatic animals (turtles, sea urchins, etc.); activities of vessels engaged both in fishing and in fish processing and preserving; the collection of other marine organisms and materials (natural pearls, sponges, corals, algae) and (0312) *'Freshwater fishing'*, which includes: commercial freshwater fishing, collecting of freshwater crustaceans and mollusks, collecting of freshwater aquatic animals, collecting of freshwater materials.

The *"Aquaculture"* class of activities (032) includes activities on aquatic farms, i.e., the production process involving culturing, including harvesting, in fish farms of aquatic organisms - fish, mollusks, crustaceans, plants, crocodiles, other amphibians, etc. - by using techniques created to increase the production of these organisms, beyond the natural capacity of the environment (e.g., regular stocking, feeding and protection from predators) and it refers to raising them up to their juvenile and/or adult stage in the conditions of captivity of those organisms. Moreover, 'aquaculture' also contains the ownership (individual, collective or state) of the respective individual organisms during the growing up stage and it includes the stage of harvesting them. This group comprises the following sub-activities: (0321) *'Marine aquaculture'*, which includes: fish culturing in marine waters, including culturing ornamental marine fish; bivalve spat (oysters, mussels) production; lobsterling production, post-larvae shrimp, juvenile salmon; growing edible kelp and other marine plants; raising crustaceans, bivalves, other mollusks and other aquatic animals in the seawater; aquaculture activities in low salinity waters; aquaculture activities in tanks or reservoirs filled with saltwater; marine fish hatcheries' activities (fish eggs incubators); marine worm farms' activities and (0322) *'Freshwater aquaculture'*, which includes: culturing of fish in freshwater, including freshwater ornamental fish; culturing of freshwater crustaceans, bivalves and other mollusks and aquatic animals; activities of hatcheries with freshwater fish broods (fish eggs incubators); raising frogs; aquaculture activities in tanks or reservoirs filled with saltwater.

Currently, throughout Romania's territory approximately 100 companies whose main field of activity is "*Marine fishing*" (0311), 50 companies whose main field of activity is "*Marine aquaculture*" (0321) and about 900 companies whose main field of activity is "*Freshwater aquaculture*" (0322) are registered.

According to the economic literature, *turnover* consists of the revenues generated by a company as a result of the activity it carried out, turnover maximization being an objective set by the companies with the aim of increasing the market share and counteracting the competition. In order to achieve the turnover maximization objective, economic agents act in the direction of increasing *fixed assets* since they are the assets generating future economic benefits.

Table 1 highlights the structure of the average turnover by subgroups of activities according to the NACE code for the companies in the *Fishing and Aquaculture* field that are registered in Constanța County.

Table no. 1 The average turnover recorded by agencies whose main activity is "Fishing and Aquaculture" by sub-activities

Turnover	Marine fishing	Freshwater fishing	Marine aquaculture	Freshwater aquaculture	Total
2010	93,169.39	60,686.75	32,466.50	210,542.94	133,835.40
2011	92,214.00	128,278.60	27,528.00	280,898.89	170,138.27
2012	79,995.67	54,091.57	82,350.67	1,848,770.22	726,193.18
2013	58,182.97	98,568.09	26,853.83	409,557.86	189,283.73
2014	205,736.79	493,746.25	279,595.00	658,725.61	402,685.81
2015	223,388.73	453,702.80	156,225.50	297,756.14	263,749.27
2016	370,578.23	650,496.50	58,369.00	363,623.86	372,108.30
2017	396,499.50	993,194.17	1,580.00	452,160.31	452,276.00
2018	323,338.60	1,018,375.00	1,000.00	350,892.25	395,008.60
2019	335,930.06	512,981.00	3,000.00	193,673.96	313,727.81

Source: Author's own processing

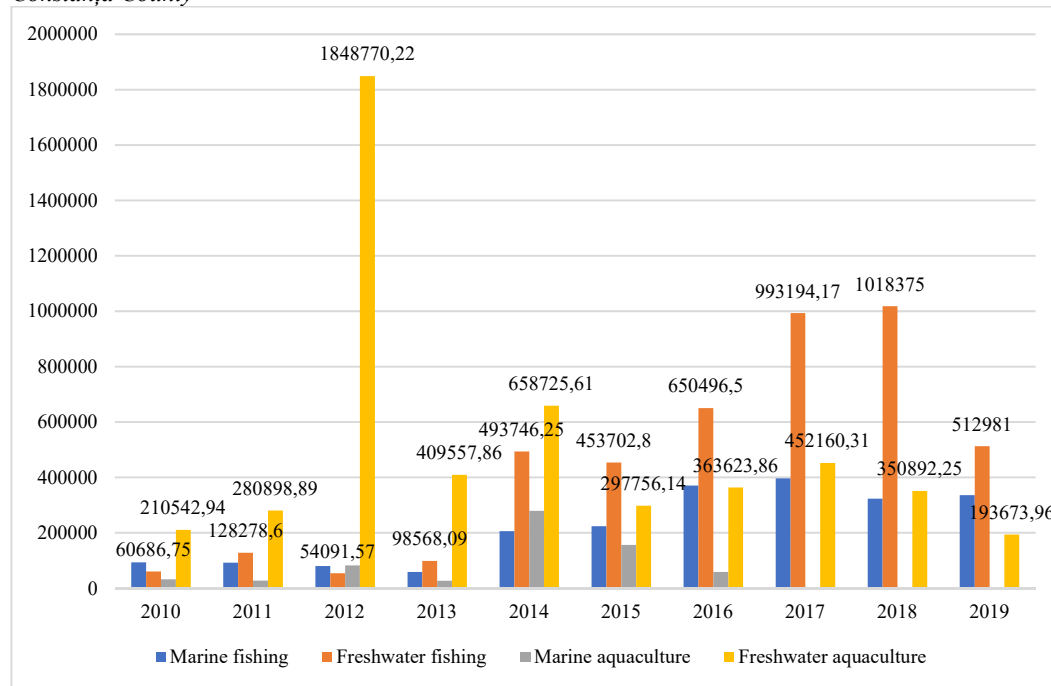
As was the case with other economic activities, economic crises have had a considerable impact on investment and financing decisions in the fishing and aquaculture sector. Thus, the analysis of the statistical units investigated over a period of 10 years shows that 2012 is the year of comebacks, in which the fishing and aquaculture sector registered the highest average turnover (726,193.18 lei). In 2013, the value of turnover (189,283.73 lei) decreased compared to the value in 2010 (133,835.40 lei) and 2011 (170,138.27 lei), and since 2014 there is an upward trend in the value of turnover, which shows that entities in this field of activity have been concerned about the revenue situation, making significant investments in the area.

Marine fishing is carried out along the Romanian coastline and is limited to the marine area located up to the 60-70 m isobath and on the maritime side of the Danube Delta Biosphere Reserve. One can note that, starting from 2014, the Black Sea marine fishing activity registered an increase, the year 2017 being the one in which the value of the turnover reached the maximum of 396,499.50 lei.

Corresponding to the dynamics of each activity subsector, the traded products have different contributions to the achievement of the turnover. The aquaculture activity's importance is confirmed by the fact that in the coastal region of Romania the largest areas intended for aquaculture are concentrated, approximately 65% of the national area, the maximum value of turnover recorded by the marine aquaculture sub-activity, in the 10 years analyzed, being 279,595.00 lei (in 2014).

Although the development of aquaculture in the coastal area has registered a positive dynamics it is oscillating, being determined and influenced by the local socio-political conditions. In some cases, aquaculture enterprises are regarded as foreign to the local community and granting of licenses for the establishment of aquaculture farms is seen as a form of expropriation of the common maritime space used for traditional fishing activities by the local groups (Hofherr, Natale and Trujillo, 2015).

Figure no. 1 The turnover dynamics of the companies in the Fishing and Aquaculture field at the level of Constanța County



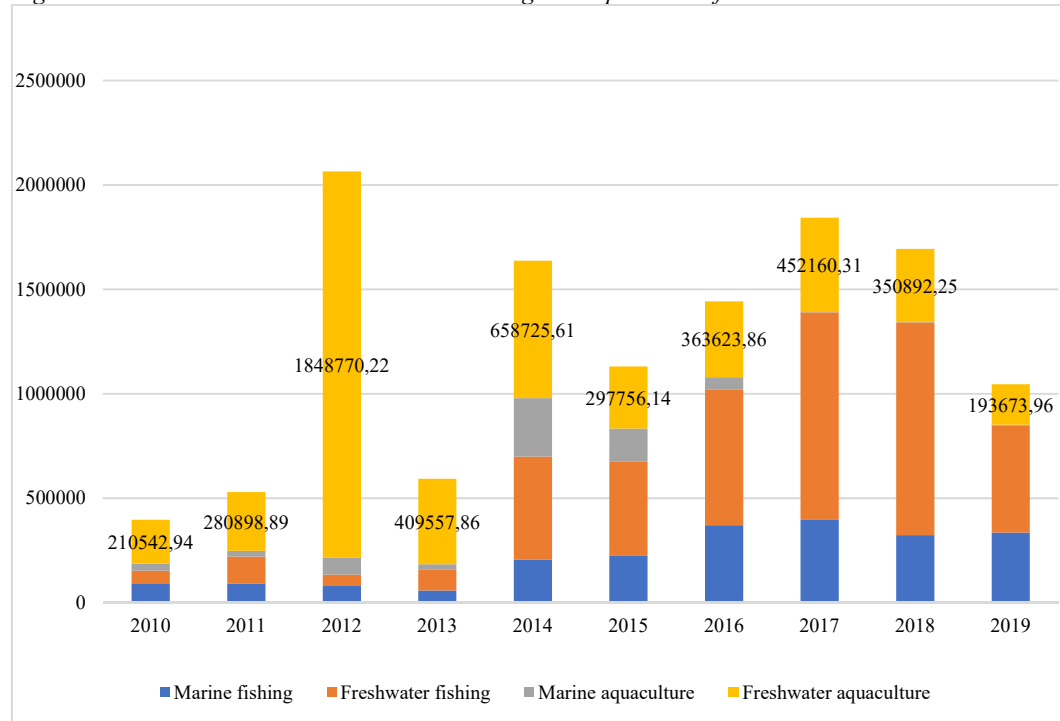
Source: Author's own processing

The potential of the *Fishing and Aquaculture* field is supported both by the historical tradition, prevalent in the coastal region of Romania, and by the existence of the most abundant resource that comes from both the Danube and the Black Sea. Figure 2, which presents the dynamics of the turnover's structure for the companies analyzed by class of activity, shows the predominance of freshwater fishing and aquaculture activities.

The *2014-2020 National Fishing Sector Strategy* acknowledges the role of traditional fish farming in fisheries facilities as an activity which creates opportunities for the development of the local economy, such as job creation in rural areas and capitalization of poorly productive land. Also noteworthy are the environmental benefits or services, such as biodiversity and microclimate. In this context, aquaculture farms, which have a relatively long history, have been very well integrated into the natural landscape, playing an important role in strengthening ecological balances, taking in excess water, ensuring and maintaining large areas of wetlands.

Despite all this support at the national level, the dynamics of the turnover on each sub-activity is very heterogeneous, as a result of the overestimation of demand and inadequate dimensioning of production, the failure to obtain the planned production, the emergence of substitute products, the decreasing solvent demand of the potential buyers, the quality of the manufactured products, the intensification of the competition.

Figure no. 2 The turnover's structure in the Fishing and Aquaculture field



Source: Author's own processing

Improving the performance of a company, of a sub-activity, reflected in the turnover's level, can also lead to the improvement of the company's image from the perspective of investors, creditors, employees, customers. This creates the possibility of attracting new sources of financing, both in the form of bank loans and in the form of bond issuance, under more advantageous interest rates and repayment terms. Improving the company's image also determines the stability of the staff, attracting qualified workforce from the labor market and developing customer loyalty.

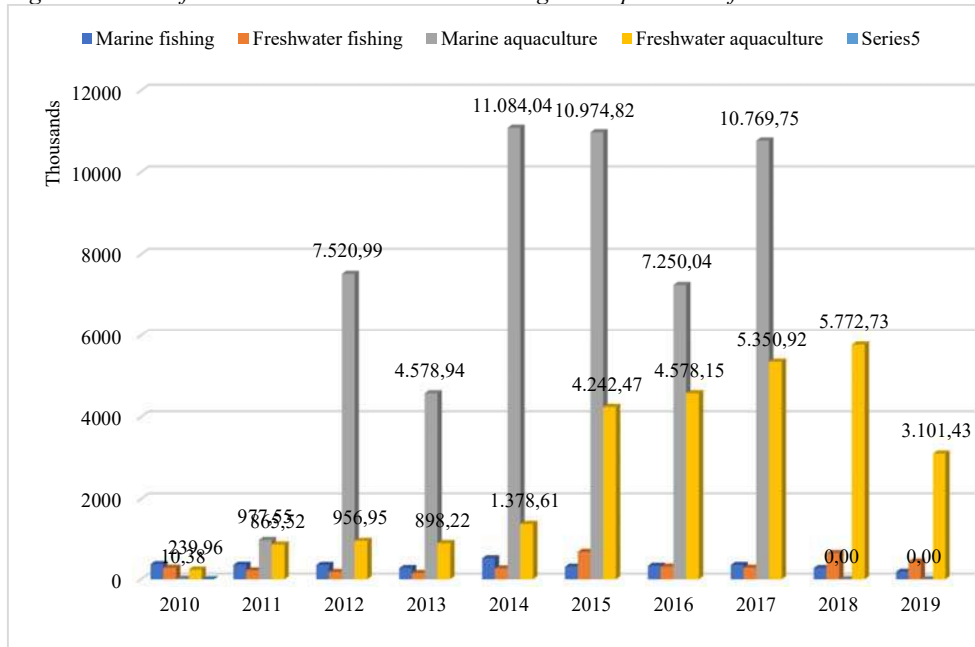
Table no. 2 The fixed assets of the companies in the Fishing and Aquaculture field

Fixed assets	Marine fishing	Freshwater fishing	Marine aquaculture	Freshwater aquaculture	Total
2010	375,061.87	283,628.50	103,770.00	239,963.50	301,574.41
2011	358,209.53	218,780.80	977,554.67	865,522.56	596,104.41
2012	355,662.21	178,385.83	7,520,985.33	956,951.44	1,126,250.38
2013	277,139.32	153,706.22	4,578,942.80	898,221.29	863,820.74
2014	521,094.69	269,228.75	11,084,039.00	1,378,607.25	1,411,584.84
2015	311,600.23	681,493.60	10,974,816.00	4,242,465.36	1,971,985.60
2016	334,759.43	309,452.75	7,250,039.33	4,578,149.00	1,914,106.87
2017	356,924.85	285,584.67	10,769,750.50	5,350,923.45	1,805,609.37
2018	276,246.51	646,997.86	0	5,772,727.20	1,342,173.67
2019	184,590.49	438,234.11	0	3,101,426.95	933,976.01

Source: Author's own processing

It is a well-known fact that the cost of fixed assets, which are found in the form of constructions, installations, machinery, equipment, vehicles, etc. and the appropriate means to purchase fixed assets have a great influence on the accumulation of capital, which can stimulate the rapid development of the fishing and aquaculture sector.

Figure no. 3 The fixed assets' structure in the Fishing and Aquaculture field



Source: Author's own processing

The managerial capacity to maintain, improve and increase the material base in the field of fixed assets directly contributes to the creation of an environment conducive to the economic activity of these companies.

Although in terms of the value of fixed assets in Table 2 one can notice an upward trend, the evolution of the indicator is atypical. The constant increase until 2015 (1,971,985.60 lei) was followed by a decrease in 2016 (1,914,106.87 lei) compared to 2015 and then until 2019 (933,976.01 lei), largely due to the prospects of continuing the fishing and aquaculture activities, which has left its mark on the oscillating dynamics.

5. Conclusions

The importance of studying coastal areas is justified by the key role played by companies in the socio-economic development (Petrișor et al., 2020), which is why we must know the economic potential of local development of the fishing and aquaculture field. Rodrigues, Abdallah and Gasalla (2019) have shown that economic data, such as turnover and fixed assets, play an important role in understanding the economic viability of fishing, whereas marine aquaculture, which is a promising industry, is characterized by the fact that it is generally capital consuming, with a high contribution to the creation of surplus value and high labor productivity (Hofherr, Natale and Trujillo, 2015). MSP has been defined as an integrated management approach, including a planning approach of the future coastal and marine areas, with an emphasis on the stakeholder's involvement for creating a sustainable environmental development. Although stakeholder participation and involvement are an integral part of MSP's success (Pomeroy and Dover, 2008), there are studies which have shown that specialized stakeholders have reported limitations in fishing and aquaculture activities (Salas-Leiton, Vieira and Guilhermino, 2021), while other studies (Jentoft and Knol, 2014) claim that these entities have difficulty in presenting and expressing their problems in the context of MSP.

Within the policy of penetrating new markets or expanding into existing markets, increasing the turnover, accompanied by the interest in diversifying sources of income and product supply, represent a way to reduce the risk and uncertainties that arise on the market segments on which the companies operate. Thus, the risk of being subjected to the excessive fluctuations which characterize the modern economy can be reduced and they have the opportunity to take measures to counteract the disruptive situations that may arise in their activity.

6. Acknowledgments

This work has been supported by the European Commission through the European Maritime and Fisheries Fund, Cross-border Maritime Spatial Planning for Black Sea – Bulgaria and Romania (MARSPLAN-BS-II), EASME/EMFF/2018/1.2.1.5/01/SI2.806725.

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Determinants of New Companies' Formation in Romania at Regional Level. A Fixed Effects Model (FEM) Approach

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Abstract

This below article will empirically analyse the determinants of new companies' formation basing on a panel data, covering the period 2010-2019, for 42 counties (including Bucharest municipality) of Romania. An OLS regression equation will be employed with new companies' formation as dependent variable, and regional GDP, existing entrepreneurship, density of population, immigrants and unemployment rate as independent ones. We estimate the model with cross sections and/or with time fixed and/or random effects and we will also use an LSDV model using dummy variables in order to observe the similarities. Decisions in using a period fixed effect model FEM will be based on Hausman test and redundancy test under Eviews environment. Most of determinants considered will be found significant in their influences on new companies' formation in Romanian counties.

Key words: new companies formation, entrepreneurship, fixed effect model, dummy variables

J.E.L. classification: C21,C23,M1, M2, M13

1. Introduction

The impact of exogenous on new companies' formation in Romania will be here analysed at the beginning, using a *pooled model*, in which we assume that there is no any individual effect from cross sections (42 Romanian's counties) and/or period involved – i.e. any county is assumed as similar to the others. The next second step will belong to *fixed and random effect models* employed, according to their opportunity or redundancy. The choice of one or another type of model will be made according to results and will be assessed by variables' significance, correlation coefficient R^2 and Durbin Watson statistic. Cross correlation dependence will not be ignored either.

2. Literature review

Since Schumpeter (1950), entrepreneurship is viewed in the literature as a major topic for the theory and practice related to economic growth and development. Its importance explains by that a significant part of new hirings during a period comes to be done by newly entered companies and this, together with “productive innovation” equally brought in (Baumol, 2002). Therefore, it becomes enough important to understand the factors that promote or mitigate entrepreneurial creativity (Acs, 2004). As already mentioned above, our article bases on analysing the influence of factors proper to the creation of new companies: unemployment rate, regional GDP, number of immigrants, existing entrepreneurship and population density. A series of studies on these determinative links have been conducted in Japan, Bulgaria, the Czech Republic, Germany, Poland and the USA, as well as Romania.

2.1 The endogenous will be, of course, the *newly established companies at regional level* in Romania. Two methods of measuring this variable are revealed in the literature. The *ecological* one approaches the new companies as a ratio to the whole mass of existing entrepreneurship. The other is the *labour market* method: the total of existing entrepreneurship relates to the number of people

employed in the region. A previous study conducted in Bulgaria, on the country's 28 territorial districts, mentions these two approaches, then preferring the use of the ecological one (Alexandrova, 2015). Another study conducted in the Czech Republic (Hajek and all., 2015), mentions this variable as the number of new companies to 1000 active individuals and this represents a measure for the entrepreneurial climate in the Czech micro-regions. As for here, we preferred the approach through the labour market - the number of new companies, relative to the active population, resulting in 420 observations (42 counties * 10 years*) for each variable, after which the data turn into logarithms.

2.2 The exogenous. *Existent entrepreneurship* actually is the number of existent entrepreneurs and it is taken as favourable for the new entrepreneurs /new entrepreneurship in the literature. It is the appropriate design of a stable business environment in a country. Otsuka (2008) here similarly sees the Japan's 43 districts through an 'economic crowding' that defines a true entrepreneurship social mentality. Here the existing entrepreneurship is seen through the number of establishments related to the one of population in the same region. Basically, the higher the number of companies with their offices, the more the available capital boosting the rest of resources and factors, here including intelligence, talent and opportunities (Ciccone and Hall, 1996).

Then, it is argued in this study for the mass of entrepreneurship with delayed effect on the newly attached business (Alexandrova, 2015). Plus, this effect will limit to past influencing present and does not go to any influence in the future. A presumably positive relation of the future to the existing environment equals the opportunities opened and business encouraged; the negative one equals the same business opportunities rather embarrassed by it in general or in some of details. Hájek and all. (2015) see the high entrepreneurship's ratio to population as a proxy for the business climate. A quality entrepreneurial climate can positively influence the individual's decision to become an entrepreneur, and other previous studies come to support such an idea (Armington & Acs, 2002; Delfmann, 2014). Similarly, according to Fotopoulos (2014), new business formation would be influenced by entrepreneurial climate that is supposed to have been already settled in the past.

GDP per capita at regional level. Most empirical studies in this field prefer rather the converse relation, i.e. focusing on new business formation effect on regional development. The empirical results of these studies (Fritsch, 2008). How does new business formation affect regional development? Studies show that the effects of new business formation on economic development are not clear enough. Only few of them could provide persuasive evidence of such a positive relationship -- many others fail on this (Fritsch, 2008). On the contrary, the per capita growth as a predictor of new firm formation is found to have a positive effect by Armington & Acs (2002), not too much this way by Lee et al (2004) and even contrary such effect (i.e. of per capita income growth on new firm formation) by Sutaria & Hicks (2004). Back here, in our study the per capita regional GDP is a measure of per capita growth.

Unemployment and unemployment rate. The literature finds unemployment as also influential for the new companies founded or business enlargement. It is here found as a natural labour resource on specific entrepreneurs' area – i.e. this part of labour is primarily searching for a profit specific to self employment, as primarily compared to unemployment benefits. But in other views the same unemployment rather is negative factor for new companies' foundation and not only (Delfman, 2014 & Sutaria and Hicks, 2004). Similarly, Fotopoulos (2014) and Bishop (2012) see the unemployment as likely caused by deep structural economic and social causes, the ones equally affecting entrepreneurship. Otsuka (2008) and Hajek (2015) find the business environment as not compatible with high unemployment.

Storey (1991), Lindh and Ohlsson (1996) note that time-series analyses point to unemployment as positively associated with the creation of new businesses, whereas cross-sectional studies appear to indicate the opposite.

The population density (i.e. inhabitants per square kilometer) adds to determinant factors for new companies born, in the literature's view. Alexandrova (2015) sees this through 'savings crowding'. When and where labour and capital do concentrate, on the contrary, specific costs of resources' and consumers' distancing lower. Actually, high population in a region means more

available labour skilled. Young and educated people around will be also attracted by new business. And so there will be more potential entrepreneurs amongst.

Immigration. Basically, the theory of entrepreneurial choice generally points out positive relationship between the share of immigrants in population and new business formation (Acs, 2004). But just two aspects to be here explained. The one is that according to Romanian Institute of National Statistic the immigrants are assumed as domiciled in Romania, possibly with the change of their former domicile abroad. It is in this last context that most immigrants actually are remarked as former Romanian citizens back to their county and so the other aspect here considered – i.e. more related to our study – would be that such former local emigrants and current immigrants make a good potential source of new entrepreneurs. In a word, when and where we say and note ‘immigrants’ in our paper below the understanding will limit to former emigrants back home as potential entrepreneurs – i.e. this is for Romania does not belong to usual and traditional immigration countries category.

2. Research methodology

We collected data for variables from ONRC’s (National Commerce Romanian Register) data along the 2010-2019 interval and share for those 42 territorial districts. *New companies* as dependent variable is just the number of new companies per year related to the employed population for a better image of the new companies’ territorial distribution – namely, this will be new companies to each thousands of employed people in the area (counties). First independent variable in the model, the existing *entrepreneurship* dimension, will equally consist in a number of companies -- i.e. their total number in Romania and by counties each year of our study --, data collected from INSSE (National Institute of Statistics) - i.e. these might be all: legal entities, family business units and/or authorized persons.

As for *by counties GDP*, as *second dependent variable*, data also come from INSSE in billions of Ron for each of the years (2010-2019) at current prices – i.e. this way a proper GDP volume searched for will need constant/comparable prices and so CPI will be applied on the 2010 basis, then results related to each county’s population. Per capita GDP results in each county and year of the interval will be in Ron.

Unemployment, as *third dependent variable*, will be taken as its rate (unemployment rate) in each of districts by INSSE statistics. *Population density*, as *fifth dependent variable*, consist in the number of inhabitants per square kilometre and, of course, once more for each of territorial districts (i.e. counties), for which surface stays the same during the whole period analysed. Then, the *immigrants*, the last exogenous here taken, will be seen as their ratio in total population of the same individual county. As such, this ratio is supposed to bring in a plus of distinction-variation of this exogenous throughout the whole country area – i.e. despite the so low weights of immigration in total population all over the country such a differentiation might identify some significance of this variable on our endogenous chosen in the territory. An OLS regression equation will be employed with new companies’ formation as dependent variable, and regional GDP, existing entrepreneurship, density of population, immigrants and unemployment rate as independent ones. We will estimate a model with cross sections and/or with time fixed and/or random effects and we will also use an LSDV model using dummy variables in order to find similarities. Decisions in using a period fixed effect model FEM will be based on Hausman test and redundancy test under Eviews environment.

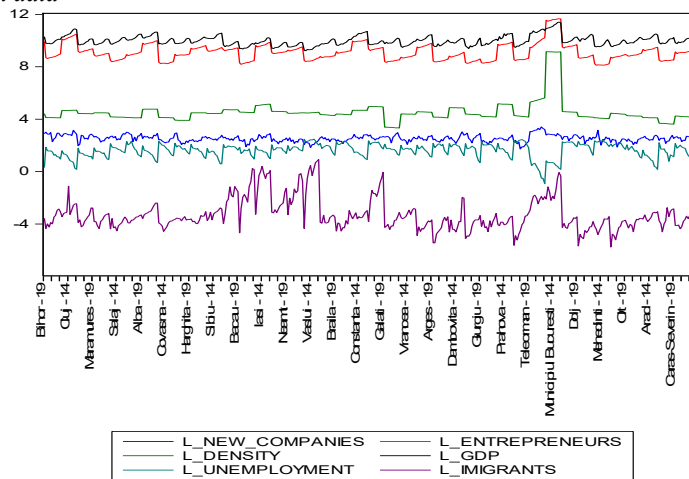
4. Findings: model estimating

Such an analysis to be performed first requires *stationary* and *co-integration* specific tests assigned to data series. The previous of these to be applied assumes the individual series under *Panel unit root* test and *Schwartz Info* criterion for lag length was here apply. This test has null hypothesis and alternative hypothesis:

(a). H0: The panel data of individual variables have unit root (new companies, entrepreneurs, density, immigrants, GDP, unemployment, immigrants);

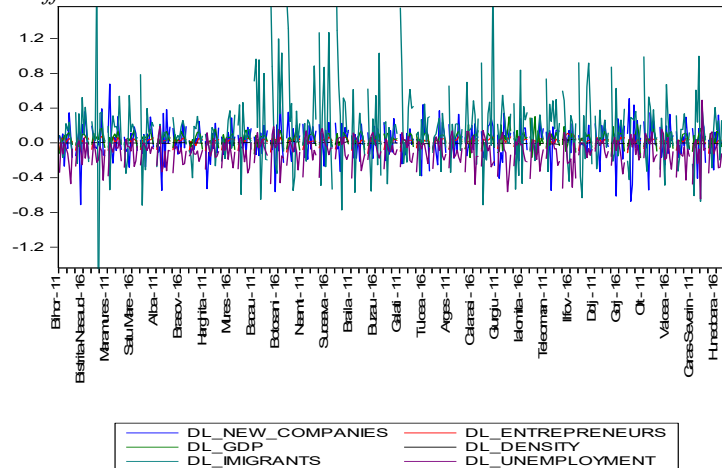
(b). H1: The panel data are stationary for a significance threshold accepted as $\alpha = 5\%$ or 0.05.

Figure no. 1. Level data



Source : Author’s own calculations in Eviews

Figure no. 2. First difference data



Source : Author’s own calculations in Eviews

We found that our variables have unit root in level data, so they are not stationary at level but they obtain stationarity on first difference. All variables are found to be integrated of order one $I(1)$. The test for co integration was inconclusive. We choose to estimate a model by OLS technique for a static panel testing for fixed or random individual effects.

As already mentioned above in introduction, the estimating method of the regression equation that uses panel data can be done by three approaches: *Common Effect Model* or *Pooled Least Square (PLS)*, *Fixed Effect Model (FEM)* and *Random Effect Model (REM)*. Let us have them in turn in the following descriptions.

4.1. Pooled Least Square (PLS) model

This type of panel data model assumes homogeneity of all its data in sections – i.e. it does not treat individual sections any differently (Adesete, 2017). All data sections are treated concomitantly, as just one section. No unique characteristic of individuals within the measurement set and no universal effects over time either. *Pooled OLS* makes no difference among the 42 counties in this analyse and neglects both the cross section and the time series nature of given data. See the general form of OLS regression equation for Pooled data (Brooks, 2008):

$y_{it} = \alpha + \beta x_{it} + u$
in which: $i = 1, 2, \dots, 42$ and $t = 1, 2, \dots, 10$ are the number of individuals of cross section and the number of time periods and u_{it} is the disturbance term. This is what in our model will be written as:

$$DL_NEW_COMPANIES_{it} = C(1) * DL_ENTREPRENEURS_{it} + C(2) * DL_GDP_{it} + C(3) * DL_DENSITY_{it} + C(4) * DL_IMIGRANTS_{it} + C(5) * DL_UNEMPLOYMENT_{it} + C(6)$$

But ignoring the cross-dimensional and period effects could lead to biased results. We also obtained insignificant values for variables of entrepreneurship, density and immigrants, a low R^2 correlation coefficient (11%) and a Durbin Watson statistic with correlated residuals. Under *pooled OLS* estimation, GDP, unemployment rate and intercept values were found significant (i.e. probability p-value lower than 0,05 significance level). See the table:

Table no. 1 Method: Panel Least Squares, Dependent Variable: DL_NEW_COMPANIES
Periods included: 9, Cross-sections included: 42; Total panel (balanced) observations: 378

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DL_ENTREPRENEURS	-0.270162	0.262731	-1.028283	0.30450
DL_GDP	0.545486	0.134429	4.057802	0.00010
DL_DENSITY	0.276781	1.255295	0.220491	0.82560
DL_IMIGRANTS	0.029441	0.021555	1.365827	0.17280
DL_UNEMPLOYMENT	-0.299947	0.066072	-4.539685	0.00000
C	-0.035754	0.014639	-2.44234	0.01510
R-squared	0.115421	Mean dependent var		0.016415
Adjusted R-squared	0.103532	S.D. dependent var		0.187566
S.E. of regression	0.177591	Akaike info criterion		-0.602921
Sum squared resid	11.73235	Schwarz criterion		-0.540463
Log likelihood	119.9521	Hannan-Quinn criterion.		-0.578133
F-statistic	9.707817	Durbin-Watson stat		2.968418
Prob(F-statistic)	0.00000			

Source: Author's own calculations in Eviews

4.2 Fixed Effect Model (FEM)

This other type of model that could develop here allows for heterogeneity or individuality among different cross-sections – i.e. it allows each cross-section to have its own intercept. So the intercept may be different for the cross sections, but equally time invariant – i.e. the intercept remains the same over time (Adesete, 2017). The error term in a fixed effect model (FEM) is assumed to vary over each entity and each year time. There are unique attributes of individuals which do not vary across time and correlate with independent variables.

See the following specific equation for how FEM works (Brooks, 2008):

$$y_{it} = \alpha + \beta * x_{it} + u_{it}$$

in which the disturbance term, u_{it} decomposes into an individual specific effect, μ_i , and the 'remainder disturbance', v_{it} , varies over time and entities (capturing everything that is left unexplained about y_{it}).

$$u_{it} = \mu_i + v_{it}$$

So we could rewrite equation by substituting in for u_{it} to obtain as follows:

$$y_{it} = \alpha + \beta * x_{it} + \mu_i + v_{it}$$

The μ_i term will consist in all of variables that affect Y_{it} cross-sectionally, but do not vary over time. Equation for our panel model with cross section and period fixed effect can be written as follows:

$$DL_NEW_COMPANIES = C(1)*DL_ENTREPRENEURS + C(2)*DL_GDP + C(3)*DL_DENSITY + C(4)*DL_IMIGRANTS + C(5)*DL_UNEMPLOYMENT + C(6) + [CX=F, PER=F]$$

in which:

CX=F, fixed cross-section effect

PER=F, period fixed effect

The results in estimating two-way fixed effect model will provide different results. Entrepreneurship environment becomes relevant at county level in influencing the new firms' formation, as expected from the very beginning. The R^2 correlation coefficient rises to 59%. We estimate the fixed effect model with robust standard errors to serial correlation (Arellano,1987and White,1980). We choose the white period as the coefficient covariance method and no degree of freedom for the covariance calculation.

Table no. 2 Model estimation with cross section and period fixed effects

Dependent Variable: DL_NEW_COMPANIES				
Method: Panel Least Squares				
Date: 03/11/21 Time: 15:08				
Sample (adjusted): 2011 2019				
Periods included: 9				
Cross-sections included: 42				
Total panel (balanced) observations: 378				
White period standard errors & covariance (no d.f. correction)				
WARNING: estimated coefficient covariance matrix is of reduced rank				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DL_ENTREPRENEURS	2.217239	0.597052	3.713647	0.0002
DL_GDP	0.122775	0.120873	1.015736	0.3105
DL_DENSITY	-4.853573	2.553000	-1.901125	0.0582
DL_IMIGRANTS	0.023276	0.019697	1.181710	0.2382
DL_UNEMPLOYMENT	-0.012080	0.043213	-0.279542	0.7800
C	-0.046924	0.013407	-3.500039	0.0005
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.590942	Mean dependent var	0.016415	
Adjusted R-squared	0.522555	S.D. dependent var	0.187566	
S.E. of regression	0.129603	Akaike info criterion	-1.114917	
Sum squared resid	5.425416	Schwarz criterion	-0.542380	
Log likelihood	265.7193	Hannan-Quinn criter.	-0.887686	
F-statistic	8.641098	Durbin-Watson stat	2.586327	
Prob(F-statistic)	0.000000			

Source: Author's own calculations in Eviews

And now it is to answer the question whether *fixed effects* here above treated are or not redundant. Or, here the '*Redundant fixed effect likelihood ratio test*' is to be applied. Its H null hypothesis is that fixed effects are redundant and its H alternative hypothesis, on the contrary, is that fixed effects are not redundant. The p value $p=0.99$ for cross section effects (higher than 0.05 significance level) shows that these cross sections for fixed effect are redundant. Similarly, $p = 0.00$ for period individual effects, which is lower than 0,05 significance level show that period effects are not redundant.

4.3 Redundant Fixed Effects Tests. Test cross-section and period fixed effects

In its primary steps taken of our study the first difference of data was made in order to deal with no stationary and unit root (see unit root test). Applying the first difference of data, all fixed cross section effects were removed because they do not vary over time (μ_i). The redundancy of cross section fixed effect is tested also with *redundancy fixed effect test*. Redundancy test accounts for separately testing cross-section and period effects and lastly joint significance of all of the

effects. This test has the null hypothesis H0: fixed effects are redundant and the alternative hypothesis H1: fixed effect are appropriate. According to *redundancy test* a *one-way fixed effect model*, with only individual time effects is to be estimated. Under *time-fixed effects model* the average value of “Y” changes over time, but not cross-sectionally. Within time-fixed effects, the intercepts would be allowed to vary over time as such, but assumed to be the same across entities at each given point in time (Brooks, 2008). A *time-fixed effects* model could be written as:

$$y_{it} = \alpha + \beta * x_{it} + \lambda_t + v_{it}$$

in which λ_t is a *time-varying intercept* that captures all of the variables that affect y_{it} and they vary over time, but stay constant as cross-sectional. In such circumstances, this change of environment will influence y , but the same way for all counties. And these last could be assumed, in their turn, to be equally affected by the change.

We check the above individual parameters significance for year influence on dependent variable, through *Wald* tests, where the null hypothesis is: coefficients for years are jointly zero : $C(6) \dots = C(14) = 0$ We reject the null hypothesis at 1% significance level and confirm that the coefficients are not zero $C(6) \dots = C(14) \neq 0$.

When the *fixed effect model* was estimated through OLS equation an R^2 adjusted correlation coefficient was found as high as 55%. Durbin Watson statistic at the 2.4 level shows a possible absence of autocorrelation at lag 1 of residuals. Estimators of *entrepreneurship* and of *density of population* are significant for 5% confidence level, and the *immigrants'* estimator is significant for 10% of confidence level. The *p-value* probability for intercept is also significant.

4.4 Correlated Random Effects Hausman Test

Robustness of the model was then tested with another version of estimation, as hypothesis of *random time effects* -- i.e. the *Hausman test*. *Random effects* model -- also known as the *variance components* model -- then equally allows for heterogeneity and proves time invariant. Nevertheless, its individual specific effect stays uncorrelated with the independent variables. It can also refer to as a kind of *hierarchical* linear model, assuming data being drawn from several populations made distinct between by a certain hierarchy here referred (Adesete, 2017).

Hausman test keeps the null hypothesis $H_0 = \text{random}$ effects model is appropriate and the alternative hypothesis $H_1 = \text{fixed}$ effects model is appropriate. P-value for time random effects is lower than the 0.05 significance level, so the null hypothesis will be rejected and then a confirmation of better approach of a model with an individual time effects, rather than random effects, will correspondingly come up.

Table no. 3 Correlated Random Effects - Hausman Test

Test period random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	19.470153	5	0.0016

Source: Author's own calculations in Eviews

4.5 Residual diagnostic - Pesaran CD test

The formal statistical procedures designed to test for *cross-sectional dependence* in low-T, high-N panels, is here the Pesaran (2004) cross-sectional dependence(CD) test. The *CD test* is the *Lagrange multiplier (LM)* test, developed by Breusch & Pagan (1980) often applied when the time-series dimension T of the panel is lower than the cross-sectional dimension N as the case of our data. The null hypothesis H_0 : there is no cross sectional dependence and the alternative hypothesis H_1 : there is cross correlation in the model. *Pesaran CD test* = 0.8066, higher than the 0.05 significance level, so the null hypothesis H_0 is accepted: no cross sectional dependence in the model.

Table no. 4 Pesaran CD test

Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation)			
Pool: DATEPANEL			
Periods included: 9,Cross-sections included: 42,Total panel observations: 378			
Note: non-zero cross-section means detected in data			
Cross-section means were removed during computation of correlations			
Test	Statistic	d.f.	Prob.
Pesaran CD	0.244799		0.8066

Source: Author’s own calculations in Eviews

5. Conclusions

Basically, in the panel type model cases estimators are likely substantial – e.g. see both the above given and actually all random effects models. Besides, the same estimators are efficient for fixed effect models. It is in such a context that this article argues in favour of the model with *fixed time effects* for the case of the ‘*new companies’ formation*’ facing its proper influence factors – i.e. as here identified: *entrepreneurial climate, regional GDP, immigration and unemployment* – since its efficient *estimations* and high *determination coefficient*. These above variables were converted into their natural logarithms to minimize variability and were *first differenced* to get rid of the unit root problem and so to obtain *stationarity*. Then three types of models were developed – (i) *Pool OLS model*, (ii) *Fixed effect model* and (iii) *Random effects model* – and statistical tests employed indicate that the fixed time effect is here appropriate. Actually, there was a double purpose to talk about, from the very beginning of this approach: (a) of course, a model to be shaped as able to find and explain relationship between variables and (b) as such, searching for possible individual effects able to identify differences among Romanian counties -- i.e. to make them really different behaviours from one-another. Time effects could capture the impact of crisis periods, as well as, on the contrary, the new firms’ formation phenomenon as specific for the economic recovery. *Redundancy test* was employed to see whether the fixed effects are redundant against *Pooled OLS model* and *Hausman test* helped to choose between the fixed effect and the random effect models.

No specific individuality among the 42 Romanian counties was found – i.e. multiple similarities of these areas prove here implied, e.g. so different time effects similarly affecting all counties at the same during each year. It was this way that the *fixed effects* model with only *time effects* proven the most appropriate in this case.

The cross-sectional dependence *Pesaran CD* test considered appropriate for $N > T$ (number of cross section > years) was employed and the results revealed that the panel variables had not exhibited cross-sectional dependence.

Results of the final model show that existing *entrepreneurship’s and density of population coefficients* are significant at the 0.05 level, and *immigration* at the 0.10 level. As expected, the entrepreneurship environment keeps a positive impact on new companies’ formation – i.e. a 1% increase of entrepreneurship leads to a 1.75 % increase in new companies’ formation. Namely, new companies are likely to prefer stable business environments with business relationships truly shaped and strong.

Immigration, in its turn, has a positive impact on new companies’ formation, as expected – but this under the punctual observation that since 2014 the National Institute of Statistic (INSSE) sees as immigrants just the Romanian people back home from abroad and here remaking their main residence. Shortly, those Romanian *immigrants* reach a not too high, but positive influence on the new business creation: a 1% increase of immigrants’ number will lead to a 0.026% increase in the number of Romanian new business.

As for *density of population*, *once more*, it keeps a significant, but negative coefficient (i.e. unexpected by the literature): a 1% increase in density of population will lead to a 1.95% decrease a new companies’ formation.

Both the *unemployment’s* and *regional GDP’s* coefficients appear not highly significant – i.e. $p\text{-value} > 0.05$ significance levels. Unemployed people, when see themselves constrained to choose between their low but certain benefit and the entrepreneurship, actually get able to notice that the last is rather risky. Regional GDP proves not too significant either for future companies. Besides,

each year considered in our model proves its individual impact and so it has been added in equation. Fixed effects were separately highlighted – e.g. in the FEM approach. The R squared determination coefficient is 0.57(adjusted R-squared = 0,55) and expresses that 57% of new companies’ formation could be explained by given exogenous: existing entrepreneurs, regional GDP, unemployment, population density and immigration. The rest of 43% identifies the percentage of total variation of endogenous that explains by factors other than those here above considered. The intercept value of (-0.3) represents the intersection between the OY axis and the regression line or the average value of Y endogenous (new companies), the other factors being zero.

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Methods and Techniques for Rural Development of the South-East Region

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Abstract

Sustainable development involves the analysis of financial resources and other support instruments that can positively influence an area or region. The economy of the South-East Region is based on agriculture, which assumes 40% of the total occupancy in the region.

Agriculture can be seen as the core of the region's sustainable and sustainable economic development. This article involves highlighting and highlighting the problems encountered in the South-East region and carrying out a set of measures and ways to improve rural performances. A questionnaire was carried out to the inhabitants of rural areas of the region in order to establish the disadvantages encountered.

Key words: rural, agriculture, region, potential

J.E.L. classification: O18, Q01, Q14

1. Introduction

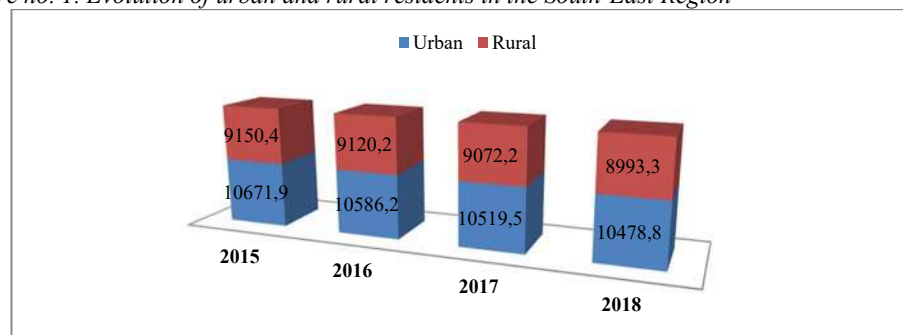
This paper covers the most important difficulties facing the south-east region. In this paper, we analyzed the concept of rural development by identifying the priorities of the South-East region and the needs and development potential.

The main purpose of this article is to highlight measures to improve rural areas and increase young employment in the region.

The rural environment is in constant competition with the urban area, the latter experiencing a more alert development process.

In recent years, both the number of urban and rural residents have undergone changes as can be seen in the figure below.

Figure no. 1. Evolution of urban and rural residents in the South-East Region



Source: Own Processed Data on INS, Tempo – Online

2. Theoretical background

The interpreted data studied in this article provide information on agricultural and increased production. There are two categories of information studied. The first category focused more on the role of the agricultural sector and the identification of the priorities of the analysed region (South-East Regional Development Plan, 2014-2020). This information highlights an important connection between agriculture and economic growth in the region (Herman, 2011).

Meanwhile, there are numerous studies on the sustainable development of agriculture, but also of the rural environment. Some of the recent studies on the topic analyse the problem sectors, and others study the increase of competitiveness and performance (Vasile, Ion, Turek Rahoveanu, 2016).

The challenges encountered more and more often in the rural area are bigger and more intense, the researchers showing their interest in the analysis of the agricultural systems. The economic and social challenges are proposed to the analysis based on the principle that demonstrates the increase of the competition of the rural environment (Buhociu, 2016).

The study of the literature identifies strategies that are focused on the performance and development of agriculture. Tools involving developed technology have also been considered. An environmental development plan is initially based on the study of the current state of the area with the identification of the main sectors requesting assistance (Stanciu, 2015). This plan can be achieved by achieving and performing a set of measures and techniques that lead to the achievement of the goals set.

The definition of rural devolution is embedded in a border concept, that of the rural economy, as a branch of economic science intersecting with rural space and agriculture, with the environment economy and the development economy. For the rural economy is important that the economy of the agricultural holding with its market-related valences, agro food industries which makes the analysis of the rural economy associated with rural policy, agro-food, consumption and agricultural policy (Boussard, 1992).

3. Research methodology

The results of this article are based on detailed research using quantitative methods. The information was processed after consulting the National Institute of Statistics. The database targets the following variables: the concept of rural, development priority identified in the studied region, strong work in the South – East Region.

The studies data are updated every year. In the present research, data from 2014 to 2019 were used, and year 2019 was used for an analysis of economic performance.

Qualitative research is based on studies of literature specific to this field. The following questions guided the present research:

- What was the evolution of the inhabitants of the South – East Region, rural and urban?
- What is the area of the counties of the analyzed region?
- How did the administrative structure in the region evolve in 2018?
- How did the activity rate evolve in the period 2014-2018?

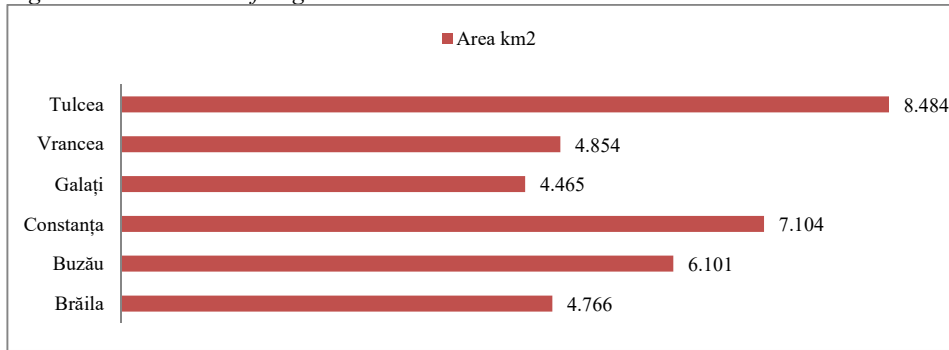
4. Findings

4.1. The concept of rural development and the identification of rural development priorities of the South-East Region

Located in the south-east of Romania, the South-East Region is next to Bulgaria, to the east with the Black Sea, the Republic of Moldova and Ukraine, to the north with the Northwest Development Region, to the west with the Central Development Region, and to the southwest with the South-Muntenia and Bucharest-Ilfov Development Regions. It is the second largest of the 8 development regions of Romania and comprises 6 counties, namely Brăila, Buzău, Constanta, Galați, Tulcea and Vrancea.

In the figure below we see the distribution of the counties of the region by area.

Figure no. 1. Counties of Region 2 South – East



Source: Own Processed Data from INS – Tempo Online

The rural development of a region involves not only the growth of the economy, but also the development of social and human resources, which involves several directions:

- Increase in human resources;
- Improving natural resources and knowingly using them;
- Developing economic competitiveness;
- Improving infrastructure;
- Development of technology.

The total area of the South-East Region is 35774 km², 15% of the area of Romania. The largest county by area in the region is Tulcea with 8484 km², and the smallest is Galati with only 4465 km². In the table below we observe the administrative structure of the South-East Region.

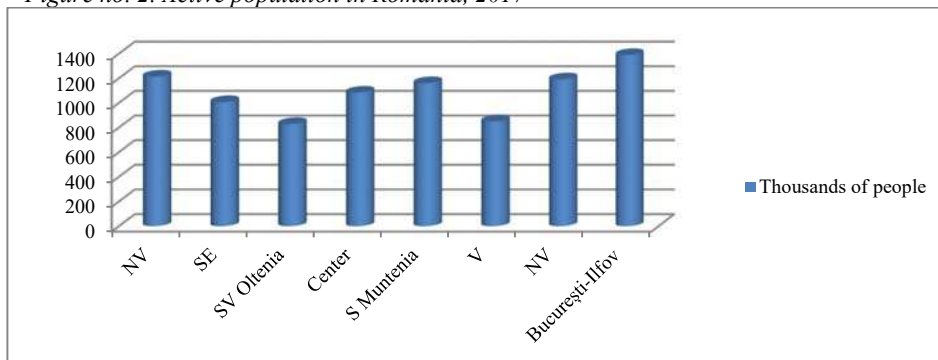
Table no. 1. Administrative structure of the South-East Region (2018)

	Number of cities and municipalities	Municipalities	Common No.	Villages No.
Brăila	4	1	40	140
Buzău	5	2	82	475
Constanta	11	3	59	189
Galați	4	2	61	180
Tulcea	5	1	46	133
Vrancea	5	2	68	331

Source: Own Processed Data from INS – Tempo Online

By the number of active inhabitants, the South-East Region ranks 6th among the development regions of Romania as seen in the figure below.

Figure no. 2. Active population in Romania, 2017



Source: Own Processed Data from INS – Tempo Online, 2019

In recent years, the working population of the South-East Region has seen year-on-year declines due to emigration. The majority of the population in the region operates in agriculture, with agricultural land meaning 65% of the total area of the region.

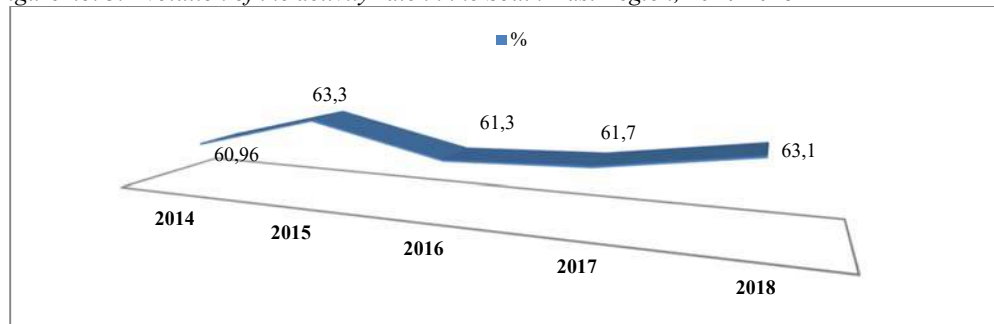
4.2. Study on the needs and development potential of the South-East Region

Regional development is a concept aimed at boosting and diversifying economic activities, stimulating investment in the private sector, contributing to reducing unemployment, and initiatives leading to an improvement in living standards.

(http://www.adrse.ro/Documente/Planificare/Studii/Rezumat_studiu_EDER.pdf pag. 7).

The highest activity rate is recorded in Vrancea, 70.3%, and the lowest in Galați, 59.2%. In the figure below we see how the activity rate has evolved in the period 2014-2018 in the South-East Region.

Figure no. 3. Evolution of the activity rate in the South-East Region, 2014-2018



Source: Own Processed Data from INS – Tempo Online, 2019

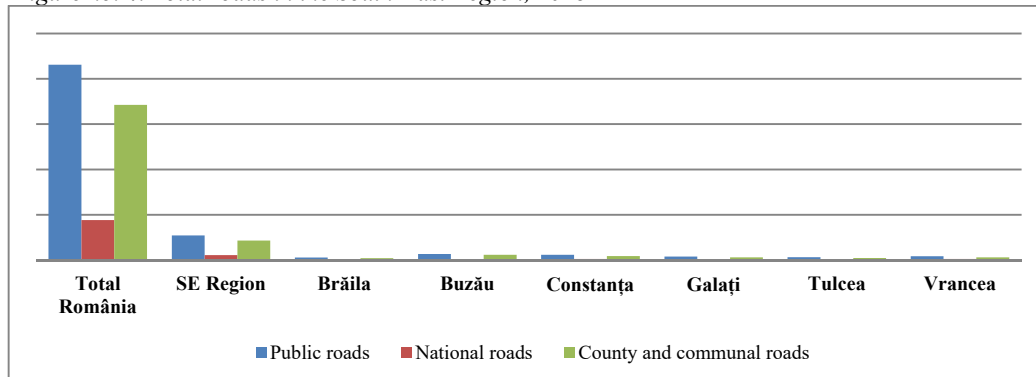
In the South-East Region there is a difficulty in terms of skilled work personnel.

The main objectives for rural development in the South-East Region are:

- Infrastructure development and telecommunications improvement;
- Increasing the number of dwellings and creating new residential areas;
- Growth of public services;
- Protecting the environment;
- Increase in local tourism;
- Developing and supporting the economy;
- Job growth;
- Attracting investors.

The South-East region does not enjoy projects involving the construction or development of motorways. In the figure below we see the distribution of roads in the region at the end of 2018.

Figure no. 4. Total roads in the South-East Region, 2018

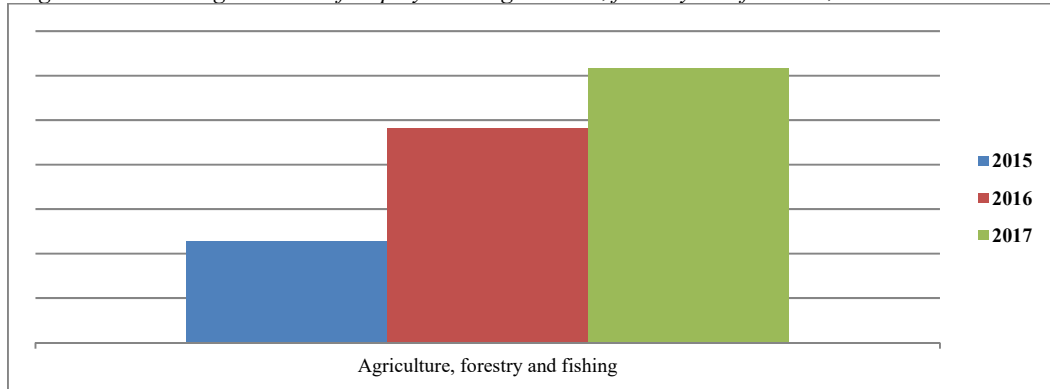


Source: Self-processed data from

https://insse.ro/cms/sites/default/files/field/publicatii/lungimea_cailor_de_transport_la_sfarsitul_anului_2018_1.pdfNS – Tempo Online, 2019

In the South-East Region we have the lowest density of public roads in Romania, only 30.7%. From an economic point of view, the South-East Region has a small number of workers concentrated in agriculture, forestry and fisheries. In the figure below we see their evolution in the period 2015-2017.

Figure no. 5. Average number of employees in agriculture, forestry and fisheries, 2015-2017



Source: Own processed data from INS, TEMPO- ONLINE, 2018

In recent years, the population of the South-East Region has suffered decreases in most fields of activity, especially in agriculture.

The activity rate in the region is increasing, the highest being recorded in Vrancea, the second being Brăila, then Buzău, Tulcea, Constanta, and the last place is Galați County.

In the region, the lowest earnings were recorded, only 1987 lei recorded in 2017, with the highest in the region being registered in Constanta and the lowest in Vrancea.

5. Conclusions

The development plan of a region is based on the study of the characteristics of that region, but also on the emphasis on needs or development potential in a region. The South-East region can ensure the achievement of a good and lasting economic environment that will lead to increased competitiveness and employment.

The South-East Workforce has few issues that can positively influence the sustainable and sustainable development of the region.

The results provided by this paper contribute to identifying the needs related to the level of development of the region studied. A number of negative aspects were highlighted, namely:

- Lack of efficient development of the small and medium-sized enterprise sector;
- Lack of support for small and medium-sized enterprises;
- Regional gross domestic product is quite small;
- Lack of cross-border cooperation in the economic environment;
- Reduced support for research and development activities;
- Lack of skilled labour;
- Poor infrastructure quality;
- High degree of difficulty in accessing funding;
- Poor quality of tourism, especially since the South-East Region has great tourism potential.

Agriculture plays a supreme role in rural economic activity, especially since Romania is a state where rural life prevails.

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The Economy of Romania and Foreign Direct Investments

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Abstract

In the context of the market economy, foreign direct investments make an important contribution to economic growth. For Romania, foreign direct investments had a crucial importance both during the transition period and in the period following the achievement of the functional market economy status.

Although the foreign direct investment (FDI) stocks represent an important share of Romania's GDP, in the competition with the other former socialist countries which have joined the European Union, our country is situated below the level recorded by this indicator in all the 11 states analyzed. Given the positive effects generated by the FDI stocks, Romania still needs the contribution of foreign investors in order to evolve. The aim pursued in elaborating this paper was to highlight the positive impact of the flow of foreign direct investments on the economic growth in Romania and implicitly to emphasize the role that foreign investors can continue to play in the economic development of our country.

Key words: foreign direct investment, gross domestic product, multinational firms, competitiveness, economical growth

J.E.L. classification: F21

1. Introduction

A country needs financial resources so as to develop its economy. For the developing countries and the countries in transition, the financial resources needed for development can come from accessing long-term loans or they can take the form of attracted FDI flows. While it is essential that one option does not exclude the other, we can ask ourselves which of the two options should be prominent.

Although they increase the level of indebtedness, development loans allow to a certain extent to bring the future into the present, in the sense that there is no need to wait for a large number of years in order to have successive accumulations to ensure the necessary financial resources for economic progress. Moreover, governments can adjust development projects according to the specific conditions existing in each country. If the right thing is done and the general interests of the society are put first, then the beneficial effects generated by such an approach will be major. Unfortunately, reality has shown that in very many cases, due to incompetence or decision-makers' acts of corruption, the economic results were not as expected. In addition, the burden of over-indebtedness had to be borne by the respective nations for a long time.

Attracting FDI is the alternative that more and more countries have been relying on. For the host countries, foreign-owned subsidiaries or foreign-owned joint ventures have been significant factors in their economic development process. We keep in mind the fact that foreign direct investments are usually made for a long period of time, being difficult to abandon. On the other hand, the foreign investor has control in the company in which it invests and as such will manage it in such a way as to obtain profit. In addition to the technology it transfers to the host country, the foreign investor also ensures a flow of management, marketing knowledge, etc., which often has a beneficial impact on the local companies with which it interacts when conducting its business. The high level of the salaries collected by the employees of companies with foreign capital, the volume

of taxes paid by these companies to the local or national budgets, their contribution to stimulating the exports of the host country are further arguments that can be taken into account when a government develops its own policy regarding FDI.

It is noteworthy that in the period following the Second World War there was a reluctance towards foreign investors in the context of the declaration of independence by a significant number of colonies. The new independent states which had gained their political independence also wanted a greater independence from an economic perspective, trying in this context to limit the economic ties with the former metropolises. After the '80s of the last century, the approach in the field changed radically, most countries of the world being favorable to attracting foreign investors, the regulations issued by those countries being an eloquent testimony in this regard. Exceptions were countries such as Venezuela, Bolivia or Ecuador, which took measures to limit or even block foreign capital inflow.

The objective of this scientific approach is generated by the need to emphasize the overall beneficial effects of FDI flows upon host countries. At the same time, the role that foreign direct investments have played in Romania's economic growth in the period since the fall of communism is also highlighted.

2. Theoretical background

The intensification of the globalization phenomenon of the world economy in the last decades has materialized, among other things, in a strong liberalization of the movement of goods and capital. The foreign investors were able to easily invest their capital in the countries that ensured the best profitability in the context of lower risks. Thus, a competition emerged for attracting as large a volume of FDI as possible, a competition which manifested especially among the developing countries or those in transition.

Both nationally and internationally, there are numerous authors who have analyzed and debated various aspects of the effects that foreign direct investments have on the host countries' economies.

Costea Munteanu carried out an interesting analysis on the role of the investment in the economy and the involvement of international companies in making investments abroad. Moreover, he addressed the policies in the field of FDI promoted by different categories of countries.

Viorela Beatrice Iacoboiu very accurately depicted the effects generated by foreign direct investments at the macroeconomic and microeconomic level, as well as the impact of these investments on the Romanian economy.

Alexandra Horobet tackled a number of issues related to the theory of risk and the quantification of the effects it generates. Also interesting is the attention given to the evaluation of the impact that FDI flows have on our country' economy.

Alexander Belohlavek highlighted the issue of foreign direct investment in the EU, focusing on aspects related to international law.

Federico Carril-Caccia voiced concerns about the evolution of the share of FDI stocks in GDP at the global and EU level, while emphasizing the increasing role of the emerging countries both in terms of the issuance and in terms of the absorption of foreign direct investments.

The statistical data made available to the public by the National Bank of Romania and the United Nations Conference on Trade and Development (UNCTAD) were also extremely important for capturing the evolution of economic phenomena.

3. Research methodology

Starting from the theoretical documentation of the established topic, through the methods and tools used, we have aimed to highlight the characteristics generated by the FDI flows of the Romanian economy.

Through the carried out quantitative research, we have set out to emphasize the existing connections between the analyzed phenomena.

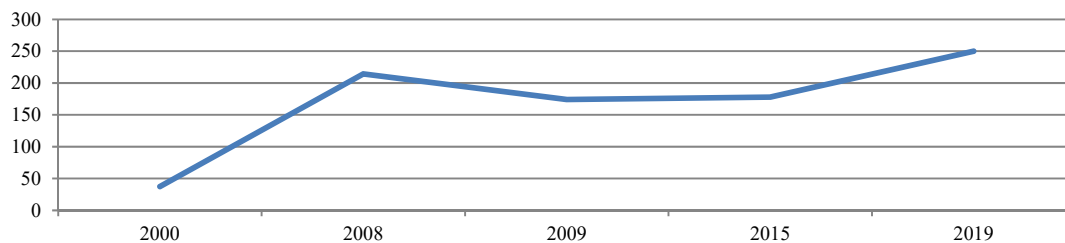
As a result of the comparative analysis regarding the effects generated by foreign direct investments in Romania and in the former socialist EU members, we have highlighted the dimension of the role that foreign direct investments play in the Romanian economy.

4. The evolution of GDP and FDI flow in Romania

In the period elapsed from the takeover of power by the communists until the events of December 1989, the Romanian legislation did not prohibit foreign investments in our country, however, it drastically limited them. Thus, foreign investments in Romania could materialize in the form of joint ventures in which the Romanian side had to have the majority. The consequence of this approach in terms of attracting foreign direct investment was the small number of joint ventures (with Romanian and foreign capital) that existed during the communist period, with negative consequences on the technological level of our country's economy and, implicitly, on the level of competitiveness of the Romanian products.

The fall of communism led to a fundamental change in the approach to foreign direct investment. The Romanian legislation, adopted immediately after 1990, allowed the access of foreign investments in Romania, granting important incentives in this respect. Moreover, for several years, for example, the facilities related to exemptions and reductions in income tax were clearly favorable to foreign investors, a discrimination being evident in relation to those granted to domestic investors. On the other hand, the political and legislative instability, the miners' riots, the acts of corruption, the lack of transparency, the existence of a strong economic state sector, etc. were all factors which fueled the reluctance of foreign investors towards Romania.

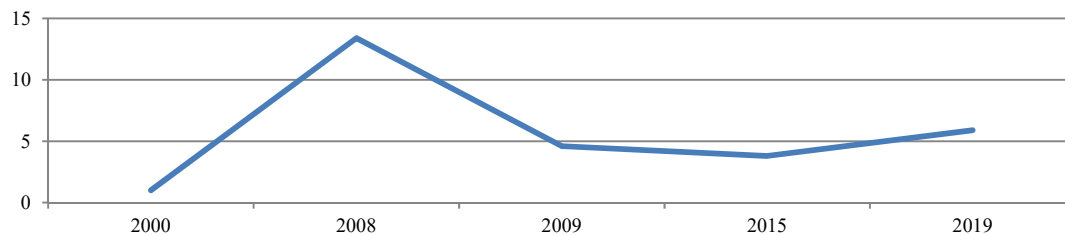
Figure no. 1. Romania's GDP evolution (\$ billion)



Source: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en

Regarding the evolution of GDP and annual FDI flows attracted by Romania in the last 20 years, we notice that there is a certain similarity. Up to 2008, both GDP and FDI flows increased rapidly. The global financial crisis strongly affected both indicators, the amplitude and duration of the impact being greater in the case of the FDI flows attracted by Romania.

Figure no. 2 FDI flow attracted by Romania (\$ billion)



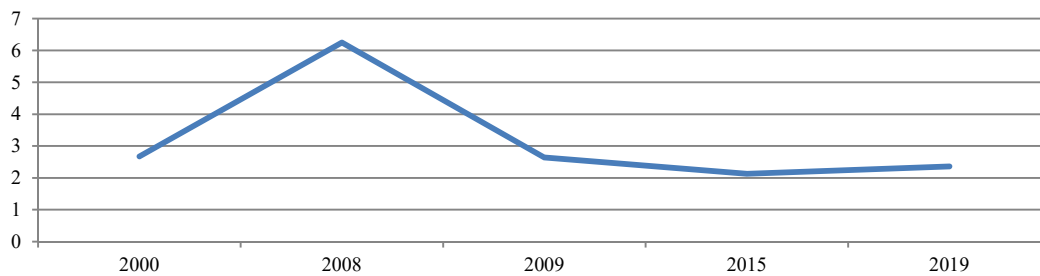
Source: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en

We must note the strong increase in the FDI flows attracted by Romania in the years preceding the last global financial crisis, due to the new positions achieved by Romania (NATO membership, EU membership), but also to the special privatization offer of those years.

The global financial crisis meant a substantial decrease in annual FDI flows for the entire period that followed. Although there have been some timid recovery tendencies of the FDI flows, the levels reached by them are far from the levels recorded in 2006 or 2008. After a slight upward trend between 2015 and 2019, the impact produced by the pandemic crisis on the economy

materialized in the reduction by 60% of the FDI attracted by Romania in the year 2020 compared to the level recorded in the previous year.

Figure no. 3 The dynamics of the share of attracted FDI flow in Romania's GDP (%)



Source: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en

As a result of the decrease in foreign investment flows in the period since the global financial crisis, there has been a reduction in the impact that these annual flows have had on our country's economy. Thus, the share of annual flows in GDP decreased from 6.25% in 2008 to just 2.13% in 2015 and 2.36% in 2019. We can say that the substantial reduction in the opportunities provided by the privatization, the attitude manifested in some cases by decision-makers, the poor transport infrastructure, the deficits in human resources, etc. represent causes that led to the decrease in the volume of attracted investments and, implicitly, to the reduction of the effects generated by FDI in the Romanian economy.

For the entire analyzed period, we can conclude that the flows of foreign investments attracted by Romania have been at a lower level than the needs of our country.

5. The impact of FDI stocks on the Romanian economy

Most of the FDI stocks attracted by Romania until the end of 2019 (40.4%) went to industry. In this respect, Romania registers higher levels compared to the situation in the other countries in the area. Construction and real estate transactions (16.9%), trade (16.6%), financial intermediation and insurance (11.5%) were also areas of major interest for the investors who turned their attention to Romania. (BNR, 2019, p.10)

Although the FDI in the extractive industry represents only 4.4% of the total, the exploitation of Romania's natural resources is mainly carried out by companies with foreign capital, an aspect which, in many respects, cannot be appreciated as positive. Things must be seen in the context in which Romania has considerable natural resources, at least in relation to the general situation in Europe.

Romania's successes are limited when we analyze the foreign direct investments made in knowledge-intensive activities.

It is not a coincidence that in terms of the competitiveness index, which takes into account macroeconomic stability, infrastructure, health, education's efficiency, labor market's efficiency, technological training, innovation, etc., Romania is found next to Bulgaria on the last places in the European Union.

Many of the foreign direct investments in Romania were of the greenfield type (61.8% of the FDI stocks attracted by Romania), thus contributing to the increase in Romania's production capacities and at the same time providing jobs for the domestic citizens. Furthermore, the salary level and the working conditions are clearly higher compared to those provided by the Romanian capital. It is edifying, in this sense, that multinational companies' investments per employee were double in volume compared to the investments per employee made by companies with Romanian capital. Unfortunately, in the last 10 years the average growth rate of the greenfield type of FDI stocks has been lower than the average growth rate of the total FDI stocks attracted by Romania.

Regarding the origin of the FDI stocks entered in Romania, most of them came from the Netherlands, Austria, Germany, Italy, Cyprus, etc. The surprising appearance of the Netherlands in the first position is noticed, which can be explained by the fiscal facilities in this country, many of

the Dutch investments being, in fact, American investments. Also surprising is the position occupied by Cyprus, which has overtaken countries such as France or the United Kingdom. Given the tax haven qualities that Cyprus has shown more or less persuasively over time, the position that this country occupies in the top of the investors in Romania becomes reasonable. We are considering the possibility that some Romanian businessmen could be at the origin of the FDI flows made by Cyprus in our country.

In terms of distribution by development areas, the FDI stocks attracted by Romania were distributed mainly in the Bucharest-Ilfov region (62.7%) and the Center region (8.7%), at the opposite pole being the South-West Oltenia region (2.9%) and the North-East region (2.0%). This strongly asymmetrical zonal distribution of the FDI stocks denotes the weak contribution that foreign investors had in the direction of achieving that desideratum that aimed at diminishing Romania's development disparities in its territory.

The contribution that foreign direct investment companies have to the realization of Romania's foreign trade is more than remarkable. In 2019, the share held by FDI companies in Romania in total exports (FOB) was superior to the share held in total imports (CIF). At least in theory this situation should be satisfying.

In the case of goods, FDI companies account for 74.2% of total exports and 68.2% of total imports, but in absolute values there is a deficit of 6.7 billion euros. In terms of services, FDI companies hold a share of 49.9% of total exports and 41.7% of total imports, resulting in a surplus of international trade in services of 5.8 billion euros. (BNR, 2019, pp. 23, 24, 38, 39)

On the whole of the international trade in goods and services, we find that FDI companies registered a slight deficit in the year 2019 (almost one billion dollars). This trend has also manifested over the last decades, when Romanian companies resulted from foreign direct investments registered higher imports than exports every year, which has generated a constant trade deficit.

It is worrying that annually in the top 100 Romanian exporters there are only 3-4 companies with majority state capital, these being usually placed in the second half of the ranking.

6. Romania vs. the former socialist EU countries from the perspective of the FDI stocks' share in the GDP

The contribution of foreign direct investments to the formation of GDP, to stimulating foreign trade, etc. is obvious. Some personalities even consider that the Romanian economy is too dependent on the foreign capital, with all the shortcomings that derive from this state of affairs.

Table no.1. The comparative evolution of the share of attracted FDI stocks

		2000	2010	2019
FDI Stocks (\$ billion)	Bulgaria	2.7	44.9	51.8
	Croatia	-	32.3	29.8
	Czech Republic	21.6	128.5	170.6
	Estonia	2.6	15.5	27.4
	Hungary	22.8	91.0	97.8
	Latvia	1.6	10.8	17.9
	Lithuania	2.3	15.3	19.5
	Poland	33.4	187.6	228.5
	Romania	6.9	68.6	97.0
	Slovakia	6.9	50.3	59.7
	Slovenia	2.3	10.9	16.7
	Total	103.1	655.4	816.7
GDP (\$ billion)	Bulgaria	13.2	50.3	67.9
	Croatia	-	59.8	60.4
	Czech Republic	61.3	209.0	250.6
	Estonia	5.9	19.6	31.4
	Hungary	47.2	131.9	163.4
	Latvia	7.9	23.8	34.1
	Lithuania	11.5	37.1	54.6

	Poland	172.2	479.8	595.8
	Romania	37.4	166.2	250.0
	Slovakia	20.7	90.3	105.0
	Slovenia	20.2	48.1	54.1
	Total	397.5	1315.9	1712.3
Share of FDI stocks in GDP	Former socialist countries	25.9	49.8	47.6
	Romania	18.4	41.2	38.8
	Global	21.9	30.0	41.7

Source: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en

In order to better highlight Romania's situation in this respect, we have considered it necessary to emphasize the evolution of the share of FDI stocks in Romania's GDP by making a comparison, on the one hand, with the global situation, and on the other hand, with the cumulative situation of those 11 former socialist countries which have since become EU members.

In terms of the share of the FDI stocks in GDP at the beginning of the analyzed period (2000-2019), Romania, with 18.4%, was slightly below the level reached on a global level (21.9%) and significantly lower in relation to the cumulative situation of the 11 former socialist states (25.9%). This position of Romania can be explained by the delays manifested in the economic reform process, the external perception of the domestic business climate, etc. Over time, the values recorded by Romania in this indicator increased, for example in 2010 our country slightly exceeded the level reached worldwide. Instead, in the year 2019 it largely returned to the values recorded in 2000. Thus, in the year 2019 the share of foreign direct investment stocks in GDP was 38.8% in the case of Romania, 41.7% - at global level and 47.6% - in the case of the 11 former socialist countries currently members of the European Union.

For Romania, the differences are even greater for this indicator when the comparison is made with countries such as Hungary (59.8%), the Czech Republic (68.1%) or Estonia (87.2%), the figures being valid for the year 2019.

Although the major role that FDI plays in the Romanian economy is obvious, we also take into account the situation recorded in the other former socialist EU countries and the current, concrete needs of our country's economy, the increase in the FDI flows attracted by Romania being a necessary phenomenon.

7. Conclusions

We can conclude that in the last decades there has been a real competition among the countries in terms of attracting foreign direct investments. China, Hungary, Poland are eloquent examples in this sense. We must also highlight certain changes in the perception of public opinion regarding the activity carried out by multinational companies. Through the subsidiaries they implant abroad, the multinational companies have proven over time to be the main providers of FDI. Regarded with reluctance by some, especially due to the increasing dependence of the national economies on foreign capital, and by others considered to be the main factor of economic development and rising living standards, multinational companies will always be a controversial topic. At present, the population seems to appreciate to a greater extent the aspects related to competitiveness that the multinational companies create, paying a little less attention to the negative effects that they induce in the economies of the host countries.

Although from the perspective of the share held by the FDI stocks in GDP, Romania occupies a lower position compared to most former socialist EU member states, the role played by FDI in the economic development of our country is obvious. Considering the evolution of the countries that did not join the EU, we can state that if Romania had remained outside the EU the FDI stocks would have been much smaller, thus having a negative impact on economic growth. At the same time, it is necessary to redirect the foreign direct investments attracted by Romania towards technology-intensive sectors, therefore setting the premises for carrying out high value-added activities.

The current reality, with all its shortcomings, seems to be favorable to Romania. The pandemic crisis has highlighted certain vulnerabilities of the European Union generated by the transfer of many production capacities into China. The pandemic context, the competitiveness of Romanian products in terms of price-quality ratio, the fact that over 70% of Romanian exports are destined for EU countries are all elements that could lead to the development of certain industries in Romania, including by attracting foreign capital.

An additional piece of evidence in this regard lies in the fact that Romania recorded in the first quarter of 2021 the highest economic growth of all EU countries, which should not go unnoticed by the foreign investors.

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Marketing and Management Strategies in Order to Increase Rural Tourism in Romania - Implementing National Development Programmes by Government Institutions or Other Types of Organizations

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Abstract

In recent years, tourism industry has begun to exploit cultural and environmental distinction (identity, culture, history, heritage, nature, wildlife) as one of the most attractive and valuable attractions offered to tourists. An increased demand for rural destination travelling has been notified over the past years, along with the changes in customers' mentality, who are in search of authenticity and exploring cultural differences and the uniqueness of each national heritage.

In this paper we will discuss about rural tourism in Romania, aspects that increase this type of tourism's value and development perspectives, according to management strategies in course of implementation of national development programmes, adopted by organizations and the local government, in order to improve quality of life in respective areas, as well as contributing to economy growth as a result of developing this type of tourism.

Key words: rural, tourism, valorization, development

J.E.L. classification: Z32

1. Introduction

According to the definition of the World Tourism Organization, rural tourism represents the „type of tourism organized in rural areas and conducted by locals, exploiting rural resources (natural, cultural, historical, human) and touristic facilities, including pensions, guesthouses and agro touristic farms” (Nistoreanu et al., 2003,p.34).

Rural tourism involves the exploitation of natural touristic and anthropogenic resources of the respective rural areas, focusing on economic and social activities in order to generate profits for local communities (Surugiu, 2008, p.13). Another definition of the European Commission illustrates this type of tourism as the touristic activity carried out in rural areas, made up of an integrated relaxation offering, simultaneously satisfying the need of being in contact with the environment and with the local community (Henche Garcia, 2004, p. 51), allowing recreation and recovery of individuals' spare time, a getaway from everyday life and from the urban crowd, in a socio-cultural context, in villages and rustic landscapes.

2. Theoretical background. Romanian rural tourism and key factors for its valorization

Romania is still a preponderant rural country. In 2018, the rural population percentage was still at 46,2% of the total population, an extremely high level which clearly differentiates Romania from the rest of the European Union, which indicates the survival of a system of villages and small towns that continue to play an important role in the socio-economical and cultural life of the country.

Traditional rural settlements are established in a group of homes, households, in which locals maintain their own typical lifestyle, where traditions and habits are kept over the generations, being defined by their historical age, their socio-economical position, the duration of occupation and the distribution of households.

In Romania there are villages with predominantly agricultural know-how that has determined a specific lifestyle, distinct forms of organization: diffused, dispersed or concentrated villages. Despite the vicissitudes of time, the Romanian rural space has kept its cultural traditions, habits and hospitality, specifics of our country and is among the few European states preserving these elements almost intact.

Among rural houses, architecture, crafts, folklore, traditions and costumes, Romanian villages have other resources: historical monuments, art and architecture, unpopulated natural regions (mineral waters, picturesque landscapes, hunting grounds), with the possibility to offer other attractions for all touristic categories. (Turtureanu, 2008, p.50)

The social life of rural communities takes place in a certain pace and in full agreement with the variety of collective interests such as ethno-folkloric events (winter holidays, spring celebration, agricultural events, pastoral events, summer ethno-folkloric events, ethno-folkloric celebrations in the mountains).

Among the ancestral attractions of great significance, we encounter: occupations and crafts, traditional costumes, traditional games and songs, traditional holidays, rural architecture, locals' accommodation. The occupations and crafts illustrate a large topological diversity at a regional level.

Habits are defined as creative manifestations of the rural spirituality, where different events of the individual or collective life gain symbolic dimensions and prophetic practices. Romania has true treasures in this regard, represented by traditional clothing, songs and dances. We underline the originality of the Romanian folklore, its great variety and its amazing preservation until today. Traditional costumes from Năsăud, Oaş, Bucovina, Oltenia, Muntenia or Banat represent unique benchmarks for the Romanian rural spirituality.

Many other considerations can be added here, but the main reason for choosing to experiment rural tourism in Romania, beside the exploration of culture, would be discovering the country's heritage, the getaway from the everyday life in order to enjoy the peace and quiet, to admire the wild nature.

These aspects were probably also taken into consideration by his Royal Highness Prince Charles of Wales, when he decided to purchase a few properties in Transylvania. His choice can be justified by the fact that the Romanian villages still hold the fingerprint of originality, novelty and emotion.

The survival of a diverse culture and rural society full of life makes Romania an attractive destination for a growing number of tourists, interested in the natural and cultural heritage (Light, 2000, p.159). Romania's rural regions have a great potential to attract numerous visitors. The existence of numerous sites included in the UNESCO World Heritage List represents proof of the touristic potential of this country: the Danube Delta, the Lutheran Churches in Transylvania, the Horezu Monastery, the painted monasteries in the north of Moldavia and Bucovina, the Historical Centre of Sighişoara, the wooden monasteries of Maramureş and several Dacian Fortresses.

We can classify the categories of tourists we can encounter in our country according to their preferences. There are tourists that prefer rural areas, for instance Eco tourists, who are interested in the development of legally protected areas, preserving and protecting the environment at the same time; the agro tourist, eager to experiment the life style of the locals from villages and farms; from a similar category come tourists who are mainly interested in exploring the culture and history of every place. We also have geo-tourists, an admirer of the beauty of landscapes and nature, the active tourist, passionate about the outdoor activities, sports and adventures and taking hikes in places difficult to reach.

Balneary tourism is practiced as well by internal tourists and foreign ones, given the big number of natural springs, sludge and gases with healing properties and the diversity of treatment offers based on these natural resources. The country's capital, Bucharest – a business and cultural center – has become a city break and business type destination, for foreigners and Romanians alike.

There are also tourists that are interested in experiencing socializing and nightlife, which are drawn to the seaside area, mainly Mamaia North resort, with its glamorous restaurants and nightclubs or those who are drawn to music festivals (Neversea-which also takes places at the seaside and Untold, held in the city of Cluj).

3. Research methodology

In this paper, we used the fundamental and theoretical research methods by studying the specialized literature, revising articles, reports and books found in the electronic databases. Moreover, the observation method was used to identify the challenges and opportunities to grow the rural tourism in Romania. The study was conducted based on the analysis of the secondary data and the most important indicators were emphasized such as: capacity of units with accommodation functions, average length of stay, number of arrivals. The main data was provided by the National Institute of Statistics and the interpretation was made using descriptive statistics. The study concluded with the proposed strategies for national development of rural tourism that the organizations and the local government should apply that can lead to both economic growth and higher quality of live by enhancing this type of tourism.

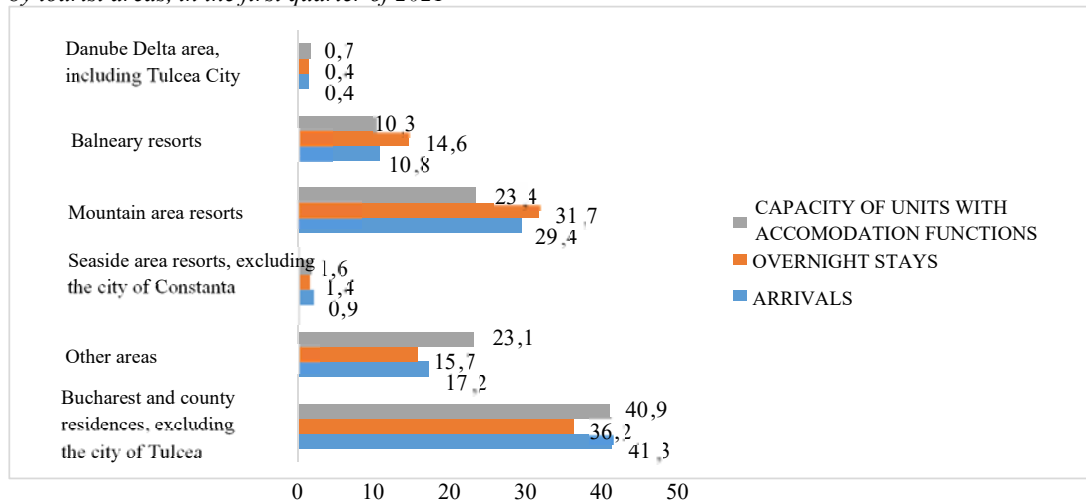
4. Results. Statistics regarding tourist frequency of reception units with accomodation functions in the first quarter of 2021

According to the statistics provided by INS(National Institute of Statistics), in the first quarter of 2021 compared to the first quarter of 2020, the attendance of tourist reception structures with accommodation functions is characterized by the decrease of the tourist accommodation capacity in operation and the number of Romanian and foreign tourists(<https://insse.ro/cms/ro/tags/frecventarea-structurilor-de-primire-turistica-cu-functiuni-de-cazare-0>).

The tourist accommodation capacity in operation of the tourist reception structures in the first quarter of 2021 was 15141.1 thousand places-days, 1.9% lower than in the first quarter of 2020. In the total tourist accommodation capacity in operation, the hotels held a share of 57.7%, agrotouristic pensions held a percentage of, 15.3%, tourist pensions-12.7%, tourist villas- 4.4%, hostels- 3.5%, motels- 3.4%, tourist chalets- 1.9% and the other types of tourist reception structures with tourist accommodation functions held a share of 1.1%.

The net usage index of the tourist accommodation capacity in operation in the first quarter of 2021 was 17.2% for the total tourist reception structures with accommodation functions, for hotels-20.0%, tourist villas-17.0%, tourist chalets-15,6%, inns-15.4%, tourist pensions 14.2%, bungalows-13.4%, agrotouristic pensions- 12.8%, tourist stops- 12.5%, hostels 11.6% and under 11.0% for the other types of tourist reception structures. The hotels registered the highest usage indicators (34.2%) in the mountain area. Regarding counties, higher indicators were registered at the tourist reception structures with accommodation functions in Covasna (28.5%), Bihor (25.6%), Braşov (24.9%), Prahova (23,7%), Mureş (21.6%), Caraş Severin (21.2%), Suceava (20.5%), Gorj (19.7%), Galaţi (18.9%), Vâlcea (18.4%), Brăila (17.9%), Arad (17.3%), Alba (17.0%), Iaşi and Vaslui (each with 16.9%), Sibiu (16.0%), Constanţa (15.3%), Bacău (14.5%), Mehedinţi and Argeş (each with 14.4%), Satu-Mare (14.2%), Harghita and Bistriţa Năsăud (each with 13.7%) and Bucharest (13.5%). 7 The tourist area "Bucharest municipality and county seat cities, excluding Tulcea city" had the largest share in the total tourist accommodation capacity in operation and in total arrivals / overnight stays.

Figure no. 1 The structure of arrivals, overnight stays and tourist accommodation capacity in operation by tourist areas, in the first quarter of 2021



Source: <https://insse.ro/cms/ro/tags/frecventarea-structurilor-de-primire-turistica-cu-functiuni-de-cazare-0>, accessed on 31.05.2021

The average length of stay in the first quarter of 2021 decreased by 0.2 percentage points compared to the first quarter of 2020, on total structures of tourist reception with accommodation functions was 1.8 days. Higher values were recorded for inns (2.2 days), bungalows (2.1 days), and holiday villages (2.0 days). Regarding tourist areas, the longest average length of stay was registered in the area "resorts in the coastal area, excluding the city of Constanța" (2.8 days), followed by the area "spa resorts (2.5 days). For Romanian tourists, the average length of stay was higher in the "seaside resorts, excluding the city of Constanta" (2.8 days) and in the "spas" area (2.5 days). For foreign tourists, a longer average length of stay was registered in "spas" (3.8 days) and "seaside resorts, excluding the city of Constanta" (3.1 days).

According to the results of the above mentioned research we can state that the marketing and promotion strategies for the Romanian rural tourism must be taken into account, in order to attract more tourists towards this type of tourism.

5. Prospects for the development of the Romanian rural tourism – Management and marketing strategies adopted by government Institutions and Organizations

The regions that already have the experience of rural tourism are regions whose natural heritage is already internationally known. Thus the ideal circumstances through which the local development takes place are those in which rural tourism interacts and overlaps with cultural tourism and ecotourism, which demonstrated the significance of integrated marketing and proper promotion of the heritage through local, national or international initiatives.

The relation between rural tourism and the preserving of local tradition is one of great significance. Iorio and Corsale state that the preserving of a vivid and culturally diversified rural society will transform Romania in an attractive destination for a growing number of tourists, interested in the cultural and natural heritage (Iorio et al., 2010, p.152)

According to Turtureanu and Ioan , the objective of valorisation of Romanian rural tourism (heritage, culture, history) can be reached with the following actions:

- Stimulating parallel activities that can generate additional earnings (rural tourism and agrotourism)
- Promoting the rural space and stimulating the local economy;
- Promoting legislation that covers current problems with the rural space, including special protection(protecting ecotourism);
- Strengthening the traditional houses and of the entire agriculture policies;

- Stimulating agricultural complementary activities, especially by creating new economic units (for instance: agro-production and services by valorisation of the touristic and agricultural potential);
- Elaborating studies and projects for sustainable development (ecotourism), improving, for instance: implementing projects for the practice of sports, of leisure activities and cultural entertainment, itineraries programs, in order to offer tourists a wide spectrum of activities and attractions (Turtureanu et al., 2005, p.124).

The development of rural tourism develops opportunities for exploiting the respective regions as well as for other local economical activities, for instance butcher’s shops, bakeries, handcrafts and other types of small, successful businesses.

A well performed administration from all parties involved in such activities could bring multiple benefits to these rural regions and communities, including creating of better living conditions but also attracting young people to settle in these regions (avoiding emmigration), given that they will have work opportunities. In this way, the risk of emmigration is reduced, being a well known fact that many young people from the rural environment leave their country in search of better workplaces.

Minciu describes the role of the government in the development of tourism as being direct by stimulation, control, supervision and promoting, and indirect by supplying tourism product (Minciu, 2004, p.60). The political commitment is thus essential in an effort to approach a sustainable development of a country, but we mention that besides government institutions, the implication of NGO’s and other stakeholders is necessary, such as the academical and research environment (Bulin, 2015, p.77).

Following the entry into the European Union, Romania has approached development strategies, including in the tourism sector. We mention Romania’s Sustainable Development Strategy for 2030 and the National Tourism Master Plan for 2007 – 2026.

Firstly, the Sustainable Development Strategy which focuses on two main areas, namely the development and planning of infrastructure in order to capitalize on natural resources and to promote tourist and to create the necessary infrastructure, having the following objectives (Bulin,2015, p.78):

- a) Valorisation of the cultural heritage and natural resources for tourism, meaning:
 - Modernization and development of accommodation and leisure activities units;
 - Valorisation of the potential of mountain resorts
 - Planning of objectives regarding the natural tourism;
 - Health and spa tourism development.
- b) Improving the quality of the tourism specific infrastructure:
 - Development of domestic tourism through diversification and marketing specific activities;
 - Defining and promoting the national touristic brand.

The second planning instrument, adopted and implemented by Romania, with focus on the tourism industry, is the National Tourism Master Plan, developed in collaboration with the International Tourism Organization. The experts pointed out a number of expected benefits that the Master Plan can bring for the Romanian economy and for the tourism sector: growing the investments in the tourism adjacent sectors; stimulating the creation of new work places and of the labor market; preserving of the natural resources and of the natural heritage; improving the quality of life. The following marketing strategies are illustrated:

- a) Recommendations regarding the following changes in marketing approaches:

Markets – the tourist sources must be classified in categories based on market opportunity for Romania in the short, medium and long run, based on a three-tier classification system:

 - primary / priority markets, such as Germany, Austria, Italy, France, Great Britain / Ireland, Hungary, Russia and USA;
 - secondary markets, such as the Scandinavian Countries, Benelux, Iberian Peninsula and other EU states;
 - opportunity markets, such as China, Japan, other countries (according to the identification through research).
- b) Elaborating a strategy based on a number of market segments, established as an objective, following a study on the international tourism trends.

- c) Conducting market research studies in series of installments, on the primary / priority, secondary and opportunity tourist markets, in order to draw conclusions on:
- the market size and potential (including forecasts) ;
 - the profile and characteristics of the key market segments that need to be targeted;
 - the evaluation of the future possible mix of touristic packages and individual tourists;
 - the evaluation of the efficiency of different marketing instruments and techniques, promotion and public relations, regarding the transformation of key market segments’ potential.
- d) Conducting an immediate cost – benefit analysis study on the network of abroad ministry bureaus, especially regarding:
- marketing agreements with local companies;
 - reporting system between bureaus from abroad and headquarters;
 - evaluation of the ongoing marketing and promotion activities;
 - defining performance standards and criteria with which one can measure, follow up on and evaluate the bureaus’ efficiency.
- e) A significant annual programme for traveling with educational and knowledge purposes for tour operators and main tourism agencies. Participants must be selected based on their capacity of conducting business for Romania. The Directorate for Promotions within the National Tourism Office must be restructured in the form of a Directorate for Marketing and Promotion, and must focus on:
- market statistics and research on the source segments and markets;
 - responsibility for every source market or market groups through a system of “bureau inspectors” that work with the bureaus from abroad and market representatives;
 - digital marketing – development and maintenance of the website;
 - industry development within Romania – among others, by encouraging public / private partnership initiatives and programmes;
 - employing of a specialized agency for the exploitation of Romanian image and destination brand;
 - key attributes and resources must be integrated in the image and brand concept, distinctively developed, that allows Romania to differentiate itself from its regional competitors; it is also important that these developed concepts to be able to serve as “house brands” for a series of sub brands associated with interests or touristic attractions from all over the country, such as Transylvania, Maramureş. These subbrands must be developed as a part of the process and will need a large dialogue between the employed agency and the ministry, as well as with regional and local authorities.
- f) implementing a sustained marketing and promotion programme, for the internal market as well as the international markets, which will be conceived in such a manner that it will be able to valorize Romania’s potential on identified markets and market segments. This will encompass three components:
- public – advertising and promotional activities (paid media publicity, promotional materials, website, tourism fairs);
 - touristic products commerce;
 - publicity and promotion activities for selling of touristic products (commercial advertising, visual photo-audio library, supporting tour operators, mixt promotion, tourism fairs, get-to-know visits);
 - mass media – public relations (representation abroad, press articles, informing summaries and letters, media visits, endorsements, publicity events).

In the short run, the focus on international markets will lay mainly on image development and less on the intensive promotion of specific products – thus allowing the progress of different products from their development and improvement standpoint; at the same time, for the internal market a more intense marketing and promoting programme based on the products will be needed, in order to restrict the vacation flux of Romanians towards foreign countries.

All these preservation and rehabilitation programmes must be conceived by cultural development and according to other aspects of social and economical development. The role of management and marketing from rural areas is to reunite all individual initiatives with easy to access reglementations and standards.

The well-defined organizational and legal framework represents the starting point for Romanian rural tourism intensification. Subsequent regulations must be adopted in order to improve the infrastructure, access routes and roads, providing running water to the respective villages, publishing certain promotional materials regarding rural tourism.

In Romania, The National Association of Rural, Eco and Cultural Tourism (A.N.T.R.E.C.) has implemented such management for the development of rural tourism, which resulted in a unique idea, being provided with its own national network. By integrating A.N.T.R.E.C. subsidiaries, they can allocate technical assistance to village inhabitants, with the purpose of developing this activity, as well as for increasing the types of cooperation in rural tourism. A.N.T.R.E.C. is also involved in the professional training of persons involved in rural tourism activities, systematically organizing trainings and applications in the area.

As Stoian (2011) stated, what local tourism management and marketing is concerned, A.N.T.R.E.C. focuses mainly on:

- identifying and promoting rural tourism potential;
- organizing professional training for owners (hosts), rural tourism agencies, seminars, etc;
- obtaining experience and information exchanges with other similar organizations or associations from abroad;
- communicating useful information to government institutions, public administrations, in order to support this type of tourism;
- organizing active publicity campaigns for categorized and approved units, included in the network through mass media;
- attracting new rural motels in the A.N.T.R.E.C. network and supporting them for approval and licensing;
- participating to important events that develop internally and externally, at a national, regional and local level, and that include fairs, exhibitions and conferences.

In the last few decades, the European Union’s regional development policy, in conjunction with the member states’ national policy, encourages tourism by focusing on rural areas, considering its effects as being positive.

A country’s tourism policy should be contingent upon the national plans for economic development. Strictly from an economical point of view, the main objectives are increasing the tourism benefits, diversifying activities, integrating tourism in the national economic circuit, developing of an area through tourism etc. Of course, there are also the social objectives, such as eradicating poverty, a better distribution of wealth, implicating and enabling local entrepreneurship, in the specific industry respectively, and environmental objectives: protecting the heritage, spatial planning, preserving biodiversity etc. Because tourism’s socio-economical impact is significant for the national economy of many countries, the government is directly interested in developing this sector and establishing a national strategy by sectors, for example the was resources are being allocated(Bulin,2015, p.80):

In order to exploit rural areas’ advantages, measures must be taken for the infrastructure’s development (running water, residual water and heat administration, improving and modernization of access roads) in order to increase tourists’ comfort according to the required standards and to facilitate the accessibility to and from the respective areas, developing and diversifying technical, commercial and sports facilities. Among all these marketing activities for promoting the area at a national and European level as an organic, unitary product, other measures must also be enforced, taking into consideration the foreign tourists’ tendencies of concentrating on nature and unmodified values of rural communities. Individual initiatives have drawn the local and national authorities’ attention on the potential of rural tourism as a driver for local economy. Sustained efforts are necessary in order to increase the attractivity potential and an analysis of criteria that must be met in order to increase the entire potential of the discussed areas.

6. Conclusions

Tourism is a phenomenon of the modern society which responds to people's needs to cut loose from the tumultuous everyday life. The global economic process has suffered many changes, and the local communities must adapt to current challenges in order to maintain and develop their economic and social competitiveness. Rural areas must serve, in their own advantage, to people's needs to spend their vacations away from crowded urban areas. Lately, the potential of rural areas has been recognized, fact that is owed to nature, traditions and habits, kept by the rural communities, to the quiet and unmodified environment.

The rural space sets its geographical components at people's disposal, and in exchange, people model it according to their needs, filling it with anthropological creations. The rebirth of rural tourism happened thanks to the need of a new form of spending vacations, in a quality, pure environment and in new touristic destinations; traveling at the end of the week has become as important as annual ones, the European Union has acknowledged the importance of rural tourism and has encouraged its development, and it is considered the key point for the development of local and national economy.

The significance of rural tourism is acknowledged at an European level through the regional development policies of the European Union, combined with the national policies of member states, which encourage the orientation of tourism towards rural areas, taking into consideration its positive effects and its implications. Thus, thanks to the tourism activities for bringing the natural environment and the cultural and historical heritage in the domestic and international economic circuit, these are directly contributing to the economic development of rural areas.

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Innovation in Public Sector through European Funds: What is the Role of Local Authorities in Regional Development and Implementation of Smart City Solutions in Romania?

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Abstract

21st century is becoming more and more a period of new social, natural, economic and political paradigms, a century of contrasts, disruptive technologies and speed. Thus, there is a growing need for continuous innovation, in all fields, with the support of advanced technologies and concepts. But who will take the main role in implementing long-term solutions, development strategies that are holistic, integrated and relevant for smart and sustainable regions? Lately, more and more local public authorities in Romania are interested in developing smart solutions that improve the quality of life and enhance the possibility of (re)using available resources, thus contributing to regional development through accessing available European funding. At the same time, we observe there are enough public funds available to implement such smart solutions and public administrations are forced to use their experience and innovative capacity in order to attract funds to develop smart projects.

Key words: regional development, smart city, European funding, public sector, innovation

J.E.L. classification: H83, O31, O38, R11

1. Introduction

In the literature specialized on debating concepts such as innovation or smart city several opinions have crystallized calling for a more systemic approach to these concepts, beyond the use of ICT and other disruptive technologies, taking into account human factors as well (Pultrone, 2014; Albino et al., 2015). As Nam and Pardo (2011) suggest, smart city solutions should be based on integrated services, not system-driven, i.e. a smart city project should address existing problems in a city without the belief that only the use of ICT will automatically produce smart city solutions or sustainable development. Moreover, they point out that 85% of public IT projects fail mainly due to non-technical factors, such as organization, policy and management. As a result, these considerations require public policy initiatives aimed at focusing efforts on addressing and remedying possible uneven results of ICT applications and use (Walters, 2011).

In this context, the role of local public authorities in the development of innovation, sustainable development and smart city projects is crucial, firstly because they represent the actors initiating smart city initiatives and development strategies and, secondly, because innovative solutions cover many areas and therefore require an integrated approach. Equally, local authorities are the actors that create the societal and institutional context, acting as orchestrators with executive authority and policy planning competences (Nam and Pardo, 2011; Zygiari, 2013; Neirotti et al., 2014).

It is a well-known fact that EU funded projects have an impact on the organizations that implement them, on the stakeholders, as well as on the regions in which they are implemented. These projects aim at developing regions and achieving the European goal of sustainable

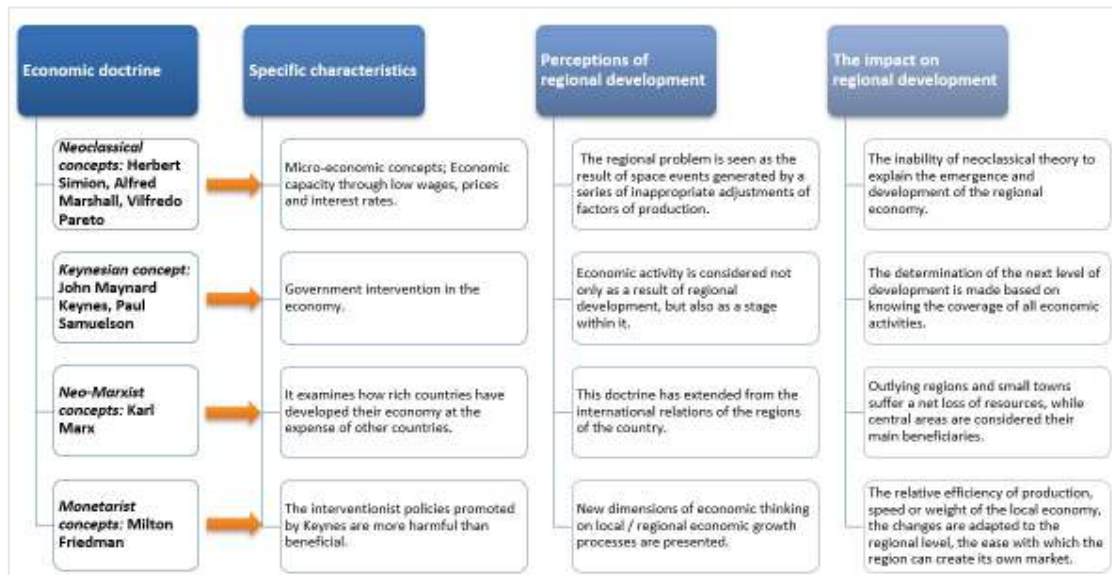
development. Given the large number of investments initiated by projects in the European Union, it is necessary to assess the impact of these projects on the local and regional economy, respectively, to analyze the effects created to verify whether the proposed objectives have been achieved or not, especially since through these projects initiated mainly by local authorities, a smart sustainable development is being promised.

2. Theoretical considerations on regional development

To understand the concept of regional development, we must first analyze the term *region*. Some theorists claim that the region is only a territory located in a certain area, while others are based on more explicit theories and definitions. Christaller (1933) and Losch (1954) defined the "region" by providing a suitable approach of the concept. Thus, in their view, regions are seen as systems based on a hierarchy of places or cities. A region consists of a few large cities and numerous small towns and the order of a city seems to be determined by the number of goods and the size of the market offering them. Also, it is important to notice that importing and exporting goods is a frequent practice among larger and smaller cities. Hoover and Giarratani (1985), in turn, consider that activities within a region circle around a predominant node as opposed to the peripheral surrounding area. This popular theory of the nodes is later developed by Karl Fox's idea of the "functional economic zone" (Fox, 1996). This whole concept provides in our opinion a good framework for defining economic areas.

In order to have a better view on the complexity of regional development, it would be useful to acknowledge that there are some economic doctrines that influenced the phenomenon of regional development, as illustrated in Figure no. 1.

Figure no. 1. Economic doctrines and their influence on regional development.



Source: authors' own elaboration.

Based on Figure no. 1, we can observe a vision of economic development, which is different for each researcher, and the complexity of the theory depends on the factors underlying its development. Based on the information currently available, we can say that regional development focuses on the economic mechanisms of self-regulation, complemented by state interventionist policies and the ability of regions to be competitive.

3. Research methodology

The aim of the research is to conduct an analysis on the role of local public authorities in attracting EU funds and thus contributing to the regional development and implementation of smart city solutions. In this context, one of the research methodologies is represented by the analysis and presentation of some theoretical concepts regarding regional development or European Union financing programs. The main method of documentation was represented by the content analysis, to which the authors added the comparative method used to highlight the characteristics of the analyzed concepts and notions. Also, documents and statistics regarding the absorption of EU funds in Romania were consulted and analyzed. Conclusions were formulated with regards to the innovation in the public sector as a prerequisite for further regional sustainable development and ensuring the durability of smart city projects.

4. Opportunities for local authorities to finance projects through EU programs

European regional policy promotes the economic development of the poor regions of the Community. Participating in reducing disparities in the economic development of individual regions is seen as one of the tasks of the European Union. In paragraph 2 of Article 158 of the Treaty establishing the European Community states as its main objective the reduction of disparities in the development of the various regions and the delay of the poorest of them. At present, equalization of regional development is an important aspect of the European market economy and determines the EU's regional development policy. To create equalization of regional development, several funds are available, namely: the European Social Fund, the European Regional Development Fund and the Cohesion Fund. These represent EU's financial instruments for implementing regional policy, which in turn has as objective the reducing the development gaps among different regions and EU member states. In this context, it is safe to conclude that the funds have an enormous impact on strengthening economic, social and territorial integrity.

The use of regional policy instruments depends to a large extent on the potential of the regions, on the territorial differences in their development, on the particularities of regional issues, on the level of decentralization of public administration and on regional autonomy. The characteristic of EU regional policy is the strengthening of the homogeneity of national policy, the convergence of principles and mechanisms for its implementation, increasing the central government's initiative to reduce regional disparities, giving regional investment preference over regional incentives, focusing on capital investment and employment. for work.

EU Structural Funds include:

- European Social Fund, the oldest of the Structural Funds, set up in 1958 under the Treaty of Rome. It has the status of the EU's main financial instrument in the field of employment.
- The idea of supporting underdeveloped regions in terms of scientific and technological progress has quickly materialized. In 1975, the European Regional Development Fund was set up in order to develop the infrastructure of the regions, to stimulate job creation, to support and also to boost local projects, etc. It is no doubt that the European Regional Development Fund contributes to reducing disparities among regions because, among other, it aims at financing the development of transport and communications infrastructure in EU regions, such as construction of roads, highways, etc.
- The last decade of the twentieth century is characterized by the intensive improvement of regional development policy. Cohesion Fund has been set up under the EU Treaty, better known as the Maastricht Treaty (1992). The Cohesion Fund was set up in 1993 to further strengthen the Community's structural policy. The fund's task is to finance the development of transport infrastructure and environmental projects.

About 35.7% of the EU budget in 2007-2013 was allocated to support cohesion policy and regional development. For the period 2007-2013, the European Council approved a budget for structural programs of 347 billion euros. The funds are divided into three main financial instruments: the European Regional Development Fund, the European Social Fund and the Cohesion Fund. The activities of the European Regional Development Fund focus on four

priorities: innovation and research; development of digital technologies; support for small and medium-sized enterprises; low carbon economy.

5. Current status and perspectives on the implementation of European projects in Romania

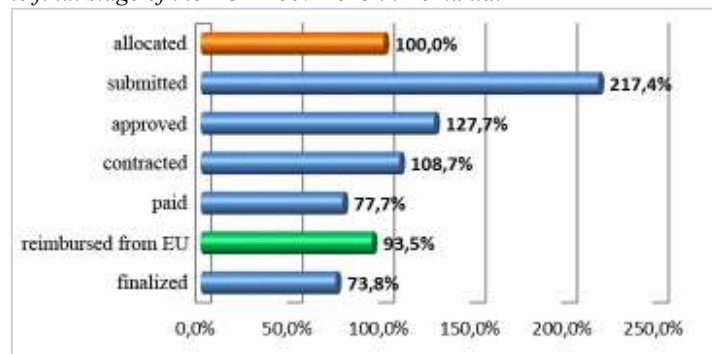
Given the crucial role played by the local public authorities in the process of EU funds absorption and the design and implementation of smart city solutions, we consider important that we analyze the situation in Romania of European grants, since they have proven their benefits to developing some regions of Romania and have become an engine that has launched many smart initiatives in cities such as Alba Iulia, Cluj, Oradea, Bucharest and Timisoara.

The strategic programs on smart cities were initiated in Romania in close connection with programs run by the European Union. Dedicated transnational bodies (e.g., European Union funding programs and grants) have played a key role in what type of projects have been carried out in the country and in what timeframe they have reached the expected results. In particular, the Regional Operational Program (both the one from the previous programming period, 2007-2013 and the one still in implementation, ROP 2014-2020), which was also initiated by the European Union, had a key role in the projects developed by cities in all development regions, resulting in smart city solutions. European Union programs have created the possibility for local authorities to apply for funding in the area of smart cities, but also to enhance sustainable development. The programs also indicated specific objectives of smart sustainable cities, leaving some freedom to the regions, while giving priority to areas (such as, for example, Internet-based infrastructure and technologies). In addition, we believe that EU funding programs have contributed (at least in Romania) to fragmentation in regional development, as many of the projects have been won and implemented by experienced local authorities, and they have been carried out exclusively over a specific period of time.

The general objective of the Regional Operational Program 2007-2013 (ROP) was to support an economic, social, territorially balanced and sustainable development of Romania's regions, corresponding to their specific needs and resources, by focusing on urban growth poles, by improving infrastructural conditions and business environment to make the regions of Romania, especially the ones left behind, more attractive places to live, visit, invest and work. Main beneficiary of ROP 2007-2013 was represented by the public sector, that is local public authorities. This is a clear indication in our opinion that the main actor with responsibilities in regional development in Romania is the public administration.

The value of the community funds (ERDF) allocated to the ROP for the period 2007-2013 was 3,966,021,762 euros, and at the end of October 2016 the stage of implementation of the program was as follows:

Figure no. 2. The final stage of the ROP 2007-2013 in Romania.



Source: ROP 2007-2013, Final Implementation Report (2017).

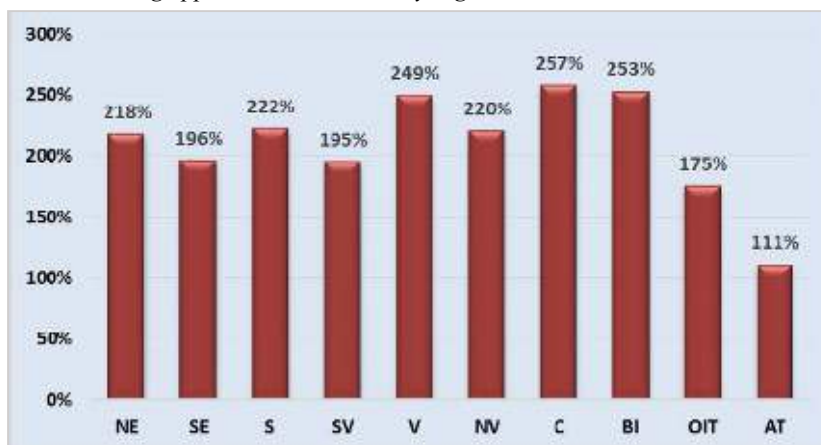
The analysis of the ratio between the most developed and the least developed region, in terms of GDP / inhabitant, shows a constant increase of up to 1: 4 in the period up to 2008, followed by a sharp decrease in the range of 1:3.8 - 1:3.9 during the years 2009-2010, so that in 2011 is registered

a significant increase, representing the double of the previous fall, with 1:4.26. Finally, in the period 2012-2014 there is a return in the range 1:3.8 - 1:3.9.

We thus observe that, when compared to the trend of constant growth in regional disparities, registered before 2008, the period between 2008-2014 is characterized by a relative stagnation of regional disparities in the range 1:3.7 - 1:3.9.

At the regional level, there are different levels of demand for funds allocated, of approximately or even over 200% in all eight development regions of Romania, which highlights the high needs that exist in all development regions in the areas financed by the ROP, which recommended continuing their funding in the 2014-2020 programming period as well.

Figure no. 3. Financing applications submitted by regions within the ROP 2007-2013 in Romania.



Source: ROP 2007-2013, Final Implementation Report (2017).

A total of 4,554 financing contracts were signed, totaling 6.96 billion euros, of which the value of the ERDF represented 4.31 billion euros (contracting rate of 108.7%).

Table no. 1. Degree of contracting funds through ROP 2007-2013 by domains and regions.

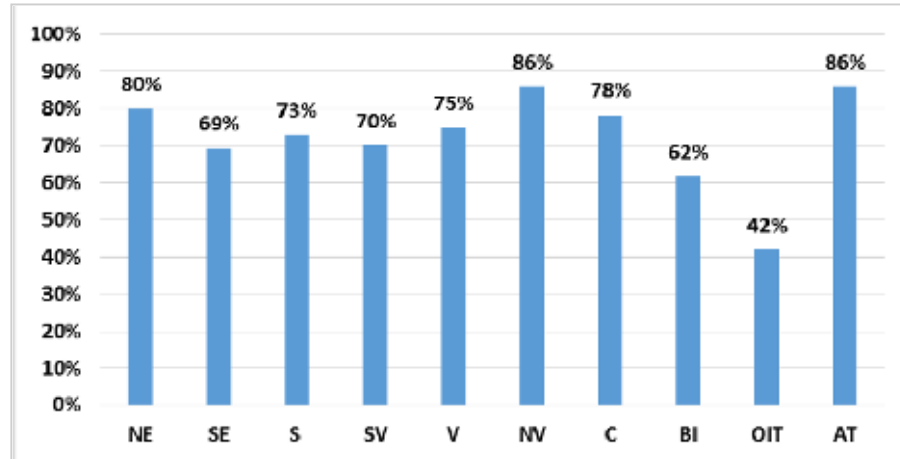
Domains of intervention/ Region	NE	SE	S	SV	V	NV	C	BI	ROP
Growth poles	96%	94%	103%	99%	86%	105%	108%	NA	99%
Development poles	110%	133%	109%	112%	123%	154%	101%	NA	120%
Urban centers	164%	111%	140%	136%	136%	100%	159%	104%	128%
Energetic efficiency	10%	16%	17%	36%	111%	167%	89%	820%	125%
Road infrastructure	104%	109%	122%	124%	129%	131%	116%	110%	118%
Health infrastructure	125%	137%	101%	94%	127%	112%	112%	91%	111%
Social infrastructure	110%	127%	116%	113%	112%	124%	116%	106%	116%
Emergency equipment	106%	65%	113%	101%	103%	117%	115%	132%	105%
Educational infrastructure	120%	103%	130%	105%	125%	177%	91%	68%	117%
Business infrastructure	91%	43%	83%	43%	99%	91%	72%	115%	79%
Industrial sites	NA	NA	NA	NA	78%	NA	119%	NA	87%
Small companies	110%	106%	119%	94%	101%	97%	109%	92%	105%
Cultural heritage	98%	119%	98%	105%	87%	108%	103%	92%	102%
Accommodation and tourist leisure	99%	93%	78%	119%	79%	140%	109%	87%	101%

Total per region	108%	104%	111%	106%	110%	122%	110%	113%	110%
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Source: ROP 2007-2013, Final Implementation Report (2017).

As for the completed projects, they totaled 4,491 completed projects, with a total eligible value of EUR 3.67 billion, of which the ERDF contribution was EUR 2.93 billion (representing 74% of the ERDF allocation of the ROP).

Figure no. 4. Financing applications finalized by regions within the ROP 2007-2013 in Romania.



Source: ROP 2007-2013, Final Implementation Report (2017).

At the regional level, the North-West, North-East and Central regions stand out, given that all regions recorded values of over 60%.

The strategic vision regarding the development needs that the ROP 2014-2020 must meet is based on the analysis of the economic and social situation of the Romanian regions (in the National Strategy for Regional Development 2014-2020), which led to defining some directions of strategic action mentioned by the European Commission regarding the financing from the European Structural and Investment Funds, through the European Regional Development Fund for the period 2014-2020:

- Innovation and research;
- Digital agenda;
- Support for small and medium enterprises (SMEs);
- Low carbon economy.

It is with this programming period that Romania enters a stage of financing that is superior to the one before, that is projects implemented by local authorities are meant to ensure a smart sustainable development with innovative solutions and care for natural resources. Technology is a main focus and its role is to support beneficiaries in proposing ambitious projects and initiatives for a smart future.

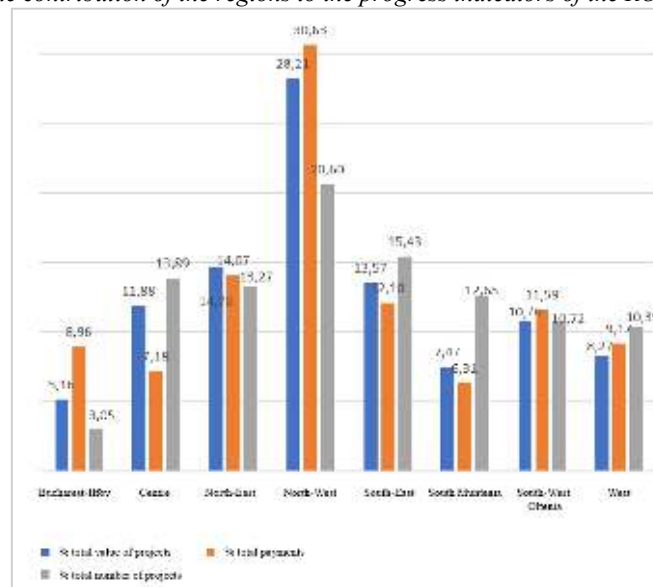
Regarding the current programming stage, with a total allocation of 8.384 billion euros, out of which 6.860 billion euros EU contribution, the Regional Operational Program 2014-2020 is the main instrument for financing regional development policy in Romania with still local public authorities as main beneficiaries. The objective of the program is the balanced development of the territory, respectively the reduction of the development gaps at the level of the 8 regions of Romania.

The situation of progress in the implementation of the ROP 2014-2020 shows that at national level there are a number of 3,572 projects contracted, respectively completed or being implemented (without Technical Assistance priority), amounting to 17.627 billion lei EU contribution (about 3.843 billion euros), the payments made to the beneficiaries amounting to about 2.475 billion lei (respectively 538 million euros). The analysis of the indicators referring to the number and value of contracted projects, as well as to the value of payments made to beneficiaries shows that the

situation of attracting ROP funds at regional level allows the identification of three categories of regions for each indicator: the "above average" category, which includes the regions with a very high level of each indicator analyzed; the "average" category, which includes regions with similar values and relatively balanced performance across all indicators; "below average" category, which includes regions with relatively lower values than other regions and relatively lower performance. Thus, the North-West region stands out as the leading region, with the number of projects, the values of projects and payments made higher than the rest of the country, concentrating between 30% and 20% of the total in the country on each indicator. The North-East, South-East and South-Muntenia regions are a group of "average" regions, with the rest of the regions making relatively lower progress, especially in terms of payments to beneficiaries.

The findings suggest the existence in Romania of a process of initiation and implementation of smart city initiatives funded by EU projects in which some factors play an important role. For example, the already existing economic disparities between the development regions in Romania create the context of different opportunities for local municipalities with more or less sufficient funds for the implementation of such projects. In addition, disparities in the economic development of different regions create a chain in the process of implementing smart city projects that work in favor of the most experienced local actors in developed regions: the ability to attract major private companies to invest in public-private partnerships for such of initiatives are not evenly distributed, and human resources are, moreover, concentrated in the most developed regions.

Figure no. 5. The contribution of the regions to the progress indicators of the ROP 2014-2020.



Source: Analysis of the ROP implementation system (2019).

Regional disparities and differences in economic development between development regions favor the emergence, implementation and success of smart city initiatives in the three most developed regions of the country: Ilfov Region, North-West Region and West Region, while the other regions are left behind. In our opinion, EU funds have come to support the already innovative and experiences local public authorities to implement smart projects for citizens and other stakeholders. What is left for academia and experts in regional development to examine whether the new programming period will carry on to accentuate regional disparities since it is already ruled that there will be as many ROPs as regions in Romania, with distinct allocation and adjusted estimated results according to the level of needs and development reached so far.

6. Conclusions

This research has unequivocally showed that the public authorities have a fundamental role to play in the long-term regional development and implementation of smart city solutions, with impact on both economic and social fields. Undoubtedly, the development of smart city solutions is more successful, and the urban ecosystem has a chance to evolve once the receptivity of stakeholders to the impact of digitalization and the exponential growth of public data is ensured. As already mentioned, this study intends to cover regions in Romania with cities that are transforming and / or have the potential to become smart cities. There are many key actors and roles involved in the development of smart cities, however, this study only includes the perspective of local public authorities, since they are the main beneficiary of EU funds meant for regional development in Romania in several fields that do no longer cover basic needs of citizens and communities, but require innovation, access to technology, digitalization, research and low carbon economy. With new EU financing programs for the period 2021-2027 approaching, we should start accepting that regional development is increasingly determined by social, cultural, spiritual, environmental, informational, technological and other factors, i.e., non-economic transfers.

7. Acknowledgement

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Macroeconomic Impact of Natural Disasters in Albania

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Abstract

This paper has aim to take a general look at the impact that natural disasters have on a country's economy. Further expanding concretely in the impact caused by the earthquake of November 26, 2019, in the economy of Albania. This paper studied macroeconomic indicators over the past few years, forecasts for their progress before the natural disaster, and how they are projected to change after that. Damages and losses will be analyzed according to specific sectors of the economy as well as the impact on the main affected municipalities. The paper presents the authors conclusions and recommendations regarding the actions to be taken to help with the least harmful way of the earthquake.

Key words: macro, impact, natural, disaster

J.E.L. classification: E01, E10, E37, F62, F64

1. Introduction

Macroeconomic impact is also called secondary impact (Benson and Clay 2000: 12, Murlidharan and Shah 2003: 21f) includes impact on economic variables such as: Gross domestic product, consumption, inflation, debt level, reallocation of state resources for assistance and reconstruction (Mechler 2004a: 36). Macroeconomic impact is a matter of the impact of economic performance as a whole, both for short-term and long-term periods. However, the net effect on macroeconomic variables from a catastrophe is the final product of direct and indirect effects: (Rose 2004: 15, ECLAC 2003: 71, Otero and Marti 1995: 16-18). In addition, the magnitude of the positive or negative effects on macroeconomic performance cannot be directly determined: (Albala-Bertrand 1993a: 57ff).

Albania is a country exposed from time to time to natural disasters, such as earthquakes, floods, droughts and landslides. The threats posed by the above catastrophes can result in morbidity or loss of life among people, damage and destruction of property, damage to infrastructure and economy, environmental damage and damage to the agricultural sector. The cost of damage has a negative impact on the country's macroeconomic situation. Albania ranks 41st in the world for vulnerability to landslides, 43rd for earthquakes and 58th for drought risk: 2009 Global Assessment Report. Albania is also exposed to a number of environmental problems inherited from the time of the centralized economy. These include bio-diversity damage, soil erosion, specific sectorial problems (water, air and soil pollution), and the continued existence of high-risk areas related to environmental pollution. Currently, these problems come as a result of the lack of implementation of institutional and legal systems.

2. Literature review

Influence on a country's economy. Natural disasters can have an impact on the overall performance of an economy in a state (example: negative effects on growth rates, balance of payments or debt levels) (Hochrainer 2006. page 33) In most cases, the catastrophe must strike with

considerable force to have an impact on performance, but it happens that even if only the main activity of an economy is hit, which would bring a "negligible" loss for a powerful state, can affect macroeconomic performance (JM Albala Bertrand). Natural disasters cause considerable budgetary pressures, including the narrow and short-term fiscal impact and the country's development complications in a broader framework and long-term period (Benson and Clay 2003). However, some economists allude to the opposite effects of these catastrophes, even arguing that catastrophes can be a positive shock. This view has been put forward by Stewart and others (2001: 15-16): "The developmental costs of war are greater than the destruction associated with natural disasters, for two reasons. First, natural disasters tend to destroy homes and infrastructure, but have less of an effect on productive capacity and do not affect human capital, labor power (unless there is a loss of life, of course). "Second, while social and organizational capital remains untouched and natural disasters tend to be relatively short-lived, investment makes the country recover as quickly as possible, and may even have a multiplier effect on the economy as a whole." This argument relies heavily on a multi-state empirical analysis of the impact of single catastrophic events on overall levels of economic growth and other macroeconomic factors undertaken: (Albala-Bertrand 1993). From his several-year study he concluded that GDP is not affected, and that GDP growth is easily positive stimulated by these events. A theoretical explanation for this contradictory finding at first glance has been given by (Aghion and Howitt,1998) in an endogenous model of growth through a process of destruction.

Meanwhile, (Noy 2009) undertook another study in many states using Emergency Data Database (EM-DAT) data for a number of 109 states in the period 1970-2003. The results show that in developing countries natural disasters have a negative impact on GDP growth of approximately 9%. (Hochrainer 2009) treated it as a projection of GDP and then compared it to the actual value of GDP after the disaster. Based on his model of 225 major natural disasters from 1960 to 2005, he found that the negative impact on GDP lasts up to 5 years, with an average reduction of 4% compared to a base of 5 years after the disaster. Another study (Benson and Clay, 2004) highlights a major impact on macroeconomics from a natural disaster depending on the size of the country which is the center. So, if the event takes place in a large, urbanized center or in the metropolis, it will have major economic consequences. Assessing the macroeconomic impact includes taking a different perspective and assessing the aggregate impact on economic variables such as gross domestic product (GDP), consumption and inflation as a result of disasters, and reallocating government resources for facilitation and reconstruction efforts. (ECLAC 2003, Chhibber and Laajaj 2008) consider that an earthquake can most likely result in "build-back" or "build-back-better" because the reconstruction considered can attract prosperity and eventually lead to technological change.

Table no. 1. Impact on macroeconomic indicators of a natural disaster

Macroeconomic Indicators	Expected change
GDP	Immediate decline in GDP growth in the year the event occurs. Growth in GDP growth next year. Slowdown in the second and / or third year
Agricultural Sector	Significant decline in production (in the case of hurricanes, floods or landslides).
Processing Sector	Decreased activity due to interruption of transport; reduction of production capacity.
Service Sector	Decline due to suspension of transport and payment system.
Export of goods	Reduction of the growth rate in the year of the event. Next year it returns to previous levels. In the following years it is a continuation of the next year.
Import of goods	Significant increase in the growth rate in the year of the event.

	Return to pre-disaster level in the following year. In the following years a further decline, most likely caused by declining revenues.
Gross Fixed Capital Formation	Sharp increase in the year after the event.
Inflation rate	Low growth caused by cessation of production and distribution and increase in transport costs.
Public finances	Deficit deteriorates as a result of lack of tax revenues and increased public spending.
Trade balance	Deficit as a result of declining exports and increased imports, associated with weakening production capacity and strengthening public and private investment in reconstruction.

Source: Adapted from Hoch Rainer, 2006 World Bank document. (GFDRR, May 2015)

Impact on the Albanian economy. Albania's economy and population are exposed to earthquakes and floods, with earthquakes that have a higher risk of a more severe impact, but with a lower probability of event (GFDRR 2015). The average annual earthquake-stricken population in Albania is about 200,000, and the average annual GDP affected is about \$ 700 million. The average annual earthquake and capital loss caused by earthquakes is \$ 50 million and about \$ 100 million World Bank document. (GFDRR, May 2015), respectively. Victims and capital losses caused by an earthquake of higher intensity but less frequently may be substantially greater than the annual average.

Such was the earthquake of November 26, 2019, with a magnitude of 6.3 on the Richter scale, with an epicenter 22 km from the city of Durres. The earthquake has been described as the strongest to hit Albania in the country in 30 years. It caused extensive damage in 11 municipalities in the country, including the two most populous and urbanized (Tirana, Durres). The most affected municipalities were: Shijaku, Durrës, Kruja, Tirana, Kamza, Kavaja, Kurbini, and Lezha. As a result of the catastrophe, 202,291 people were affected, directly and indirectly, 51 of whom lost their lives tragically. Moreover, 17,000 people lost their homes as a result of the collapse.

3. Research methodology

This paper is based on data published by the European Commission regarding the situation in Albania before and after the earthquake Albania Post Disaster Recovery. Specifically, the overall impact on the economy and the concrete impact on macroeconomic factors have been analyzed and brought. The data published by this report were specifically analyzed, and then processed to compile the graphs in this paper and to construct the tables.

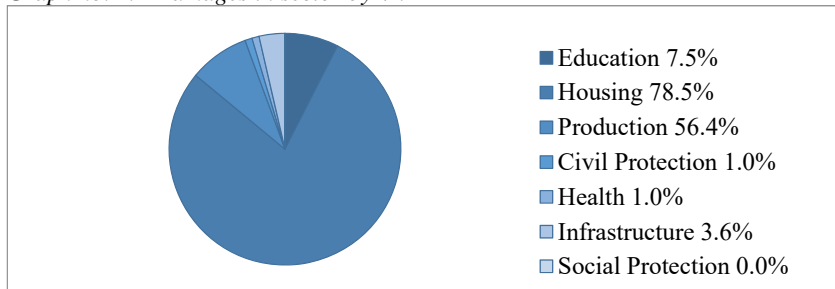
The publication of the World Bank regarding the countries at risk for floods and earthquakes, in which Albania is also involved Country Risk Profiles for Floods and Earthquakes, has also been taken into account. Based on the expected impact of disasters in our country, data have been presented on macroeconomic factors and how they are expected to change after the earthquake. The variety of data obtained from the reports of the World Bank and the European Commission, makes this paper even closer to the reality in which we are and creates a higher reliability

4. Findings

The Albanian economy has seen a significant slowdown in 2019, with more Albanians leaving the country and fewer returning within borders. A problematic year, with increased pressures and a halved economic growth, this is because the country was characterized by natural disasters. Regarding the impact, it will have on the economy, it is predicted that the negative effects will extend for a medium to 3-to-5-year period.

4.1 Total losses and losses. The estimate shows that the total effect of the disaster in the 11 affected municipalities is about 121.21 billion ALL (985.1 million Euros), of which 103.84 billion ALL represent the value of destroyed physical assets and 17.37 billion ALL refer to losses.

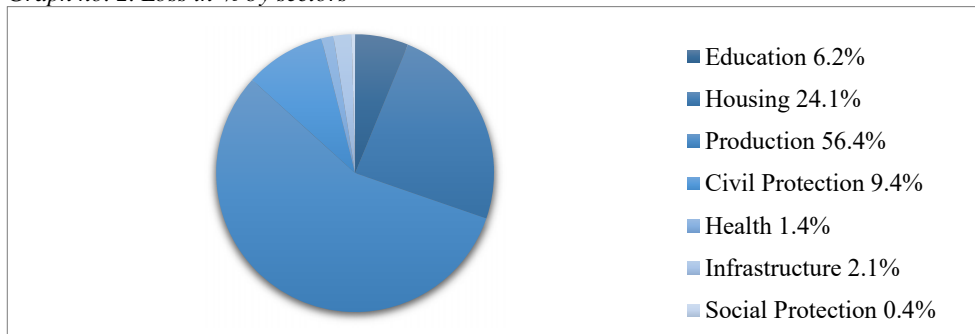
Graph no. 1. Damages in sector by %.



Source: European Commission

Numerous damages were caused in the Housing sector (78.5%) followed by the Production sector (8.4%) and the Education sector (7.5%). Referring to losses, the Production sector holds the highest percentage (56.4%), followed by Housing (24.1%) and Civil Protection (9.4%). Referring to the ownership of the effects, 76.5% are private and 23.5% public.

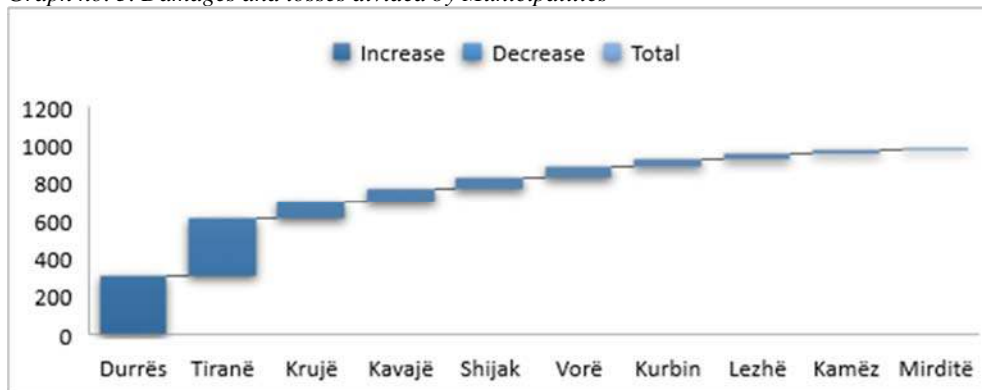
Graph no. 2. Loss in % by sectors



Source: European Commission

The total value of assets destroyed or damaged in the 11 affected municipalities turns out to be about 843.9 million Euros (103.8 billion ALL), and the total value of losses is estimated at about 141.2 million Euros (17.4 billion ALL). Both give us a total of 985.1 million Euros (121.2 billion ALL).

Graph no. 3. Damages and losses divided by Municipalities

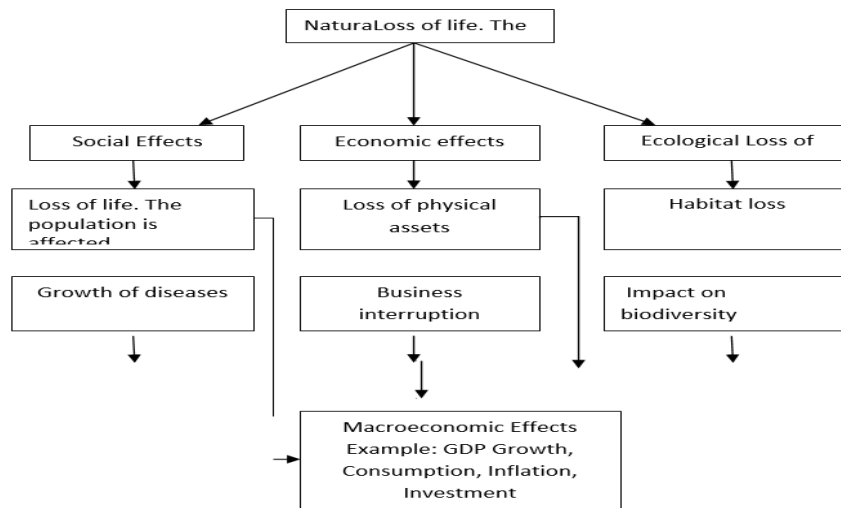


Source: European Commission

According to the above data, we observe that the most damaged municipality is the Municipality of Durrës, with an estimated damage of 310.2 million euros, followed by the Municipality of Tirana, with an estimated damage of 303.5 million euros. Translated as a percentage, the most urbanized municipalities (Tirana and Durrës) together account for the vast majority of damages and losses (62%). The rest is supplemented by the other 9 municipalities affected by the disaster.

4.2 Macroeconomic impact. The quake is estimated to have caused an impact which is equivalent to 6.4% of GDP in damage and 1.1% of GDP in loss. Damage accounts for about 26.4% of gross fixed capital, implying a limited capacity of Albania to achieve full reconstruction in the short term.

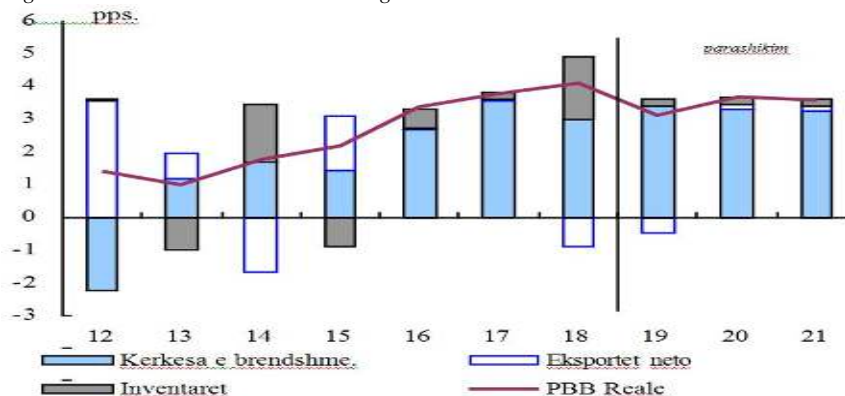
Figure no. 4.2.1: The state of the economy before the catastrophe,



Source: Authors' own contribution

After a 4.1% expansion in 2018, annual growth was projected to slow to 2.9% in 2019. A drastic drop in rainfall in the first half of the year halted the production of electric energy in the middle and was projected to bring a decrease of GDP growth by half a percentage point. In addition to rising political tensions, rising domestic demand led to an increase in 2019. Net exports reduced growth by 0.4 percentage points, as "sleeping" growth among market partner's limited traditional exports, while energy exports fell. Job creation, higher wages and consumer credit continue to drive private consumption, which contributed 2.1% to GDP growth.

Figure no. 4.2.2 Albania - Real GDP growth and contributions



Source: European Economic Forecast - autumn 2019

Meanwhile, investments increased thanks to better conditions for credit and government spending on infrastructure, contributing 0.5% points to GDP growth. Employment continued to rise, while unemployment reached a record low of 11.4% in the third quarter of 2019. Inflation decreased compared to the end of 2018, thanks to low inflation imported by Albania's trading partners and the appreciation of the Albanian currency (Albanian currency in Albanian language, ALL). Income tax on personal income and social security contributions flourished easily, supported by higher wages and efforts to reduce informality. Prior to the quake, the budget deficit was projected to reach 1.9% of GDP, while public debt was projected to fall to 66% of GDP in 2019. Energy shock and declining foreign demand exposed the country's external weaknesses. As a result of the energy shock, the current account deficit was expected to increase from 6.8% of GDP in 2018 to 8% in 2019.

The impact of the disaster on GDP. The losses caused by this earthquake will slow economic growth by 0.5% in 2019, and 0.3% in 2020. Calculations for Damage Assessment and Losses show that tourism and real estate activities have been hit hardest by the earthquake; and significant damage has been caused to education, health, manufacturing, and trade. The assessment of the impact on GDP growth is based on the calculation of production losses at the sector level, taking into account the low economic income from other sectors. In nominal terms, GDP in 2020 is estimated to decrease to 12.06 billion Albanian currency (98 million Euros). The quake is expected to hit net exports strongly, mainly through declining tourism revenues and imports, with rising imports of construction materials. The decline in wealth in Albanian families in cooperation with the reduction of employment will have an impact on private consumption. On the other hand, repairing the damage and rebuilding will most likely lead to a larger investment increase than previously planned. The earthquake is thought to have no significant impact on inflation, given the low inflation rate in Albania and its trading partners.

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The impact of the earthquake on the Balance of Payments. Assuming extensive funding in the form of government grants for reconstruction in the amount of ALL 7 billion (EUR 56.9 million) in line with the approved 2020 budget, the earthquake is projected to be a moderate impact on the current account deficit in 2020. The current account deficit is thought to be 7.3% of GDP from a pre-earthquake 7.1% basis, as the amount of grants partially offsets the expansion of the trade deficit.

The trade balance ratio - GDP is expected to expand to 3.8% (compared to the base), which will be partially offset by an increase in current transfers by 0.1% this year (mainly official grants, while remittances are projected to remain at the same level). Exports are projected to decline as a result of the loss of foreign visitors - estimated at around 5.1 billion Albanian currency (41.3 million Euros), and production. Imports on the other hand are expected to increase by 38 billion Albanian currency (308.8 million Euros) as a result of the emergency response and recovery activities in 2020.

Macroeconomic indicators	2018	2019	2020	2021		
Period	current	Calculations before the earthquake	Calculations after the earthquake	Anticipation before earthquake	Prediction after the earthquake	Series Prediction 1/2021
Production and prices						
GDP (mil EUR)	12,783	13,741	13,733	14,420	14,322	15,080
GDP growth rate (%)	4.1	2.9	2.4	3.4	3.2	3.6
Inflation (%)	2.0	1.4	1.4	2.1	2.1	2.4
Deflator (%)	0.9	0.8	0.8	1.1	1.1	1.7
Fiscal Indicators						
Total income (mil EUR)	3,656	3,847	3,759	4,042	4,101	4,177
Total income (% of GDP)	27.6	28	27.4	28	28.6	27.7
Tax revenue (mil EUR)	3,286	3,567	3,498	3,739	3,740	3,938
Non-tax revenue (mil EUR)	370	280	260	302	360	239
Costs (mil EUR)	3,732	4,115	4,026	4,277	4,425	4,463,82
Costs (% of GDP)	29.2	29.9	29.3	29.7	30.9	29.6
Foreign Sector						
Current account balance (mil EUR)	-861	-1,102	-1,102	-1,018	-1,042	-1,086
Exports (mil EUR)	4,059	4,253	4,253	4,724	4,682	4,886
Growth rate (%)	11.1	4.8	4.8	11.1	10.1	4.4
Imports (mil EUR)	5,819	6,363	6,363	6,694	6,733	6,801.30
Growth rate (%)	7.8	9.4	9.4	5.2	5.8	1.0

Table no. 2 Macroeconomic Indicators. Source: European Commission

Source: European Commission

5. Conclusions and Recommendations

The year 2020, in which we are currently, was expected to be a difficult year for the Albanian economy. Amid efforts and plans to rebuild homes damaged by the quake, the "COVID-19" pandemic crisis has put further pressure on the Albanian government's budget. Despite this and the government's plan to recover the economy from this crisis, we must not forget the natural disaster which caused an economic panic in our country. Another factor that has negatively affected the country's economy this year is the lack of major projects such as the TAP Pipeline or the Devoll cascade, which is nearing completion.

Reconstruction of dwellings should be the first priority, as this sector, housing has been the most affected of all sectors. It remains to be seen in the coming weeks about the government's plan to revive tourism, not only after the earthquake, but also after the pandemic.

The recommendations of this study regarding the issue of natural disaster of November 26, 2019, would be the following:

- The most important thing is to start rebuilding the apartment as soon as possible.
- To secure property from these disasters I would suggest the application by the government of compulsory property insurance. (Here we may encounter problems, as this would lead to an increase in the basic property insurance fee).
- The government should devise a specific plan to help provide families with economic hardship (as not all families can afford it).
- A key point in which I think there is a need for improvement in our country, is transparency with the funds and grants received at the Donors' Conference, or gift funds benefited from private foundations associated with this disaster.
- I would suggest setting up an "agency" to oversee construction within permitted standards and basic construction norms. It should especially be applied to multi-store buildings and near the most vulnerable seismic areas.
- Review and amendment of the Fund for Civil Emergencies, in order to successfully cope with natural disasters and the consequences that they bring to the economy of our country.

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Information Systems Models in the Hotel Industry and Effects on the Economy (The case of Albania)

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Abstract

In the framework of this study are initially analyzed the Information systems in the field of hospitality, the development of new innovative systems and the problems encountered in their use. These systems are used for collecting, storing, processing and reporting data in the company, serving in daily operations, in the decision-making process, planning, etc. The tourism sector, which is entering the main topic of economic, social and national development of our country, uses different information systems, which help managers in their main task, that of decision-making. This study aims to empirically analyze the importance of information systems in decision making in hotel companies in Albania, through the perception of managers of three levels. The study also provides a theoretical conceptual model for the importance of Information Systems in decision making in hotel companies in Albania, a model based on the functionality of information systems used by these companies and how they are perceived by managers.

Key words: MIS, hotels, systems, models

J.E.L. classification: Q55, Z31, Z38, Z31, Z32

1. Introduction

Today's global environment is competitive not only for the company but also for its employees, both nationally and internationally. Therefore, the employees of a business should be trained in the use of information technology.

Of course, mastery and mastery in the use of information systems, among other things, provides very fast calculations, for very large numerical volumes, fast and accurate communication and cooperation, within and between organizations, fast and cost-free use of information. Of particular importance in this environment is the ethics of using information, ways to maintain privacy and security, to avoid threats to systems, as well as human error.

The goal of information systems is to make the right information available to the right people, at the right time, in the right amount and in the right format. Undoubtedly applications and information systems will benefit more if you understand the logic on which they are created and if employees are able and have up-to-date knowledge to improve the quality of the company's IT applications through their suggestions. This way they will be more productive and successful.

1. PMS management systems are responsible for managing day-to-day activities such as accepting reservations, canceling reservations and creating daily events or happenings. It is an effective tool to run hotels of any size. In a hotel PMS will take care of the online hotel reservation system and other administrative tasks. So some important functions that will be performed by a PMS software are front desk reception operations, reservations, management channels, housekeeping, price and availability management, payment methods. The hotel's PMS program is also responsible for checking bookings and financial transactions. It also helps to manage housekeeping maintenance and perform HR in terms of functions. Hotel Property Management systems are used by large hotel

chains. With these programs at the reception, hoteliers can check the booking status of the rooms and check the reservations. Using a PMS program in the hotel, hoteliers can also manage back-office operations, food and beverage services, and room rates according to their own standards.

2. Channel Managers - A Channel Manager is a software program that will help hoteliers connect with various agents. So these agents have real-time information about room availability and they are able to resell rooms more efficiently against a commission.

3. Online BOOKINGEngines - These are a special type of hotel information system that help accept bookings directly from the website. It is a necessity and a mandatory component for almost any type of hotel.

4. Pricing tools - Pricing tools help to develop an effective revenue management strategy. This type of information system avoids changing prices manually or calculating the revenue to be generated for each room. In this case these new pricing tools can be used to automate the process.

Hotel management systems modules

1. Dashboard: A friendly and very helpful system is noticed in the hotel management program. The panel provides an overview of all activities taking place at the hotel. This system provides information such as availability, number of check-ins-checkouts, free rooms, staff availability, etc.

2. Online booking support: Online distribution channels help to grow the business, but they come at a cost and that cost increases, as can the percentage increase in commissions. But if in some way a person manages to find the hotel website easily, their direct booking can be realized. Customers do not have time to wait to complete a registration form and wait for a response. An online booking in the hotel billing program will allow the guest to explore different options, check availability, make payment and get confirmation all in one session. Even large hotel chains that have strong relationships with online travel agencies have made a massive push towards the direct online booking engine.

3. Best available prices (bar): Best available rates BAR helps you to control price plans. Using the bar functionality you can manage promotions, employee performance, and can easily respond to market conditions. Your hotel program should be efficient enough to provide BAR functionality based on different seasons ie by setting higher prices in the tourist season seasons and lower price in the less busy seasons. Along with the bar functionality, the billing program makes it easy to change prices and promotional packages. Creating promotional codes and special prices is never lacking through the facilities offered through the above functionalities.

4. Maintenance: Using a reception system one can check the condition of the rooms which must be prepared before the customers arrive. In connection with the maintenance of a hotel management the program keeps future schedules in terms of repair schedules to ensure that plumbing and electrical repairs are carried out effectively and efficiently. The program combines housekeeping and timekeeping by providing guests with all the services and at the same time helps the management so that all efforts are structured in the right direction.

5. Reporting: A reporting module is a must for any hotel management program. There are many reports that are mandatory for a hotel that need to be done every night. These reports are divided into three categories. • Production Reports - This report helps to understand how the online hotel management system is operating according to the rate plan, distribution channel, ADR, and REVPAR calculations. Reports are used to make strategic decisions based on delivery pricing. • Financial reports - They report income, taxes, commissions, net income, etc. This report helps to understand the payment methods and all transactions performed. . • Daily activity reports - The report of customer arrivals, their departures and the number of existing customers in the hotel are the reports which record the traces of the guests and help to lead a smooth operation.

6. Customer database Some of the best online booking systems operate as a basic management system for storing customer data. Customer information stored in the system previously constitutes the real treasure of a hotel. This technique definitely helps in stability and increasing the number of clients. The fact that the client profiles are available helps to keep track of their personal information, which will make them feel more comfortable.

7. Customer communication management The hotel management program should be able to communicate with customers in a structured and professional manner. The hotel requires constant attention to the little things.

2. Theoretical background

In the literature, some empirical studies on the profitability of information systems have been conducted in a specific country while others have focused on a number of countries.

According to: (Whitten, 2001), Information System is an agreement between human, data, processes and interface, which interact to support the day-to-day operations of a business as well as support to solve the problems and decision-making needs of managers and users. In other words, the information system can also be described as the totality of all the tools and methods that provide managers with information to support operations and decision making in an organization.

Kenneth C. Laudon and Jane P. Laudon (2012) have defined information systems as a set of separate components that collect, process, store, and distribute information to support decision-making, coordination, and control in an organization.

Information systems contain information about important people, places, and things within the organization or the environment in which it operates. By information is meant data which is shaped in a form that makes sense and is usable by man. (Laudon & Laudon, 2012). Information systems support efficient business operations, teamwork and enterprise collaboration, or effective business decision-making.

Information technology can change the way business competes (O'Brien & Marakas 2006).

One of the main roles of information systems applications in business is to provide effective support to the company strategy using IT. So to develop products, services and capabilities that give the company a great advantage over the competitors it faces in the global market. Strategic information systems support or in other words shape the competitive position and strategies of an enterprise. Thus, strategic information systems can be any type of information system (TPS, MIS, DSS, etc.) that uses technology to help an organization gain a competitive advantage, reduce a competitive disadvantage, or meet other strategic enterprise objectives (O'Brien & Marakas 2006).

There are numerous studies that have focused on information systems and technology, analyzing the impact that these systems have on entrepreneurship and finding many factors that in some ways are related to entrepreneurship. Entrepreneurs combine several personality traits - innovation, risk-taking, proactivity in the sense of doing the things that need to be done to realize the combination of ideas with taking responsibility for success or failure (Covin & Slavin, 1991; Morris & Sexton, 1996).

IT systems affect products and services, markets, production costs and firm product differentiation. Thus, the success of successful companies depends largely on the implementation and creative use of Information Technologies. (Deans & Kane, 1992, Pearse J. M. 2008) describe information technologies in line with social enterprise as financial levers for sustainable development. Computers and other technologies have found a place in all areas of business, industry, banking, education and governance while (Deans and Kane1992) have found that information technology plays an indisputable role in the success of a company in uncertain economic conditions and turbid.

In conclusion, it can be said that entrepreneurship is the process of creating value by combining a unique blend of the aforementioned concepts, in order to take advantage of an opportunity (Morris & Sexton, 1996). Meanwhile, in different countries studies have been done on the relationship between systems of information and technology and entrepreneurship, where it is worth mentioning the study of [Janson and (Wrycza done in Poland)] who have found a positive relationship with a high level between the use of IT and entrepreneurship in this country.

3. Research methodology

Based on the literature on hotel information systems and profitability in the tourism sector we came to the conclusion that the most important specific factors of information systems are the logic on which they are created and whether employees are able and have up-to-date knowledge.

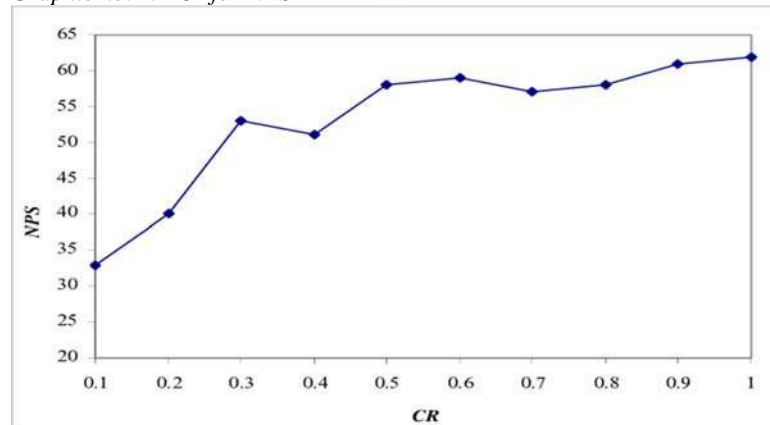
In this paper we will perform an analysis of the RevPar and NPS systems models and their impact on hotels as well as how these management systems are an added value for hotel ventures. Whereas, as performance indicators we have taken (RevPAR) Revenue Per Available Room and NPS. (Net Promoter Score). A high index (on a scale of 0-100) means that the hotel is doing well compared to

the accommodated group of accommodations. Any score of NPS above 0. It means the audience is loyal. Anything over 20 is considered. $REVPAR = ADR$ (Average Daily Rate) / OR (Occupancy Rate) Revenue per available room (RevPAR) is a performance measure used in the hotel industry.

The REVPAR result comes as a proportional result of ADR (average daily room) the average price of rooms per night with the occupancy of rooms in total. RevPAR is also calculated by dividing the total room revenue by the total number of rooms available in the period being measured. An increase in RevPAR indicates an improvement in its occupancy rate and performance RevPAR is a metric used in the hospitality industry to assess a hotel’s ability to fill its available rooms at an average rate. An increase in RevPAR means that its average room level or occupancy level is improving. However, an increase in RevPar does not necessarily mean better performance. Benchmarking, NPS & Custom.

Benchmarking reports against the competition starts by analyzing the NPS and working towards improving it. Custom reports are created based on a wide range of variables, allowing the hotel to identify what customers value most. Guest feedback is used to build a long-term strategy based on the most important variables.

Graphic no. 1. ROI for NPS



Source: Authors’ contribution

NPS surveys can provide a company with valuable customer base knowledge. Some benefits of using NPS include getting of where the company is trending. Although NPS is certainly a high-level metric, it can give an accurate idea of how well the business is performing in the CX sector. A contraction in the number of liabilities and an increase in promoters would indicate that the company is on an upward trend. Conversely, an increase in liabilities or destroyers often provides calls for change, whether in product quality, in the business process, or in any other area. Priority of efforts according to customer responses.

NPS can also help personalize and prioritize marketing efforts according to the responses received. For example, marketing strategy may involve an initiative towards opponents. You may decide to communicate your gratitude for their honesty, regret any inconvenience or frustration they experienced while using your product, and a special discount (or free) offer to influence them towards a more positive brand image. Getting valuable feedback on business processes. If the NPS survey includes an open-ended comment section, then feedback will surely be received from customers on what society is doing well, and which areas can use some improvements. Both types of feedback are valid.

4. Findings

Analysis of indicators related to tourism. Source World Council of Travel and Tourism In a general analysis, the World Travel and Tourism Council WTTC mentions the impact of Albanian tourism on Gross Domestic Product, employment, number of visitors as well as total investment. Albania has become in recent years a favorite destination for foreigners, who are increasingly choosing our country to spend the holidays.

The Institute of Statistics announced earlier last year that in the period January-August 2018, the entry of foreign nationals for holiday purposes increased by 24.7%, compared to the same period last year. The development of the tourism sector, consequently is expected to make a significant contribution to the Albanian economy, through employment, increased consumption, increased activity for hotels and restaurants.

The WTTC in its report for 2019 estimates that growth mainly reflects the economic activity produced by industries such as hotels, travel agents, airlines and other passenger transport services. But it also includes, for example, restaurant activities and leisure industries directly supported by tourists. Also, according to the tourism council, the contribution of tourism and travel to Albania's gross domestic product is 27.3% for 2019, with an increase of 5.2% from 2018. The World Tourism and Travel Council reported that thanks to the growing trend of the tourism sector in Albania, the country is expected to be visited by about 6.6 million tourists by 2028.

The direct contribution of tourism to the Gross Domestic Product is expected to increase by 4.7 %, reaching 9.3% of GDP by 2028. The WTTC anticipates increasing all of these factors. According to her, direct tourism contributions to GDP during 2017 were 134.1 billion ALL (USD 1,124.1mln), or 8.5% of total GDP, while for 2018 there is an increase of 3.9% in 2018 and an increase of 4.7% per year during the years 2018-2028. This increase will reach ALL 220.4 billion (USD 1,847.2 mln) or 9.3% of total GDP in 2028. According to WTTC, the total contribution for 2017 was 414.2 billion ALL (USD 3,471.9 million) or 26.2% of GDP and the forecast is an increase of 4.4% in 2018 and an increase of 4.7% per year, to 684.2 billion ALL (USD 5,735.0 million) or 28.9% of GDP in 2028. 3. Investments in the tourism sector are projected to increase by 5.5% in 2018 from ALL 32.2 billion in 2017. WTTC expects total tourism and travel investments to gradually reach ALL 52.1 billion in 2028.

One of the most beneficial sectors for the development of tourism in the country is undoubtedly employment. The increase of foreign tourists in the country, creates the need for new human resources for service in hotels, resorts, bars and restaurants. According to the WTTC, In 2017, the tourism industry directly supported 93,500 jobs (7.7% of total employment). In 2018, tourism directly supported the creation of 286 thousand jobs, an increase of 3.3%. This is expected to reach over 300 thousand jobs in 2019 and increase by 1.4% to 111,000 jobs in 2028 (8.8% of total employment).

In 2017, the total contribution of tourism to employment, including jobs indirectly supported by industry was 24.1% of total employment (291,500 jobs). This has increased by 3.8% in 2018 to 302,500 jobs and will increase by 1.3% to 344,000 jobs in 2028 (27.3% of the total) According to the WTTC, exports to visitors amounted to ALL 235.5 billion (USD 1,974.1 mln), 54.2% of total exports in 2017. This is projected to increase by 3.6% in 2018 and will increase by 4.7%, from 2018-2028, to ALL 387.4 billion (USD 3,247.4 mln) in 2028 or 62.2% of the total. investments Meanwhile, for investments WTTC says that for 2017 it was 32.2 billion ALL or 7.5% of the total investment (USD 269.9 million). They will increase by 5.5% in 2018, and by 4.4% over the next 10 years up to ALL 52.1 billion (USD 437.1mln). In 2018, Albania is expected to attract 4.85 million foreign tourists, while by 2028 the annual number of international arrivals is projected to reach 6.6 million foreign tourists.

Table no. 1. Impact of Albanian tourism on Gross Domestic Product.

	2017 (% of total)	2018 (annual growth)	2028 (% of total)
GDP: direct contribution	8.5%	3.9%	9.3%
GDP: total contribution	26.2%	4.4%	28.9%
Employment: direct contribution	7.7%	3.3%	8.8%
Employment: total contribution	24.1%	3.8%	27.3%
Visitor exports	54.2%	3.6%	62.2%
Investment	7.5%	5.5%	8.2%

Source: WTTC

Predictive analysis related to tourism for 2020 - 2028. (World Travel and Tourism Council Corona 19 effect) virus effect of this pandemic in the tourism sector. According to research conducted: (World Travel and Tourism Council (WTTC)), about one million jobs are being lost every day in the travel and tourism sector due to the spread of the coronavirus, (Anadolu Agency (AA)).

The WTTC says up to 75 million jobs are at immediate risk, up 50 percent from its previous survey. The data say that due to the comprehensive effect of the pandemic, this year the loss from travel and tourism will be \$ 2.1 trillion.

The council also revealed the level of crisis for individual regions. The Asia-Pacific region is expected to be most affected with up to 49 million jobs at risk across the region, accounting for a loss of about \$ 800 billion. Tourism and the travel sector in Europe are projected to lose 10 million jobs, representing a loss of nearly \$ 552 billion. North and South America are also expected to be hit hard by this crisis, with the US, Canada and Mexico expected to lose up to \$ 570 billion together, with nearly 7 million jobs at risk.

The report notes that Germany risks being the most affected country in Europe, with nearly 1.6 million jobs at risk, followed by Russia with about 1.1 million potential job losses. (S&P Global Rating analysis) ranks Albania among the 15 most hit countries in the world by COVID, tourism hard hit.

The Debt Assessment Agency S&P Global Rating conducted a special analysis of the impact of the emergency that COVID-19 has created on external financing, for countries that have based these inflows from the tourism sector. S&P scenarios have stimulated somewhat different impacts, predicting declining incomes in the tourism sector, ranging from 11 to 27% in 122 countries which will experience declines. The analysis shows that Albania is among the 15 countries along with Barbados, Aruba, Belize, Cape Verde, Montenegro that will suffer the greatest losses. Due to the already large external financing needs, some large Eurozone countries will experience material deterioration in their external liquidity, including Greece, Cyprus and Portugal. In the "extreme" scenario, a total of nine countries will experience a deterioration in gross external financing by at least 10% of current account receipts.

According to S&P analysis, the "Economy of the Sun, Sea and Sand" will be most exposed to the effects of covid-19. The second region with the highest negative impact globally will be the Balkans. According to S&P, even in the lowest stress scenario, these countries will lose from tourism inflows of 1.9-2.2% of GDP. Other major tourism exporters such as Portugal, Turkey, Spain and Australia may also experience a decline in tourism GDP of between 0.9-2.5%.

The COVID-19 pandemic appears to have exceeded the rate of spread more than any other infection (World Health Organization) officials have stated that Europe is now the epicenter of the pandemic, reflecting its rapid spread globally. The consequences for economies around the world are now material, most likely in a global recession. Many sectors have been affected by this situation, but the tourism sector will be hardest hit. For many countries, tourism is the main source of foreign exchange, GDP growth and fiscal revenues.

The rate of slowdown in the sector is currently subject to considerable uncertainty. However, the prolonged slowdown will make tourism-dependent countries less credible for lending. In all S&P scenarios, the contraction of growth is followed by a return to previous levels in 2021. Estimates point to a one-year shock to GDP growth, which is likely to lead to a one-sided deterioration of fiscal parameters in the year 2020, which exacerbates public debt.

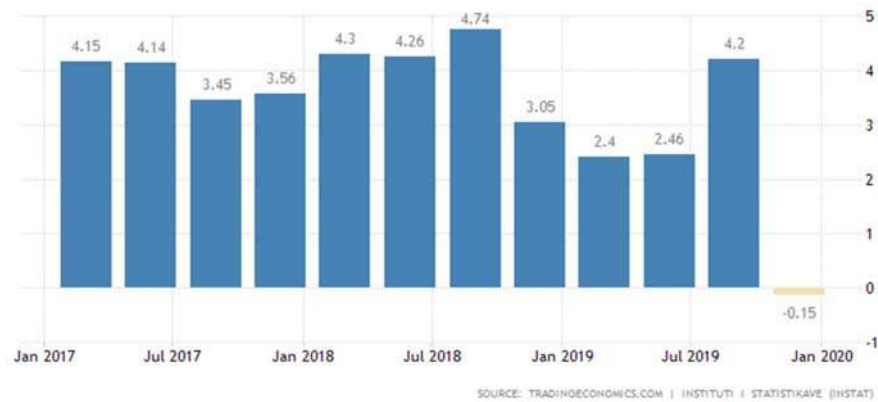
Table no. 2. Ranking of Albania among the 15 most hit countries in the world by COVID

Sovereigns Ranked By Deterioration In External Liquidity									
			Tourism receipts/CAR %	--Deviation in gross external financing needs/CAR + usable reserves (%)--					
			2018*	--2020--			--2021--		
Ranking	Sovereign	FC Ratings	Actual	11% shock	19% shock	27% shock	11% shock	19% shock	27% shock
1	Bahamas	BB+/Negative/B	73.10	20.99	38.56	58.50	20.60	37.58	56.58
2	Barbados	B-/Stable/B	45.87	12.16	22.17	33.37	9.52	17.11	25.35
3	Aruba	BBB+/Stable/A-2	74.31	7.49	13.77	20.91	7.09	12.87	19.27
4	Belize	B-/Stable/B	39.91	5.87	10.52	15.54	5.28	9.39	13.75
5	Greece	BB-/Positive/B	23.51	5.50	9.67	13.99	4.61	8.08	11.65
6	Cyprus	BBB-/Stable/A-3	19.48	5.19	9.10	13.14	4.15	7.26	10.44
7	Cape Verde	B/Stable/B	38.07	4.55	8.10	11.88	3.83	6.77	9.85
8	Bahrain	B+/Positive/B	11.84	4.07	7.10	10.19	3.51	6.11	8.75
9	Jordan	B+/Stable/B	28.47	3.98	7.02	10.18	3.55	6.24	9.02
10	Portugal	BBB/Positive/A-2	19.17	3.86	6.76	9.74	3.18	5.55	7.97
11	Bermuda	A+/Positive/A-1	15.71	3.46	6.05	8.71	3.10	5.41	7.77
12	Fiji	BB-/Stable/B	43.40	3.13	5.57	8.15	3.04	5.37	7.81
13	Panama	BBB+/Stable/A-2	17.70	3.22	5.65	8.13	2.65	4.62	6.63
14	Montenegro	B+/Stable/B	39.18	3.05	5.38	7.82	3.20	5.63	8.15
15	Albania	B+/Stable/B	35.78	2.91	5.13	7.44	2.58	4.54	6.56

Source: World Health Organization

Referring to the year 2020 for Albania, the contribution to travel and tourism related to GDP is 21.2% of the total economy Albania's GDP contracted 0.2 percent year-on-year in the fourth quarter of 2019, following a revised upward expansion of 4.2 percent in the previous period. It was the first annual GDP decline since the last quarter of 2014. On a quarterly basis, the economy also shrank by 0.2 percent. Taking full account of 2019, GDP advanced 2.2 percent, slowing down from an expansion of 4.1 percent in 2018

Graphic no. 2. The contribution to travel and tourism related to GDP



Source: INSTAT

Table no. 3 Forecasting for the future

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
-0.15	4.20	13.50	-10.84	1996 - 2019	percent	Quarterly NSA

Calendar	GMT	Reference	Actual	Previous	Consensus	TE Forecast
2019-07-01	02:20 PM	Q1	2.2%	3.3%		3.6%
2019-09-30	10:35 AM	Q2	2.3%	2.4%		2.9%
2019-12-24	11:00 AM	Q3	3.8%	2.5%		2%
2020-03-27	11:30 AM	Q4	-0.2%	4.2%		3.3%
2020-06-30	10:00 AM	Q1		-0.2%		-1.5%
2020-09-30	10:00 AM	Q2				-3.5%
2020-12-24	11:00 AM	Q3				-0.3%

Source: INSTAT

6. Conclusions

The purpose of this paper is to identify the relationship between information systems ratio and profitability ratios. In this analysis the profitability is represented by the revenue ratios for the occupancy of the rooms (REVPAR) and the ratio (NPS).

Travel and tourism contribute to 10.4 percent of the global PPV and is directly responsible for generating 10 percent of the world's jobs, while for eight years in a row it has exceeded the growth rate of the global economy.

The NPS itself may not be enough as a management tool, but in the right framework and with some additional motivational questions it can definitely be a useful metric. Its greatest strength is simplicity, making it functional and interpretable to any stakeholder.

Given the large number of large enterprises that use this tool consistently, it has certainly proven its worth. NPS is just a starting point. After the analysis, real work can begin, improving the organization and taking action to increase the NPS. This will be a long-term project, but NPS allows a perfect assessment of what stage the organization is at in this growth process.

Par Revpar and NPS are important indicators of the profitability of the hotel industry in Albania.

It is recommended that focusing on improving or managing these indicators can increase the profitability of hotels or even their performance.

One recommendation that can be made for report analysis is the inclusion of other indicators. Adding more variables can be a suggestion, this can help researchers to increase the accuracy of the reports. In addition to the risk of debtors, I recommend that other risks of the hotel sector be considered to see what the relationship with profitability will be.

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An Overview of Macroprudential Policy in the European Union Countries in the Last Decade

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Abstract

Macroprudential policy is a research topic that has been intensely approached in recent years. The analyses present in the economic literature covers several aspects and aims to clarify the management and functioning of the macroprudential policy, to identify the effects and effectiveness regarding the implementation of macroprudential measures, and to determine the relationship with other macroeconomic policies, i.e., the influence exerted on them. A key element for macroprudential policy to play its role in reducing systemic risk is the political and institutional environment in which it is implemented and that should support this goal. The article aims at identifying a possible dominant profile for macroprudential policy in the European Union, based on the analysis of specific elements related to the type of the governance of national macroprudential authority, the instruments applied and the degree of compliance with the European Systemic Risk Board recommendation on the macroprudential mandate of national authorities.

Key words: macroprudential mandate, central bank, decision power, European Systemic Risk Board recommendations

J.E.L. classification: E58, F15, G18, G28

1. Introduction

Following the global financial crisis, macroprudential policy is on the agenda of the international financial organizations (Financial Stability Board, Basel Committee on Banking Supervision, International Organization of Securities Commissions, International Monetary Fund, Bank for International Settlements, etc.), and of the regional and national financial regulators.

At European Union (EU) level, the European Systemic Risk Board (ESRB) and national authorities are working together to improve the macroprudential policy mechanism. A key element for macroprudential policy to play its role in reducing systemic risk is the political and institutional environment in which it is implemented and that should support this goal.

Although the soundness of the financial system requires the functioning of appropriate macroprudential institutional and governance mechanisms, there is no consensus or general rule on the way of setup the macroprudential policy.

As a rule, the institutional mechanism and the management of the macroprudential policy are based on the assumption of responsibility in this field, and this is done according to: the degree of alignment of the macroprudential policy objectives with the other institutional objectives; the availability of necessary resources for implementing the macroprudential policy (technical tools, qualification in the field, access to information); the type of macroprudential policy governance; the degree of central bank involvement in macroprudential policy (IMF-FSB-BIS, 2016).

The study aims to identify the dominant profile of macroprudential policy management in the European Union countries, based on representative criteria, taking into account theoretical background for macroprudential policy, and also some features at EU level, presented in section 2. The methodology used is described in section 3, and the results are displayed in section 4, followed by some final remarks, in section 5.

2. Theoretical background

According to Barwell (2013), the origin of “macroprudential” term dates from 1970s, but the issue of (macro)prudential regulation is institutionally addressed by the Bank for International Settlements (Clement, 2010).

The Basel Committee established the basic principles for the independent banking supervisors as early as 1997, and Crockett (2000) also stressed from that period the need to strengthen a macroprudential regulatory and supervisory framework. However, the debate on the governance and independence of financial regulators and supervisors is relatively recent.

The effects and costs of the financial crisis have highlighted the importance of creating and consolidating macroprudential policy regimes, but the regulatory deadline in this area is still unclear and insufficiently understood (Barwell, 2013; Claessens, 2015).

The reconfiguration of the regulatory and supervisory framework following the global financial crisis aims to ensure a greater resilience of the financial system, as well as to counteract its specific pro-cyclical behaviour.

The challenges engendered by the global financial crisis have required certain changes, reformations, and adaptations for pursuing the financial stability as well at the level of the EU and its member states.

Although even before the onset of the financial crisis, the central banks of European countries regularly monitored systemic risks and published the results in their Financial Stability Reports, there was still no responsible and empowered institution to use macroprudential instruments to mitigate systemic risks.

The 2009 Larosière Report on financial supervision at EU level emphasized that the aim of macroprudential oversight policy is to limit problems in the overall financial system in order to protect the economy from serious distortions of real output. Based on the recommendations set out in the Report, in 2010 the European Systemic Risk Board was set up as the body responsible for the macroprudential oversight of the EU financial system, in particular for the prevention and mitigation of systemic risks.

Since its inception, the ESRB has taken several important steps to promote a coherent macroprudential framework for the EU and make it operational, but the instruments available to this institution are in the soft category, as warnings and recommendations (Mazzaferro and Dierick, 2018). The cornerstone of such a framework has been laid by establishing macroprudential authorities at national level in all EU member states and by explaining their mandate and responsibilities. The next step was to clarify the concept of macroprudential oversight, by identifying the intermediate objectives of macroprudential policy and designing its instruments.

At EU level, an important element to analyse is the extent to which the national macroprudential authorities respond to the recommendations made explicitly by the ESRB (ESRB, 2011).

The framework of macroprudential policy can be described on the basis of a complex set of elements (Criste and Lupu, 2021), including not only the institutional profile, given the type of organization and management, the sphere of responsibility, the decision-making power of macroprudential authority, or the operational profile regarding the implementation of macroprudential measures, but also particularities related to the policy of financial stability (the definition of the objective, the way of tracking and reporting its fulfilment) or its relationship with other macroeconomic policies, etc.

3. Research methodology

The topic covered in this article aims at identifying the profile of macroprudential policy at EU level, reflected by the situation in the Member States, taking into account characteristics related to the institutional arrangement of national macroprudential authority, the macroprudential instruments applied, and also to the degree of fulfilment of ESRB/2011/3 Recommendation on the macroprudential mandate of national authorities.

For our analysis it has been considered the following four criteria:

- The institutional arrangement, which is defined according to whether or not there is a policy coordinating body, as well as whether or not the central bank is involved in this policy. Nevertheless, there is no consensus on the optimum type of governance, and the benefits and risks involved in the two categories should be weighed, as we mentioned in more detail in Criste and Lupu (2021). Regardless of the type of institutional governance, however, it is considered that central banks should play a key role in conducting macroprudential policy, given the special relationship between monetary and macroprudential policy (Bengtsson, 2019), as well as the privileged position that this institution usually has with regard to its systemic risk assessment capacity (advanced technical tools, qualification in the field, special access to specialized information).
- Decision-making power of the macroprudential authority, which may be:
 - full power (“hard power”), the macroprudential authority has the direct control over the calibration of specific macroprudential tools;
 - “semi-hard” power, the macroprudential authority has the capacity to make formal recommendations, coupled with a ‘comply or explain’ mechanism;
 - “soft power”, the macroprudential authority has the capacity limited to performing only analyses and monitoring systemic risks and that to express an opinion, or a recommendation that is not subject to ‘comply or explain’.
- The activism of the macroprudential authority, reflected by the number of macroprudential instruments applied or assumed. Our analysis considers the 19 instruments, according to the ESRB classification. These are grouped into three categories: capital buffers, borrower-based measures, and other measures. Capital Buffers includes: Capital Conservation Buffer (CCoB), Countercyclical Capital Buffer (CCyB), Global Systemically Important Institution Buffer (G-SII buffer), Other Systemically Important Institution Buffer (O-SII buffer), Systemic Risk Buffer (SRB). Borrower Based measures includes: Debt-service-to-income (DSTI), Loan-to-income (LTI), Loan-to-value (LTV), Debt-to-income (DTI), Loan maturity (LM). From the third category (Other measures) includes: Leverage ratio (LVR), Liquidity ratio (LQR), Loan amortization (LA), Loss-given-default (LGD), Loan-to-deposit (LTD), Pillar II, Risk weights (RW), Stress test / sensitivity test (ST), and Other.
- The degree of fulfilment of Recommendation ESRB/2011/3, which aims to establish macroprudential authorities at national level in all EU member states, with an explanation of their mandate and responsibilities.

27 EU countries have been selected for the present study, namely: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Nederland, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

Data and information on the type of measures applied and declared, as well as the degree of alignment with the ESRB/2011/3 Recommendation are taken from the ESRB database. In addition, it was used the IMF database on macroprudential policy, for up-to-date information on decision-making power, and for the institutional features of the macroprudential authorities.

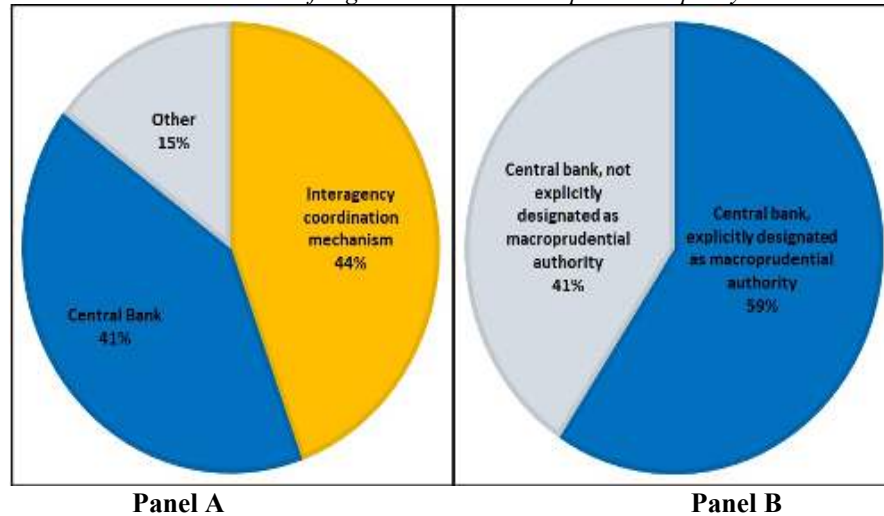
4. Findings

From the point of view of the institutional governance mechanism, the EU countries have opted for the functioning of either an interinstitutional committee on financial stability or a single institution (central bank or other regulator), the latter being the most frequent type of arrangement

for the macroprudential authority in the analysed countries (56%, according to Figure 1, Panel A).

It should be noted that regardless of the type of institutional governance, the central bank is among the institutions with a fundamental role in the management and implementation of macroprudential policy in EU countries, with 59% of the analysed countries having this characteristic (Figure 1, Panel B). Moreover, according to ESRB data (ESRB, 2014), a large proportion (about 82%) of the central banks of selected EU countries are directly or indirectly involved in the conduct of national macroprudential policy.

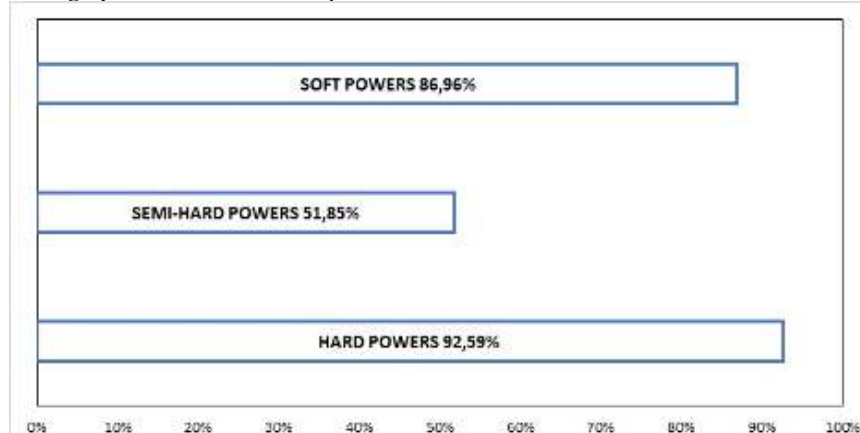
Figure no. 1. Institutional mechanisms for governance the macroprudential policy in EU countries



Source: ESRB (2020) and data form IMF Macroprudential database, available at: <https://www.elibrary-areaer.imf.org/Macroprudential/Pages/ChapterQuery.aspx> (data accessed on 17 May 2021).

The decision-making power of the macroprudential authority in EU countries is divided between the three types mentioned above, with full decision-making capacity predominating in this area: most macroprudential authorities (over 90%) have direct control over the calibration of specific macroprudential instruments (Figure 2). Austria and Poland are the countries where there is no full capacity of the macroprudential authority, but it is limited to the other two categories. On the other hand, the “soft power” capacity is also dominant among the macroprudential authorities of the 27 selected EU countries (almost 87%), based on which they can issue warnings to the market about the identified systemic risks.

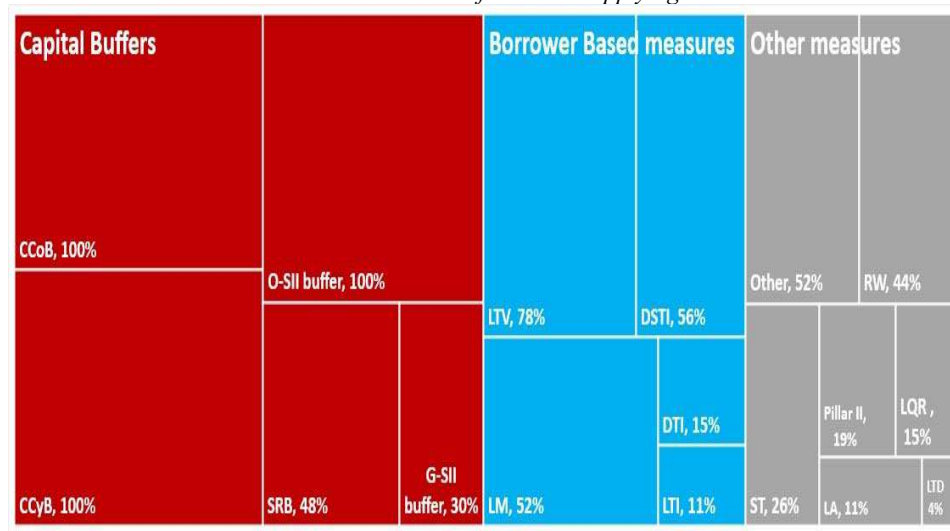
Figure no. 2. Decision-making power of macroprudential authorities in EU countries - for each category, share in total macroprudential authorities -



Source: IMF Macroprudential database, available at: <https://www.elibrary-areaer.imf.org/Macroprudential/Pages/ChapterQuery.aspx> (data accessed on 17 May 2021).

According to ESRB data (ESRB, 2020), the most frequently used macroprudential instruments are capital buffers (see Figure 3). Thus, based on the ESRB classification, all countries apply at least three of the five categories: Countercyclical Capital Buffer, Capital Conservation Buffer and Other Systemically Important Institution Buffer. From the second category of instruments (the borrower-based measures) the most frequently applied is LTV (almost 80%), but also DSTI and LM (over 50%), according to Figure 3.

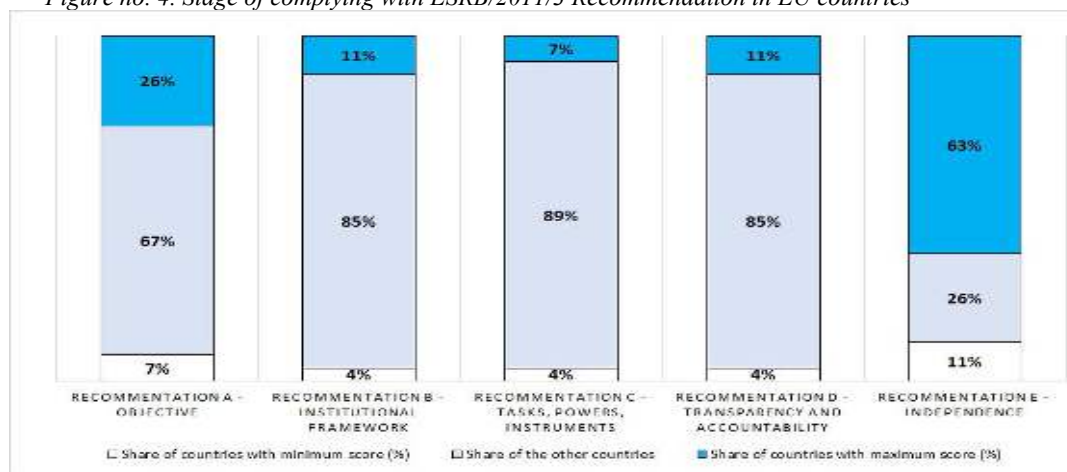
Figure no. 3. Macroprudential measures applied/assumed by national authorities of EU countries - the share of countries applying the instruments in total countries -



Source: Processing based on data available at: https://www.esrb.europa.eu/national_policy/html/index.en.html. (last update: 25 March 2021).

The complete fulfilment of the criteria formulated by the ESRB Recommendation on the mandate of macroprudential policy at national level is achieved in different proportions by EU countries (see Figure 4), with the highest proportion (63% of all selected countries) being in the case of macroprudential authority independence (recommendation E), while for the recommendations on institutional framework and those on transparency and accountability, the share is 11%. Only 7% of the national macroprudential authorities analysed fully comply with the recommendation on tasks, powers, and instruments (recommendation C). These results show that in most EU countries the mandate of national macroprudential authorities is still being strengthened.

Figure no. 4. Stage of complying with ESRB/2011/3 Recommendation in EU countries



Source: Processing data from ESRB, 2014.

5. Conclusions

Overall, within the EU from the macroprudential policy perspective, there is no dominant profile on the chosen macroprudential elements. The type of governance is relatively balanced between the interinstitutional coordination and single institution, which confirms the idea that there is no generally valid optimum model from this point of view. Decisions regarding the choice of a certain type of governance also depend on the tradition related to financial regulations and public administration, on the whole, but also on the structure and characteristics of local financial markets. It should be noted, however, that regardless of the type of institutional arrangement for governance, most central banks in EU countries are involved in this policy, and in terms of decision-making capacity, almost all macroprudential authorities (about 93%) have full power.

Based on the ESRB classification, among the macroprudential instruments applied by national authorities, those in the category of capital buffers in response to the ESRB recommendations predominate, but these are complemented by the demand-based instruments or other macroprudential measures, though to a lesser extent.

The complete fulfilment of the ESRB's criteria regarding the mandate of macroprudential policy at national level is achieved in different proportions by EU countries, which shows that in most EU countries the mandate of national macroprudential authorities is still being strengthened.

A comparative analysis between EU countries could provide a more concrete picture of the pattern of macroprudential regulation they fall into, as well as a ranking of them.

It should be noted that such a “picture” of macroprudential policy at EU level is a dynamic one, determined not only by the simple “placement” in the core of ESRB/2011/3 Recommendation, but especially by the new challenges posed by the COVID-19 pandemic, which will also leave their mark on the configuration of this policy, the specific objectives and the types of instruments used in this direction. Moreover, decisions of a macroprudential nature had and will probably continue to have a major role in resolving the COVID-19 crisis in the EU.

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Opportunities to Finance Cross-Border Regions from European Funds and in Particular the INTERREG Initiative

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Abstract

The article is dedicated to the description of the financing instrument for cross-border cooperation within the European Union, which in recent years has become an important instrument of European Union policy in the context of regional development, including cooperation with non-EU border regions. The article aims to analyze the INTERREG financial support instrument, analyzing the evolution of this instrument and its main objectives. The European Territorial Cooperation Instrument has significant financial and administrative resources, provides support to EU regions and economically underdeveloped third countries, ensures the development of an innovative economy and activates cooperation programs in new directions. For the research, the reports published by the European Commission, statistics and scientific articles by other authors specialized in this field were used.

Key word: Neighborhood Programs, INTERREG, Financial instrument, Cross-border cooperation

J.E.L. classification: F2, F3, F5

1. Introduction

Cross-border cooperation is one of the forms of deepening European integration and serves as an appropriate instrument of the European Union's regional policy.

The EU's regional development strategy has as its main objective the support of border regions, which are also peripheral areas and have a low economic development compared to the main centers. The strategy pays major attention to the role of cross-border cooperation at the EU's internal and external borders, as it contributes to regional development, improving living standards in peripheral areas and the socio-economic growth of these areas. The EU provides financial support to cross-border regions through initiatives, programs and projects.

The vast majority of funding sources for cross-border cooperation operate on a project approach. This means that their operation is based on open competitive recruitment, encouraging border actors to develop partnerships, submit joint applications and implement projects that deliver the expected results to meet needs and solve problems on both sides of the border.

Thanks to the financial assistance provided by the European Union through its programs and initiatives, the opportunities for partner countries to develop cross-border cooperation at its borders are significantly expanding. This makes it relevant to study the problems of financing cross-border cooperation, namely the experience of EU countries in using funding opportunities for this type of cooperation, in particular the study of one of the main sources of funding for cross-border cooperation - INTERREG.

2. Theoretical background

Cross-border cooperation is considered to be a part of the current system of international relations. The concept of cross-border cooperation in its modern sense emerged relatively recently - in the middle of the last century, when Europe's regions began to play an independent role in international relations, they were given wider rights in international cooperation at local level, where regions considered an important component of development (Nagy, 2020). Cross-border cooperation involves joint actions of neighboring states aimed at establishing and deepening economic, social, scientific, technical, environmental, cultural and other relations between their territorial communities, local and regional state bodies (Giolda, 2015).

The transformation processes that have taken place in Europe are characterized by socio-economic crisis phenomena that have affected most economic and social spheres. One way to solve these problems is cross-border cooperation. Its purpose is to eliminate the negative consequences of locating territories at the border, ie to move them away from the main economic centers of the country and, at the same time, to use the opportunities that open up due to the proximity of the neighboring country. Cross-border cooperation is one of the important means of eliminating disparities in economic and social development on both sides of the border. (Medeiros 2016).

The European Commission plays a significant role in organizing cross-border cooperation in European governance. Thus, in 2003, the European Commission adopted the document "Enlarged Europe". who stated that the EU has a commitment not only to its citizens but also to its current and future neighbors to ensure social cohesion and economic dynamism (De Sousa 2013). The EU must promote regional and subregional cooperation and integration, which are prerequisites for political stability, economic development and poverty reduction and social differentiation. In particular, the European The Union must strengthen its existing neighborhood policies towards these regions around two main objectives: working with partners to reduce poverty and creating an area with high well-being and living conditions, through stronger economic integration, strengthening political relations between cross-border cooperation and the establishment of shared responsibilities to prevent conflicts between the EU and its neighbors; strengthening the EU's proposal for concrete benefits and preferential relations in a diverse framework, commensurate with the progress made by partner countries through their political and economic reforms (European Union, 2013).

3. Research methodology

The main purpose of the article is to study the main financial instruments that help to implement programs in the field of cross-border cooperation.

To carry out this study, a large number of Council of Europe reports, reports from statistical institutions, scientific articles were analyzed to better understand the essence of financial instruments and in particular to study the INTERREG regional initiative.

In the modern scientific literature there are various approaches to the division of financial instruments for the implementation of cross-border cooperation programs, mainly due to their focus on solving problems specific to territorial development and the specificity of financial relations.

The disclosure of financial instruments is based on the Financial Directive, which states that financial instruments are measures of EU financial support, which are carried out in addition to the EU budget to address one or more specific policy objectives.

4. Findings

Cross-border cooperation is a key priority of the European Union's regional policy, which is achieved in order to achieve economic and social cohesion and to reduce the development gap of EU regions and countries. The financial instruments for implementing the European Union's structural policy are the Structural Funds and the Cohesion Fund, and has as main goal the financial implementation of the economic and social cohesion policy on several levels and the realization of common interests in cooperation with the member states (Cretu, 2018). The EU provides a number of structural funds, the largest of which is the European Regional Development Fund. In the EU Structural Funds System, the European Regional Development Fund (ERDF) is the main funding

mechanism for the implementation of regional policy. The ERDF was set up in 1975 to finance measures to overcome existing regional disparities in the EU by participating in the development and restructuring of the regions left behind by the industrialized regions (De Sousa 2013).

The EU has provided financial support for such cooperation and continues to offer through various programs, initiatives and projects through assistance the most important are: INTERREG, PHARE CBC, TACIS CBC, PHARE CREDO, MEDA, CARDS, LACE.

INTERREG is the EU's largest program of local initiatives to support the development of border communities in EU Member States and some coastal areas.

In the period 2000-2006, this program became known as INTERREG III, which offers three areas of cooperation: cross-border cooperation (direction A); transnational cooperation (direction B); interregional cooperation (direction C).

PHARE CBC is a program to support cross-border cooperation in the border areas of Central Europe that borders the EU and has been operating since 1994. Other financial instruments of the European Union are the TACIS CBC programs (covering the border regions of Russia, Ukraine, Belarus and Moldova), MEDA (for remote border regions of third countries); CARDS (program for the Western Balkans), LACE (a project of the Assembly of European Border Regions) (Bohm, Drapela, 2017).

Until 31 December 2006, EU assistance to European Neighborhood Policy (ENP) countries has been provided through numerous regional programs, such as TACIS. As of 1 January 2007, as part of the reform of EU assistance instruments, TACIS and many other programs (MEDA) have been replaced by the European Neighborhood and Partnership Instrument. ENPI has been applied since 2007 in the countries previously covered by the TACIS program (Tiganasu, Jijie, Kourtit, 2020).

The ENPI (European Neighborhood and Partnership Instrument) is designed as a more flexible and policy-oriented instrument. It is based on two main objectives:

- promoting deeper economic and political cooperation between the EU and partner countries;
- providing assistance on how to use funding opportunities.

Evolution of the INTERREG financing instrument

The ERDF has been funding cross-border cooperation since 1991 through the local INTERREG initiative, which has become the EU's largest initiative to support the development of EU Member States' border regions and coastal areas.

The INTERREG initiative (1990-1999) - a Community initiative on trans-European cooperation aimed at encouraging the harmonious and balanced development of the European territory - was created to stimulate cooperation between EU Member States at various levels and to reduce the impact of national borders in favor of economic, social and cultural development throughout the European Union.

The INTERREG initiative started as INTERREG I for the period 1989-1993, continued as INTERREG II for 1994-1999, passed to the level of INTERREG III (2000-2006), from 2007 to 2013 functioned as INTERREG IV and INTERREG V (2014 -2020). The whole initiative has three directions:

- A - cross-border cooperation;
- B - transnational cooperation;
- C - interregional cooperation.

Table no.1 The evolution of the INTERREG Initiative in the period 1990-2020

	INTERREG I	INTERREG II	INTERREG III	INTERREG IV	INTERREG V
Legal status	Community initiative		Integrated into structural funds regulation		Own regulation
Benefiting member states	11	15	25	28	28
Budget	1,1 BN EUR	3,8 BN EUR	5,8 BN EUR	8,7 BN EUR	10,1 BN EUR

Source: europa.eu

Under the INTERREG I program (1990-1993), 31 operational programs worth EUR 1,082 million were supported from the EU Structural Funds in various fields, including transport and communications (45%), environmental protection (10%), the economy. and tourism (28%), rural development (6%), education and other areas (11%).

INTERREG II received funds amounting to 413 million euros and allowed the implementation of 59 operational programs. Taking into account co-financing (national, regional, local and private funds), EUR 4 billion was spent on cross-border cooperation at the EU's internal and external borders. Since 1990, EUR 6.5 billion has been paid under the INTERREG initiative and several thousand cross-border projects have been implemented.

From the beginning, the INTERREG program covered all the EU's internal and external borders, and the operational programs were distributed as follows: 35 programs were implemented at the internal borders, 24 - at the external ones (Central European countries, Russia, Norway, Switzerland, Cyprus, Morocco). The new territories that benefited from the INTERREG II program were the eastern territories of the united Germany and the coastal territories: the Irish-British border (Walla), the Franco-British (East-Sussex-Haute-Normandie), the Spanish-Moroccan, the Greek-Italian and French Italian (Corsica-Livonia).

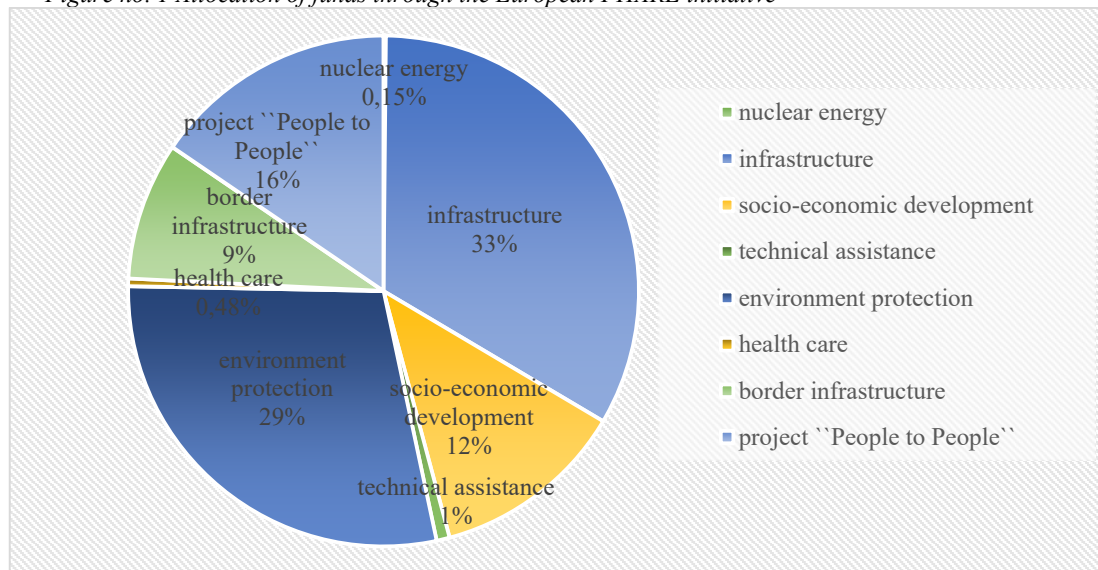
INTERREG III Program (2000-2006). became the largest initiative with a total funding of EUR 4.875 million and covered three areas, which included the following objectives:

A: cross-border cooperation between local authorities in adjacent border areas, designed to support integrated regional development, in particular at the EU's external borders;

B: transnational cooperation between national, regional and local authorities, in order to build a harmonized and balanced society and to improve territorial integration with EU candidates and neighboring countries;

C: interregional cooperation, designed to implement effective regional development and cohesion policies and mechanisms to create networks.

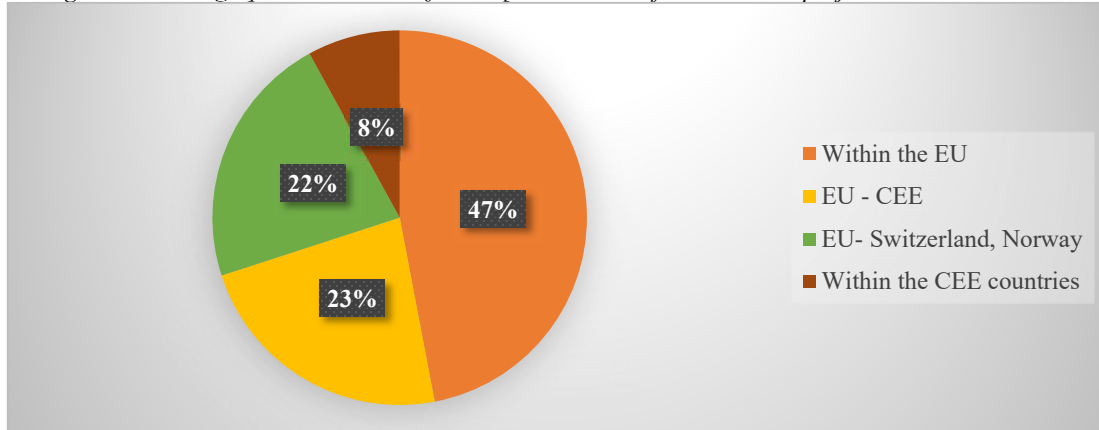
Figure no. 1 Allocation of funds through the European PHARE initiative



Source: Own processing according to: europa.eu

According to M. Perkman's analysis, about half of cross-border projects have been implemented in the EU (Perkman, 2003). The structure regarding the implementation of cross-border projects that are part of INTERREG III is presented in Figure 2.

Figure no. 2 Geographical structure of the implementation of cross-border projects within INTERREG III



Source: Own processing according to: europa.eu

In the third stage of the INTERREG initiative, 115,200 new jobs and 5,800 new entrepreneurial initiatives were created and another 3,900 existing forms of entrepreneurship were implemented. Approximately 544,000 people participated in events organized as part of the program's cooperation. Over 18,000 km of roads, railways were built or restored in the border regions during this period, funds were invested in telecommunications and environmental protection, over 25,000 projects initiated at local or regional level were supported (European Commission, 2014).

INTERREG IV covered the following programs:

Directorate A (a total of 52 programs, which covered 74% of all funds - about 6.5 billion euros). The strongest were the FLUXPYR program - was launched to manage water, carbon and energy flows in the Pyrenees ecosystem; The ISLES project - the development of renewable energy sources off the coasts of Scotland and Ireland; SHAPING 24 - Cultural Tourism Initiative in East England and the Lower Counties (ecofun.ctfc.cat);

Directorate B (13 transnational cooperation programs in the Baltic, Alpine and Mediterranean regions worth EUR 1.8 billion): BLAST (Bringing Land and Sea Together) - is a joint project between public, private and scientific authorities from different countries that make up the Black Sea region; Smart Cities - development of electronic services; SoNorA - improving the transport infrastructure between the Baltic Sea and the Adriatic Sea (Nadalutti, 2015);

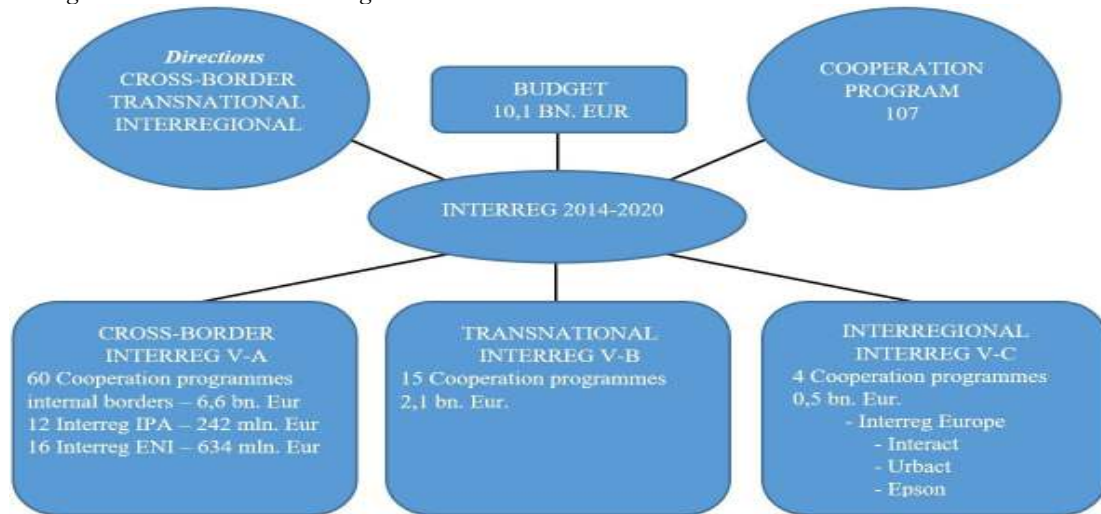
Directorate C (13 network programs covering all EU countries - EUR 445 million) - exchange of experience between regional and local authorities in different countries (European Commission, 2018).

INTERREG V

In the period 2014-2020, EUR 10.1 billion was allocated, which represented 2.8% of the total cohesion policy budget and was distributed through 107 programs. These programs were in three areas: cross-border cooperation, transnational cooperation and interregional cooperation.

The budget of the program has been made available to EU Member States and neighboring countries. 74% of the total budget was allocated to 88 internal and external programs, of which 60 within the EU and 28 at the external borders. (European Commission, 2020).

Figure no. 3 INTERREG V budget allocation



Source: europa.eu

5. Conclusions

Cross-border cooperation is one of the key elements of the EU's policy towards its neighbors, which supports sustainable development in cross-border regions, helps to reduce disparities in living standards and solves common problems in cross-border regions. The mobilization and efficient use of the resource potential of border regions, as well as taking into account the particularities of their functioning will allow the development of economic processes using flexible and innovative forms of financing, addressing regional development policy priorities and ensuring economic convergence, employment, work and interregional and cross-border cooperation.

This requires the use of effective mechanisms and instruments for financing the development of territorial communities, improving the mechanism of state financial support for cross-border cooperation programs and projects of Euroregions, rational use of EU funds for cross-border cooperation through long-term programs and ensuring long-term co-financing. at national and regional level, the creation, implementation and joint financing of cross-border programs and projects, as well as the improvement of financial and credit mechanisms in the field of investment.

Given the current situation in the field of financial support for cross-border cooperation, it is necessary to take a number of measures aimed at the effective implementation of cross-border programs in the framework of the European Neighborhood Policy, namely:

- decentralization and delegation to a lower administrative level of public administration competences and functions in order to address regional and local development issues that are common to neighboring regions;
- giving local authorities the right to independently select priority cross-border projects on a competitive basis and to co-finance them to the detriment of funds provided by the relevant articles of local and state budgets. It will provide adequate organizational and financial support to participants in cross-border projects implemented under cross-border cooperation programs. At the same time, the financial independence of local authorities in the implementation of joint international projects, including cross-border, is possible subject to the formation of the state budget.

6. Acknowledgement

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Seafarers’ Religion and Regional Development

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Abstract

Religion in the shipping sector represent a factor that can indirectly influence regional development and good cooperation between regions.

The paper has the research objective to identify connections between the narrow concept of “seafarers’ religion” and the broad concept of “regional development” in order to establish if there are sufficient available data for designing specific policies, program and activities, at the regional or national level, needed for upscaling development in the particular sector of international water transport.

Key words: OECD, cultural map, traditional, secular, shipping

J.E.L. classification: L91, N30, R11, Z12

1. Introduction

According to the Organisation for Economic Co-operation and Development (OECD), regional development comprises of various meaning but in general it refers to the effort to “enhance well-being and living standards in all region types” (oecd.org). Regional development refers to both an equilibrium of development in the various spatial regions of one country, including from rural areas to urban areas, as well as the development of group of countries at the international level. The approach of regional disparities is possible by “supporting economic activities in all regions” (oecd.org). How can be commented classical principles and activities designed for regional development, when considering aspects of seafarers’ religion? Regional development programs can vary from environmentally friendly transportation systems, trade facilitation, industry infrastructure intermodal transportation, human capital development and new transport technologies.

2. Theoretical background

The relationship between the development of maritime transport and the dynamics of economic growth in the countries of the Caspian Sea coast was researched by Akbulaev and Bayramli (2020) who emphasized the impact of maritime transport on the economic development of such countries as Russia, Azerbaijan, Turkmenistan, Kazakhstan and Iran and the fact that “implementation of projects to improve the development of maritime transport by the management creates conditions for sustainable economic growth of the countries in the Caspian basin.”

Regionalism refers to “a legal framework of cooperation among states which are in the same geographical area including economic, political and cultural relationships for the intention of protecting their interests on a regional basis” (Mulun, 2007, p.5) while the term “region” in the maritime context deals to both the geographical aspect, as well as to the functionality of resource exploitation and the political context of “cooperation developed by states for common interests” no matter the geographical vicinity (id. pp. 20-21; Boyle, 2000, p. 26)

There is no specific theoretical background when analyzing regional development in relation to seafarers’ religion. At a first sight, no connection can be seen. However, groups religion is a factor that can indirectly influence regional development and good cooperation between regions. There are plenty of research resources when discussing each of the topic, separately: seafarers’ religion

and, respectively, regional development, in particular policies and programs of regional development, but there are not available references related to seafarers’ religion and regional development.

3. Research methodology

The paper has the research objective to identify connections between the narrow concept of “seafarers’ religion” and the broad concept of “regional development” in order to establish if there are sufficient available data for designing specific policies, program and activities, at the regional or national level for upscaling development in the particular sector of seafaring and water transport. There are analysed available resource tools as interactive maps from relevant organisations as the OECD, together with available published researched in the area of the topics, although relevant literature matching exactly the topic is scarce to inexistent. Methodology

4. Findings

The interactive map provided by the OECD with 2015 data for visualization on Regions and Cities (Figure 1) indicate there are not sufficient data to establish clear connection between the aggregated indicator of labour productivity in trade, transport, accommodation, food services and the dispersions of religion in a particular sector as is the seafaring sector.

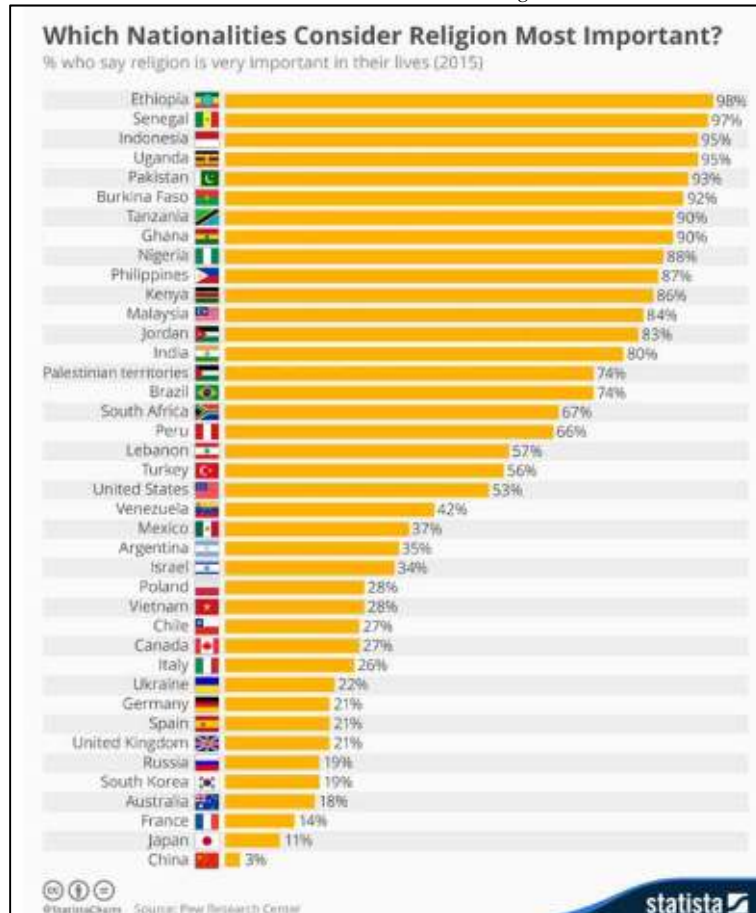
Figure no. 1. Labour productivity and regions



Source: (OECD, 2015)

Based on a visual correlation between the above OECD aggregated indicator and the below Pew research study published in 2015 (Figure 2) on the topic of regions and nationalities we conclude that there is no visible correspondence between labour productivity in trade, transport, accommodation and food services and the nationalities which consider religion as being most important. Less developed African countries as Ethiopia, Senegal, Indonesia, Uganda have the most percentage of population (98%-95%) with strong religious beliefs, considering religion is very important in their lives while most developed countries in the world, as the United States, are placed at the middle of the religion top, with 53%, Canada with 27% and China only 3%. So there is no evidence for establishing a relation between country development and the religious beliefs of their citizens.

Figure no. 2. Relation between various nationalities and their religion



Source: (Pew Research Center, 2015)

Another survey developed by Pew Research Center acknowledge religion is very important to people in Africa, Middle East, South Asia and Latin America.

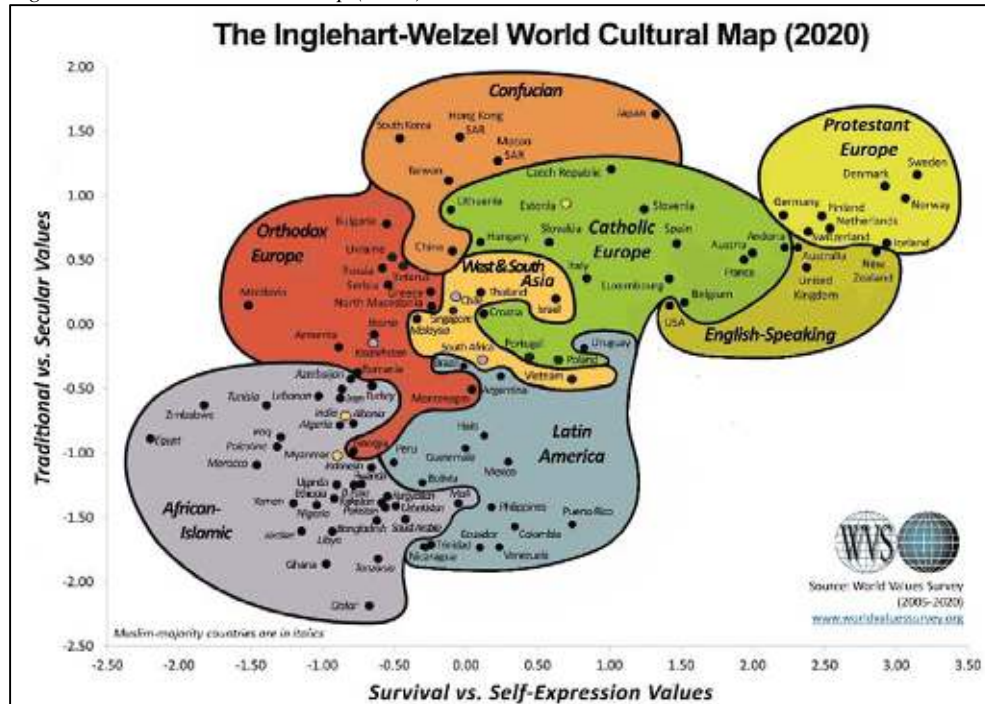
Figure no. 3. Pew Research study on religion and geographic regions



Source: (Pew Research Center, 2018)

Complementary scientific results include the Inglehart-Welzel World Cultural Map (2020) indicating traditional versus secular values and survival versus self-expression values in correlation with dominant religion in the studied countries. We identify religious connections between distinct geographic regions, meaning that countries placed on long distances share same religious values

Figure no. 4. World Cultural Map (2020)



Source: World Values Survey (2020)

Resources analyzed above are useful in expanding studies on seafarers religion and regional development. There are international organisations concentrating efforts in achieving sustainable development for all, including for seafarers, e.g.: United Nations Centre for Regional Development (UNCRD) established in 1971, aiming in achieving sustainable living environment for all and to assist developing countries in their efforts to achieve sustainable development; maritime organisations and religious charities for the wellbeing of seafarers.

5. Conclusions

This paper represents a first attempt of providing analysis of seafarers' religion and regional development. Although there is a generous scientific literature on topics related to seafarers and on topics related to regional development, there is no sufficient scientific literature and studies analyzing specific relation between seafarers' religion and regional development. However, taking into account that the largest share of goods travel by sea, by the work of seafarers, and that there are specific countries with strong religious believes, many of them being maritime countries, we conclude there is a certain part of seafarers which are religious and their work on board vessel contribute, indirectly, to the development of regions, through their transport of goods, cargo or passengers.

Further research should identify quantitative aspects regarding the number of seafarers divided in the major religions on the globe.

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Seafarers’ Religion and Globalization

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Abstract

Religion has a specific role in the development of international operations. Creating a framework for free development of religious beliefs on board vessel is essential for the wellbeing of practican seafarers, as well as for the cohesion of the entire crew. The lack of such framework might lead to frustration or development of intolerant environments, raising concerns of safety risks for crew, as well as low productivity or cohesion.

The paper’s novelty is related to the identification of religious references within Maritime Labor Convention (MLC) developed by the International Labor Organization (ILO) in relation to standardized specific instruments created by the International Standardization Organization (ISO). Results emphasize the interconnection between legal instruments (as the MLC) and ISO standards used as tools for globalized activities. The identified interconnected ISO standards should take into account religious aspects included in the MLC, necessary for the wellbeing and mental health of seafarers.

In the paper is also emphasized the role of the Maritime labor Convention, 2006, as being a key instrument for fair globalization, as well as the indirect role of creating a safe and natural environment on board for religious activities.

Key words: International Labour Organisation, Maritime Labour Convention, faith, shipping

J.E.L. classification: F66, L91, N30, Z12

1. Introduction

Maritime labor Convention (MLC) is an international legal instrument created under the auspices of International Labor Organization (ILO) designed, discussed, negotiated and ratified for the wellbeing and fair work of seafarers around the globe. It brings “consensus on the standards to achieve <<fair globalization>> in the maritime sector (Doumbia-Henry, Devlin, McConnell, 2006) due to the fact it contains regulations, standards and guidelines for “minimum working and living standards for all seafarers working on ships flying the flags of ratifying countries” (ilo.org).

According to Review of Maritime Transport (2020) issued yearly by the United Nations Conference on Trade and Development (UNCTAD), “accelerated shift in globalization patterns and supply chain designs. The slowdown of globalization reflected in lower trade-to-gross domestic product (GDP) ratios observed since the 2008 financial crisis and the regionalization of trade are likely to accelerate, with the post-pandemic world featuring an element of shortened supply chains (near shoring reshoring) and redundancy (excess stocks and inventory). (...) The established just-in-time supply chain model will be reassessed to include considerations such as resilience and robustness. Diversification in sourcing, routing and distribution channels will grow in importance. Moving away from single country-centric location sourcing to multiple location sourcing that is not only focused on cutting costs and delays but also on risk management and resilience will evolve further.”

2. Literature review

In 1686, Jean Bodin in “Les six livres de la Republique” envisioned the need for a new direction in the evolution of relations between states, based on state sovereignty and stipulated in legal

norms. The French Revolution emphasized the assertion of the principle of the nation's sovereignty, proclaiming "equality between the people, freedom and fraternity", representing an essential historical moment in the assertion of the sovereign national construction, which allowed the development of many states.

Francis Fukuyama's "The End of History and the Last Man" (1992) believed that "global development is a chance for humanity." During the meetings of the World Economic Forum in Davos, critical views were expressed on the problems of globalization. Table year, discussions

Numerous researchers have analyzed trends in the relationship between sovereignty and globalism in the present and on the evolution of these relationships in the future.

Abbot Gregory drafted the Declaration on the Law of the Gentiles, which upheld the "inalienability of the nation's sovereignty", proclaiming "the right of every union to establish its own form of government."

At present, the sovereignty and independence of states are fundamental principles, enshrined in the fundamental constitutional laws of the country.

The abolition of totalitarian systems and the expansion of democracy have provided opportunities for a global approach to the processes of progress and development. (Mazilu, D., 2021). Globalization is materialized through a global centralization of production, a concentration of capital and a transfer of the decision-making system from the level of sovereign states to supranationalism.

In the age of globalization, the corporate system has been consolidated and multinational companies are acting freely in all fields, both in industry and especially during the pandemic, in the field of health and pharmaceuticals. Globalization also tends to encompass cultural domains, imposing on them directions of action

Umberto Eco considers "Linguistic and cultural globalization would be a real disaster for the planet", due to several worrying effects: "polarization of wealth, at one pole, and poverty, at the other pole".

Joseph E Stiglitz, Nobel Prize winner for economics: in the years of globalization. The human community has seen the accumulation of immense wealth in the hands of a bed of 1% of the population, and 99% are struggling in poverty, living on the brink of subsistence. (Stiglitz, The Price of Inequality: How Today's Divided Society Endangers our Future, 2012, p.113)

However, "shipping in the modern context is the primary instrument for the conduct of global trade." (Mulun, 2007). Maritime Labour Convention has the aim to create standardized fair and decent employment practices for seafarers worldwide. The legal instrument contains several references to religion.

3. Research methodology

The research methodology of the paper used the comparative analysis between religious references included in the Maritime Labour Convention (MLC) issued by the International Labor Organization (ILO) and global international standards adapted to the maritime industry through other United Nations intergovernmental agency: the International Standardization Organization (ISO). Standards issued by the ISO are relevant for developing global trade, by providing reliable common sets of technical and economic tools, systems and processes among different countries.

4. Findings

In Table 1 below are included sections containing religious references within the Maritime Labor Convention 2006 legal instrument, issued by the International Labour Organization headquartered at Geneva, Switzerland. The colors in the table indicate the specific zone where religious references are included: green - Guideline section; orange - Standards, and purple - Regulations. In the opinion of the author, ISO standards correspondent to ILO MLC sections with religious content, no matter their technicality, should take into account the religious aspect in order to provide a homogenous reply to market demands.

Table no. 1 Correlation between MLC sections with religious references and corresponding ISO standards

No.	MLC, 2006 Section	Sub-section	Article	Specification concerning seafarers' religion	Relation to global standards
1	Guideline B2.2- Wages. Guideline	B2.2.1- Specific definitions	4	National laws and regulations adopted after consulting the representative shipowners' and seafarers' organizations or, as appropriate, collective agreements should take into account the following principles: equal remuneration for work of equal value should apply to all seafarers employed on the same ship without discrimination based upon race, colour, sex, religion , political opinion, national extraction or social origin.	Remuneration of work - ISO 10667-1:2020 Assessment service delivery — Procedures and methods to assess people in work and organizational settings
2	Standard A3.1 – Accommodation and recreational facilities		19	In the case of ships where there is need to take account, without discrimination, of the interests of seafarers having differing and distinctive religious and social practices, the competent authority may, after consultation with the shipowners' and seafarers' organizations concerned, permit fairly applied variations in respect of this Standard on condition that such variations do not result in overall facilities less favorable than those which would result from the application of this Standard.	Shipbuilding and marine structures ICS 47. The Standard is relevant in the field of: Shipbuilding and marine structures in general, including offshore structures, except offshore structures for petroleum and natural gas industries, and seabed mining Water transport; ICS 47.040 - Seagoing vessels; 47.060 - Inland navigation vessels including their systems and components 47.080 - Small craft
3	Guideline B3.1- Accommodation and recreational facilities	Guideline B3.1.6 – Mess rooms	1	Mess room facilities may be either common or separate. The decision in this respect should be taken after consultation with seafarers' and shipowners' representatives and subject to the approval of the competent authority. Account should be taken of factors such as the size of the ship and the distinctive cultural, religious and social needs of the seafarers.	Shipbuilding – ICS 47 Shipbuilding and marine structures
4		Guideline B3.1.11 –	1; 4	1. Recreational facilities and services should be reviewed	ISO/TC 83 - Sports and other

		Recreational facilities, mail and ship visit arrangements		frequently to ensure that they are appropriate in the light of changes in the needs of seafarers resulting from technical, operational and other developments in the shipping industry. 4. Consideration should also be given to including the following facilities at no cost to the seafarer, where practicable (...) (i) where appropriate, the provision of bars on board for seafarers unless these are contrary to national, religious or social customs.	recreational facilities and equipment
5	Standard A3.2 – Food and catering			2. Each Member shall ensure that ships that fly its flag meet the following minimum standards: (a) food and drinking water supplies, having regard to the number of seafarers on board, their religious requirements and cultural practices as they pertain to food, and the duration and nature of the voyage, shall be suitable in respect of quantity, nutritional value, quality and variety	ISO 22000 — Food safety management
6	Regulation 3.2 – Food and catering <i>Purpose: To ensure that seafarers have access to good quality food and drinking water provided under regulated hygienic conditions</i>		1	Each Member shall ensure that ships that fly its flag carry on board and serve food and drinking water of appropriate quality, nutritional value and quantity that adequately covers the requirements of the ship and takes into account the differing cultural and religious backgrounds.	ISO 22000 — Food safety management
7	Guideline B4.1 – Medical care on board ship and ashore	Guideline B4.1.3 – Medical care ashore	3	Suitable measures should be taken to facilitate the treatment of seafarers suffering from disease. In particular, seafarers should be promptly admitted to clinics and hospitals ashore, without difficulty and irrespective of nationality or religious belief, and, whenever possible, arrangements should be made to ensure, when necessary, continuation of treatment to supplement the medical facilities available to them.	Medical facilities: ISO 45001 Health and Safety Standard
8	Regulation 4.4 –	Standard	1	1. Each Member shall require,	Welfare facilities:

	Access to shore-based welfare facilities	A4.4 – Access to shore-based welfare facilities		where welfare facilities exist on its territory, that they are available for the use of all seafarers, irrespective of nationality, race, colour, sex, religion , political opinion or social origin and irrespective of the flag State of the ship on which they are employed or engaged or work	ISO 45000 family – Occupational health and safety
9	Guideline B4.4 – Access to shore-based welfare facilities	Guideline B4.4.2 – Welfare facilities and services in ports	3	Necessary welfare and recreational facilities should be established or developed in ports. These should include: (a) meeting and recreation rooms as required; (b) facilities for sports and outdoor facilities, including competitions; (c) educational facilities; and (d) where appropriate, facilities for religious observances and for personal counselling.	ISO/TC 83 Sports and other recreational facilities and equipment
10			7	These accommodation facilities should be open to all seafarers, irrespective of nationality, race, colour, sex, religion , political opinion or social origin and irrespective of the flag State of the ship on which they are employed or engaged or work. Without in any way infringing this principle, it may be necessary in certain ports to provide several types of facilities, comparable in standard but adapted to the customs and needs of different groups of seafarers.	SO 21401:2018. Tourism and related services – Sustainability management system for accommodation establishments

Source: (Maritime Labour Convention, 2006; International Standardisation Organization standards – ISO)

According to the table above we observe correspondences between Maritime Labour Convention and the following six ISO standards: 10667 (remuneration of work); ICS 47 (Shipbuilding and marine structures); ISO/TC 83 (Sports and other recreational facilities and equipment); ISO 22000 (Food safety management); ISO 45000 (Occupational health and safety); ISO 21401 (Tourism and related services). At this moment, the six ISO standards do not include religious references to seafaring.

“Technology standards have become an important means of global economic competition, and directly influence the competitiveness of an industry, region or country” (Conference on Information Technology, 2005), and for several years, it has been accepted that „technology standards directly affect at least eighty percent of international trade” (Purcell et al, 2016) therefore, a specific interest is placed on developing and updating standards for the societal necessities and wellbeing.

5. Conclusions

In this paper has been presented a correlation between sections of Maritime Labour Convention, 2006 involving religious aspects and six corresponding International Standardisation Organization standards which should correspond to religious aspects and necessities for users and beneficiaries.

The role of standardization is well known for globalization. Standards issued by the ISO are relevant for ensuring safe and reliable global trade, designed on common aspects of functionalities and necessities.

A distinct attention should be also placed on religious needs on board vessel, and such necessities should be reflected within the circular economy of shipbuilding and social activities in ISO standards.

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The Challenges of Power Generation, Transmission, and Distribution in the South African Power Sector

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Abstract

The South African Power Sector which since inception, over the years has come to be monopolized by the behemoth South African Utility Companies, has been undergoing some supply stress due to increased demand for electricity in the face of dearth of investment, corruption, climatic change due to gas emission; and its inability to meet these demands. Since their establishment the utility companies, are facing one of their toughest transition from a majorly coal-powered generating business to alternative sources of energy. These are not unconnected to the numerous challenges, which range from aging plants, lack of adequate investment to climatic change; particularly so when 26 % of South African electricity is powered and anchored coal-fuelled technology. Power is a critical component and factor in the developmental process of every nation, more so when every country owes it to its citizens a fundamental duty to provide a safe environment in the developmental trajectory of its economic and social programs.

Key words: electricity generation, transmission, distribution, challenges
J.E.L. classification: E2, P28, L94, O4

1. Introduction

The power sector of any nation, specifically the electricity supply of any country is the most critical segment and the fulcrum that every developmental process rest on. Without energy, particularly electricity supply, in this technological age, life will be grim and boring. Every human activity now revolves around the use of one form of electricity or the other; from powering our computers, phones, to industrial concerns. Kenny (2015) affirmed this assertion in his submission that the provision of power, specifically electricity as a service, underscores its importance and centrality among current millennium innovations, technical and scientific developments; because of its value-added and transformative role in the world for the benefit of humanity.

It is because of the importance of electricity that every nation, in their quest to develop their economy and industrialize that they give priority to the provision of electricity to ensure there is steady, stable, and uninterrupted; and unhindered electricity supply; not only to power households but also industries so that economic activities can be sustained to an assured growth in every sector. (Eskom, 2010a)

Unfettered access to electricity is no more an exclusive privilege and preserve of a few developed economies but it is increasingly being treated globally as an integral and indispensable, but part of inalienable right of the human race; also, an important ingredient of the socio-economic development of any nation.

The forcefulness of this fact is captured in the speech made where he acknowledged that access to energy is important to human development. (South Africa 2008). The Head of the South African Government, President Cyril Ramaphosa (2019), highlighted this important fact in his Human Rights Day speech on 21st March 2019 where he also juxtaposed the importance of energy as human right issue in pari passu with housing, healthcare when he said that, while energy might not be listed in

among the bill of right, it goes without saying that It is equally sacrosanct to the dignity of man, safety of lives, health and of course the overall wellbeing of the human race. He pointed out that it is the inalienable right of every citizen to have unencumbered and access to energy, just like a place of abode; including their overall well-being. It is their entitlement. It may not be acknowledged in the Statement of Freedoms, but it is indispensable to the human decency, security, well-being of our societies.

2. Literature review

The importance of electricity to development in any society and indeed the world over has been amplified by no less a body than the United Nation General Assembly (UNGA 2011) when in its declaration stressed the fundamentals to consummating and achieving its developmental objectives is anchored on low-priced energy supply. The agenda of the world body, for example, specify the role of electricity in the eradication of extreme poverty and hunger, the attainment of global elementary learning, the advancement of feminine equal opportunity, by giving them the opportunity to realize their God-given potentials as equal stakeholders. (Goal 3), the curtailment in infant death, and enhancement in the well-being of childbearing women. It also inclusive of access to modern energy supplies which offers major benefits to general wellbeing, literacy, and certainly the ability and of capabilities of the female to contribute meaningfully to the society in general (Barnard 2013, 30). The global body upholds that avenue to dependable and inexpensive power supply is foundations of sustainable development, which is not achievable in the absence of a viable energy source (UN 2013).

The benefits of unfettered electricity supply cannot be overemphasized. A stable electricity supply is the key to unlocking the great economic potential of South Africa, considering its huge mineral based that is waiting to be tapped; and has the capacity to make South Africa one of the ten top economies of the world. It has the capacity to transform the countries communication and digital system necessary for industrial and cutting-edge technical discoveries and innovations. This ultimately, will greatly impact on the country's healthcare delivery system, thereby upping the living standard of the citizenry.

One of the fundamental principles of state policy is provide security and also meet the basic needs of its people, whose collective endeavors will contribute immensely to the economic development of the country. A healthy people are a pride to any nation. Therefore, the energy sector holds a prime place in every national government developmental effort. The need for electricity is paramount for the growth of any country. Therefore, access to electricity as the basic form of energy supply to the masses is vital for the development of a nation's economy. It is undoubtedly so, its indispensability, and its irreplaceability in our day-to-day lives, particularly in respect of home appliances; and offices to power our machines, and equipment.

However, aside from the fact that very few developing countries were able to get it right by ensuring adequate and uninterrupted electricity supply, most third world nations over the years have been struggling and battling to provide 24/7 electricity which can be attributed to so many factors; some of which are historical, structural as well as funding.

While access to unhindered electricity supply is a necessity and a *sin qua non* to the long-term wellbeing of the nation, it is equally expensive and capital intensive.

This paper is an attempt to examine the challenges that South Africa power sector is facing, in its quest to increase the quantity of power being generated in order to meet its soaring electricity demand as a nation; which is still grappling with load-shedding, an euphemism for power outages and shortages; which has become a recurring decimal in the daily lives of South African. This has greatly slowed down the economic development pace of South Africa in the last ten (10) years. It is evidenced in the dwindling fortune of the South African economic indices (Oxford Policy management, 2020). The country is therefore facing one of the toughest challenges post-apartheid, particularly in the industrial and commercial sector of the economy.

The choice of South Africa has some historical significance, particularly if we juxtapose post-apartheid South African society during the White Minority rule. South Africa's retrogressive industrial and economic decline can be attributed to decreasing electricity sustainability to keep up with increasing demand for energy by consumers and increase tempo of industrial and commercial sector, as a prime economic contributor to South Africa's GDP. This state of affairs is reflected in the

current South Africa’s economic statistics. The GDP from Utilities in South Africa decreased to 62937.37 ZAR Million in the first quarter of 2021 from 63350.26 ZAR Million in the fourth quarter of 2020.(:Trading Economics,2021).

Historically speaking, South Africa has been the hub for mining activities particularly home to some of the biggest, coal, diamond and goldmines in the world as well as industries which are energy-dependent, and require constant but stable electricity for their operations. Over time, the provision of energy to the nation has been dwindling, retrogressively and this forced South Africa’s utility companies to ration supply to consumers. The quantity of energy supply in the country has been persistently on the decrease and this has led to rationing of electricity by Eskom and other municipal authorities.

It goes without saying that South Africa’s main utility company since inception in 1894 when it debuted as EVOM has dominated the sector for decades, taking on the enviable task of generating and transmitting electricity across the entire nation, owning and operating virtually 92 percent of generation capacity in the country; and these are largely dependent on coal-fired technology that fuels the power stations, and of course municipalities and private generators splitting the remaining six and two percent, respectively. The total quantity of electricity generated in 1993 was 190TWh. (National Energy Report, 1999).

It is in the light of these creeping challenges that have motivated me to undertake this study on the South African Electricity Power sector. To identify the causes of such a state of affair in the sector, because South Africa can be regarded as a developed nation, and also offer concrete suggestions and the way forward in navigating out of this quagmire mitigating these challenges.

It is pertinent to emphasis here that cheap, abundant energy is crucial to keep up the momentum of continuous economic growth, which is critical to helping South Africa recover from the global crisis, and bolster industrial competitiveness.

South Africa’s main generating technology is coal-dependent in the running of most of its power stations, which are sited in the prime coal-mining shafts and also proximity to big consumers of the electricity generated in these plants. By December 1999, South Africa has 49 power stations, out of which 20 are coal-driven, generating 90 percent of their combined capacity of 43142MW; exclusive of others in the pipeline, as well as those in reserve. These power stations were construction out of pressing necessity during sanctions imposed by the United Nation on the white-minority rule in order to meet their energy needs. South Africa therefore had older Coal-fired power station that had extra generating capacity capable of adding 3556MW.

It is also important to mention here that South Africa also ventured into generating electricity using nuclear technology; this is called the Koeberg nuclear station; operating at 4% of its 1,930 MW capacity. The Construction of Koeberg Nuclear Facility which was cited in the Western Cape Province of the country, started in 1976, but it was only in 1985 that it started operating. It contributes 4.4% of South Africa’s generating capacity. It earned itself and an enviable position and accolade of being first nuclear power station, with an installed capacity of 1910 MW of power, but current total net output is 1860 MW. The Table below shows a breakdown of energy sources of South Africa.

Figure no. 1 Electricity output by source

ENERGY SOURCE	PERCENTAGE
Coal	94.20%
Gas	0.03%
Nuclear	4.27%
Hydro	1.17%
Geothermal	0.24%
Solar, renewable & Waste	0.09%

Source: DME (n.d)

3. Research methodology

The approach we chose in writing this paper is basically intellectual in form, scrutinizing and collecting material from printed books and articles, by other authors; bulletins as well as budgetary and policy documents, pronouncements by the government Departments of South Africa. This study tends to fill the gap in understanding the challenges and the opportunities affecting electricity generation, transmission and distribution in South Africa and proposing strategies to help South Africa in providing its citizens with stable and steady and efficient electricity supply.

4. Findings

4.1. Overview of the South African Electricity Sector

The current edition of Africa's Energy Report of 28th April, 2021 on South Africa, captures the grim prospect of the energy sector of Africa's most industrialized nation, which painted a pessimistic outlook. It is there considered opinion that the threats confronting the South African energy management have escalated in the last decade. With current burdensome pandemic putting a heavy toll on the economy at the same time coping with intense rationing of electricity supply, (under the prevailing circumstances. (African Energy Report, 2021).

The article illustrated and threw light on some of the inherent and underlying symptoms plaguing the energy sector to include political power scuffle, administrative issues, despite catalogues of policy guidelines that provides the road map for charting a new course; taking cognizance of the country's huge inherent potential for alternative sources of energy. This includes wind, solar, kinetic and other renewable energy potentials that will propel South Africa through a seamless passage away from coal.

4.2 Generation

South Africa according to the International Energy Agency Report (IEA March 30, 2021) has a GDP of USD 325.94BN and a population of 57.78 million people. Eskom alone presently produces 47,000 MW, as against its established capacity of 52,000 MW. (Oxford Policy Management 2020). Meanwhile, based on government figure, The Ministry of Mineral Resources and Energy

According to the report declared by the government of South Africa, the entire national bulk electricity production is 58,095 megawatts (DME 2020).

Consequence, coal-fired production facilities are the predominant being used to generate energy comprising 80 percent of the country's energy matrix. Not with standing, it is an urgent priority of government to phase out the use of conventional method in the next two decades which encompasses thermic and coal-dependent technology; a combined capacity of 24,100 Megawatts.

While, the country is currently heavily dependent on fossil fuel as its main source at this point in time, the proportion of overall quantity is expected to progressively decline as additional renewable generating capabilities are commissioned in the future. The Government hopes to achieve this by using Renewable Energy Independent Power Producer Procurement Program (REIPPPP).

To show its total commitment to the present goal, the government through the nation's Renewable Freelance Power Producer Acquisition Program (REIPPPP) by inking twenty-seven (27) energy purchase deals in June 2018; mainly on renewable and sustainable energy. The renewed IRP outlines a number of measures the government plan to fulfill, in order to structure South Africa's disreputable and deteriorating energy sector, concentrating on expanded acceptance of natural gas, preserving the nuclear sector, while emphasizing the social inclusiveness as the core driving force. (Oxford Policy Management 2020).

4.3 Transmission

At the moment, electricity transmission in South Africa covers a distance of 28,000km, across the length and breadth of country, which is a task being shouldered by the Transmission arm of Eskom SOC Holdings. (Oxford Policy Management 2020)

On the distribution side which is currently being carried out by Eskom in conjunction with 187 municipalities. (DMER 2021)

The electricity supply sector is playing a very pivotal role in meeting the economic development of the country, as a catalyst to industrial development but also in improving the quality of life for the previously underprivileged majority.

The Electricity generated by coal-fueled stations in South Africa account for 25percent of the total; with liquid fuels making up the rest (DME, 2000). Major consumers of energy supply electricity in South Africa are, principally in the productive sector, which comprises industrial and the prospecting sectors consumes 60% of the energy produced. Fortuitously, they are the main catalyst for development and growth; making huge contribution to exports and ultimately powers South Africa’s economic growth. (Berger, 2000; DME, 2000; Trollip, 1996).

Hitherto during the apartheid era, before the ushering of majority rule, many impoverished South Africans black communities have been neglected. Most such neighborhoods are left without electricity. But under the ANC-dominated democratic rule, whose main policy thrust, anchored on Reconstruction and Development was able to successfully impact the lives of many households through the holistic provision of electricity for the masses.

4.4 Distribution

On the distribution side which is currently being carried out by Eskom in conjunction with 187 municipalities. (DMER 2021).

5. South Africa energy challenges

The numerous challenges confronting the nation’s energy segment, specifically electricity supply to its growing population is daunting; not just in its capacity to generate, but to carry what is produced and distribute it to where it is needed.

One of the major challenges is inadequate generating capacity. South Africa currently generates approximately 47,000 MW against an installed generation capacity of 52,000 MW). The industry is also bogged down by operational failures and which by extension includes but not limited to the issue of maintenance of its plants and facilities. The blackout started in 2008 and has become a permanent part of South African lives. For instance, during covering January to April, 2008, these blackouts were felt across the nation, with attendant destructive effects on South Africa’s commercial and industrial life. Based on the report issued by the National Energy Regulatory of South Africa, it gave a gloomy verdict, with the South African economy loosing over R50bn (NERSA).

There are ongoing cases of corruption bordering on grafts, underhand deals as well as Eskom officials with stakes, interest and financial ties with companies having transactions with Eskom personnel’s. There were 278 cases of grafts; an underhand payment in court, with 82 cases bordering on criminality is being handled by the police; as at September, 2020.

Another very important challenge is in the area of distribution of electricity if South Africa wants to achieve the desire goal the government set for itself. Lack of technical and financial capability is one of the challenges that need to be tackled. Another ominous challenge is the frequent breakdown of its generating companies due to aging facilities that over the years, due to corruption and grafts are poorly maintained or at best neglected, hence the frequent blackouts and load shedding.

Other challenges of course include: i. poor utilization of existing assets and deferred maintenance; ii. Delays in the implementation of new projects; iii The National Grid is yet to cover many parts of the country; iv. Vulnerable and overloaded existing transmission system; v. The current maximum electricity wheeling capacity is 47,000 MW which is awfully below the required national needs of 58,095MW; vi. Some sections of the National Grid are outdated with equipment in a state of poor and inadequate maintenance; vii. Low tariff.

6. South African current national energy policy

In spite of all the demands currently besetting the South African economy, the Government has through the instrumentality of the state budgetary and fiscal policies has taken the challenge by rolling out strategic policy initiatives, aimed at meeting the electricity supply challenges.

In his speech to the parliament during the budgetary debate by the South African parliament, the President, Cyril Ramaphosa lay out the country energy policy guidelines to meet these challenges; and this undoubtedly underscore the centrality of the energy sector in South African quest to mitigate these challenges in both the short-term, medium- and long-term.

7. Charting a New Course for the Future

The genesis of the South African power sector began way back in 2008 when Eskom's operation in the electricity industrial suffered set back which, which ushered in shortages and outages of power. The generating stations experienced a decrease in capacity. They were not capable of generating enough power to satisfy needs of the nation. The electricity shortage has been an issue for better than a decade, with industrial and commercial activities being seriously interrupted whenever there is an energy reduction, affecting both smaller and big businesses alike. This has over time contributed to sluggish growth and low investor trust.

The resolve in bring about the needed transformation in energy challenges isn't just important; but it is equally imperative to South Africa's economic resurgence. It is in tandem with this new paradigm shift that the government is making great strides in bringing alternative sources of energy into operation as soon as practicable.

A giant leap forward in this direction was the unveiling of new policy initiative by screen and approving some power producers to generate additional 200MW of energy to fill in the deficit and meet the supply gap in the country's power demands.

This emergency power capacity is expected to be sourced from variety of sources. These includes liquefied natural gas, wind, batteries and solar. Funding for this ambitious project will come from private capital and it is projected to cost R54Bn. The main attraction and benefit of such project is the fact a greater part of the material required in the execution of these project will be procured from local sources in South Africa. It is the projected that by August 2021, these programs will come on stream, and be up and running.

The Government of South Africa is also looking at the renewable energy as an alternative source of energy. During this period the government of South Africa called for proposal from interested investors for the procurement of an additional 2600 megawatts of renewable and sustainable energy. It is the country's fifth bid in its quest to look at tap into the renewable energy source from independent energy producers.

It is important to note that this program has seen a quantum leap in the number of venture capitalist interested in the country's power sector.

The government has also showed its commitment in realizing its objectives in this regard through the instrumentality of parliamentary legislation and policy guidelines to make it easier for industries to generate electricity for their use. Such a self-generated power will curtail the demands on Eskom's power stations and help free resources by Eskom to invest in alternative energy sources. It also has the capacity to increase and strengthen the power pool that is badly needed through private investment.

The ANC-led government, in its current Integrated Resource Plan, it emphasized emphatically and unambiguously that renewable energy will be the next frontier for the next decade, towards meeting the energy needs of the country. As a demonstration to its unavow commitment, a hitherto comatose contract program for Independent Power Producers (IPP) was kick-started with a timeline by year 2030 to increase the electricity generating capacity to 17,800MW through renewable energy sources. It is envisaged that will help leap-frog the country seamless transition from Coal-dependent to a sustainable, leaner, cleaner and environmentally friendly power sources, thereby reducing; and in the long run eliminate the country's environmentally hazardous and polluting carbon emissions.

The sad reality at this point is that, 80% of South Africa's energy supply is largely dependent on coal, principally because it has a large untapped reserves of it, while 20 % are a mixture of thermal, fossil, hydro, solar and wind. Nonetheless, this is about to change, as contained in government's 2019

white paper on Integrated Resource Plan (IRP). It is proposed that in the next two decades the use of coal and thermal energy will be deemphasized, skewed in favour of renewable alternative sources of energy.

The main source at this point in time, its proportion of overall quantity is expected to decline as additional renewable generating capabilities are commissioned in the future.

The IRP program, recently outlines a number of measures the government plan to comply with in order to complement South Africa's disreputable and deteriorating energy sector, concentrating on expanded endorsement of use of liquefied natural gas, preserving the nuclear sector, while emphasizing social inclusiveness as its core attraction for renewable and source of power.

8. Conclusions

The transitional years are ahead being very crucial for South Africa in terms of getting it right by strictly implementing and adhering to the policy framework on power reforms that will transform South Africa as a leading economy in Africa; by generating sufficient power to power its economic growth thereby lifting the living standard of its citizens.

However, South Africa's strategic choice of transforming its electricity mix is based on a multi-facet strategy. There is rising apprehension as to whether the extra electric capacity to be injected into the national network is economical and affordable by the populace.

And this is an important ingredient that needs critical analysis, because it could be a potential restraint on this variegation strategy. Statistics indicates that the pattern of expenditure on electricity is biased towards higher wage category, with the wealthiest making up 20% of the public, making up 50% more of the overall. In recent survey conducted by the Department of Energy, 75% of South Africans said that the preference for government energy program should be to hold electricity prices down: commercial factors outweighed other preferences by an ample surplus. Regarding the ultimate fuel mix, virtually one third of the peopled surveyed concurred with the assertion that every source of energy is desirable to fill in the gap as long as it is affordable to every consumer.

Conversely one quarter of those surveyed unanimously backed the use of alternative energy source, particularly renewable energy; and 14% specifically placing priority on sources that are not harmful and does not endanger the environment.

It is important to stress here that government will be confronted with complex alternatives as it engages in its intentions of variegating and diminishing the impact of its power matrix on the environment. It is also imperative that the government pursues a progressive, inclusive but effective strategy of national discuss on the issue.

In spite of the challenges and tough choices confronting the government, there is unanimity of opinion that the aggregation of its consultative but holistic policymaking, backed by strong legislation, with an investment friendly and attractive policies for renewable energy; will achieve the desire objectives.

Consequently, by recognizing the critical role of private equity financing, based on rational resource allocation process, based on market fundamentals, coupled with regional integration strategy adopted, South Africa is well positions to accomplish such an important exercise.

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BlockChain (BC), Technology Notary in Data Driven Marketing (DDM) Contracts

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Abstract

Today, Data Driven Marketing is challenged by the supply of vague data, inconsistencies between them and fraud through advertising in the digital marketing ecosystem. Through three basic concepts like open ledger, distributed ledger, and miners, BlockChain (BC) is a perfectly positioned technology, restoring not only trust and transparency, but ensuring a greater uniformity of transactions within a largely fragmented sector. BC makes DDM more directly and reliable, validating and analyzing each customer's movement in advertising campaigns. In BlockChain the traditional principle that creates the positive correlation between fee and delivery time through the "Third Trust Party" becomes null because transparency is one of the basic properties of this technology, which on the other hand for DDM is the Achilles heel.

Key words: chain, ledger, nodes, Merkle, Hash.

J.E.L. classification: A10, A19, C68, L15, M15, M30, M31, M37, L86.

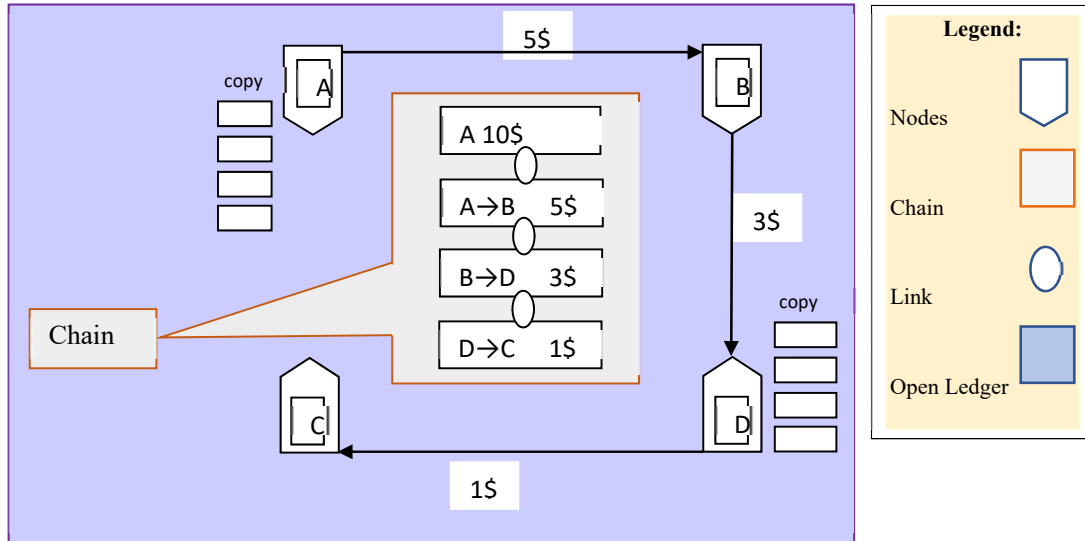
1. Introduction

It has been more than 12 years since Satoshi Nakamoto, the unknown person or group behind Bitcoin, described how the BC technology, a distributed peer-to-peer linked structure, could be used to solve the problem of maintaining the order of transactions and to avoid double-spending problems. Bitcoin orders transactions and groups them in a constrained size structure named blocks sharing the same timestamp.

The nodes of the network (miners) are responsible for linking the blocks to each other in chronological order, with each block containing the hash of the previous block to create a BC (Crosbyetal., 2016). BlockChain this innovative technology, is a system based on the digital currency transaction. This technology has received a lot of attention recently due to the success of the most popular cryptocurrency, Bitcoin. Attention! BlockChain is not Bitcoin. BC serves as an account book and immutable which allows transactions to take place in a decentralized manner. Applications based on BC are being set up, covering many areas of the economy including financial services.

The reputation of the Internet of Things (IoT) system, lately completing data driven marketing. BlockChain is effective as a registry (open book / legend) distribution technology, or DLT. A distributed ledger is openly shared with all participants, and there are no private transactions, and it is decentralized. Cryptographic verification from block to block creates a chain of trust in these transactions. There are still many challenges to BC technology such as scaling and security issues which are still improving and thus the "gaps" displayed, to be overcome through three substantial concepts on which BC technology is based. Suppose we have a network of four people which are labeled "nodes" eg: A (in Switzerland), B (in Albania), C (in Greece), and D (in Italy), who transfer money between them. We continue the assumption by stating that initially in "Genesis", A has \$ 10 and from these he transfers to person B the value of \$ 5. Under these conditions a transaction is performed where we link the genesis with the transfer from A to B. Then, B transfers to D \$ 3. And so, from D to C are transferred \$ 1.

Figure no. 1. A Open Ledger



Source: Authors' idea

Open Ledger

The three basic concepts on which Blockchain technology is built.

i. Open Ledger, is the open and centralized registry only to the nodes that are part of this, and in this way is created a Chain with transfers (transactions), within an open register. Ledger is basically a chain of transactions that is open and public to anyone. That is one of the reasons why it is called BC. But what we mean by this open and public register? It is open and public, it means that any of the 4-people in the network can see where \$ is, how much \$ everyone has in their pocket and any of the people in the network can decide if a transaction is valid or not. If we want to transfer \$ 15, this is impossible because Genesis started at \$ 10 and none of the nodes in the network (ABCD) has \$ 15, so this transaction will not be active in this open legend. Such a transaction is not possible and thus cannot be part of the chain. Because we have a centralized location this means that Ledger does not have the option to provide \$ 15 to complete the required transaction. But the primary goal of BC is to alienate centralization.

ii. Distributed Ledger, is a distributed and decentralized register, and implies that BC is changing form, from open and centralized to distributed and decentralized, beyond nodes in the network. If we continue the assumption, illustrated as in Figure 1, node D may be creating a copy of the open legend of all transactions and meanwhile and A can do the same. When this copy becomes available for anyone to copy (not just those in Figure 1) to make the same for those who participate in this network, and give to someone who is not in this centralized group the opportunity to copy the same, from other countries like Kosovo, Romania, Zealand, etc.

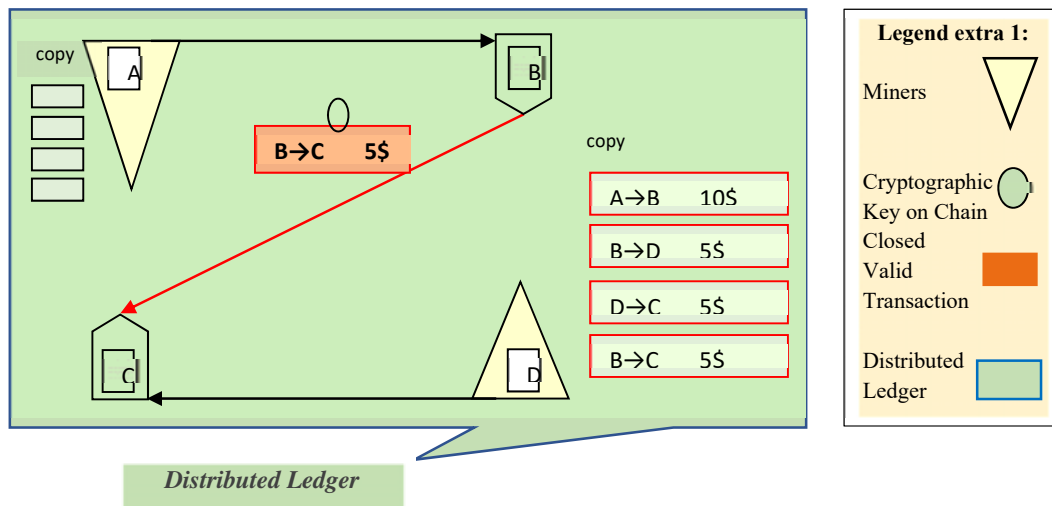
Then we entered a partially decentralized legend as in figure2. Since we are dealing with different copies of this legend, BC ensures that all these copies are synchronized (coordinated) between them, and all participants who want to access in this network can see the same copy of the registry Ledger and have the same version of it.

- To evaluate the new transaction, that it is a fact because B wants to transfer to C \$ 5.
- Create an algorithm and find a special key which activates the mine to take over this transaction, and that after this to be able close the whole.

To achieve this process, the mine calculates its own powers to know if it has the financial potential and time to complete this transaction because this key is completely unpredictable. Through its algorithm, the mine generates keys to solve this random puzzle. Firstly, she must find the funding. In terms that it has financial capacity, it remains to be seen how ledgers are synchronized on the network. Meanwhile from the assumption, mine D undertook to carry out the transaction between B to C and record it. Later, she finds a way to network (publish) this transaction and to express that it

is a valid transaction. To have a dispersed (not open) state the legend must be decentralized. Figure 1, transformed into the new outline Figure2. After D transmits and has completed the chain of this transaction, then the key that performed it () closes it as a transaction.

Figure no.2. Distributed Ledger



Source: Authors' idea

In short, BC is a dynamic form of book distribution technology based on the BlockChain concept, where each block represents a digital record of a bunch of valuable digital transactions. The structure and technology of BC is open, distributed and decentralized and so is its organization and development. Distributed Ledger (Register / Book / Legend), on the other hand, refers to all those technologies that aim to facilitate connection to a shared database, designed to provide an assessment of transactions and a consensus record. The technology behind the distributed ledger is a common Internet game because the process is totally decentralized and transparent.

iii. Miners, is also the basic and the most important principle of BC, illustrated below with Fig2. So, we had an open legend. It was seen from all nodes part of the centralized network, but with mining, it is understood that we now have a distributed legend of various nodes and decentralized. What remains to be understood is how these nodes are synchronized between them as best as possible.

To give a sense of this situation we are still assuming that B (in BC fig.2, where the legend is decentralized, we mentioned that it does not matter where the node (person) is located and this was one of the three practical advantages), will transfer to C a value of \$ 5. Meanwhile nodes B transmits (publishes) and describes the transaction that has made it. Immediately anyone on the network sees and understands that B, wants to transfer \$ 5 to C. This fact has not been yet billed (on paper). To be documented we must wait to clarify the new concept of Miners. These mines are special nodes, they are waiting for a ledger (recording), to be closer to the explanatory mode, and to not add other nodes to complicate it, assume that A and D, are mines. The mines, now when the transaction are occurs between B and C, decide who will be the first to accept this transaction and who will validate it. Now one of the mines wins the "race" and finds a way to finance with digital currency. But how, one of these Mines win the transaction? To answer, in advance these two nodes make two more assumptions:

1. To evaluate the new transaction, that it is a fact because B wants to transfer to C \$ 5.
2. Create an algorithm and find a special key which activates the mine to take over this transaction, and that after this to be able close the whole. To achieve this process, the mine calculates its own powers to know if it has the financial potential and time to complete this transaction because this key is completely unpredictable.

Through its algorithm, the mine generates keys to solve this random puzzle. Firstly, she must find the funding. In terms that it has financial capacity, it remains to be seen how ledgers are synchronized on the network. Meanwhile from the assumption, mine D undertook to carry out the transaction between B to C and record it. Later, she finds a way to network (publish) this transaction and to express that it is a valid transaction.

To have a dispersed (not open) state the legend must be decentralized. Figure 1, transformed into the new outline Figure2. After D transmits and has completed the chain of this transaction, then the key that performed it () closes it as a transaction. In short, BC is a dynamic form of book distribution technology based on the blockchain concept, where each block represents a digital record of a bunch of valuable digital transactions. The structure and technology of BC is open, distributed and decentralized and so is its organization and development. Distributed Ledger (register / book / legend), on the other hand, refers to all those technologies that aim to facilitate connection to a shared database, designed to provide an assessment of transactions and a consensus record. The technology behind the distributed ledger is a common Internet game because the process is totally decentralized and transparent.

There are different types of blockages in the ecosystem which will be addressed in the following sub-topics. There are three types of BC: 1. Public; 2. Private; 3. Partnership / Consortium.

Five basic principles underlying technology.

1. Distributed database.
2. Peer-to-Peer transmission.
3. Transparency under a pseudonym (Anonymous).
4. Irrevocability of Recordings.
5. Computational logic.

2. Literature review

Modern technologies put consumers at the forefront of security, privacy, trust, and transparency challenges. BlockChain is transforming digital marketing by removing companies' abilities to pull data from customers without also offering to reimburse them for its value. Marketers can leverage the technology's positive attributes that customers are searching for in today's digital landscape, both in transparency and data protection. In terms of digital marketing, BC is one of the most important topics for its applications in the marketing field. Argues that each time individuals engage in an online transaction (Prabhaker, 2000). They leave behind a digital trail of detailed information about their identity, their buying preferences, spending habits, credit card details, and other personally identifiable information (PII) (i.e., data that can be used to identify a particular person). Online businesses regularly fail to meet regulatory requirements, and privacy leaks are frequent and have a lasting impact on consumers' trust (Ingram et al, 2018); (Martin, 2018); (Bodoni, 2019).

As a result, consumer awareness heightens, their suspicions raise, and they are more prudent about online transactions as their (PII) can be used or sold for monetary gain without their permission (Norman et al, 2016). Avoiding online purchases is not a solution since brick-and-mortar retailers also encourage the use of loyalty cards and maintain a centralized database which may be vulnerable to hacking or misuse. Moreover, many developing countries do not have privacy regulations in place to protect consumers (PII). Therefore, brands must keep abreast of the latest privacy regulations, understand consumer expectations, and keep up to date with technology innovation and best practices. Advocates for enhanced consumer privacy suggest that systems should be built with a "privacy-by-design" framework (Cavoukian, 2011). The recent hype around BC technology has led to promising use cases in areas such as finance, supply chain management, healthcare, tourism, real estate, and the marketing field is no exception. Initially launched for underpinning the cryptocurrency BC. Technology and Applications for Digital Marketing provides insights on BC technology and its applications in digital marketing. This paper provides an orientation of how this technology is functioning within modern marketing and how it can influence the future of the digital marketing industry. The applications of BC, benefits and challenges, disruptive innovations in digital marketing, privacy and security concerns, and the recent trends of BC in digital marketing. The inherent characteristics of BC architecture and design provide properties like transparency, robustness, auditability, and security (Greenspan, 2015); (Christidis et al, 2016). A BlockChain can

be considered a distributed database that is organised as a list of ordered blocks, where the committed blocks are immutable.

What BlockChain Could Mean for Marketing (Ghose, 2018)? BlockChain can make data-driven marketing more transparent by validating and analyzing every consumer's journey through verified ad delivery, confirming that a real person saw the ad as per the specifics of a media contract. Marketers will be able to control how their assets are delivered by monitoring exactly where their ads are being placed, alleviating ad fraud from automated bots by ensuring that real followers and consumers are engaging with their ads, and ensuring proper ad engagement tracking that will lead to more precise digital attribution. How consensus is reached in BC, between the nodes? This consensus is known as the Byzantine Generals' Problem (BG). The Byzantine fault tolerance concept originates in the BG problem. The gist of the story: the Byzantine army has surrounded an enemy city. The army is led by several Byzantine generals and each of the generals leads their own division. However, there are traitors among the generals who are interested in the Byzantine army failing. The BG problem is a term etched from the IT science description of a situation where involved parties must agree on a single strategy to avoid complete failure, but where some of the involved parties are corrupt and disseminating false information or are otherwise unreliable. (Zheng et al, 2017).

Marketing helps companies to understand and explain the value a consumer perceives and derives from a product or service (Larivière et al, 2013). Despite uncertain financial returns, small firms are now investing in fee-based technologies and platforms that they perceive as essential for sustaining a competitive position in their markets (Rishel et al, 1997). Digital marketing is leveraging new channels across social media that provide firms with new, innovative, cost-effective, and influential capabilities to engage with customers (Melewar et al, 2017). In turn, customers are becoming an integral part of the evolving engagement dialogue and are strengthening their influence on the marketing process (Berman and McClellan, 2002).

3. Research methodology

The internet-enabled technologies help the businesspeople to develop new digital markets and to make new demands for their products and services. Thus, the internet-enabled technologies are contributing a lot to the market engagement and customer target. In line, a new technology called blockchain has transformed the digital marketing process completely and helps to do the business effectively with accurate and up-to-date data. Like the marketing automation technologies redesign the firms' outreach one side and increase the consumers' purchase intention on the other side, thus the new generation marketing technologies shifting the customer-company relations to the new horizons (Treiblmaie, 2018).

Blockchain technology works by creating an environment that is secure and transparent for the financial transactions of virtual values. Hash codes of each block keep records safe in the blockchain. This is mainly because irrespective of the size of the information or document, the mathematical hash function provides a hash code of the same length for each block. So, attempting to change a block of information would generate a completely new hash value (How Blockchain Technology Works, online 2019). A network that is open to everyone and concurrently maintains user's anonymity undoubtedly raises trust issues regarding the participants. So, to build the trust the participants need to go through several consensus algorithms such as Proof of Work and Proof of Stake. The digital cryptocurrency Bitcoin uses the first-ever blockchain technology (Amaba et al, 2017).

It is a digital store of value that enables peer to peer transactions over the internet without the intervention of a third party. The blockchain network is a decentralized structure that consists of scattered nodes (computers) that inspect and validate the authenticity of any new transactions that attempt to take place. This combine agreement is done through several consensus models by the process of mining (Baliga 2017). The process of mining demonstrates that each node trying to add a new transaction has gone through and solved the complex computational puzzle through extensive work and deserves to get a reward in return for their service.

For the validation of a transaction, the network must confirm the following conditions: The sender account holds sufficient cryptocurrency balance that it intends to transfer (Prashanth Joshi, 2018). The amount intended to transfer has not already been sent to some other recipient. Once a transaction has been validated and agreed upon by all the nodes, it then gets added to the digital ledger and

protected using cryptography that uses a public key that is accessible to all the other nodes and a private key that must be kept secret (Wachal, 2019).

To maintain the transactions using digital currency in the blockchain network, we need to understand the digital wallet which is used to store, send, and receive digital currency (Li, X., Jiang 2017). A digital wallet or a cryptocurrency wallet is a string of letters and numbers forming a public address associated with each block in the blockchain. This public address is used whenever a transaction takes place; However, to prove the ownership of the public address there is a private key associated with the wallet that serves as the user's digital signature that is used to confirm the processing of any transaction. The user's public key is the shortened version of his private key generated through complex and advanced mathematical (Tschorsch et al, 2016).

BlockChain is not a cryptocurrency and should not be confused with cryptocurrencies such as Bitcoin. Nowadays, cryptocurrency has become an everyday word both in industry and in academic settings. When we use the word cryptocurrency the mind simultaneously goes to the most successful cryptocurrencies, such as Bitcoin, Ethereum, which have achieved great success with their capital in the world market. With a special data storage structure, transactions on the Bitcoin network can occur without the involvement of any third-party intermediary, because at the core of the technology to create this cryptocurrency, is the BlockChain (which was launched in 2008 and implemented for the first time in 2009). Blockchain has brought a drastic change to technology in the last few years, and it is referred to as distributed ledger technology (DLT). The BC can be considered as the main public book that records and stores in the block all transactions that take place. This chain grows as new blocks are added to it constantly. From time to time, the hash digest of the last mined block is written into a public blockchain to guarantee immutability. The right to send transactions is granted by validator nodes to users by endowing them with the local Ethers mined. Overall, the proposed approach has the same transparency and immutability of a public blockchain, without its drawbacks, (Marchesi et al, 2020).

Marketers can leverage the technology's positive attributes that customers are searching for in today's digital landscape, both in transparency and data protection. In terms of data drive marketing, blockchain is one of the most important topics for its applications in the marketing field. Blockchain Technology and Applications for Digital Marketing provides insights on blockchain technology and its applications in digital marketing (Ramachandran et al, 2017).

4. Findings

4.1. What exactly can BC Technology do for DDM?

Through this technology, many traders will be profitable and will not suffer the permanent problems created from: Data inconsistencies; The challenges of an unclear supply chain; Advertising fraud in today's digital marketing ecosystem.

BlockChain is a perfectly positioned system to address these issues, restoring not only trust and transparency, but ensuring greater uniformity of transactions, especially within a largely fragmented sector. This will potentially revolutionize the way that marketers conduct their campaigns. Intelligent contracts and self-executing agreements can be pre-coded with guidelines to evaluate impressions, ensuring that each meets a common standard.

From what we refer in this paper, the premises are created to: have high uniformity in data standards while offering greater assurance in terms that advertisers do not "pay" only for genuine impressions of the service but to create the ideal premises in relation with visibility and everything to be verifiable. This could potentially solve the permanent issue of the Achilles heel in DDM, which stems from advertising fraud, which is estimated to capture \$ 35 billion for a year. Simultaneously, as an immutable and distributed ledger BC can inject greater responsibility into a well-thought-out campaign environment designed by marketers. Through BC, all actors of the marketing campaign involved, gain a complete and standardized view of all transactions that occur in real time. In a Forrester report, for 2016, up to 56% of the entire on-screen advertising budget was lost in fraudulent inventory. The cost of advertising fraud worldwide is expected to rise to \$ 50 billion over the next decade (A. Weissbrot, 2020).

A recent study on the state of programmatic advertising found that 79% of advertisers surveyed expressed concerns about transparency, and by over a third about the lack of being exposed by third parties as one of their main concerns. Data-driven marketing accomplishes what was once almost impossible to achieve due to data quality issues. A smart contract in the BC can fix this by providing a level of tracking and transparency that is currently realized by DDM. If consumers share more of their preference information, marketers will know more about them, which in turn will increase the relevance of their messages and decrease their advertising frequency. Natural transparency based on the BC registry book can help companies gain consumer trust.

From what we have encountered in today's theories through this modest paper, we can confirm with conviction that BC helps to achieve innovation, increase transparency, refine data standards, and advance an integrated approach to quality service in those enterprises and digital marketing-driven industries. It can promote digital advertising to consumers, it is profitable in spending big money on digital advertising campaigns. Under the new technology, consumers can share and improve their statistics simultaneously with advertisers and advertisers. BlockChain technology can be considered to restore data control to statistics researchers focused on digital advertising.

4.2. Introducing BlockChain in Data Drive Marketing

In fact, consensus is an incredible transformation. But how to reach a consensus in a diffuse and high-risk environment, is a challenge. Equally a challenge for BC is how the network is distributed. BlockChain technology, there is no central node that ensures that the main registers in the distributed nodes are all the same. Most of BC are currently used in financial markets. More and more apps are popping up. Traditional industries can consider BC and implement it to increase their campaigns. User reputation can be stored in BC, but at the same time the emerging industry can use BC to improve performance. BlockChain has shown its potential for transforming the traditional industry with the features of its main: decentralization, persistence, anonymity, and auditing. In this paper, a more descriptive overview of BC is presented.

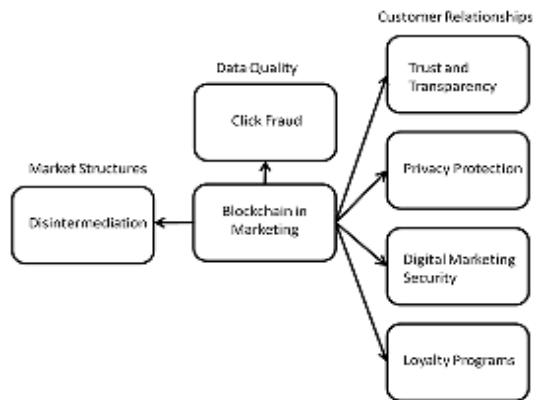
By analogy, data-driven marketing, in the policies it harmonizes, is on the concept of creating a simple profitable business. In the primary mission that DDM has, it is interested in creating an accomplished environment. To "catch in the air" the preferences of customers and create for them the highest level of satisfaction. In this aspect, DDM uses BC systems to secure this mission. After BC was classified as a technological experiment, it has since taken the big step from theory to practice, and while technology continues to mature, we are seeing increased development solutions that are ready for enterprise. Today society is totally digitalized, and technology is playing a very important role in the life of everyone (Ragothaman, 2021).

BlockChain is a method which is useful in recording information and makes it difficult to change, hack or cheat with the system. A BlockChain is essentially a digital transaction volume book that is distributed throughout the overall IT system network in the BC. This technology acts as a reliable layer in the evolution of e-commerce. The spread of information, communication technology and a host of smart internet business platforms came together with smart phone technology, which later created the internet of things, and thus changed the business landscape, restructuring their bodies and renew the value creation process. In this way it facilitates the strategies of marketers to achieve a deeper level and a wider customer base from the personalized goals of the customers, thus increasing the trust and loyalty of the customers towards a certain brand. Internet enabled technologies gave an unimaginable impetus to develop new digital markets and make new demands on the products and services offered by marketers. Thus, technologies enabled by the internet are greatly contributing to market engagement and customer targeting. Whereas a new technology called BC, has completely transformed the digital marketing process (data driven marketing) and helps to do business in an effectively way with accurate and up-to-date data.

Rigorous academic studies on blockchain applications in support of marketing activities are scarce. Despite this, in the practitioner-based literature, the benefits of blockchain are viewed as indisputable (Ghose, 2018). From a consumer-centric perspective, blockchain technology has the potential to substantially transform consumer relationships by enhancing data and information transparency and improving privacy and security. It also allows for innovative forms of consumer loyalty programs which might help to create additional value. Data driven marketing, has

demonstrated how BC technology as a data science innovation based on data operates in the customer-centric model. The use of BC technology in digital marketing is still a concept that has just emerged.

Figure no.3. Impact of blockchain on marketing.



Source: <https://www.frontiersin.org/>

The principal role of BC is to create secure digital registers and will also allow secure storage of data. Authors (Erragcha et al, 2021) in the book "Blockchain Technology and Applications for Digital Marketing" have given us an explanation of the meaning of the concept of BC technology, its principle of operation, as well as the different types and sectors of its applications, to make the relationship between BC technology and other emerging technologies, such as big data, AI and smart contracts, to review the positive impact of BC technology on the e-commerce sector and in particular on customer relationship management as a key challenge in DDM.

4.3. The challenge" of cryptocurrency in digital marketing

Over the last few years, Cryptocurrency has developed, both in value and in comprehensiveness. Indeed, many industry leaders believe that Cryptocurrency can change money and promote it until the end of time. In any case, as computerized money, (Bitcoin turns out to be the most common), Cryptocurrency can introduce some issues to advertisers hoping to collect buyer information. The cryptocurrency market is a convenient environment dependent on distributed network innovation.

Decentralization is a distinctive feature of this framework and is an impression of how there is no national central bank or other case that authorizes power over the entire organization. Exchanges are managed and controlled to use an acquired BC system that relies on customer assets called diggers / miners. Using blockchain technology in digital marketing is still a budding concept. Blockchain is a decentralized digital technology that is growing and standing out in digital marketing. The potential use of blockchain technology (BCT) will help affected companies create secure digital records and will also allow secure storage of data (Hence, 2021).

Today, the world has become a digital platform where technology has become an important part of daily life (Trivedi et al, 2021). The world is growing at a rapid pace where there is an innovation every day. As the days go, every aspect of life fade into the internet. Companies have also identified the field and opportunity of digital marketing. Cryptocurrency itself is a challenge for digital marketing. The purpose of the research is to identify the impact of cryptocurrency on digital marketing. Digital marketing is a Data driven Marketing technique and cryptocurrency is a payment method which hides the data, thus, the popularity of cryptocurrency as a payment method is a current challenge for digital marketing.

4.4. Development of a model achieved in BCh

Digitalization through technology influences to change a business model and provide new revenue models and inevitably opportunities for value production.

Blockchain is a type of database that stores different types of information in blocks that form an information chain. It is one of the secured ways of transferring and storing data. Blockchain is helping build trust for digitalization among its users. Numerous researches have concluded that the basic model in the production of value in DDM, through BCh technology, passes five variables: Residence; Privacy; Faith; Security; Purpose.

We are still a little far from the current implementation of BCh by the Ad-tech ecosystem. The main roadblock that needs to be improved is the speed of transactions. Due to its diffuse nature, where transactions are verified by "miners" around the world, a block usually takes 10-30 seconds to authenticate transactions. This means that Ad's technology transactions (which occur in milliseconds) cannot be estimated very quickly nowadays. In this way, DDM managers who implement advertising technology will have to group advertising transactions into a single block to create a single transaction, but on the other hand there is the risk that it reduces transparency. In the short term, brands are likely to use BC as a post-campaign layer to authenticate and validate transactions, not in real time, but after the fact occurs. However, this is still a major improvement over current practice. Despite the speed limitations, BC will change the data-driven marketing business landscape (Ghose, 2018).

Covid-19 has completely changed the way we live and has also changed the way we work. The current disruption from the Pandemic has created many challenges for all businesses in the short term but has created many opportunities in the long run (Bathla et al, 2021). By helping with crisis and recovery, BC can play an important role in accelerating post-crisis digital transformation initiativeson (2021) "BC technology and Applications for Digital Marketing". Trading has become more efficient, comprehensive, and less costly through BC (Schwab, 2016).

5. Conclusions

There is ample evidence of how consumers are willing to share their data with marketers in exchange for the best offers they regularly support. Their discovered preference is that they are willing to separate from the data to gain something of real value. This means that brands that have won the trust of the consumer and that offer a relevant exchange will be given greater access to personal information. In an asymmetric way we can say that cryptography and consensus distribution with algorithms have been implemented for user security and log book stability.

Blockchain technology usually has the key characteristics of decentralization, consistency, anonymity, and auditing. BlockChain with these features can save a lot of costs and significantly improve efficiency. As it allows payment to be completed without any bank or intermediary, BC can be used in various financial services such as digital assets, remittances, and online payments. Furthermore, it can also be applied to other areas, including smart contracts, public services, Internet of Things (IoT), reputation systems and security services. These areas favor the BC in many ways.

First, BC is immutable and basically the algorithms are resistant to data modification. The transaction is difficult to confuse, it is "tangled" in the BC. Businesses that seek to have high honesty and credibility, to attract customers can use the blockchain. This is where Data Driven Marketing comes in. But, in addition, BC dispersed and can avoid the weakness of even a single point in a failure situation. In terms of smart contracts, the contract can be executed by the miners automatically after they are linked to BC. Although BC technology has admirable potential in building future Internet systems, it is facing a high number of technical challenges. Escalation is the biggest concern. Example: The size of the Bitcoin Block is now limited to 1 MB, while one block is mined about every 10 minutes. Subsequently, the Bitcoin Network is limited to a rate of 10 transactions / second, which is impossible to accomplish with high trading frequency. However, wider blocks mean more storage space thus making network propagation slower. This will lead to gradual centralization as if we want to keep fewer users on such a large BC.

Therefore, the "tradeoff" between block size and security has been a difficult challenge. Blockchain makes data-driven marketing more transparent by verifying and analyzing each customer's journey through verified ad delivery, confirming that a real person saw the ad according to the specifics of a media contract. On one hand, entrepreneurs will be able to control the way their assets are delivered by monitoring exactly where are spent their budgets in their marketing campaigns, bypassing ad fraud by automated clicks ensuring that true followers and customers engage with their advertising and ensuring proper advertising engagement tracking that will lead to more digital attributes. On the other hand, the annoyance and embarrassment experienced by consumers will be minimized. Companies are overloading their customers with lots of ads, emails, coupons, and messages. The reason they send a dozen different messages is that they do not know too much about consumer preferences. The current practice is often like throwing a dozen darts into the air and hoping that someone will be hit. Blockchain technology can prevent the same ad on the monitor from being served on anyone, ensuring the optimal frequency of ad service for each customer. Studies have shown that when it comes to the impact of ad exposure frequency on consumers' propensity to buy, somewhere between four and six ad exposures is optimal. Although BC, reduces the risk of manipulation, fraud, and cybercrime due to its immutable nature. There is no need to trust to a third party now that the data is stored in distributed ledgers. There are several other advantages specific to the case in which it is used.

The pandemic changed the way of all businesses run in relation to the past. Many of the businesses today either close due to lack of technological performance or others move towards online mode to maintain their position in the market. During this pandemic, businesses have no choice but to switch to online mode. Some of the businesses have surrendered as it was not possible for them to switch to online mode in such a fast and short time due to lack of technology and lack of knowledge. They faced many difficulties to operate in their markets and were forced into bankruptcy. The impact of technology during Covid-19 pandemic plays a very important role worldwide. When this pandemic was at its peak technology became like a lifeline to human beings. Blockchain is a unique new technology, and the way facts are stored and shared electronically. Blockchain in digital advertising reflects clarity, security and access to revenue and overflow.

In conclusion, Blockchain is a technology. In my opinion if it is not opposed, BC technology can be imagined like a financial institution that realizes, secures, and guarantees cryptocurrency transactions. Regarding to the role of this technology in economy and marketing, it creates a new dimension. We can say that the security provided by BC Technology is like the function of a notary in Data Driven Marketing (DDM) Contracts.

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Infant-Child Mortality and Maternal Employment in Nigeria

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Abstract

Recently, scholars have focused on assessing economic progress within countries via some important development indicators including infant-child mortality and maternal employment. These are in tandem with the sustainable development goals (SDGs) whose target is 2030. To model the impact of child and infant mortality on nursing mothers' employment status, the study adopted the Grossman (1972) theoretical framework while employing the Fully Modified Ordinary Least Square (FMOLS). Prior to this, some preliminary test was conducted including the descriptive statistics, correlation test, and the unit-roots test. The Johansen cointegration was utilized to ascertain whether the variables cointegrate. The outcome of the trace and maximum eigenvalue tests supports the fact that there is at minimum five cointegrating equation. Furthermore, the FMOLS test confirmed that the influence of infant mortality on mother's employment is negative, while the relationship between child mortality and mothers' employment was positive. Owing to the above, the study concluded that the contextual evidence is essential for culturally sensitive child survival interventions and programmes as well as improved women's formal employment participation which favours Nigerian child survival. Lastly, the government should provide adequate education and support for mothers in order to reduce drastically both child and infant mortality.

Key words: infant mortality, child mortality, maternal employment, household income
J.E.L. vlassification: I12, J16, J21

1. Introduction

Recently, scholars have focused on assessing economic progress within countries via some important development indicators including infant-child mortality and maternal employment. This is because the higher the record of child and infant mortality the lower the life expectancy of such an economy. More importantly, life expectancy is an important index used to calculate the human development index (HDI) which is a global measure to group countries along the categories of developed, emerging and less developed countries depending on the position in which such a country fall within the zero to one scale on which the HDI scale is built. In addition, scholars such as Akinyemi, Solanke and Odimegwu, (2018) have argued that employment of women seeks to ensure as well as avail them the required finance to seek adequate health care which might reduce infant-child mortality. In addition, this necessitates increased women labour force participation, which was also one of the forerunners of third-millennium development goals.

Interestingly, the above is in tandem with the Sustainable Development Goal (SDG) which is expected to last till the next 14 years, however, the 17 goals, are inter-related and cut across all the critical but numerous aspects of health as well as development. This paper connects to the interlink amongst the third (SDG 3) and fifth (SDG 5) goal, which engrossed on well-being and gender equality and empowerment especially the employment of women within childbearing age (United Nations, 2015). For instance, according to the 2016 world development report, Sub-Saharan Africa female employment raised from 57.1% in 1990 to 63.0% in 2014 (World Bank, 2016). More so, the mortality rate for under-five dwindled by 52% between 1990 (179 per 1000 live births) as well as in

2015 (86 per 1000 live births) over the same period (United Nations (UN), 2015). Meanwhile, the household income tends to improve as a result of female labour force participation, thereby resulting in the children of the employed mother having improved and a better living standard (DeRose, 2007). Also, the literature suggests that female labour force participation tends to have an impact on demographic outcomes such as childhood mortality as well as fertility. The female labour force participation influence on fertility are comparatively documented in the literature. Nonetheless, Akinyemi provided evidence on the link between female labour force participation and fertility rate could be argued to be varied depending on the background of the study, the prevalent result is that women's employment relates to lower fertility. The connection is habitually ascribed to the divergence amidst employment and childbearing responsibilities (Bloom, Canning, Fink and Finlay, 2009). Obviously, in most scenario's an employed woman would likely go for a smaller family size in order to meet up with her job demands unlike her counterpart at home. Regarding infant-child mortality rate, there is no substantial indication on the role played by maternal employment, particularly in developing nations. Though, a few studies proposed that children of employed women tend to face a higher risk of mortality than those of unemployed women, due to time constraint (Akinyemi et al., 2018). A comprehensive study carried out in South-East Asia indicates that in Nepal there is a negative relationship amid infant-child mortality and maternal employment. It is based on this dichotomy, controversy and ongoing argument that propel the need for the re-examination of this debacle.

In the case of Nigeria, this anticipation was established by Ukwuani and Suchinbdran (2003), who discovered that children whose mothers participate actively in the labour force tends to have good nutritional stand and as well able to take them along. However, women in the formal sector who are not entitled to maternity leaves, their active participation in the labour force may impact negatively on their children's subsistence, more exclusively during the neonatal period. Regrettably, most sub-Saharan Africa women work in the informal sector, where such opportunities are not feasible. The recent determination to promote women employment as well as plans to drastically reduce infant-child mortality and morbidity could be actually hampered without appropriate balancing. The Nigerian case is not different since the report from the National Bureau of Statistics, 2018 divulges that despite the rise in Nigerian female labour force participation from 39% in 1990 to 48.3% in 2015, also, women nonagricultural employments rose from 35% to 41.0% over the same period (World Bank, 2016).

Owing from the above, it can be deduced that most scholars analyzed these phenomena using qualitative analysis. However, this study would adopt a rather different and unique approach which is the quantitative technique of analysis. Here, the study utilized the fully modified ordinary least square technique after testing for unit roots. Furthermore, the Johansen cointegration technique was adopted to ascertain whether or not prolonged relationship (cointegration) exist among the variables. The remaining parts of this research report is presented as: section 2 literature review, section 3 research methodology and technique of analysis, section 4 presentation of results and interpretation, section 5 conclusion and recommendation.

2. Literature review

This section of the study reviews the theories, empirical research works, and concepts that are in line with the area of study. Several theories abound which provides the link between infant -child mortality and maternal employment in Nigeria. The capability theory or approach to human welfare as propounding by Sen (1980). The capability approach or theory was conceived in the 1980s as an alternative approach to welfare economics by Amartya Sen. The theory made an intentional effort to consider human life as a set of "doings and beings" which are called "functioning" and it relates the evaluation of the maternal and child wellbeing to the assessment of the capability of human being to function through conscious efforts of proper nutrition and health care. In this approach, Sen brought together a range of ideas that were previously excluded from (or inadequately formulated in) traditional approaches to the economics of welfare.

The core focus of the capability approach is on what individuals can do. According to him, capabilities are the alternative combinations of functionings that are feasible for a person to achieve. Formulations of capability have two parts which are functionings and opportunity freedom that is the

substantive freedom to pursue different functioning combinations (Alkire, 2009). Ultimately, capabilities denote a person's opportunity and ability to generate valuable outcomes, considering relevant personal characteristics and external factors. The important part of this definition is the freedom to achieve, because if freedom had only instrumental value (valuable as a means to achieve an end) and no intrinsic value (valuable in and of itself) to a person's well-being, then the value of the capability set as a whole would simply be defined by the value of a person's actual combination of functionings (Sen, 1992).

There are several scholars who have studied infant-child mortality in relation to maternal employment. This include but not limited to the following.

Adewusi and Nwokocha (2018) utilizing data elicited from the Nigerian Demographic Health Survey of 2013 and evaluated using descriptive and inferential statistical techniques. The research observed that uneducated and under-educated mothers tend to have high infant-child mortality when compared with educated mothers, even though sex of household head, size of the family, wealth index as well as religious affiliation together have strong impact on these women.

Also, the survey carried out in 1992-1993 by the India's National Family Health Survey (NFHS) in supports of the Family Welfare as well as the Health Ministry. The study, however, make available state-level as well as national fertility approximations, maternal-child healthcare, infant-child mortality, family planning practices, as well as appropriate use of available services to promote mothers and children welfare.

Similarly, Adetoro and Amoo (2014) focused on Nigerian under-five mortality upsurge from 138 per 1,000 live births in 2007 to 158 per 1,000 live births in 2011 contrary to the Millennium development Goal target of 71 per 1,000 live births, using cross-tabulation as well as binary logistic regression techniques. Employing data from the Nigeria Demographic and Health Survey (NDHS) 2008 to examine the analysts of Nigerian infant-child (aged 0-4 years) mortality. The study also utilized data from women who are currently married, and the data were filtered by their infant-child mortality experience (n = 9,809). The study examined 16,065 women in totally. The reveals that mortality rate was at peak (49.14%) for children whose mothers are illiterate and bottommost (13.29%) amid women with higher education profile, more so the logistic regression analysis, shows that both parent level of education and mother's occupation were found to be statistically significant in the reduction of infant-child mortality rate. In addition, to the aforementioned, the result as well revealed that women age at first birth, maternal wealth index, and place of residence all have significant effect on Nigerian infant-child mortality rate. The study then concluded that intensification of women education will in turn upsurge their age at first birth and moderate the menace of poor infant-child health outcomes.

Akinyemi, Solanke and Odimegwu (2018) using Cox proportional hazards models, provided answers relationship among infant-child mortality and maternal employment in Nigeria, the impact of paternal occupation, accommodation type, as well as geopolitical region. Employing retrospectively techniques, they study analyzed a sample weight of 31,828 infant-child cross-sectional data extracted from 2013 Demographic and Health Survey, in Nigeria. The study reveals that approximately two-third (68.7%) infant-child mortality were children whose mothers are actively participating in the labour force especially self-employed women. Meanwhile, infant-child mortality rate amid children of employed mothers (65 per 1000 live births) was to some extent lower when compared with that of children of unemployed mothers (70 per 1000 live births). Also, the hazards regression models showed that the risk of infant-child mortality was higher amidst unemployed women. The result also revealed that infant-child mortality rate risk was more predominate among women that are self-employed while the interaction effects analysis, showed variations by type of residence, father's occupation as well as geopolitical region.

In the same light, Morrill (2011), conducted a study on the consequences of maternal employment on the health of school-age children using bivariate probit and two-stage least squares estimation models. Employing data from National Health Interview Survey (1985–2004), the study found that children of employed mothers are better off in terms of nutritional stand as well as household income. Gennetian, Heater, London and Leonard (2010) deliberated on the effects of low-income mothers' employment on young children health and discovered that there the children did not benefit from such maternal employment rather it impacted hazardously on the children's experience. Meanwhile, Baker, Gruber and Milligan (2008) evaluated the effect of maternal labor supply on young children's

health by examining the impact of a local childcare subsidy program in Quebec in the late 1990s. The study however, employed difference-in-differences identification strategy and as well found that the policy put in place to improve women employment as well as infant-child healthcare, were not properly implemented, thereby not having any effect on the infant-child and maternal welfare.

3. Research methodology

This section focuses on describing and stating the source of data utilized for analysis in this study. The theoretical base of this study is adopted from Grossman (1972) who developed a theoretical health production function, which is specified as:

$$H = F(X) \dots \dots \dots (3.1)$$

Where H is a measure of individual health output and X is a vector of individual inputs to the health production function F. The elements of the vector include literacy rate, government health expenditure, numbers of medical physicians, real per capita income and female labor participation. To capture both the consumption and investment aspects of health inputs, the demand for health by an individual is analyzed via the utility optimization framework. This is represented in equation as:

$$H_t = \beta X_t + \varepsilon_t, t = 1 \dots T \dots \dots \dots (3.2)$$

Where H_t is the explained variable (Health Status), X_t is a vector of explanatory variables which can determine the health outcomes, t is the time series, β represent the coefficient of the vector of explanatory variables and ε_t is the random variable with zero mean and constant variance. Introducing other variables into the equation 2.42 above, the resultant functional model is specified below as:

$$ME = F(SETF, SESF, HI, CM, IM) \dots \dots \dots (3.3)$$

Applying transformation to the equation 2.44 below, the resultant mathematical equation is specified as represented below:

$$ME_t = \beta_0 + \beta_1 SETF_t + \beta_2 SESF_t + \beta_3 HI_t + \beta_4 CM_t + \beta_5 IM_t + \varepsilon_t \dots \dots \dots (3.4)$$

Where IMMR is the infant-maternal mortality rate, CHE is the capital health expenditure, FLFR is the female labour participation rate, RPCI is the real per capita income, EDU stands for level of education (secondary school enrolment).

The study utilized mainly secondary data sourced from the World Bank World Development Indicators (WDI) 2017 from 1980 to 2017.

The estimation technique for analysis in the study adopted the Fully Modified Ordinary Least Square technique. Also, the descriptive statistics, unit roots test, correlation test and cointegration test (Johansen test) were conducted.

4. Findings

Unarguably, this section presents the expected results of the analysis, by means of the data that was drawn via the world development indicator. Based on the above, it starts with the variables' descriptive statistics. Furthermore, table 4.1 reveals that maternal employment within the period of study 1980-2017 averaged 48.271, as it rallies between 47.132 and 50.390. However, the table revealed that school enrollment tertiary female on the average was 61.914, it also increased from 59.925 to 64.467, while school enrolment secondary female increased from 4.997 to 12.250 and as well averaged 8.346, in the same manner, household income raised from 18.548 to 58.784 while its average is 34.221. Meanwhile, child and infant mortality per 100,000 birth raised from 1323.501 to 2563.092, 100.200 to 213.700, and averaged 1748.906 as well as 175.555 respectively. All the same, the probability value will be used to give a better clarification of the Jarque-Berra statistics test, from the table, it can be concluded that all the variables are normally distributed. Therefore, the null hypothesis was not rejected, by means of the probability value of the variables being more than 5% level of significant.

Table no. 4.1 Descriptive Statistics

Statistics	ME	SETF	SESF	HI	CM	IM
Mean	48.27107	5.291205	26.82449	1748.906	175.5553	105.8789
Median	47.56150	5.028729	22.54573	1547.367	193.9500	115.8000
Maximum	50.39000	8.664780	53.48824	2563.092	213.7000	126.6000
Minimum	47.13200	1.770140	8.698330	1323.501	100.2000	64.60000
Std. Dev.	1.183063	2.589917	10.27354	429.9799	39.35953	21.38727
Skewness	0.768920	0.003386	0.720805	0.685018	-0.643254	-0.652992
Kurtosis	1.960187	1.414499	2.950471	1.933177	1.859612	1.882338
Jarque-Bera	4.020528	2.828092	3.207734	4.773926	4.679680	4.678374
Probability	0.133953	0.243157	0.201117	0.091908	0.096343	0.096406
Sum	1351.590	142.8625	992.5063	66458.43	6671.100	4023.400
Sum Sq. Dev.	37.79025	174.3994	3799.644	6840661.	57319.39	16924.36
Observations	28	27	37	38	38	38

Source: Authors' Computation using World Development Indicator

In the same light, it will be important for the study to conduct a correlation test to observe the degree of the relationship among the variables. Meanwhile, the essence of the investigation is to ensure that the variables do not share a flawless relationship; in order to avoid multicollinearity problem in econometric. Clearly, from the results presented in table 4.2 below, the maternal employment, female tertiary school enrollment, female secondary school enrollment, per capita income, child and infant mortality per 100,000 birth

Table no. 4.2 Correlation Test Result

Variables	ME	SETF	SESF	PCI	CM	IM
ME	1.00	0.72	0.936151	0.92541	-0.91781	-0.91911
SETF		1.00	0.79	0.76	-0.9265	-0.92587
SESF			1.00	0.95	-0.93	-0.93508
HI				1.00	-0.93	-0.93
CM					1.00	0.99
IM						1.00

Source: Authors' Computation using World Development Indicator

Evidently, it is important that the unit root test be estimated, as this will evade spurious regression problem. Meanwhile, the Kwiatkowski-Phillips-Schmidt-Shin test (KPSS) test technique follows the null hypothesis that the series are stationary against the alternative hypothesis of series having unit root process. More so, table 4.3 divulged that all the variables employed are all stationary at first difference.

Table no. 4.3 Unit Root Test

Variables	KPSS (1992) Null Hyp: Series is Stationary			Order
	5% C.V	Statistic I(0)	At Statistic At I(1)	
ME	0.463000	0.596605	0.372031	1(1)
SETF	0.463000	0.744191	0.125436	1(1)
SESF	0.463000	0.653945	0.079675	1(1)
HI	0.463000	0.530045	0.436080	1(1)
CM	0.463000	0.678678	0.136055	1(1)
IM	0.463000	0.678856	0.134278	1(1)

Source: Authors' Computation using World Development Indicator

Based on the foregoing, Johansen cointegration test is employed in the estimation of the model's cointegration for variables that unified at different orders. Equally, the table showed that the five (5) equations are cointegrated, meaning that there is cointegration in the relationship that the study seeks to establish. This is further supported as the trace statistics (TS) disclosed value that is more than 5% critical value.

Table no. 4.4 Johansen Cointegration Test Result

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.995062	288.4039	95.75366	0.0000
At most 1 *	0.983910	182.1861	69.81889	0.0000
At most 2 *	0.889766	99.59435	47.85613	0.0000
At most 3 *	0.781448	55.49140	29.79707	0.0000
At most 4 *	0.691522	25.07675	15.49471	0.0013
At most 5	0.074787	1.554632	3.841466	0.2125

Trace test indicates 5 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level

Source: Authors' Computation using World Development Indicator

Table no. 4.5 Fully Modified Least Squares (FMOLs)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SETF	-0.247074*	0.058899	-4.194879	0.0007
SESF	0.020195	0.012516	1.613628	0.1262
HI	-0.000371	0.000477	-0.778364	0.4477
IM	-1.144227*	0.435914	-2.624894	0.0184
CM	0.580913**	0.241531	2.405131	0.0286
C	68.64122*	3.374899	20.33875	0.0000
Result Properties				
R-squared	0.986970	Mean dependent var	47.74832	
Adjusted R-squared	0.982898	S.D. dependent var	0.673445	
S.E. of regression	0.088069	Sum squared resid	0.124098	
Long-run variance	0.007190			

* Implies Statistically significant at 1% and ** implies statistically significant at 5%

Source: Authors' Computation using World Development Indicator

Ostensibly, table 4.5 above shows that female tertiary school enrollment impacted negatively on maternal employment as well as statistically significant at 1%. Unarguably, this implies that female tertiary school certificate is not necessarily used in maternal employment but other lower educational qualification as shown by the study, despite its impactor factor of -0.247. Basically, this can be attributed to poor educational system and that is why Nigerian graduates are unemployable. In line with the above, the result also reveals that female secondary school enrollment is positively correlated to maternal employment, and as well has 0.020 impact factor and is statistically insignificant. The implies that most of the maternal employment of the literate mothers is basically based on their secondary school certificate. More so, its statistical insignificant can be attributed to the fact that there are other sources of female employment that is not necessarily their secondary certificates such as small and medium enterprise (self-employment).

Meanwhile, household income is negatively related to maternal employment and is statistically insignificant. It means that the income generating strength of Nigerian women is not inclusive. However, infant mortality is negatively related to maternal employment and as well statically significant at 1%. This implies that maternal employment helps to curb infant mortality in Nigeria, as it has an impact factor of -1.144. basically, this can be attributed to the fact that if mothers are

educated and empowered financially, they tend to take good care of their infant, in terms of feeding the infant with the right meals, ensuring that their feeding utensils are properly sterilized, properly vaccinated as well as routine visits to their pediatrician (s). Evidently, child mortality is positively related to maternal employment as well as statistically significant at 5%. It also has the impact factor of 0.581 on maternal employment. Unarguably from table 4.5 above, child mortality did not tally with a prior expectation as it is expected to have a negative relationship with maternal employment.

This may be attributed to the fact that working-class mothers resume fully after maternity leave and four months half day work immediately after resumption from maternity leave. Thereby leaving the child under the care of the Nanny, who may or may not care about the wellbeing of the child which may result to child mortality, as most of the working-class mother leave their homes early while the kids are still sleep and return home late in the night when they are asleep, Lagos state mothers are a typical example. Some also go to work during the weekends especially the bankers among them.

5. Conclusions

This paper investigated the impact of maternal employment on infant- child mortality in Nigeria. However, the result concludes that infant mortality is negatively correlated with maternal employment and as well as statistically significant at 1%. Furthermore, the result also concluded that child mortality and female secondary school enrollment are positively linked with maternal employment as well as statistically significant at 5% and statistically insignificant respectively. Based on the foregoing, female tertiary school enrollment impacted negatively on maternal employment as well as statistically significant at 1%. From the result, the level of household income is negatively associated with maternal employment and as well statistically insignificant. In line with the above, this study concludes that a well-structured, effective, improved institutional management, as well as increased government long term expenditures on the health sector, will not only enhance infant-child healthcare but as well improve women labour force participation as well as their welfare. Lastly, the government should provide adequate education and support for mothers in order to lessen child-infant mortality to the barest minimum level in Nigeria.

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The Beach Extention Project in Mamaia Resort, on the Romanian Black Sea Coast: Certain Benefits, but also Numerous Tourist Complaints

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Abstract

Tourism is one of the most important "industries" in the world, both in terms of its contribution to GDP and also job creation.

In many areas and countries of the world, seaside tourism has been developing rapidly in the last decades and, for many countries, it represents a very important economic activity.

The coastal areas are facing more or less severe effects of the coastal erosion. Significant beach areas disappear annually, under the influence of natural and anthropogenic factors. Therefore, actions to restore, protect and expand the beaches are needed.

In Romania, there is an ongoing development on widening the beaches, but, although those works are urgently needed, there are many tourist dissatisfactions regarding the exaggerated width of the newly extended beaches, the quality of the sand, etc.

The purpose of this paper is to raise awareness on finding a correct balance between coastal erosion protection works and tourism demands.

Key words: extention of the tourist beach, fighting coastal erosion, tourist dissatisfaction, Mamaia tourist resort, Romania

J.E.L. classification: D73, L83, L78, P28, Q24, Q25, Q54, Q57, Z32

1. Introduction

The Romanian Black Sea coast stretches over 245 km, from Gurile Dunării (Danube Mouths), in the North, to the Bulgarian border, in the South. The Southern sector, the tourist one, of the Romanian seaside, where the resorts and tourist destinations are, is 82 km long, being situated between Capul Midia (Cape Midia), in the North and Vama Veche, in the South, and located between the 44th parallel 25' and the 43th parallel 25' North latitude, on the same geographical coordinates as other famous tourist destinations in Southwestern Europe, such as: San Remo, San Marino, Monaco, Rimini (Jugănar, 2004, p.54).

Mamaia is the largest of all the tourist resorts on the Romanian coast, with an accommodation capacity, on July 31, 2020 of 20,571 places, in 92 units (tourist reception structures with tourist accommodation functions, mostly hotels). From an administrative point of view, Mamaia belongs to Constanța municipality, the county seat bearing the same name. Furthermore, Mamaia is the oldest tourist resort on the Romanian coast, being established 115 years ago (Jugănar, 2020, p.705), and considered the "Pearl" of the Romanian coast.

Coastal erosion has greatly affected, in the last decades, the tourist beaches on the Romanian coast, the width of the beaches being reduced, in some places even until their total disappearance, the sea water reaching the first buildings of the resort, as was the case in the Eforie North resort. However, the situation has been different, in terms of the width of the beaches, from one resort or tourist destination to another.

The first phase of this project aimed at reducing the coastal erosion on the Romanian seaside began in the year 2016, 5 beach areas from the Mamaia resort (the Southern area), in Constanța and Eforie North being set up (widened) with the help of dredged and pumped sand from the open

Black Sea. The cumulative length of the extended beaches is about 7.3 km, these beaches being extended with an area of 60.66 hectares (N.A.R.W., 2020a).

In Mamaia resort, the works to widen the beaches in the Northern part of the resort were completed in May 2021, the widest beaches being set up here; in some areas, the new beaches reach widths of up to 240-250 m or even over 300 m (the distance between the limit of the Black Sea water and the limit of the resort). In these areas, the tourists' access to the sea water is quite difficult, both due to the long distance they have to cover, and to the fact that the sand with which the sanding works were done on the new beach surfaces has a higher granularity and a lot of seashells, which makes it difficult and even dangerous to walk on the beach without protective footwear. For this reason, a large number of tourists avoid staying in this area of the resort.

2. Literature review

The erosion of the beaches and seafronts is a natural phenomenon. However, frequently the causes are also anthropogenic, as a result of various hydrographic arrangements, such as the construction of dams.

Beach nourishment is the process of adding sediments to a beach affected by erosion, in order to prevent sediment loss on a beach affected by erosion, preventing the future loss of sediments, caused by various factors.

Beach nourishment has been used primarily for the benefit of the tourism industry, due to the relatively low costs of the landscaping works and periodic maintenance. Moreover, the benefits of such projects are also referring to the reduction of the risks caused by the storms to the properties located on the shore, on the seafront, as well as the recreational benefits of a wider beach (Philips and Jones, 2006).

The sandy sediments used for the restoration and extension of the beaches can come either from sand deposits found on the surface (such as sand dunes or abandoned beaches), or from submarine sand deposits, from where the sand is dredged and pushed hydraulically to the beach (Benedet et al., 2007, p. 12).

Within the national policies on reducing the effects of coastal erosion, at the moment, the "soft" approaches of the landscaping works are more and more frequent, by studying and carrying out defense systems with a lower environmental impact. These include: (i) beach nourishment; (ii) innovative systems (dune protection features, Beach Drainage Systems), meant to reduce the erosion of beaches and seafronts (Damiani, et al., 2011; Saporieri and Damiani, 2015); (iii) submerged structures, intended to partially reduce the impact of erosion.

In the specialized literature there is an important number of studies on the analysis of the history of these phenomena, and also predictions on how coastal erosion will evolve. Many of these studies assess the environmental impact, but also the economic one, on a continental or even global level.

More and more recent studies are analyzing the effects of storms on beaches, for example, in Europe (Karunarithna et al., 2014; Eichtoph et al., 2019).

Depending on the type of sediment, beaches give different responses to the storms' actions. In the study of coastal area problems, the sequences in which storms occur are very important and have begun to be studied more. Most of the studies concluded that there is no consensus on how they respond to a succession of storms, which is not surprising, given the complexity of the factors which influence the evolution of the beaches (Eichtoph et al., 2019a).

Beaches have a special value for the tourism industry, which is why their protection is vital. Protecting and restoring beaches is a challenge for both engineers and coastal managers (Alexandrakis et al., 2015, p.7).

The effects of the coastal erosion phenomenon are the destruction of certain tourist infrastructures, higher costs of their insurance against the action of natural factors, but also the decrease in competitiveness of some coastal areas compared to the other areas they are competing against on the tourist market, leading to a decrease in the number of tourists, the turnover, etc. (Alexandrakis et al., 2015, p. 10).

Within a Supply of Services Agreement signed between the Directorate General of the European Commission and the National Institute for Coastal and Marine Management of the Netherlands (European Commission, 2004), 60 case studies were analyzed so as to discover

common success strategies in order to manage the effects of erosion. Among these case studies, two from the Western part of the Black Sea - one from Mamaia, Romania, and the other one from Shabla-Krapetz, Bulgaria - were presented (European Commission, 2004).

3. Research methodology

This paper has been produced by combining several types of research methods. In order to bring to attention the theoretical approaches of the studies on the causes and effects of coastal erosion, as well as the papers produced on how to fight this phenomenon and to restore and consolidate the beaches and seafronts of the Romanian Black Sea coast, we have used the desk research aimed at collecting secondary, quantitative information from the specialized literature.

Another quantitative, cross-sectional desk research is represented by the collection and interpretation of statistical data published by the National Institute of Statistics and the data provided, upon request, by the Constanța County Directorate of Statistics, on the evolution of Mamaia tourist resort and the situation on the Romanian Black Sea coast (Jugănar, 1998, pp.15-17; 23-25; 29-30). Furthermore, another research method used in this study is the focus group (Jupp, 2010, pp. 209-210), which has allowed us to collect direct, quantitative and qualitative information from the owners and the managers of certain tourist reception units, with tourist accommodation functions, from Mamaia, beach operators and travel agents who sell tourist offers having Mamaia as destination.

4. Findings

4.1. Presentation and evolution of Mamaia tourist resort, Romania

Mamaia tourist resort was inaugurated in the year 1906, when the first balneary establishment opened - two wooden pavilions and their annexes (Jugănar, 2004, Annex 5, pp. IV-V).

Professor Ion Bănescu, mayor of Constanța during 1905-1907, is considered the founder of Mamaia resort, as he insisted a great deal, within the Communal Council, on approving this project in 1905, and he took care of the leasing procedures for a 192-ha area of land, located in the North of Constanța, between Lake Siutghiol and the Black Sea, from Capul Singol (in the Pescărie area) and the tail of the lake (in the Hanul Piraților area). The area was parceled out and soon enough willing people (personalities from the country, but also wealthier locals) appeared and bought 130 plots there (Hapurnea, 2013).

Constanța had been recognized as a "balneary resort" since the year 1892 and had been operating on the basis of a "Regulation" drafted by the then mayor (Mihail Coiciu) and approved by the Ministry of Interior (Păuleanu, 206, p.188).

However, the works to expand the port of Constanța (which started in 1889), towards the South, made it impossible to preserve the "Băile de la Vii" beach, one of the most frequented beaches by the people of Constanța, but also by the tourists. The temptation for more and more Romanians (especially those coming from Bucharest) to reach Constanța was increasing, from one year to another (Jugănar, 2007, pp. 352-353).

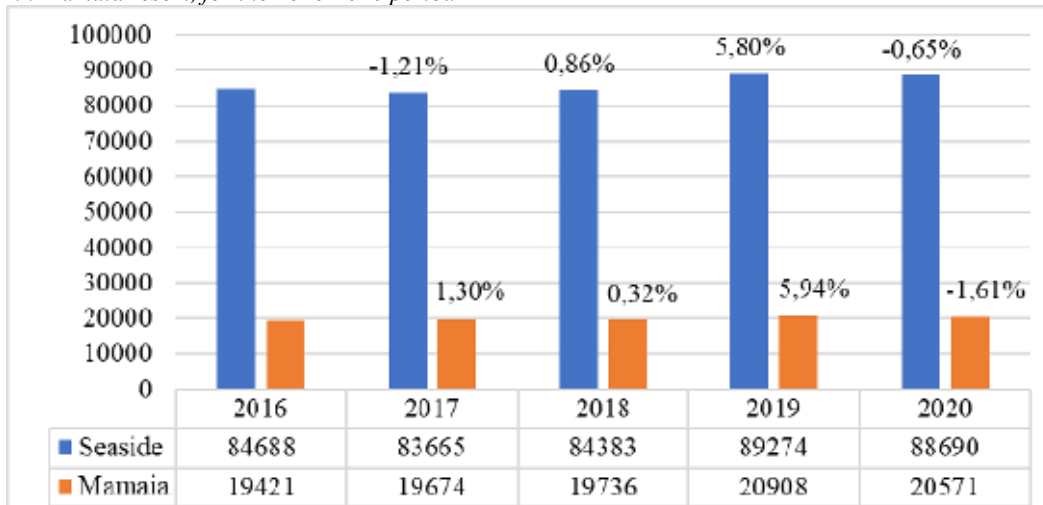
The issue of finding another solution, i.e., setting up another beach for the city of Constanța to develop as a balneary resort, was becoming more and more pressing. There had been many discussions and debates on this subject for about 10 years. The place where the new beach would be set up had to, on the one hand, be close enough to the city, have a generous area so as to be able to develop in time, and, on the other hand, have spaces of accommodation that would allow tourists, especially those with children, to spend the whole day there (Jugănar M., 2020, p. 704).

Since the beginning of its activity, Mamaia has created for itself an image of an exclusive, expensive beach /resort, accessible only to certain segments of tourists, a luxury beach (Jugănar and Jugănar, 2019, p. 513).

Figure No. 1 shows the evolution of the total tourist accommodation capacity in the coastal area of Romania, as well as the evolution of this indicator in the case of the Mamaia tourist resort. One can observe a positive evolution of the tourist accommodation capacity of Mamaia resort, in the 2016-2019 period and its decrease by 1.61%, in 2020, compared to 2019, due to the restrictions in

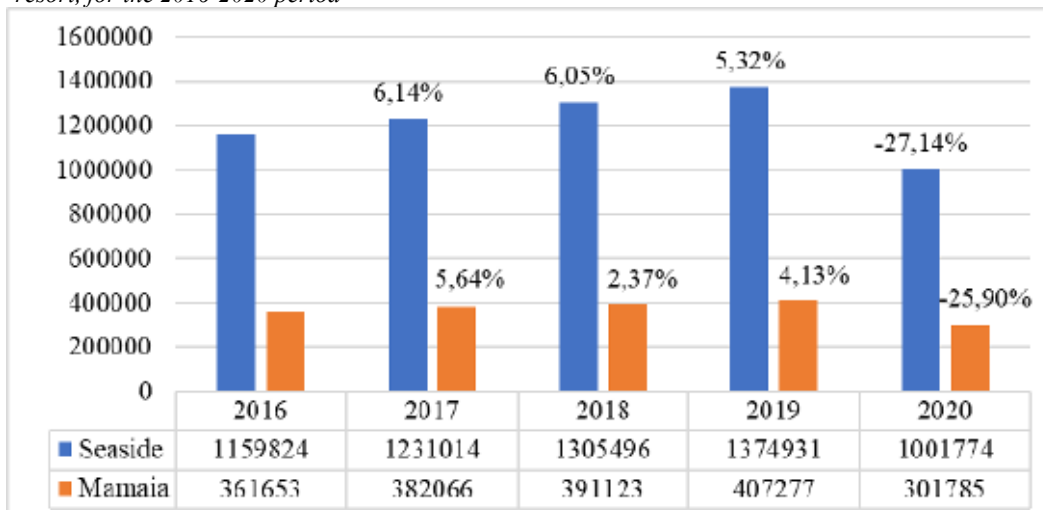
the context of the COVID-19 pandemic, which started in 2020. While in the year 2017, on the entire coastal area there was a 1.21% decrease in accommodation capacity, during the same year, in Mamaia, the accommodation capacity increased by 1.3%, compared to the year 2016.

Figure no. 1: The comparative evolution of tourist accommodation capacity on the Romanian seaside and in Mamaia resort, for the 2016-2020 period



Source: Author's own processing of the data obtained from the Constanta County Directorate of Statistics

Figure no. 2: The comparative evolution of tourist arrivals on the Romanian seaside and in Mamaia resort, for the 2016-2020 period



Source: Author's own processing of the data obtained from the Constanta County Directorate of Statistics

The comparative evolution of the results registered by the entire coast and by the Mamaia resort, in the 2016-2020 period, regarding the indicator "number of tourist arrivals" is presented in Figure No. 2. We can notice that the decrease in the number of tourist arrivals in the year 2020, compared to 2019, was smaller in Mamaia resort (-25.9%), compared to the decrease registered on the entire coastal area (-27.15%).

These data were obtained by processing the information received from the annual situations communicated by the Constanța County Directorate of Statistics, entitled "Tourist accommodation capacity and its use by localities in the year ...", regarding Constanța County, by removing the information about the non-coastal localities from the County.

4.2. The beach extension works in Mamaia tourist resort - advantages, but also tourist dissatisfactions

The works to extend the beaches on the Romanian coast are not only beneficial and have been long awaited by hoteliers and tourists, but were absolutely necessary, given that in some areas, due to erosion, the beaches had become much narrower, being close to disappearing completely.

The coastal erosion of the Romanian seaside

The beaches in Mamaia resort are made of sandy material brought by the Danube River (alluvial segments) and biogenic shell sediments. The sand is fine and has a light gray color.

In recent decades, erosion has affected the entire Mamaia resort, causing it to lose many hectares of beach. The erosion processes are more intense during winter, when storms are more frequent and stronger; storms led to sediment deficits on the beaches and damaged certain tourist facilities. The decrease in sediments in the Black Sea, to the South of the Danube Delta, has as main cause the dams built on the Danube River, which prevent the transport of the sedimentary material to the Black Sea (EuroSION, 2004, p. 7).

After the dam extension works for the widening of the commercial port of Midia (a 5 km dam, located in the North of Mamaia), the beach in Mamaia registered sediment accumulations in its Northern part and a strong erosion in its Southern part. In the winter of the year 1988, the Southern part of the beach was severely destroyed. The shoreline retreated by up to 59 m, between the year 1966 and the year 1988, and the beach area eroded by 88,900 square meters. Urgent measures were needed to protect the beaches, including longshore breakwaters and artificial sanding works. After the implementation of this protection measures' scheme, the shoreline continued to retreat, with up to 35 m and sediment accumulations of no more than 15 m, in the 1978-1995 period (EuroSION, p. 10).

In Mamaia, coastal erosion is a particular issue, the main cause being the construction of the dam for the extension of the commercial port of Midia (harbor extension dike). This dam acts as a barrier to long shore currents running from North to South. Due to this dam, which diverts the longshore sediment drift offshore, to the South-East, Mamaia beach has been transformed into a bay, as a result of the almost total lack of sediment supply (EuroSION, 2004, p. 7).

In the year 1988, the beach was almost completely destroyed in the Southern part of Mamaia resort. At that time, urgent measures were taken, both "hard" and "soft", to reduce the effects of the waves on the beaches, during stormy weather periods.

The first concrete project for the rehabilitation and consolidation of the beaches and seafronts on the Romanian coast, after the year 1990, began in the autumn of 2003, with the tender for designating the builder for the pilot project for consolidating the beaches in the area of Venus resort, where the erosion phenomenon manifested the strongest (Juganaru, 2004, p. 212).

A study conducted by Dutch experts, within the project "Implementation of the EU Water Framework Directive and Integrated Coastal Zone Management in Romania", funded by the EU, highlighted both the causes and the concrete solutions for carrying out the works to fight erosion and restore the beaches. At that time, the estimated costs for carrying out these works were about 150 million Euros, which was considered a very high amount given the financing possibilities of Romania at that time (Juganaru, 2004, p. 2013).

One of the largest works projects in Romania: "Reducing coastal erosion", Phase II (2014-2020)

In a press release from November 2018, Dobrogea-Litoral Water Basin Administration (A.B.A. D.-L.) announced the signing of the financing contract for this project, having as objective the rehabilitation and protection of degraded beaches and seafronts, reducing the erosion process.

The project has a total value of 3,805,641,720.80 lei (approximately 800 million Euros), of which 85% are non-reimbursable funds from the European Union, within the "Large Infrastructure" Operational Programme (POIM) 2014-2020, Priority Axis 5 - Promoting climate change adaptation, risk prevention and management, Specific objective 5.1. Reduction of the effects and damages on the population caused by the natural phenomena associated with the main risks accentuated by the climatic changes, mainly from floods and coastal erosion.

This project is being implemented in the 2015-2023 period, the works in the second phase being carried out in the sectors: Mamaia Center and Mamaia North, Agigea, Eforie Center, Eforie South,

Costinesti, Mangalia (Olimp, Neptune, Jupiter-Venus, Saturn, Mangalia), 2 Mai, Tomis Port, up to Constanta Port, Balta Mangalia, Stavilar Periboina and Stavilar Edighiol. The aim of the project is to prevent coastal erosion, through specific actions to limit its negative effects on coastal areas and beaches, through rehabilitation and protection activities, including artificial sanding of existing beach areas, dams to stabilize the dredging seafronts, coastal structures connected or parallel to the shore, retaining walls, etc. (ABAD-L, 2018).

During the first phase of this project, sanding works were carried out in the area between Constanta and Mamaia, as well as in the tourist resort Eforie North, on 5 beach sectors. The cumulative length is about 7.3 km, and the area of the 5 beach sectors has been increased by 60.66 ha (NARW, 2020a).

On October 12, 2020, the National Administration “Romanian Waters” announced, through a press release, that the works have started within the second phase of the project, in a first stage the sanding works being carried out in Navodari and Mamaia, and stating that, following these works, the width of the beaches would increase to 100 m (NARW, 2020b). It is difficult to understand, in the absence of official explanations, the reason why, in the end, the width of the extended beaches exceeded, in some places, 200-250 m, even 300 m.

The real reasons for tourists’ dissatisfaction with Mamaia resort, in the summer season 2021

The main dissatisfaction of the tourists who come to Mamaia resort (more precisely, in the Northern half of it), in the summer season of 2021, lies in the exaggerated size of the beaches, which exceeds, in some places, 250 m in width and sometimes even 300 m.

Beyond the positive effect of protecting the beaches from coastal erosion, tourists staying in that area of the resort have some serious reasons for dissatisfaction. Thus, not only do they have to travel long distances from the entrance to the beach to the sea shore, but they will not be able to benefit from the usual facilities in the beach areas located near the sea water, because the beach operators did not receive permission, from the administrator of the beach (Dobrogea-Litoral Water Basin Administration -ABAD-L) to place sunbeds, umbrellas and beach-bars on the new, extended portion, near the sea shore. They had to be content with the exploitation, for tourist purposes, of the old locations on the existing beach before carrying out the extension works. The reason invoked by ABAD-L is that the new beach areas cannot be rented, for the time being, because they have not been tabulated yet, so they do not yet officially exist in the cadastral records. Moreover, this operation will last quite a long time, probably until next year. Meanwhile, tourists are forced to walk 200-300 m to the edge of the sea, where they do not find the necessary conditions (sunbeds, umbrellas, a bar where they can buy something to drink or eat), they do not have at their disposal toilets or showers and must sit on the sheet, towel or mattress that they bring themselves.

Another justified tourists’ dissatisfaction is the fact that the sand on the beach is less fine than the one that existed until this year, being covered with many shells, in which they may cut the soles of their feet at any time, when stepping on the beach (Figure No. 4).

Figure no. 3. Comparative images of the width of the beaches located in the center of Mamaia resort, in 2020 and 2021, respectively



Source: Author’s personal photographs

Figure No. 4. Comparative images of the rough quality of the sand of the beaches located in the center of Mamaia resort, in 2020 and 2021, respectively



Source: Author's personal photographs

Apart from the problems created by the extension of the beaches, there are other reasons for dissatisfaction, which negatively influence the situation of Mamaia resort in the 2021 summer season, other than those already mentioned. Of these, we consider the following to be the most important:

1). *The higher risk of drowning*, due to the great depth of the water, near the seashore. The beach in Mamaia was recognized and appreciated not only for the fine sand of the beach, but also because the entrance into the water was very smooth, the water having small depths even at distances of 100-150 m from the shore, and now there are portions where, only 10-20 m from the seashore line, where the beacons (buoys) are, the water depth suddenly increases, to over 2 m.

2). *The difficult access for ambulances* and first aid crews to the seashore, where tourists who need medical intervention can be found.

4.3. Possible measures to improve the situation

We consider that at least some reasons for the dissatisfaction of the tourists (but also of tourism entrepreneurs in Mamaia) could and can be avoided through some measures, such as:

- planning the works for setting up / extending the beaches so that they could be completed on time, and the new beaches could be used by the tourists from this very season;
- carrying out discing works / loosening the sand on the new beaches and sifting it, with specialized equipment, so as to remove the seashells, at least in the areas near the sea water;
- better communication from the competent authorities (NARW, ABA D-L) so as not to surprise either the tourists, or the entrepreneurs and tourism managers facing these problems in the summer tourist season of 2021.

We also consider it imperative to speed up the cadastral and tabulation works for the new beach areas and the elaboration of the Zonal Urbanistic Plans for these areas, so that all the bureaucratic procedures are fulfilled, and the new areas can be concessioned to the beach operators by the beginning of the summer tourist season of 2022.

5. Conclusions

In a post on its Facebook page from January 26, 2021, National Administration “Romanian Waters” informs that the Romanian coast will have, at the beginning of this summer, almost 53 ha of new beach, on a length of 6,950 linear meters, using for the sanding about 4.5 million cubic meters of sand (Agerpres, 2021). However, from a subsequent post, dated April 28, on the Facebook page of Dobrogea-Litoral Water Basin Administration, we find out that, although in the initial project, the beaches were to be extended by 53 ha, following the “optimization of the project”, until that date (when the works were not yet completed), the beach area increased by 70 ha (ABA D-L, Facebook page). A public explanation on this subject from ABA D-L would have been necessary. In the absence of coherent explanations, from the competent authorities, the question from tourists, but also from hoteliers and other tourism entrepreneurs in Mamaia remains legitimate: from a scientific point of view, is such a large extension of beaches justified, or is it a mistake, given that there are so many inconveniences that have arisen since the completion of the extension of these parts of the beach, that only thorough convincing and credible explanations about the need to expand with such large beach areas can convince those affected by these works?

Hoteliers who have invested in tourist accommodation units located in the affected area are also worried and fear that all the bureaucratic legal procedures (the cadastre and tabulation of the new beach areas, the approval of a new Zonal Urbanistic Plan, the connection of beach bars and toilets to utilities - water, sewerage and electricity, etc.) will not be completed until the next season (2022), so that their tourists can benefit from sunbeds, umbrellas and beach bars on the new locations on the extended beach, near the seashore. Already, at the beginning of June 2021, a large number of tourists canceled their reservations for the summer of 2021 at the hotels in Mamaia located in the area of the recently expanded beaches, and large decreases in turnover for the accommodation, food units and for the beach operators in this area of the resort are expected.

And there is also the concern that the authorities will allow the construction of new hotels and restaurants on the existing beach prior to the works for its extension, so that new constructions would block the sea view of the existing hotels.

The Romanian Minister of Environment stated that, after the completion of the works, the reception and tabulation of the new portion of the beach, the Ministry of Environment, together with "Romanian Waters" will launch an international competition regarding urbanism and architecture solutions for setting up this portion (Agerpres, 2021b). It remains to be seen whether the respective solutions will be limited to the use of the new beach areas only for tourist leisure purposes or "hard" constructions, such as hotels, will be allowed.

In our opinion, it would be desirable not to accept the construction of new accommodation capacities for tourists, since, already at this time, Mamaia is a very crowded tourist resort, with few parking spaces, etc. It would rather be necessary, for example, to build some second-generation water parks (covered and heated) or, preferably, even third-generation (quasi-energy independent, using heating systems from unconventional energies). It would, thus, be possible to extend the tourist season on the Romanian coast, such water parks being able to operate throughout the year, not only during the summer.

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Inferring on the Right to Health in the New World Order

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Abstract

The main problems we find in the field of health, encounter also in Romania in a fairly large proportion, are those related to discrimination, abuse and violation of fundamental rights. We can say that human rights have become the obligatory reference of any modern discourse, but are sometimes treated as a simple "fashionable" element. This can be seen even when we talk about the right to health. We say this because, although the number of countries that include in their constitution the right to health and draft the national legislation necessary to comply with is constantly growing, when it comes to interactions with medical institutions and health care providers, the patients' rights are not fully respected. All these are the reasons why we decided to look deeper in the issue of the right to health, which, by its nature, requires a multidisciplinary approach, because in its content we find both educational activities and those aimed at promoting lifestyle changes, respectively encouraging policies and legislative measures to improve the quality of life.

Key words: justice, equity, discrimination, abuse, legislation

J.E.L. classification: K40

1. Introduction

The issue of the rights of people using health services has been increasingly debated in recent years, reaching a consensus with great difficulty. This is mainly due to the fact that the field is strongly influenced by the way the health system of a state is organized and by its quality, as well as by the way in which it is possible (or not) to create a relationship of cooperation between medical staff on the one hand, and patients on the other.

Regulating the right to health is very important, because it generates a first benefit, that is to set up a coherent horizon which we have to report on during this particularly demanding period due to the occurrence of Sars Cov2 virus. A second benefit could be related to the size of social movements that have taken place, in this case recalling the move for social justice in the area of medical services insurance, through which people drew attention to the extreme need for specific landmarks in society, campaigning for patients' rights to be respected and ensuring access to affordable healthcare.

Thirdly, the new world order which is emerging will be able to influence people's behaviour and this will lead to macro-economic consequences, but the state will have the real mission, it must take on its mission in terms of compliance, protection and fulfilment of health-related responsibilities with a high impact on social or economic issues (Kinney, 2001, p. 1460).

Unfortunately, we will not be able to stake on changing the social behaviour in every social categories, because, on example, those in extreme poverty, who are socially marginalized anyway, homeless persons, migrants, imprisoned people, climate refugees will not be able to adapt to these new standards of social behaviour and in their case, social justice draws attention to the decisive criteria revealing social differences which, by their nature, may negatively influence the exposure to the virus (Yamin, 2020).

For this reason there are voices advocating to learn how to live with the virus, but it is not just the way in which we are prepared to live with this pathogen agent, but the desire to change the social behaviour which can stop the spread of the virus. The virus continues to undermine an essential dimension of our existence: sociability, our natural desire to live together, to communicate, to change opinions, travels, etc. What we are living today has received a connotation too hostile for the humanity.

2. Theoretical background

The financial instability in the euro area grows the spectre of a sovereign debt crisis. The excessive private debt raises the fear of another devastating financial crisis. The containment to which we are subjected by restricting the right to freedom is the antithesis on which globalization is based. The world economy is literally at a standstill, people’s movement is prohibited, and the borders close at a speed which not even the most radical nationalists would not have dared hope for it. Philip Alston, special rapporteur on extreme poverty and human rights, have warned that the pandemic generated by COVID-19 could propel more half of billion people in poverty. It is necessary that states take measures adapted to the new economic order which is not very optimistic. These measures have seemed impossible just a few months ago, including nationalization of health systems, providing direct cash allowances and the suspension of house expulsion and mortgage prescriptions among others. However, under the current circumstances, too many other countries moved toward the application of outdated favouritism systems, but also of an autocracy, in which we are treated similarly and where truly vulnerable populations are neglected. (Yamin, 2020).

The ability of governments to face with the pandemic will determine their political future. A lack of efficiency in this area would inevitably exacerbate the crisis of legitimacy of government parties the national-populist camp could benefit from, by proposing the restoration of order to simply make permanent the authoritarian and security measures that government are obliged to take. If they were be successful, leaders could even come out with greater legitimacy after the pandemic, but it is not to be neglected that only international cooperation is capable of resolving effectively a global issue. Therefore, the principle of cooperation between nations must be reiterated (Zacharie, 2019).

The global crisis caused by the Covid-19 pandemic is also an opportunity, because it shows us that states are able to take radical measures to respond to the health emergency situation. This awareness can be beneficial in other crisis – environmental, economic, social democratic – for which the Covid-19 is a strong indicator.

The Covid-19 pandemic appears in an unstable and dangerous international context. The brutality of the external shock that it represents is for our societies a strong indicator of global crisis in our time.

The Covid-19 pandemic is first and foremost a health crisis that puts the lives of thousands of people in danger and threatens with suffocation of health systems generally weakened by years of austerity. It also causes an environmental crisis, making the environment unfit for life in society, but simultaneously it reveals a social crisis that was already evident.

The poorest and the most vulnerable are the first victims of the virus, especially in countries without universal public health system. Those without a fixed residence in which to stay contained cannot find anything to survive on the deserted streets. Asylum-seekers crowded in camps where hygiene is poor are left to themselves. Poor countries in Africa are facing the pandemic, while their underdeveloped health systems are already suffocated by other epidemics.

This creates the need to establish a protection framework and guarantee of human rights which recognises health as inherent in politics – intimately related to the social context, ideologies and power structures– but, at the same time it removes health policy decisions. As in the case of all international human rights, the implementation and application of health law are critically dependant on the legislative and judicial actions at the national level.

The right to health is part of standard sets of human rights agreed at international level and it is inseparable or “indivisible” from other rights. Related to the Universal Declaration of Human Rights, Gruskin and collaborators claim that “the interrelated nature of the rights expressed in this international instrument establishes a responsibility that extends beyond the provision of essential health services to address health determinants, such as providing adequate education, housing, food,

and favourable working conditions”, following the idea that these provisions “are human rights themselves and they are necessary for health” (Gruskin, 2007, p. 250).

3. Research methodology

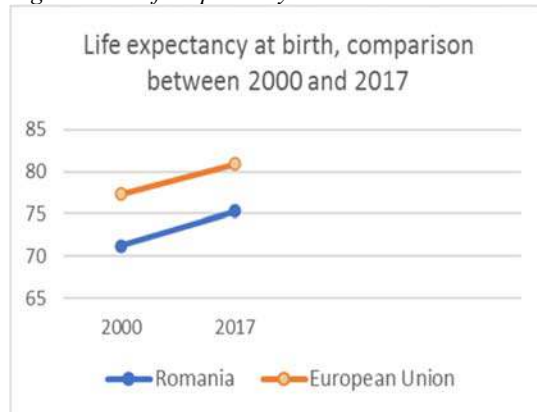
The pandemic raises awareness about the necessity to work together to future generations from the consequences that it entailed by now. We must mobilise ourselves in post-crisis collective actions to succeed together in restoring a global economic global order focused on respect for human rights. The right to health has acquired a collective dimension, so the human behaviour, even isolated, can affect us all alike (Gruskin, Mills, and Tarantola,2007).

What we get depends on how we act collectively, for the same purpose, but it also depends on how we, in turn, act to demand governments and other powerful actors to realize that it is in our interest and in the interest of all mankind that our fundamental rights be protected.

Covid-19 also reveals a deep economic and financial crisis. The current situation can be described as a spark on a barrel of gunpowder, because we are now experiencing an unprecedented shock that gave us a deep shake and it woke up at a different reality, a new world order is suddenly emerging. This economic shock announcing a deep global recession has caused a financial panic which led to a collapse of the value market. Winnings recorded on Wall Street under the chairmanship of Donald Trump have disappeared almost completely in a few weeks.

If we were to do a quick analysis of the data of the last years on life expectancy after infection with Sars Cov 2, as well as the Romanians’ statements who, in their opinion, have a good to a very good health status, we would be tempted to believe that Romania is has a strong health system. However, by examining thoroughly the survey and by making a comparative analysis of the data (by placing Romania in relation to the other Member States of the European Union), and analysing the life expectancy of Romanians infected with Sars Cov 2, who have also comorbidities, we can see that things are not as good, our country remains the Europe’s bottom line in this respect.

Figure no.1 Life expectancy at birth

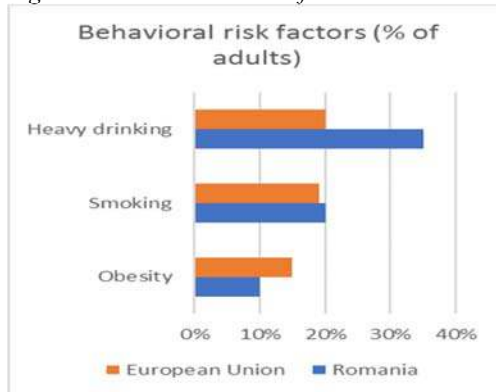


Source: made by the authors

If we take a look at the graph, we can notice that there are still very large discrepancies between Romania and the EU average and this reveals both the existence of deficiencies not at all to be neglected as regards the provision of health services, and the prevalence of unhealthy behaviour among the population.

It has often been discussed in relation with the evolution of the virus both human behaviour, living standards, quality of life, physical activity done, so we considered it appropriate to analyse Romania’s state of affairs in terms of behavioural risk factors. As we can notice in Figure 2, the rate of obesity among adults is one of the lowest in European Union. This contradicts the statistics concerning the lifestyle among Romanians. We mention this because 59% among Romanian adults have declared that they do not consume fruit and vegetables on a daily basis, and they have not a very healthy diet. In addition, 38% of adults admitted to have moderate weekly activity.

Figure no. 2 Behavioral risk factors



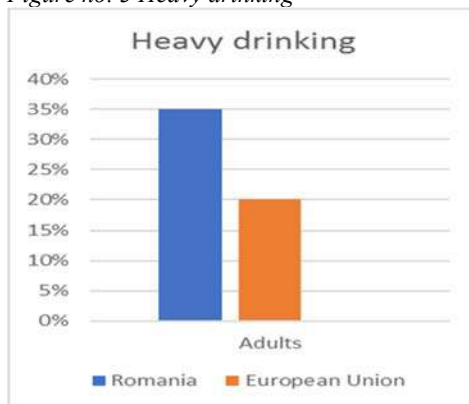
Source: made by the authors

We cannot say the same when it comes to the rate of obesity among children, it is growing steadily, reaching 15%. Unfortunately, the political instability in recent years led to a neglect of health and promotion of a healthy lifestyle in schools, as a consequence the results are becoming more visible.

In recent years we have noticed a massive campaign against smoking through all channels in an attempt to raise awareness among the population of EU countries on its harmful effects on health. Unfortunately, it has only managed to achieve its goal in a very limited manner; smoking remains a major challenge for our country, too. It is pertinent to mention here that Romania has one of the most important rates as regards smoking among young people aged 14 to 16.

Another serious concern is the excessive consumption of alcohol, among both adults and teenagers. According to data published in 2019, the excessive episodic consumption of alcohol in Romania is 35%, while the European Union average is 20% (European Commission, State of Health in the EU, Country profile in 2019 in terms of health).

Figure no. 3 Heavy drinking



Source: made by the authors

Looking around, we can see that health is not really valued only when it starts to be affected and the signs of disease appear. This is due to an inefficient and deficient promotion of health in Romania, which led to one of the highest avoidable mortality rates by prevention among the European Union countries.

These data represents a sign that social justice's desiderates focusing on the right to health, have failed to achieve their purpose or they were sporadically fulfilled. In fact, the last few years have seen inadequate and inefficient investments in health care. We believe that it is necessary to mention here both the existing shortcomings in the provision of health services and the social-economic inequalities existing in the various regions of Romania, even the obviously imbalance existing between primary and hospital care.

4. Findings

We consider that a comprehensive reform process is needed in health, and we state this because the reality on the ground does not in any way reflect the intensification of plans to reform the Romanian health system, as we were promised each time a new health minister has been appointed, in the long term they have proved to be rather fragmented just because of political instability and governance. As we have shown through research, in recent years all changes and improvements of our health system have been poorly coordinated and, implicitly, with minimal effect at national level.

First and foremost, more political stability is needed in our country. In last 11 years, Romania had more than 15 health ministers from various political parties and each of them with a "vision" on how the process of healthcare reform should be done. This has led only to a fragmentation of the measures which, because of the lack of continuity as health minister either they have not been implemented, or they have been given up on the way while other people were being in this position.

Secondly, an additional training of professionals working in the Romanian healthcare system is required, in order to encourage them to inform patients each time regarding their rights, obligations, as well the diagnostic, therapeutic indications and possible complications that may present during the hospitalization or treatment.

Not in the least, there is a need for an intensification of health. The campaigns of the last few years which have been sporadic failed to achieve their purpose, and as a result Romania is the country with the largest number of tuberculosis cases from the European Union and a vaccination rate which is well below the EU average. We have a low life expectancy by comparison with the other European states and a high level of avoidable mortality through prevention, behavioural risk factors representing a major threat to the health of the Romanian population.

Article 35 of the Charter of Fundamental Rights of the European Union is addressed to health protection by claiming that, "everyone has the right of access to preventive health care and the right to benefit from treatment under the conditions established by national laws and practices." According to art. 52 of the same instrument related to fundamental human rights, any limitation on the exercise of the rights and freedoms recognised must be provided for by law, necessary, and respect the essence of those rights and the principle of proportionality.

The European Social Charter under art. 11 guarantees the right to health protection, underlining the main objectives to be pursued by the signatory states in order to achieve it. These objectives include eliminating, as far as possible, the causes of poor health, providing health advisory and education services and developing the sense of responsibility for health of individuals, but also the prevention of epidemics, endemic diseases, and other types of diseases and accidents (Lenia, 2002, p. 296).

It is also mentioned the obligation of states to make any necessary effort, for ensuring the objectives, through establishing a fair public health policy, measures to protect the health of mothers, children and elderlies, measures to prevent environmental and alcohol consumption or drugs, a medical and health system, measures relating to vaccination, disinfection and control of epidemiological diseases, etc (Zacharie, 2019).

Thus, we can argue that the right to health protection, as a fundamental human right, is a comprehensive right, characterized by the substantive and procedural composition.

This is actually a claim-right, which means the state has general positive obligation to guarantee this right, obligation supplementing the provisions referred to in the international human rights treaties (International Covenant on Economic, Social and Cultural rights and the European Social Charter (Zacharie, 2020).

5. Conclusions

All the provisions of the international instruments culminated in major changes to the legislation at national level, by achieving the health framework standard, i.e. Law 95/2006 on health reform, which regulates as a code the entire public health system in Romania (Kose, Nagle, Ohnsorge, Sugawara, 2020). As regards our country, the right to health protection is mentioned in art. 34 of the Basic Law according to which the law is guaranteed by the Romanian State (paragraph 1). The state is obliged to ensure hygiene and public health (paragraph 2). Constitutionally, the right to health

protection can be ensured only in correlation with the other fundamental rights set out in the Constitution of Romania.

According to art. 5, of the same Law 95/2006, the main functions of the public health which consist in promoting and developing policies, strategies, and programs which aim to ensuring public health in tandem with an intensified action on monitoring the state of public health. It is necessary during this delicate and unique period a rigorous planning focused on public health, on the concept of prevention and control of all diseases and epidemiological surveillance, being required to implement policies for strategic management of public health services to watch out for the population and to protect the population from the risks occurred. In addition, information, education, and communication to promote health, building partnerships with the community to identify and solve health issues, the assessment of the effectiveness, quality, and efficiency on health services will train and facilitate the access to health services, the development of human resources and the development of public health institutions being done in the interest of the citizens.

We need to integrate public health priorities in sustainable development policies and strategies.

COVID-19 was and still represents a public health emergency. History has shown that public health emergencies often led to stigmatization and discrimination against certain communities and groups or individuals affected. *Urgențele de sănătate publică duc adesea la stigmatizare și discriminare față de anumite comunități și grupuri sau persoane afectate.*

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Health and Social Justice

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Abstract

Social justice was, still is, and will always be an important factor of influence on public policies around the world. According to the philosopher John Rawls, a society is fair if it respects three principles: the first one concerns protection, respect, and guarantee of fundamental freedom for all members of the society, the second principle deals with the issue of equal opportunities for all citizens, and the third one refers to the need to preserve those inequalities which can benefit those disadvantaged

The inclusion of health in the area of the law is added to literature in social epidemiology, which makes the connection between health and social justice. The aim of the paper is to raise awareness of public opinion and of the main social actors on the problems facing the field of health and social justice, and their analysis not only in terms of their impact on health, but also from the perspective of their relationship with laws, policies and practices that limit popular participation in decision-making and even block the establishment of a truly democratic society.

Key words: solidarity, responsibility, patient, needs, pandemic

J.E.L. classification: K40

1. Introduction

An emergency situation requires emergency measures and, for these reasons, all European and national decision-makers are required to prove understanding of the extraordinary situation which health, education, the economy and other priority areas are facing nowadays. It is worth noticing the unprecedented impact this thing will have on people in terms of mental health, education and well-being, now and for the rest of their lives, reflecting later on their future professional careers. The EU Quality Framework for Health and Education provides access for all to quality services that contribute to healthy development and the reduction of social inequalities and skills gaps between those from different socio-economic backgrounds. In the field of health, the reform instituted leaves no time for either the authorities or the organizations to adapt to the new system that is to be implemented according to the European desideratum. This led the authorities to put themselves in direct contact with NGOs, for which they had neither too much experience nor the expertise needed for analysis, authorization or control (Kinney, 2001). On the other hand, NGOs have created their own system of work, parallel to that of the state, and the reform has made a massive shift from several activities carried out by organizations to the public service, leaving many NGOs without "the object of activity", in the sense that the state has appeared on the market of services with a massive offer of such services. As for the partnership between authorities and private bodies, in order for it to become truly functional, everyone must assume its own role, namely, the state must own most of the services provided (which can be performed in partnership or can be concessioned), and private bodies should take the place of service provider, additional provider and have complementary to the state, and last but not least the role of innovator, both in terms of services, but especially in establishing a quality indicator that the state should constantly strive for. (Yamin, 2020, p.10-15).

We are therefore entitled, as a result of what we are living today, to ask ourselves, what the world and our health systems will look like after the pandemic, but also our societies after this stage of the pandemic that affects us all alike.

2. Theoretical background

What do we mean when speaking about “social justice”? According to Anton Parlagi, social justice represents “a type of extrapolation of justice, of the imperative moral rule, according to which each individual must be treated equally to the others in any of his existential aspects: anthroponomical, socioeconomic or polytonimic” (Parlagic, 2011, p. 119).

However, what is the origin of notion of social justice? This is assigned to priest Luigi Taparelli who, in 1840, used this concept to characterize the way the justice is applied in a society when we refer to the different social classes comprising it. Those who promote the existence of a social justice in a society refer to the existence of an equality in rights and economic, political and social opportunities applicable to all people who are part of that company, without any distinction between social classes (Krieger and Gruskin, 2001).

The role of the state is to ensure that all human rights are respected, not only by its citizens, but also by its institutions (according to the statistics, the most frequent violations of human rights appear in the state’s relations with its citizens), without consider their social class.

Over time it was possible to see how social justice is influenced by the manner in which the predominant political system in a society influences the adopted laws and principles of law recognized. It is also affected by the understanding, interpretation and valorisation of laws (Kose, Nagle, Ohnsorge, Sugawara, 2020, p.5-8).

The 21st century is one in which the concept of social justice is becoming more widespread, and this started at a faster rate with the decree of 20th February as World Day of Social Justice (in 2007, by the United Nations General Assembly) and with the adoption of the International Labour Organization Declaration on social justice for fair globalization on 10th June 2008.

Coming back to the social justice in relation to the healthcare system, we have to emphasize that in recent years, social movements aiming just for this human equality issue, regardless of their social classes have happened to provide easy access in terms of medical care at affordable prices or easy access to healthcare (this requires a medical cabinet close to all inhabited geographical areas).

We can also see social justice as a foundation on which people are trying to build public health, which includes health promotion and protection (and this is achieved mainly by maintaining health – promoting a balanced lifestyle, the right to a healthy environment, etc. – and disease prevention – vaccinations and information campaigns, etc.) and restoring health (through access to quality medical care) (Gruskin, Mills and Tarantola, 2007).

Although it is difficult to achieve perfect quality, this is more of an utopian society, the 21st century has made important progress on social justice. But the current situation leaves plenty of room for real improvement the health, as can be seen in the above statistics analysis presented.

3. Research methodology

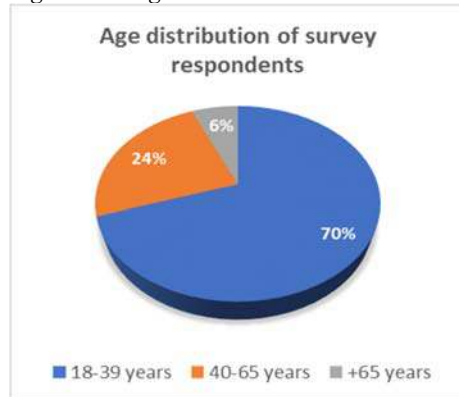
A research carried out by the Romanian patients’ Association in 2014 revealed that nine out of ten patients do not know their rights they have when entering the hospital and interact with health professionals.

According to the same research, 70% of patients had at least a limited access to health services, and 80% of them claim that they had to pay for certain services, although they were insured and the services in question should have been free of charge under these conditions.

To see if the situation has changed in 2020-2021, we tried to replicate the research carried out six years ago. For this we have analysed and compared the data obtained from 98 people by applying questionnaires (distributed online using the platform provided by Google), and by making opinion polls, by face-to-face technique. We start analysing the data collected by saying that people who have completed the questionnaires are aged between 18 and 72, and to be easier to interpret the data, we have chosen to divide them into three broad age categorie 18-39 years, 40-65 years and over 65 years.

As can be seen in the graphical representation, the highest percentage belongs to the age group 18-39 years.

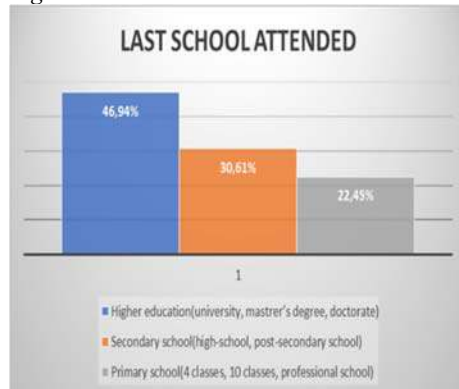
Figure no.1 Age distribution



Source: made by the authors

People questioned were also asked about the last school attended. As you can see, we have a very high percentage of people having completed higher education (university, master’s degree, doctorate), more specifically 46,94% (46 out of the total respondents). The next category in terms of share (30,61% - 30 people) belongs to those having completed at least a secondary school (high-school or post-secondary school). Out of the latest category (primary school – 4 classes, 10 classes, professional school) 22 individuals belong (22,45%).

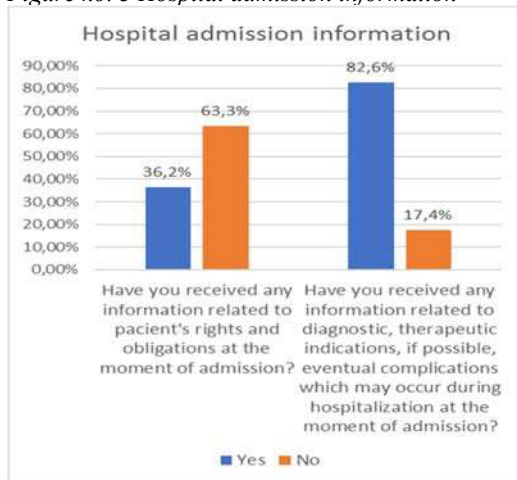
Figure no. 2 Last school attended



Source: made by the authors

The following graph shows us that the situation is much better when it comes to correct information, when admitted to hospital, related to diagnosis, therapeutic indications and, if possible, eventual complications which may occur during hospitalization and treatment or surgery, however, a large number of patients admitted in hospital establishments are not informed about their rights and obligations. Thus, 36 people stated they had been informed about patient’s rights and obligations on their hospital admission, but a larger number of people, more exactly 62, deny this. The proportion is somewhat reversed in the case of information on therapeutic indications, diagnosis, complications, because 81 people seem satisfied with the interaction medical staff-patient on this segment and only 17 people out of the total of those questioned declare that the legal provisions regarding the information provided by the medical staff were not respected.

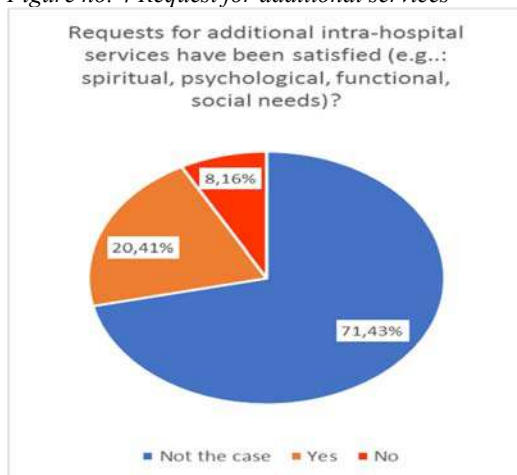
Figure no. 3 Hospital admission information



Source: made by the authors

Because there may be situations in which an inpatient has certain spiritual, psychological, functional or social needs, we asked the respondents whether they were satisfied with these requirements. Only eight people have responded negatively (i.e. 8,16%), and 20,41% positively, i.e. 20 people. In the remaining 71,43% of cases this was not the case for such requests, i.e. 70 people. Here we mention that among the most frequent requests were those related to the spiritual and psychological needs.

Figure no. 4 Request for additional services



Source: made by the authors

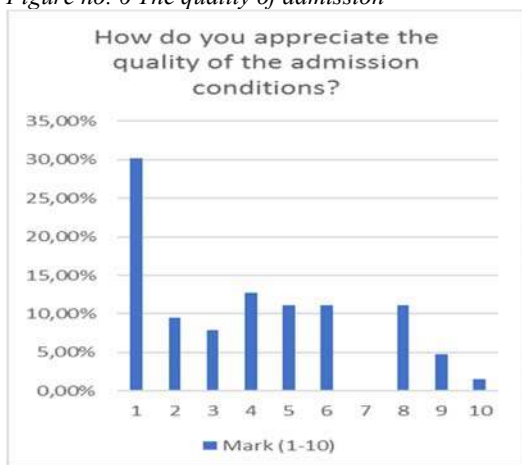
As can be seen in the following two graphs, the inpatients have not been very satisfied with the food quality and distribution, and there is even greater dissatisfaction when it comes to assessing the quality of admission conditions. It is an issue that has persisted for many years in Romania, all the dissatisfaction is mainly directed towards the state hospitals. As a matter of fact, the issues with regard the nosocomial infection rates and the poor cleaning in some Romanian hospitals are well known. Not only in this case, but also related to private hospitals, the respondents were very pleased, mostly giving marks ranging from 7 to 10. This proves once again the existence of a discrepancy between state and private hospitals.

Figure no. 5 The quality of food



Source: made by the authors

Figure no. 6 The quality of admission



Source: made by the authors

Regarding the kindness and the availability of medical staff, the percentages are more balanced, most of them giving marks of more than 6. However, we have to mention that most marks of 10 were awarded to medical staff from private hospitals. In the following graph we can see clearer the distribution of marks provided by the respondents.

Figure no. 7 The availability of medical staff



Source: made by the authors

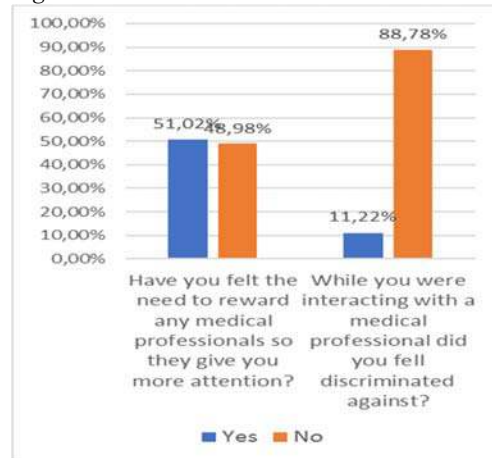
According to statistics from the Organization for Economic Cooperation and Development(OECD) in the health care system, the so-called “out-of-pocket health costs” are still very high in weight in Romania, compared to the EU average. We talk more exactly about 21,3% of the total costs that a person in our country allocates to health .

What is meant by the so-called “out-of-pocket costs”? This includes both expenditure on the purchase of pharmaceutical products, and the necessary expenditure for certain medical services (because they are not covered by the health insurance), and the unofficial payments(we have to admit that providing “little gifts” is still an issue non-negligible in Romania).

The following three questions are about this. To the first one we wanted to find out how many of the respondents felt the need to reward a medical professional so that they can receive more attention from those. The percentages are divided almost equally, 50 people answering “Yes” and 48 people answering “No”.

Analysing in more detail the questionnaires applied we conclude that there is a higher probability to feel the need for provide “little gifts”, considering that they will be better cared, in the case of elderly people, of those who have only elementary education or those who live in the countryside.

Figure no. 8 Discrimination



Source: made by the authors

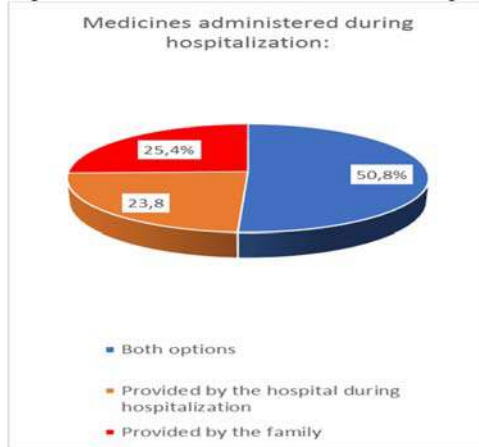
Related to discrimination in interaction with health professionals, only 11 people of those who have participated in the completion of the questionnaire said they felt the doctors did not offer them equal treatment, they consider themselves discriminated by their behaviour at the time of admission and during the hospitalization.

Through the last questions we wanted to know if, when we are inpatients, the hospital can cover most requirements relating to provide a particular type of treatment. As shown in the graphical representation, in only 23,8% of cases the hospital was able to grant the whole necessary treatment during the entire hospitalization, and in 25,4% of cases the help of the family or friends was necessary for the purchase of the medicines to be administered.

The majority said, however, both options are valid; some medicines can be provided to the patient by the hospital during hospitalization, while others had to be provided by family or friends.

The respondents to the questionnaire, who were inpatients too, answered 100% that the medicines administrated in hospital were provided by the hospital during the hospitalization.

Figure no. 9 Medicines administered during hospitalisation

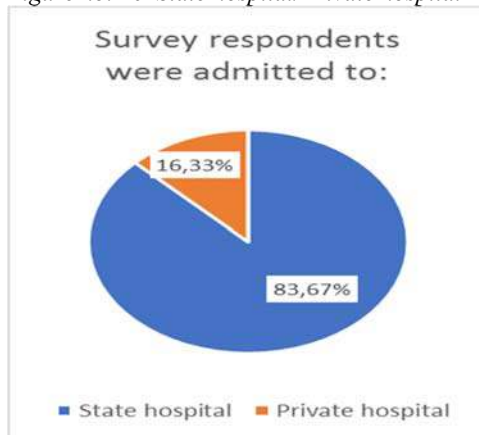


Source: made by the authors

A last relevant feature to individualise the responses is related to the type of hospital where the respondents were admitted. There are significant differences too, 82 people (83,67%) being admitted to a state hospital and only 16 people (16,33%) in a private hospital.

However, we believe that a fairly clear picture is being created regarding to how patients from a private, unlike a state hospital are treated, as we will see below.

Figure no. 10 State hospital/Private hospital



Source: made by the authors

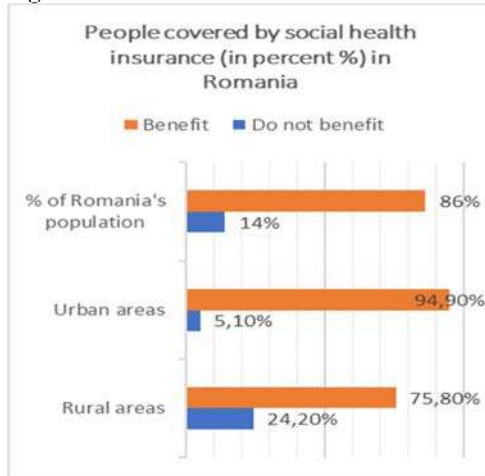
By analysing the data provided, we note that it is still necessary the social justice approach issue was, still is and will always be up-to-date just because of its importance, managing to generate ideological debates and controversy every time it is raised.

4. Findings

As regards Romania, the existing discrepancies between social classes when it comes to health care access are also obvious, there is a clear antithesis between rural and urban areas.

Referring to the total population of Romania, 86% of people are covered by a health insurance. In rural areas the percentage is 75,8%, while in urban areas it goes up to 94,9%.

Figure no. 11 Social health insurance



Source: made by the authors

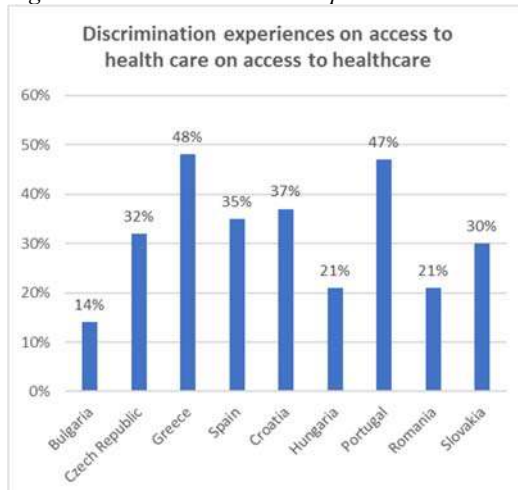
Another issue outlining the lack of equal access to healthcare is the difficulty that the inhabitants of certain rural areas can get to the hospital (for example hard-to-reach areas in small villages from Romania, we remind here Ineleț, Măgura Călanului, Rusești, Bechet or Streiu) or even a medical cabinet (because of its absence in proximity to the area).

The existence of an inequality is also observed in relation to certain socio-economic groups, especial when referring to those who are out of work, self-employed or people living with by occasional income (specific in particular to rural and usually small areas), pensioners or people who are primarily engaged in agriculture.

As regards the situation of certain minority ethnic groups, it is already known the situation of Roma people from our country. In their case we notice that in Romania, Roma people can exercise their right to health care with difficulty both because of formal exclusion (where a significant percentage is due to the non-existence of identity documents, followed by a lack of health insurance), and the informal exclusion(discrimination).

We have to point out that the situation of Roma people is not a specific one for our country, noting discrimination against them also in other Member States of the European Union. This can be seen in the graph below, percentages showing experiences of discrimination when it was about the health care access. Data are made available by the European Union Agency for Fundamental Rights (FRA) and they are valid for the last five years.

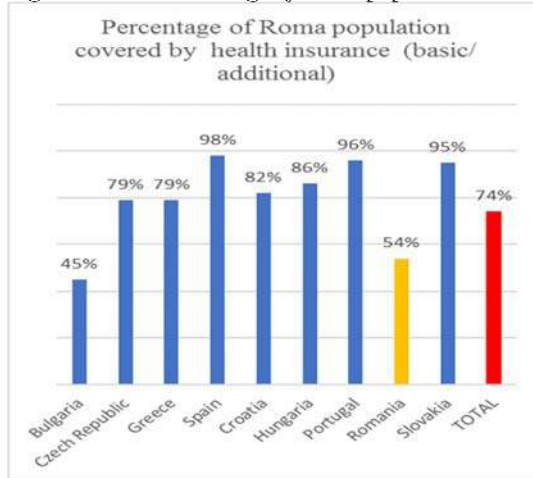
Figure no. 12 Discrimination experiences



Source: made by the authors

Related to formal exclusion, where the Roma population has no access to medical services by lack of health insurance, we notice that of the countries under analysis by the European Union Agency for Fundamental Rights, our country is the penultimate in the percentage of Roma people which are covered by a particular form of health insurance (basic or additional).

Figure no. 13 Percentage of Roma population covered by health insurance



Source: made by the authors

As a result from the research we found out how, unfortunately, Romania fails to achieve the goals proposed by itself on improving the medical system, and in the chapter on promoting health and patients' rights the deficiencies are obvious, even in the absence of up-to-date official statistics. Data of this research were hardly obtained, most of them from sources provided by the European Union, the World Health Organization, and the Organization for Economic Cooperation and Development, the healthcare system from our country may be characterised as deprived of transparency and objective assessment.

5. Conclusions

We believe that, although significant progress has been made in recent years in the field of social justice and, implicitly regarding the right to health, there are still gaps, especially when it comes to their compliance by healthcare professionals, either intentionally or by not knowing them.

The focus is on vulnerable and marginalized groups, their access to the health system being hampered first by their complete ignorance of their rights and, secondly, by the fact that these groups tend to be discriminated and as a result, they end up refusing any help in the future.

It is often overlooked that the relationship between a doctor and a patient must be based on trust, as well as collaboration, this fact stemming from the essence of the concept of social justice. In our opinion, there must be a partnership between the doctor and the patient, in which decisions must be made after fully informing the latter, so that a decision can be made between the two parties involved regarding the choice of the different treatment options that are recommended, interaction being the key word. Unfortunately, this "partnership method" is not always applied, discrimination, abuse and violation of fundamental rights continue to be a national problem, but being also found in other states within the European Union, especially when it links to vulnerable and marginalized groups.

One should focus more on the needs of the people, on creating of a social solidarity, a receptivity and *de jure* and *de facto* punctual reactions, which will ultimately reflect and make a positive impact on the collective consciousness.

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The Impact of Entrepreneurship Education in Developing Soft Skills for Students from Non-Economic Faculties

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Abstract

IDEALUS (Innovation and Development through Entrepreneurial Activities for Learning University Students) was a project organized through the program Entrepreneurial University and was sponsored by Romanian-American Foundation. IDEALUS was designed to implement an Entrepreneurial Program and a Psychological program for students from non-economic faculties. The main objective of the project was the development of soft skills, meaning a set of interpersonal attributes needed for success in the professional field. A sample of 50 students enrolled in the project was assessed with a survey, put together by the authors, on the following directions: communication skills, creativity, self-confidence, social skills, assertiveness, leadership, negotiation and critical thinking. The survey was based on psychological consecrated tests, like BASC-2 (Behavior Assessment System for Children), ABCD-M (Big Five Questionnaire) and Cognitrom Assessment System and it was applied before and after the implementation of the activities in the project. The hypotheses we tested presumed the existence of significant differences between the two assessments regarding the above listed soft skills. Results show a statistically significant improvement only in creativity and leadership, while the other variables, although increased in value, showed no significant differences between the two assessments. Results are discussed in the end in the context of the benefits of the implementation of entrepreneurial activities for student’s personal and professional development.

Key words: entrepreneurship, soft skills, education, non-economic faculties

J.E.L. classification: I15, I23, I25

1. Introduction

From the beginning of the 20th century, the concepts of entrepreneurship and innovation have been strongly related (Autio et al., 2014) in the popular mindset. Entrepreneurship represents one of the most important inputs in the economic development of a country (Khan, 2018), mainly because it creates new jobs and brings innovation, thus contributing to the shaping of the economy, both directly and indirectly. Entrepreneurship is also a way to increase global competitiveness (Ferreira et al., 2016) by firstly targeting the social and economic change and the development of client groups (Prabhu, 1999).

In this context, universities must face a series of challenges, imposed by the ever changing economic and social environment, in order to meet expectations for entrepreneurial growth (Tajpour et al., 2021). Universities are expected to solve society problems in a scientific approach and thus, entrepreneurial education for students gains a great deal of importance, becoming an important long-term factor of economic and social development. It has become pretty clear the fact that entrepreneurial universities have become the drivers of innovation and entrepreneurship activities in the new social and economic landscape (Guerrero et al., 2016). In order to achieve this goal, entrepreneurial universities need to consider the people in society in terms of how they relate

to learning, education and teaching about new ideas and business practices. The economic impact of entrepreneurial universities can be measured on local, regional and national scales. Furthermore, studies show that the regionalized impact of universities extends beyond technology transfer and tangible outputs, such as human capital, formation of entrepreneurship capital, informal networks, new ideas, etc. (Budyldina, 2018).

2. IDEALUS – Innovation and Development through Entrepreneurial Activities for Learning University Students

From March to June 2021, Ovidius University of Constanta (through the Faculty of Psychology and Educational Sciences and Ovidius Innovation Center-Student Entrepreneurial Society) in partnership with the Association for Entrepreneurial Education, implemented the IDEALUS project, in which, through entrepreneurial courses, assessment, counseling and personal development, 50 students had the possibility to enrich their entrepreneurial knowledge and to become more aware of their personality and potential.

Since it was founded in 2017, as a distinct organizational structure, more than 400 students were part of the Student Entrepreneurial Society’s projects and activities. Thus, Ovidius University of Constanta is continuously involved in developing entrepreneurial skills for students/graduates, in piloting modules of entrepreneurial education, in supporting students' business initiatives by expanding and improving the pre-accelerating business ideas, in initiating assessment, counseling and personal development programs for students in need of support in identifying their entrepreneurial resources and abilities.

The University’s entrepreneurial hub allows students to access professional information, share ideas and learn from each other. Thus, activities that have been conducted include: workshops with IBM specialists for students, teachers and local entrepreneurs; Business Model canvas classes and mentoring activities for the teams participating in EDU-TECH-SOLUTIONS-TEAMS programs; Teaching, mentoring and business simulation activities; Summer Schools with international trainers; National Conferences on Entrepreneurship and Innovation.

In this context, IDEALUS is a project that focused on the following directions: 1) The psychological assessment and development of the student’s skills (communication, creativity, critical thinking, self-confidence, collaboration, assertiveness, leadership, negotiation); 2) The implementation of an entrepreneurial education program, finalized with the simulation session How to sell a product?; 3) The dissemination the research results obtained during the initial and final assessment of the skills mentioned above through scientific instruments. We aimed to support the development of entrepreneurial education and students’ initiatives through a holistic approach. The target group has been involved in personal self-analysis and understanding activities, and in the entrepreneurial educational program and simulation activities. Our belief was that the basis of any entrepreneurial initiative is the idea of success in business, the courage to act and the will to persevere, to learn and to constantly get involved.

3. Theoretical background. Soft skills

The effectiveness of today’s economies is linked to the pace of development and activity in the entrepreneurial sector. In order to meet the challenges, universities are increasingly seeking to equip their graduates with specific **soft skills**, in order to allow them to adapt and function in a rapidly changing and dynamic world (Yan et al., 2018). Thus, it almost becomes compulsory for universities to increase the awareness about the importance of soft skills, and to seek and exploit opportunities for students to shape and create an accurate climate to work as a team in order to improve their performances and achieve their professional goals (Sadq, 2019).

Today’s professionals need not only to master the technical skills specific to their field of work, but also master various soft skills, such as the ability to communicate, work under pressure, negotiate, lead or work in teams, solve problems, find creative and efficient solutions to different problems. Soft skills have been described as a combination of interpersonal and social skills (Dixon et al., 2010), which are self-developed, interactive and transferable skills (Wats & Wats, 2009). Employers prefer to hire and promote those employees who are resourceful, ethical, self-directed,

with good communication skills (John, 2009), dependable, willing to work and learn, or with positive attitude (Wats & Wats, 2009) and thus, graduates possessing merely technical knowledge, is no longer a guarantee for a successful career (Sharma & Sharma, 2010). It has been suggested that hard skills contribute to only 15% of one's professional success, while the remaining 85% is covered by soft skills (Wats & Wats, 2009). Our article mainly discusses the following soft skills: communication, creativity, critical thinking, self-confidence, collaboration, assertiveness, leadership, negotiation. We shall describe all of them briefly.

Gruba & Al-Mahmood (2004) provide a complete frame of behaviors specific to well-developed **communication skills**, which include a sense of audience awareness, a series of personal attributes (such as confidence, concision, adaptability), an appreciation of the differences in modes of presentation, an identifiable set of desired outcomes, the ability to convey ideas to people that don't necessarily understand a particular concept, the ability to take criticism and listen to conflicting views or ideas, the ability to conduct a productive meeting and to utilize a variety of models of presentation, the ability to construct reasonable, rational, logical arguments and to present the evidence appropriately, the ability to listen, comprehend and understand others' communications, the ability to use an appropriate language for both the topic and the audience.

Innovation in entrepreneurship is closely related to the development of **creativity**. The process of new product development, marketing and organizational solutions often require diverse knowledge and skills, including creativity and divergent thinking. Creativity is a multistage process, which begins with a preparatory phase in which the problem is explored and relevant information is collected, continues with a divergent generative phase in which potential solutions are generated and it ends with a convergent testing and decision-making phase (Strazdas et al., 2013). The mentioned authors also state that creativity can be achieved through cognitive flexibility, persistence and perseverance and that idea generation requires a situation in which group members could feel safe and free from criticism. Creativity cannot be restricted only to a set of abilities like fluency, flexibility and originality (proposed by Torrance as criteria in 1962), because such restrictions only impoverish the conception of development (Feldman, 1999). In Feldman's conception, creativity involved several dimensions like: cognitive processes, social and emotional processes, family aspects (both growing up and current), education and preparation (both formal and informal), characteristics of the domain and field, social and cultural aspects, and historical forces, events and trends.

Critical thinking is a practical activity, a reflective and reasonable thinking that focuses on deciding what to believe or not (Ennis, 1985). This approach also covers a series of creative activities, like formulating hypotheses, asking questions, finding alternatives and planning experiments. Basically, Ennis states that critical thinking is a broad skill that includes abilities such as focusing on a question, analyzing arguments (conclusions, reasons, similarities and differences, irrelevant information, structure of an argument), asking and answering questions of clarification, judging the credibility of a source (based on criteria like expertise, lack of conflict of interest, agreement among sources, reputation, etc.), observing and judging reports, deducing and judging deductions (logic, necessary and sufficient conditions, etc.), inducing and judging inductions (data, sampling, tables and graphs, hypotheses, criteria, etc.), making and judging value judgments (background, consequences, alternatives), defining terms and judging definitions, identifying assumptions, interacting with others. So, it is obvious that critical thinking means using mental processes such as attention, categorization, selection and judgment (Cottrell, 2017).

Self-confidence is a psychological trait that enables the owner to be more aware of what he/she is doing, to perform better when working and to be less distressed in their field of work (Pinar et al., 2018). Self-confidence is a mediator, a common cognitive mechanism involved in people's motivation and behavior (Feltz, 2007). Literature shows there are various terms related to self-confidence, like self-efficacy, which is the conviction someone has to execute successfully the specific behavior needed to produce a certain outcome (Bandura, 1977). Furthermore, studies show that individuals with high self-confidence and problem-solving skills are innovative, responsible, creative and more successful in interpersonal relationships and academic life (Yüksel, 2015), autonomous, able to make their own decisions, to produce alternative ideas and to have critical approaches. Other concepts related to self-confidence are perceived ability (which indicates the sense that one has the ability to master a task resulting from cumulative interactions with the

environment, as O'Leary (1985) states) or self-esteem (which represents people's personal judgment of worthiness). This entitles us to state that self-confidence is highly related to critical thinking skills and to creative thinking, also cutting across diverse cognitive domains. Studies also show the fact that self-confidence has a close relationship with metacognition, which refers to one's awareness of one's own cognitive processes (Kleitman & Stankov, 2007). It can be said that metacognition is an essential aspect of information processing, with wide implications for educational, organizational, economic and entrepreneurial settings, which can be facilitated by knowledge, regulation of cognition, self-monitoring and confidence.

Social skills is also a broad concept that can be seen as a trait or as a behavior (McFall, 1982). Social skills are necessary for confident, responsive and mutually beneficial interaction with other people (Combs & Slaby, 1977), facilitating nearly every facet of every-day life, both in childhood and adulthood. This means that the lack of social skills may lead to problems in interpersonal relationships or may disrupt the optimal functioning in school, occupational or recreational activities. From a social perspective, social skills can be defined as socially significant behaviors exhibited in specific situations that predict socially important outcomes for people (Gresham, 2002). Gresham also states that the training for this type of skills has four fundamental objectives: (a) promoting skill acquisition, (b) enhancing skill performance, (c) removing or reducing competing problem behaviors, and (d) facilitating generalization and maintenance of prosocial behaviors.

Assertiveness is defined by Bishop (2013) as the ability to express oneself with confidence, thus involving self-awareness, self-esteem, self-governing and autonomy. Assertiveness also requires the ability to listen and to respond to the needs of others, but without neglecting our own interests or compromising our own principles. Furthermore, assertiveness is about improving interpersonal skills, developing a more effective communication, controlling stress through a better management of problems, people or situations. Also, Bishop (2013) states that assertiveness means that people are able to make choices, express their needs, opinions or feelings, without fear of being dominated, exploited or coerced against their wishes. Other authors see assertiveness as an alternative to personal powerlessness or manipulation (Alberti & Emmons, 2017).

Leadership skills allow the creation of a climate in which people turn challenging opportunities into remarkable success (Kouzes & Posner, 2006). So, leadership is important not only for one's career, but also for the organization, mostly because leader make a significant contribution to the long-term development of people and institutions, so they can adapt, change, prosper and grow. Leadership is defined by Gardner (1993) as the ability to perform certain functions like envisioning goals, affirming values, achieving workable unity, explaining, serving as a symbol, representing the group, provide direction, align followers or build relationships. So leaders today have to overcome challenges and make a transition from stabilizer to change manager, from controller to facilitator, from competitor to collaborator, from diversity avoider to diversity promoter (Daft, 2014). The cited author states that leadership is more than a set of skills, because it relies on a number of subtle personal qualities like enthusiasm, integrity, courage and humility. A good leadership springs from genuine caring for the work and genuine concern for other people. Basically, leadership means being emotionally connected to others, become part of a community and contributing to something worthwhile.

Last, but no least, **negotiation skills** are important the more so as negotiation processes pervade people's daily lives. Effective negotiator obtains resources, develop contracts, and reach tough agreements in situations that could have otherwise broken down (Lewicki et al., 1999, apud Roloff et al., 2003). Furthermore, people with negotiation skills are able to manage conflict effectively and to avoid capitulating, withdrawing, or relying on decisions made by higher authorities. They are able to adapt to psychological motivations, saving face or balance power difference. Thus, effectiveness in negotiation is linked to career success, often derived from adapting to, analyzing, and addressing complex problems (Roloff et al., 2003). Planning, conducting and analyzing the outcomes of negotiations are key elements of a successful business (Ashcroft, 2004).

All these skills were assessed in the beginning of IDEALUS project and in the end. Results will be presented in the following sections.

4. Research methodology

Objective. The main objective of this article and of IDEALUS project was the identification of significant differences between the initial and the final assessment, in the development of students’ soft skills.

Hypotheses. We assumed the following hypotheses, related to the objective: (1) We presume there is a significant difference in the development of communication skills before and after the projects’ activities; (2) We presume there is a significant difference in the development of creativity before and after the projects’ activities; (3) We presume there is a significant difference in the development of self-confidence before and after the projects’ activities; (4) We presume there is a significant difference in the development of social skills before and after the projects’ activities; (5) We presume there is a significant difference in the development of assertiveness before and after the projects’ activities; (6) We presume there is a significant difference in the development of leadership before and after the projects’ activities; (7) We presume there is a significant difference in the development of negotiation skills before and after the projects’ activities; (8) We presume there is a significant difference in the development of critical thinking before and after the projects’ activities.

Sample. The target group in the project consisted in 50 students from non-economic faculties, from the 1st and 2nd years of study. The students were all from Ovidius University of Constanta, from faculties like: Psychology and Educational Sciences, Mathematics and Informatics, Law and Administrative Sciences, Letters, Arts, Engineering.

Instruments. The questionnaire for the initial and final assessment was composed of one scale for each of the soft skills. The scales were selected from psychological consecrated tests. We used BASC-2 (Behavior Assessment System for Children), the self-assessment for 18-21 years for the following skills: communication, self-confidence, social skills and leadership. ABCD-M (Big Five Questionnaire) was used for the assessment of creativity. The items for critical thinking were selected from Cognitrom Assessment System (CAS++, Cluj-Napoca), from the cognitive skills section and included skills like analytic reasoning, analogical transfer, mathematic reasoning, complex perceptual analysis, perception of details, vocabulary, text comprehension, decision-making capacity. Assertiveness scale was adapted from a self-assessment questionnaire (Pro Mind Consulting, 2012) and the negotiation skills scale was adapted from Negotiations Self-Assessment Inventory (Tero International, Inc., 2014).

Research design. In the beginning of IDEALUS project, right after the enrollment of the students in the target group, the selected participants in the convenience sample received an online questionnaire, put together by the authors in Google Forms. This was the first stage of the research – the initial assessment.

After the completion of the assessment period, the main activities of IDEALUS project were implemented. The Entrepreneurial program consisted in workshops related to: (1) building the entrepreneurial mentality, (2) generating, filtering and selecting business ideas, (3) building and implementing the business model. Niches for business plans ideas were established jointly. Students proposed their business ideas which were distributed on the following fields: health, love/acceptance, money, education, leisure, and environment. Mentoring sessions followed and the members of the target group worked on their business plans, which were afterwards presented in an online Business simulation – How to sell a product?

In parallel with the Entrepreneurial program, a Psychological program was also implemented. This program was also conceived in 3 modules: (1) developing communication skills with a focus on assertive behavior and increasing self-confidence, (2) developing leadership skills, negotiation skills, collaboration and teamwork, and (3) the importance of creativity and critical thinking in entrepreneurial activities.

After the students presented their business ideas in the business simulation, they received the final assessment with the same questionnaire.

5. Findings

We scored the answers received from the participants and using the SPSS 2.0. We calculated the normality of the distribution of scores. Using Kolmogorov-Smirnov quotient we obtained only non-normal distributions, and thus we utilized only non-parametric comparison Mann-Whitney U Test for our hypotheses.

Our research presumed the existence of significant differences in the proposed soft skills before and after the implementation of the projects' activities. The following table presents the mean ranks we obtained for all soft skills we assessed.

Table no. 1 Mean Ranks for the assessed soft skills

Soft skills	Assessment	N	Mean Rank
Communication skills	Initial	50	47.62
	Final	50	53.38
	Total	100	
Creativity	Initial	50	41.02
	Final	50	59.98
	Total	100	
Self confidence	Initial	50	45.98
	Final	50	55.02
	Total	100	
Social skills	Initial	50	51.02
	Final	50	49.98
	Total	100	
Assertiveness	Initial	50	46.67
	Final	50	54.33
	Total	100	
Leadership	Initial	50	44.58
	Final	50	56.42
	Total	100	
Negotiation skills	Initial	50	49.37
	Final	50	51.63
	Total	100	
Critical thinking	Initial	50	55.18
	Final	50	45.82
	Total	100	

Source: Authors' computation

The test statistics we conducted showed the following statistical significance for the differences we obtained:

Table no. 2 Test statistics – Mann-Whitney U for the assessed soft skills

Soft skills	Mann-Whitney U	Asymp. Sig. (2-tailed)
Communication skills	1106.000	.319
Creativity	776.000	.001
Self confidence	1024.000	.117
Social skills	1224.000	.855
Assertiveness	1058.000	.186
Leadership	954.000	.041
Negotiation skills	1193.000	.697
Critical thinking	1016.000	.104

Source: Authors' computation

As it can be seen in table 2, we only obtained statistically significant differences in creativity (p=.001) and leadership (p=.041) development, so only two of our hypotheses were confirmed.

Consisting in the generation and implementation of novel and appropriate ideas (Amabile, 2011), entrepreneurial creativity was one of the soft skills we tried to develop to students in the target group. It is said that people can all be entrepreneurs, not because they should all develop their own business, but because the need to create, to perfect, to evolve is part of our DNA, and this is the quintessence of entrepreneurship.

Creativity is a process by which a symbolic domain in the culture is changed. New songs, new ideas, new machines are what creativity is about (Okpara, 2007). Creativity is what separates humans from other species (Ko & Butler, 2007). If we think about it, since ancient times, people had to adjust, to innovate and to invent their own rules in order to survive. Thus, creativity is characterized by the ability to create, to bring into existence, to invent a new form, to produce a new thing through imaginative skills (Okpara, 2007).

The activities of IDEALUS project tried to increase the awareness of the participants regarding the identification and the speculation of opportunities, the identification of possible solutions for different problems in everyday life that they may experience or may have observed, the elaboration of answers to challenges they may have faced. The Entrepreneurial program emphasized the importance of having dreams to follow and searching for answers, instead of waiting for others to find them for us. Furthermore, it has been emphasized that in order to adjust to the dramatic changes in current society, entrepreneurial instincts must once again be rediscovered. So, participants were constantly challenged to understand complex phenomena, and were enabled to think of themselves as entrepreneurs in charge of an emerging startup – one's own life. So, we can state that creativity is also an attitude, the ability to accept change and novelty, a willingness to play with ideas and possibilities, a flexibility of outlook, the habit of enjoying the good, while looking for ways to improve it (Okpara, 2007).

Students were supported in the process of development of their own approach and perspective, based on their own motivations and goals in life. They were shown the importance of identifying these motivations in order to be able to organize their ideas meant to improve both their own life, as well as the life of others. Cultivating an entrepreneurial mentality, a state of mind sustained by beliefs, attitudes, behaviors and customs is a necessary first step in the development of entrepreneurial creativity. The ability of students' creative thinking cannot be well developed unless they are given the chance to face problems (Dewi & Mashami, 2019). If, in fact, given the chance to ask questions, to shape the problem-solving process in different ways, to offer various solutions to complex problems, to explore, experiment, manipulate and listen, students in IDEALUS project learned better in a safe environment, which is also an important facilitator of entrepreneurial creativity (Brookfield, 2017). Students were thus supported in learning and implementing a practical process of identifying an innovative idea, in testing it prior to spend a lot of time and money and turning it into something big. Students were shown how to do and were enabled to believe in their own possibilities to achieve their goals. Our students felt the joy of putting their principles and ideas into practice.

However, managers and employers have a much more specific interest in the development of creativity because it links to innovation, which in turn leads to new businesses, better products and a stronger competitive position for existing businesses (Ko & Butler, 2007). Other authors, like Sternberg (2004) for example, emphasize that the amount of relevant knowledge that individuals have at their disposal is one of the most important facilitators of creativity. Also, the way in which employers and employees put together apparently unrelated bits of information is also extremely important for the creative process. These newly emerged combinations are very useful for training entrepreneurs and students to be more creative. Every stimulus around could in fact be a potential for an idea, which in time can be developed into a successful business.

The second confirmed hypothesis, regards leadership. We explain the result mainly through the fact that all 50 students in the target group were divided into teams, in the mentoring sessions. The teams were established jointly, based on the niches for their business plans ideas, and each team was made of 5-6 students. Students proposed their business ideas which were distributed on the following fields: health, love/acceptance, money, education, leisure, and environment. These teams were then supported in the mentoring sessions to develop their business plans and to find answers to questions like: identified problem/need, objectives, solution, proposal, resources, expenses, etc. Thus, entrepreneurial leadership situations were provided and students were given the social

context in which to explore the development of their leadership skills. This is an important outcome of the project, also because it has been suggested that enhancement of leaders' human capital occurs through their development of social capital (Leitch et al., 2012). Relationships were established, team work had to be managed, and tasks had to be solved.

A review of the literature on entrepreneurial learning indicates that the first stage is pre-launching, where individuals learn requisite knowledge and competencies for new venture creation and leadership (Erikson, 2003, apud Bagheri & Pihie, 2010). Second stage described by the cited authors is post-launching where entrepreneurs learn and develop their competencies through performing different tasks and roles involved in entrepreneurship and facing the challenges and problems of leading entrepreneurial activities. Furthermore, IDEALUS project offered opportunities for students to experience social interactive learning, which has influential impacts on enabling entrepreneurs to explore opportunities and cope with crises/problematic situations of their new business management. The Entrepreneurial program involved students in interaction with teachers, entrepreneurs and peers in group activities that improved their leadership skills.

6. Conclusions

The main objective of the research was to emphasize the impact of entrepreneurial education in the development of soft skills for students from non-economic faculties. Although we statistically confirmed only two hypotheses, regarding creativity and leadership skills, we consider that the objective was achieved. Furthermore, by analyzing Table no. 1 we can observe that, in fact, all soft skills we tried to develop obtained higher scores in the final assessment, even if the differences were not statistically significant.

Entrepreneurship has become the symbol of business tenacity and achievement. Entrepreneurs' sense of opportunity, their drive to create and innovate, their capacity for accomplishment have become the standard by which free enterprise is now measured (Kuratko, 2007).

Although results cannot be extended beyond our sample, we still feel that this research managed to emphasize that if appropriate learning situations are given, students can in fact develop their entrepreneurial skills. These skills, as previously discussed in the literature review section, are important for every future professional, be he/she an employer or an employee.

This study also has a few limits, the most important being the fact that the whole project had to be implemented in three months. The amount of time was not sufficient enough to develop skills that actually people develop throughout their whole life.

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Can the Degree of Indebtedness of the Economic Agents Operating in the Construction Sector in Constanta County Influence the Development of the Coastal Area ?

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Abstract

This article provides an analysis of the degree of indebtedness from the perspective of long-term and short-term debts of economic agents in Constanța County that work in the field of construction. The construction sector currently plays an important role in the development of the national economy, but also of the economy of the Romanian coastal area. This sector has an important contribution to local development, which is why it should pay due attention to it when drawing up the maritime spatial plan. The option of analyzing the average values used in this study allowed the formulation of conclusions on the general conduct of the activities subscribed to the chosen CAEN code, observed in correlation with the evolution of short-term and long-term debts that may fluctuate over time, no predictable evolution of this result being obvious.

Key words: degree of indebtedness, construction sector, Constanta county, coastal area, Maritime Spatial Planning (MSP)

J.E.L. classification: M21, O10

1. Introduction

Maritime Spatial Planning (MSP) is a complex approach that faces multiple integration challenges: different forms of knowledge, different stakeholders, policies, and sectors, as well as different scales, national borders, and the land and sea interface must be taken into account (Weig and Schultz-Zehden, 2019).

Article 3(2) of Directive 2014/89/EU defines MSP as a process by which the relevant authorities of the Member States analyze and organize human activities in marine areas to achieve environmental, economic, and social objectives. Human activities can have serious impacts on economic development and growth in coastal areas, which is why proper attention should be paid to these various pressures when drawing up maritime spatial plans.

The construction sector has had and still plays an important role in the development of the national economy, but also of the economy of the Romanian coastal area. When we talk about constructions, we are talking about various types of works, as the field is vast and is divided into certain categories to be easier to analyze and interpret. Thus, we identify residential constructions, non-residential constructions, and engineering constructions. In this context, housing construction, rehabilitation, construction of production facilities, infrastructure, and public works are important elements for the modernization and maintenance of the economy, urban areas, communications infrastructure, and tourism, promoting, on the one hand, productive and industrial activity and, on the other hand, the well-being of society (Zubizarreta et al., 2017).

The economic agents that work in the construction field have an important contribution to the economic development of Constanța County. As in any other sector of activity, in the construction sector, financial liabilities include debts that arise in connection with the acquisition of capital

attracted. The level of indebtedness has limitations as a determining factor of investments (Fernández de Guevara et al., 2021).

2. Literature review

The construction field has stood out significantly in recent years, representing one of the most important engines of the Romanian economy; annually in this field, there are increases of over 30%. The importance of this sector was not limited to its direct effect on the economy but was amplified by the so-called “tractor effect” that the sector exerts on other economic activities, which leads to a doubling of the total effect (Zubizarreta et al., 2017).

In the process of the economic-financial activity of any company, there is a need to make settlements with buyers, suppliers, state budget, staff, etc. As the time of payment of debts does not usually coincide with the time of their occurrence (delivery of goods, provision of services, calculation of salary, etc.), the company generates both receivables, which represent the means extracted from the company's circuit, and are reflected in the balance sheet, as well as debts, which represent the attracted funds and are reflected in the liabilities component.

The term “financial liability” means any liability that is either a contractual obligation to dispose of liquidity or another financial asset, or a contract that will be or may be settled in the company's equity instruments. Financial debts are a foreign financing source for the company. The degree of constraint can limit investments and not the amount of debt that a company assumes (Fernández de Guevara et al., 2021).

Short-term debts are also called *current liabilities* and are external financing sources available to the company (bond issuance loans; amounts owed to credit institutions; advances received on account of orders; trade payables to suppliers; bills of exchange payable: bills of exchange, promissory notes, checks; amounts due to affiliated entities), are expected to be settled in the normal course of the entity's operating cycle and must be paid within a maximum of 12 months. *Long-term debts* are external financing sources attracted by the company through the issuance of bonds, loans from banks, and other financial institutions, or amounts made available to the company by affiliated entities and suppliers (trade payables) and which must be repaid, as a rule, within more than 12 months.

Over the years, financial markets have transformed, and the ease with which companies can obtain credit is growing in many economies. On the other hand, the long collection period of receivables, which further leads to non-payment of debts, directly affects the level of liquidity of companies. At the same time, the level of indebtedness is not the only variable that affects financing conditions (Fernández de Guevara et al., 2021). For lenders to have confidence in lending to make investments, it is necessary to control how this really happens, so that, on the one hand, they bring profits to economic agents and, on the other hand, to cover the society needs to increase the living standard (Aivaz, 2018a; Aivaz, 2020).

A company's debt affects its value and is also sensitive to factors such as bankruptcy and agency costs (Oliveira et al., 2013).

The financial reporting options of a company have multiple deterministic perspectives which, if evaluated in the context of activity trends in the sector of activity, become of the greatest importance for the evaluation of sustainability factors (Florea Munteanu, 2021); sustainability has many pillars and covers all areas and sectors in which development takes place; therefore, its goal of “achieving a balance” depends not only on a correct definition of balance but also on the relationship between the objectives of the different hierarchical levels (Petrișor, 2017; Petrișor, Susa and Petrișor, 2020).

Planning authorities must pay increasing attention to coastal and maritime issues in various economic, political, environmental, social spheres that take into account economic, socio-cultural structures, administrative forms and priorities, and extensive information for the efficient management of coastal areas within sustainable development (Baser and Biyik, 2016). Thus, the interest for companies operating in the construction field is relevant, because this sector contributes significantly to economic growth and imposes managerial decisions in the coastal area. In this respect, the contributions of data to maritime spatial planning could be a priori diverse: for environmental purposes, to retain, avoid, reduce or offset the impact of activities, as well as for

economic ones, to anticipate and mitigate conflicts of use, to find space for new or interesting activities, for example (Dupont, 2020).

3. Research methodology

The purpose of this article is to analyze the degree of indebtedness from the perspective of long and short-term debts of economic agents in Constanța County working in the construction field, revealing how their economic effects influence maritime spatial planning (MSP).

For the analysis, we used the data provided by the National Institute of Statistics of Romania (INSSE) and the Ministry of Public Finance (ANAF / National Agency for Fiscal Administration) for the calendar year 2019. 2019 was considered the reference year before the Covid-19 pandemic, and at the same time, is the last year with available data. The centralization and systematization of data, such as obtaining the indicators used in the statistical description were done with the help of the Statistical Program for the Social Sciences (SPSS). The empirical study used all the companies from Constanța County whose main object of activity is construction.

The first objective of the analysis was to test the hypothesis of the existence of an influence of the degree of indebtedness of economic agents operating in the construction field in Constanța County on the development of the coastal area. The second objective was to see the structure of the debts of the companies in this field according to the form of ownership. The analysis confirmed our hypothesis, namely that the level of indebtedness influences the level of investment, economic growth, and so the sustainable development of the coastal area.

The option of analyzing the average values used in this study allowed the formulation of some conclusions on the general conduct of the activities subscribed to the chosen CAEN code. Thus, the analysis of the evolution of receivables observed in correlation with the evolution of short-term debts may present similarities. In contrast, as Aivaz (2021) remarks, the evolution of average indicators on long-term debt may fluctuate over time, with no predictable evolution of this result.

4. Findings

The analyzed database that includes all the companies from the territory of Constanța county whose main object of activity is the *construction* field was formed by applying several filters: CAEN code (companies with codes between 4100 and 4400 were selected) and companies with a turnover greater than zero.

This group includes the following sub-activities: 4110 Real estate development (promotion), 4120 Construction of residential and non-residential buildings, 4211 Construction of roads and highways, 4212 Construction of surface and underground railways, 4213 Construction of bridges and tunnels, 4221 Construction work for utility projects for fluids, 4222 Construction work for utility projects for electricity and telecommunications, 4291 Hydrotechnical construction, 4299 Construction work for other engineering projects n.c.a., 4311 Demolition work for construction, 4312 Land preparation works, 4313 Drilling and boring works for construction, 4321 Electrical installation, 4322 Plumbing, heating, and air-conditioning works, 4329 Other construction works, 4331 Plastering works, 4332 Joinery and carpentry works, 4333 Flooring and wall cladding works, 4334 Painting, whitewashing, and glazing works, 4339 Other finishing works, 4391 Roofing, framing, and terrace construction works, 4399 Other special construction works n.c.a.

Table 1 presents the average level of short-term debt and long-term debt for each CAEN subgroup and the number of companies in each subgroup.

Table no. 1 Short-term and long-term debts by sub-domains of activity

CAEN_name		Debts under 1 year	Debts over 1 year
4110 Real estate development (promotion)	Mean	6788157.90	3534265.62
	N	107	58
4120 Construction of residential and non-residential buildings	Mean	681216.11	929213.96
	N	917	321
4211 Construction of roads and highways	Mean	4190699.89	6255869.24
	N	35	17
4212 Construction of surface and underground railways	Mean	1231089.20	652146.75
	N	5	4
4213 Construction of bridges and tunnels	Mean	255693.00	35938.00
	N	1	1
4221 Construction work for utility projects for fluids	Mean	1599549.85	1044353.56
	N	27	9
4222 Construction work for utility projects for electricity and telecommunications	Mean	925920.42	575082.20
	N	12	5
4291 Hydrotechnical construction	Mean	5153752.82	2450319.50
	N	11	6
4299 Construction work for other engineering projects n.c.a	Mean	4205735.87	1161404.46
	N	23	13
4311 Demolition work for construction	Mean	402345.25	23650.00
	N	4	1
4312 Land preparation works	Mean	235527.62	704215.00
	N	16	2
4313 Drilling and boring works for construction	Mean	277202.17	116134.33
	N	12	6
4321 Electrical installation	Mean	280605.56	283770.32
	N	184	68
4322 Plumbing, heating, and air-conditioning works	Mean	303148.18	148006.72
	N	270	99
4329 Other construction works	Mean	575509.08	153568.75
	N	24	12
4331 Plastering works	Mean	154846.30	250484.00
	N	10	2
4332 Joinery and carpentry works	Mean	377711.01	348898.67
	N	69	24
4333 Flooring and wall cladding works	Mean	201751.74	475894.17
	N	34	6
4334 Painting, whitewashing, and glazing works	Mean	55441.84	168630.50
	N	19	10
4339 Other finishing works	Mean	33050.69	
	N	13	
4391 Roofing, framing, and terrace construction works	Mean	151886.07	211669.38
	N	14	8
4399 Other special construction works n.c.a	Mean	605952.57	431221.23
	N	91	31
Total	Mean	1033211.23	1025223.80
	N	1898	703

Source: Authors' computation

Regarding the economic agents active in the constructions field in Constanța County, from Table 1 it is observed that 1898 entities register short-term debts with a value of 1033211.23 lei, while only 703 have long-term debts in value of 1025223.80 lei.

Thus, for the entities that have *short-term debts*, in Table 1 some sub-activities have not very large debts related to a large number of companies, namely: *Construction works of residential and non-residential buildings* (4120) - 917 companies with debts of 681216.11 lei, *Plumbing, heating, and air conditioning works* (4322) - 270 companies with debts of 303148.18 lei and *Electrical installation works* (4321) - 184 companies with debts of 280605.56 lei. The sub-activity *Real estate development (promotion)* (4110) 107 companies have very high short-term debts, of 6788157.90 lei, which shows that this class that develops construction projects for residential and non-residential buildings for subsequent sale, has the resources mainly oriented towards lending to the sector. In 2019, the construction materials industry also registered an increase in costs, which led to an increased price for residential and non-residential buildings, and implicitly to the current debts of the profile companies.

The construction works of residential and non-residential buildings through new construction works, capital repair works, maintenance works, and current repairs have an important share in the sector, by the fact that on the one hand, they provide family housing and on the other hand they contribute through the construction of hospitals, schools, religious buildings, office buildings, hotels, shops, shopping malls, restaurants, gyms, buildings for industrial production, warehouses, etc. to sustainable local development.

Table 1 shows some sub-activities that have very high debts, at a small number of companies, namely: *Hydrotechnical constructions* (4291) - 11 companies with debts of 5153752.82 lei, *Construction works of other engineering projects n.a.c* (4299) - 23 companies with debts of 4205735.87 lei and *Road and highway construction works* (4211) - 35 companies with debts of 4190699.89 lei. These field-specific sub-activities are significant for the sustainable development of the coastal area because, in recent decades, the Romanian Black Sea coast has been affected by serious erosion problems for which modern hydro-technical works have been carried out (Stan, Aivaz and Ionițiu, 2019; Stan, Vintilă and Țenea, 2014). At the same time, there is a concern for the development of transport infrastructure (road sector, rail transport, river and sea transport, air transport) insofar as appropriate investments ensure conditions to promote economic growth and competitiveness and thus the development of the coastal area.

It is known that short-term financial debts have a positive influence on the profitability of companies, which indicates the possibility of making investments with a direct effect on the economy, and therefore on local development.

And the situation of *long-term debts* on each CAEN group separately, in the analyzed year 2019, is similar to that of short-term debts, and is presented as follows: *Construction works of residential and non-residential buildings* (4120) - 321 companies with debts of 929213.96 lei, *Plumbing, heating, and air conditioning works* (4322) - 99 companies with debts of 148006.72 lei, *Electrical installation works* (4321) - 68 companies with debts of 283770.32 lei and *Real estate development (promotion)* (4110) - 58 companies with debts of 3534265.62 lei. Similarly, the sub-activities that have very high debts, at a small number of companies: *Hydrotechnical constructions* (4291) - 6 companies with debts of 2450319.50 lei, *Construction works of other engineering projects n.c.a* (4299) - 13 companies with debts of 1161404.46 lei.

Bontempi, Bottazzi, and Golinelli (2020) argue that the persistence of long-term debt rates depends more on the need to finance future investments or exploit market conditions, while short-term debt fluctuates less persistently because it is often used by small and innovative companies in contingent situations, such as that of an immediate investment requirement; a higher proportion of short-term debt will reduce the risk of future accidents, however, it can be threatening for firms whose short-term debt is inappropriate for their long-term investments (Cheng et al., 2020).

Table 2 presents the short-term debts and the long-term debts by forms of ownership, on each CAEN group separately, the number of companies, with the amounts related to the analyzed year, namely 2019.

Table no. 2 Short and long term debts by forms of ownership

Type of ownership		Debts under 1 year	Debts over 1 year
Companies with domestic-foreign private-state capital (state <50%)	Mean	112529.00	
	N	1	
Craft cooperatives	Mean	35819.00	24806.50
	N	2	2
Autonomous directions/administrations	Mean	13810200.50	7887830.50
	N	2	2
Trading company with the state capital privatized during the reporting year	Mean	375195.00	42366.00
	N	1	1
Trading companies with full state capital	Mean	4610748.50	73460519.00
	N	4	1
Limited liability companies	Mean	915450.55	846327.47
	N	1863	682
Joint-stock companies	Mean	8357111.84	3613922.53
	N	25	15
Total	Mean	1033211.23	1025223.80
	N	1898	703

Source: Authors' computation

From the total of economic agents active in the construction field in Constanța County, according to the form of ownership, it is observed that the largest share of short-term debts is held by *limited liability companies* (1863 companies), at the opposite pole being *companies with domestic-foreign private-state capital (state <50%)* and *state-owned companies, privatized during the reporting year* (1 company), followed by *craft cooperatives, autonomous directions/administrations* (2 companies) and *companies with full state capital* (4 companies). In the case of long-term debt, the same trend is observed, namely *limited liability companies* (682 companies), compared to *state-owned companies, privatized during the reporting year*, and *fully state-owned companies* (1 company), followed by *craft cooperatives* and *autonomous directions/administrations* (2 companies).

Thus, if a correlation is made between the form of ownership and the type of commercial company, it is observed that the number of private companies that have short and long-term debts is considerably higher than those of public and mixed companies. The state, through the public capital, ensures a means of guaranteeing the general interest, of exercising direct control of the state over the activities. Specialized studies have shown that larger companies and/or those with more tangible assets have lower bankruptcy costs (Oliveira et al., 2013), this being the case of those established based on public property, in which there is state intervention.

The level of indebtedness, the speed with which they recover their money from the market, and the lack of liquidity position the economic agents working in the constructions field in an unfavorable context to ensure the current activity and especially the development. To adjust the liquidity level in the company, some companies may opt for loans. Thus, a firm may have a high level of indebtedness, but at the same time may enjoy favorable conditions for access to finance; and, conversely, some firms with a low level of indebtedness may face higher financial constraints (Fernández de Guevara et al., 2021).

The construction industry is the key element of the economy and society, as all sectors of the economy depend heavily on construction to provide the infrastructure underlying competitiveness, housing, specialized buildings, and production units (Aivaz, 2018b). Therefore, the access to financing of the economic agents from Constanța County determines an increasing trend of investments that can contribute to the revitalization of the construction sector (both on the residential and on the logistics industrial segments) in the area.

5. Conclusions

The construction sector has an exceptional impact on economic development around the world. Adequate buildings and infrastructure built by the construction sector ensure that a country achieves certain goals such as social development, industrialization, freight transport, sustainable development, and urbanization (Alaloul et al., 2021).

Construction activities can have impacts on coastal development and growth. Achieving the business objectives of the construction sector without compromising the values of sustainability has led to the belief that an integrative approach should be taken into account when drawing up the maritime spatial plan. Integration into MSP is understood as a multidimensional effort, however, MSP practitioners have difficulties integrating socio-economic aspects into their MSP processes (Weig and Schultz-Zehden, 2019).

Further analyzes will introduce the data for 2020 in Constanța County, to compare how the Covid-19 pandemic has left its mark on the activity in the construction sector, especially since there are already studies on aspects of sustainable investment in construction and real estate development as well as their interactions in the pre-, intra- and post-COVID-19 period (Kaklauskas et al., 2021).

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An Investigation of the Structure of Fixed Assets of Construction Companies in the Context of Coastal Area Development

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Abstract

The construction sector has a direct influence on social and economic development, which is why this article investigates the structure of fixed assets of construction companies in Constanța County in the context of coastal development to reveal how they can generate economic benefits and provide opportunities in the context of maritime spatial planning (MSP). The MSP can be a tool that can integrate and address the growth potential of the blue economy, even though tools for analyzing the economic effects of planning decisions are scarce. Starting from comparative structural analyzes regarding the fixed assets of construction companies located in Constanța County, the research objective was to obtain qualitative assessments on how economic resources can generate stimulation of coastal development.

Key words: fixed assets, construction companies, Constanta county, coastal area development, Maritime Spatial Planning (MSP)

J.E.L. classification: M21, O10

1. Introduction

Maritime Spatial Planning (MSP) is seen as a means of promoting the sustainable growth of the blue economy (Directive 2014/89/EU), as a practical way to create and establish a more rational way of organizing maritime spatial use and interaction among its uses, to ensure the balance between the need for development and the need to protect marine ecosystems and to achieve social and economic goals, set in a transparent and planned manner (Ehler and Dover, 2009).

Social and economic pressures are stressing coastal areas. Thus, the use of coastal lands induces the main man-made threats through coastal urbanization as a result of the concentration of buildings very close to the sea, the development of uncontrolled tourism and the development of recreational facilities, hydro-technical constructions of activities in coastal areas, etc. All these major man-made activities in the coastal area also involve construction works.

Potentially, MSP is a tool that can integrate and address the growth potential of both emerging sectors and traditional branches of blue economies (Schultz-Zehden, Weig, and Lukic, 2019).

The construction field is extremely wide, both at the national and European levels. Developing countries are largely dependent on the construction sector to implement sustainable development (Rafiq et al., 2021).

The construction sector has a direct influence on the social and economic development of the circulation of money. Therefore, the lack of adequate construction infrastructure results in underdevelopment of a country's sectors, an underdeveloped economy, an insufficient living standard, and an unbalanced income distribution. These are also the factors that contribute to the economic failure of a country (Alaloul et al., 2021).

2. Literature review

The development of the Romanian coastal area must be seen as a multifaceted concept, containing four pillars - economic, social, environmental, and cultural - and several dimensions, including a spatial/territorial one (Petrișor, 2014); sustainability covers all areas and sectors in which development takes place (Petrișor, 2017). Territorial development is also closely linked to the construction industry, which has a strong influence on the three aspects of sustainability: environmental, economic, and social (López Ruiz, Xavier and Santiago, 2020), cooperation between different territorial actors - companies, institutions, and citizens who opt for entrepreneurship and independent activities - can contribute to meeting the needs of the socio-economic context and can contribute to sustainable territorial development (Pérez-González and Valiente-Palma, 2021).

Through initiatives in the field of maritime spatial planning, the MSP can provide greater confidence and security for investors (Directive 2014/89/EU). Commercial and industrial stakeholders should play an important role in the MSP because such planning affects the preconditions for business operations in marine and coastal areas (Luhtala et al., 2021). Also, for business sectors, especially for those composed mainly of local, small and medium companies, the stake of MSP can be very high (Jentoft and Knol, 2014).

The construction sector is a key area that has a significant impact on the economy and the environment that contributes to economic growth, provides direct and indirect employment opportunities, meets people's needs for buildings and facilities (Norouzi et al., 2021). Its activities ensure the construction, maintenance, modernization, reconstruction, and demolition of construction structures. The construction industry has defined sustainability as meeting the growing demands of construction and infrastructure by balancing environmental protection, social diligence, and economic prosperity (Bamgbade, Nawi and Kamaruddeen, 2017).

And in the construction sector as well, companies are the basic factors of the transformation process, because they are the main actors that sell new products and services and generate economic value through it (Li et al., 2021). Assets are those means by which a company can secure an income for several years and is an essential notion in business and accounting because they are economic resources that can generate economic benefits in the future for the company that owns them.

Investments play an extremely important role, the most important component of the investment being the investment in fixed assets, decisive in the formation and development of the industrial structure (Wang, Qi and Shu, 2020). *Fixed assets* are assets and values that, unlike current assets, have a useful life of more than one year, ie they are not consumed from the first use and are divided into three categories: property, plant and equipment, intangible assets, and financial assets.

Tangible fixed assets (also called tangible or fixed assets) are goods with material content used by economic agents for a long period in the process of production of goods or provision of services (land and construction, technical installations, machines, machinery, means of transport, office equipment, etc.).

Intangible assets (also called intangible, or immaterial assets) are non-tangible assets (non-monetary identifiable) held for use in the production process or the provision of services (patents, licenses, trademarks) and include development expenses, concessions, licenses, patents, trademarks, goodwill.

Financial fixed assets refer to the financial amounts invested by the company in the long term in the form of securities and receivables, to obtain income from dividends and interest (shares, long-term loans) and which bring investors various gains.

The economy can be developed based on investment, and this is only possible through construction. Thus, the development of the coastal area is possible and due to investments in the construction sector that contribute decisively to this result (Petrișor and Petrișor, 2018), the benefit of rehabilitation works in the Romanian Black Sea coastal area has attracted investors willing to develop the area either by housing construction or by building other accommodation and related activities, which generated an increase in the revenues of companies with positive implications on the local budget (Filip, Stan and Vintilă, 2016).

Weig and Schultz-Zehden (2019) argue that maritime spatial planning (MSP) is a complex approach that faces multiple integration challenges, and although tools for analyzing the economic effects of planning decisions are scarce, there is room for improvement in the integration of economic, social and cultural perspectives.

3. Research methodology

The purpose of this article is to investigate the structure of fixed assets of construction companies in Constanța County in the context of coastal development to reveal how they can generate economic benefits and provide opportunities in the context of maritime spatial planning (MSP).

For the analysis, we used the data provided by the National Institute of Statistics of Romania (INSSE) and the Ministry of Public Finance (ANAF / National Agency for Fiscal Administration) for the calendar year 2019. 2019 was considered a reference year before the Covid-19 pandemic, and at the same time, is the last year with available data. Data processing and obtaining the indicators used in the statistical description were performed using the Statistical Program for the Social Sciences (SPSS). The research was based on the statistical analysis of several series of distribution, using a series of specific parameters, such as the average level and relative sizes, through which we reproduced the specific features of the analyzed community. The introduction in the analysis of a considerable number of companies, allowed us to obtain a synthetic image of the economic indicators regarding the assets of the companies in the field of constructions located on the territory of Constanța county.

Starting from comparative structural analyzes regarding the fixed assets of construction companies located in Constanța County, the research objective was to obtain qualitative assessments on how economic resources can generate stimulation of coastal development. The analysis confirmed our hypothesis, namely that economic resources influence the level of investment generating economic growth in the county and sustainable development of the coastal area.

4. Findings

The analyzed database that includes all companies in Constanța County whose main activity is “constructions” was formed by applying stratified selections: CAEN code, selecting companies with codes between 4100 and 4400, and the financial result, selecting companies that have made a profit.

This group includes the following sub-activities: 4110 Real estate development (promotion), 4120 Construction of residential and non-residential buildings, 4211 Construction of roads and highways, 4212 Construction of surface and underground railways, 4213 Construction of bridges and tunnels, 4221 Construction work for utility projects for fluids, 4222 Construction work for utility projects for electricity and telecommunications, 4291 Hydrotechnical construction, 4299 Construction work for other engineering projects n.c.a., 4311 Demolition work for construction, 4312 Land preparation works, 4313 Drilling and boring works for construction, 4321 Electrical installation, 4322 Plumbing, heating, and air-conditioning works, 4329 Other construction works, 4331 Plastering works, 4332 Joinery and carpentry works, 4333 Flooring and wall cladding works, 4334 Painting, whitewashing, and glazing works, 4339 Other finishing works, 4391 Roofing, framing, and terrace construction works, 4399 Other special construction works n.c.a.

Table 1 presents the structure of assets by subgroups of activities according to the CAEN code in the field of construction, the number of companies, and the average level of fixed, tangible, and financial assets.

Table no. 1 Structure of assets by subgroups of activities according to the CAEN code in the field of Constructions

CAEN Activities		Fixed assets	Intangible assets	Tangible fixed assets	Financial assets
4110 Real estate development (promotion)	Mean	4664578.76	2807.15	4566777.67	1242817.93
	N	98	27	96	15
4120 Construction of residential and non-residential buildings	Mean	771722.59	5769.98	869879.93	43150.26
	N	653	259	571	133
4211 Construction of roads and highways	Mean	3798761.50	96663.12	3352344.66	2157368.14
	N	30	17	29	7
4212 Construction of surface and underground railways	Mean	1686660.20	7265.50	1682919.20	2087.00
	N	5	2	5	2
4213 Construction of bridges and	Mean	216675.00		216675.00	

tunnels	N	1		1	
4221 Construction work for utility projects for fluids	Mean	648307.95	602.11	587600.41	147794.11
	N	22	9	22	9
4222 Construction work for utility projects for electricity and telecommunications	Mean	745535.00	975.43	1035703.00	198601.00
	N	10	7	7	1
4291 Hydrotechnical construction	Mean	1921047.55	5376.33	1827620.73	168594.33
	N	11	3	11	6
4299 Construction work for other engineering projects n.c.a	Mean	2662967.28	4568.38	2784458.82	70133.00
	N	18	8	17	8
4311 Demolition work for construction	Mean	11457.50	1095.00	10910.00	
	N	2	1	2	
4312 Land preparation works	Mean	476494.56	509.00	535992.75	
	N	9	1	8	
4313 Drilling and boring works for construction	Mean	304615.60	4410.67	303200.90	915.00
	N	10	3	10	1
4321 Electrical installation	Mean	347603.54	2195.59	384827.08	95254.72
	N	139	66	118	29
4322 Plumbing, heating, and air-conditioning works	Mean	159228.39	7492.29	160275.55	20201.02
	N	208	77	198	40
4329 Other construction works	Mean	332526.75	3174.22	313342.06	109090.00
	N	20	9	18	9
4331 Plastering works	Mean	151713.33		151713.33	
	N	6		6	
4332 Joinery and carpentry works	Mean	25896166.65	1087.90	314985.86	157453416.71
	N	43	20	36	7
4333 Flooring and wall cladding works	Mean	324975.87	2126.00	355596.58	351614.00
	N	23	7	19	2
4334 Painting, whitewashing, and glazing works	Mean	105074.82	21544.25	106606.80	1192.67
	N	11	4	10	3
4339 Other finishing works	Mean	140392.38	272.33	187053.67	
	N	8	3	6	
4391 Roofing, framing, and terrace construction works	Mean	129870.57	301.50	148454.33	5921.67
	N	7	2	6	3
4399 Other special construction works n.c.a	Mean	897303.69	10042.16	890688.00	208893.86
	N	67	19	64	14
Total	Mean	1752413.42	8038.97	1029994.81	3989496.67
	N	1401	544	1260	289

Source: Authors' computation

In the most used context, the construction covers complete processes involved in the development of buildings, infrastructures, installations, both civil and industrial, as well as associated activities that make possible the existence of the developed works. The further development of an organizational entity depends on the investment decision which is a strategic decision and is an integral part of the general policy of the company, the management of the entity is allowed to perform economic and financial analysis, influencing the decision-making process (Aivaz, 2018b).

Therefore, the companies whose main activity is "constructions" also substantiate the investment decision that leads to a capital asset made in the present, with the hope of future profitability of the company.

Table 1 highlights the structure of fixed assets by subgroups of activities according to the CAEN code for construction field companies in Constanța County. Thus, it is observed that the average value of fixed assets of 1752413.42 lei in 2019 is characteristic of 1401 companies analyzed, divided into

three categories. The investment in tangible assets was made by 544 economic agents with an average value of 8038.97 lei, compared to the value of intangible assets of 1029994.81 lei made by 1260 companies and financial assets in which the financial resources invested by 289 companies are on average 3989496.67 lei.

The analysis of the data in Table 1 allows the formulation of some findings. Thus, the sub-activity of *Carpentry and joinery works* (4332) is by far the most spectacular in the group, which for 43 companies has an average of fixed assets of 25896166.65 lei. However, the investment interest of this subgroup is in the form of securities and receivables, to obtain income from dividends and interest, the value of financial assets being 157453416.71 lei, but only for 7 companies. These data show that although sustained investments have been made, companies are not doing very well financially.

The sub-activity *Real estate development (promotion)* (4110) 98 companies have an average of fixed assets of 4664578.76 lei, 96 companies invest in tangible assets, registering an average level of 4566777.67 lei, which is explained by the very concern for the development of real estate projects, pooling of financial and technical means for the construction of residential (residential) or other (non-residential) buildings. The promotion and development of residential, commercial, or industrial projects involve the purchase of land or real estate for the subsequent sale of construction projects. This sub-activity is closely related to that of the *Construction works of residential and non-residential buildings* (4120) in which the average fixed assets achieved is 771722.59 lei for 653 companies. The low level of financial and intangible assets of this subgroup shows a significant vulnerability to the stability of the local economy.

The subgroup of *Road and highway construction works* (4211) has the average fixed assets of 3798761.50 lei for 30 economic agents, the average value of tangible assets of 3352344.66 lei for 29 companies, and the average value of financial assets of 2157368.14 lei for 7 companies. Road and highway construction works are complex works that are part of the category of heavy construction, have a long execution time, and require a high concentration of material and technical resources. The construction and maintenance of the transport infrastructure are activities with a strong multiplier effect, which create many jobs and boost the economic development of the area; there is a two-way relationship between the transport infrastructure of an area and its economic development, as evidenced by how these companies decide to invest.

The investments of the companies from the *Hydrotechnical constructions* subgroup (4291) are mainly in fixed assets with an average value of 1921047.55 lei and tangible fixed assets with an average value of 1827620.73 lei (11 companies), which from an economic point of view and, why not, from an accounting point of view, is called real estate investment (land, buildings). Thus, investments in property, plant, and equipment must have the effect of improving their initial technical parameters and leading to future economic benefits in addition to those initially estimated. The data are supported by the fact that, in recent years, the Romanian coastal area is in a process of implementing solutions and techniques specific to coastal engineering used for its rehabilitation and protection works, works that indirectly generate major benefits in local and regional development (Filip, Stan and Vintilă, 2016).

A sensitive issue in the coastal zone is land use, land cover, and land use changes which are a consequence of the conflict between economy and nature (Petrișor, Sirodoev and Ianoș, 2020), however, land use indicators for effective planning, aim to maximize global benefits, strictly control the development and construction of environmentally sensitive areas along the coast and are superior to urban planning by the destruction of the coastal zone (Su, Fan and Fu, 2020).

Table 2 presents the structure of assets by the form of ownership of construction field companies, on each CAEN group, the number of companies, and the average level of assets related to the analyzed year, 2019.

Table no. 2 Structure of assets by the type of ownership of Construction field companies

Type of ownership		Fixed assets	Intangible assets	Tangible fixed assets	Financial fixed assets
Companies with domestic-foreign private-state capital (state <50%)	Mean	1033400.00	5663.00	1027737.00	
	N	1	1	1	
Craft cooperatives	Mean	948919.00		1897628.00	210.00
	N	2		1	1
Autonomous directions/administrations	Mean	12772754.50	16432.50	12579290.50	354063.00
	N	2	2	2	1
Trading company with the state capital privatized during the reporting year	Mean	138915.00		138915.00	
	N	1		1	
Trading companies with full state capital	Mean	3314627.33	1472168.00	2781434.67	127410.00
	N	3	1	3	1
Limited liability companies	Mean	893298.67	5224.96	954302.98	175272.28
	N	1369	529	1229	270
Joint-stock companies	Mean	51897642.09	8954.82	3842953.30	69072458.69
	N	23	11	23	16
Total	Mean	1752413.42	8038.97	1029994.81	3989496.67
	N	1401	544	1260	289

Source: Authors' computation

Construction works carried out by public and private organizational entities can be analyzed in terms of contribution to increasing the economic value of the Romanian coastal area, the rigor and compliance of financial reports ensure the quality and accuracy of the information and are key features for sustainable development (Munteanu, 2020). Various actors in the construction business sector are working together to create better conditions for economic growth, generate new jobs, and thus contribute to local economic development (Aivaz, 2020).

The analyzed data revealed that *joint-stock companies* have major investment decisions for future returns, so in 2019, the average fixed assets is 51897642.09 lei and tangible fixed assets are 3842953.30 lei for 23 companies, and the average financial assets is 69072458.60 lei for 16 companies, the latter looking for the most advantageous placement for cash. These companies have the share capital consisting either only of money or money and other assets and/or receivables and is represented by shares issued by the company. This typology of companies is also concerned with the acquisition of buildings to be used by the entity as an administrative headquarters, which explains the high value of tangible assets.

Another type of construction company that recorded high financial values in investments in 2019 is the *autonomous directions/administrations* for which the average value of fixed assets is 12772754.50 lei and tangible fixed assets of 12579290.50 lei for 2 companies. This type of entity is set up to carry out activities of national or local interest and decides on the investments to be made, according to its object of activity, and which are financed from own sources, bank loans or allocations from the state budget, or, as the case may be, from local budgets.

Public investments are not enough for the sustainable development of the coastal zone; private investors are also needed to finance construction projects; construction sustainability measures are challenging because the built environment is a complex system that is characterized by huge flows of resources (Bamgbade, Nawi and Kamaruddeen, 2017).

5. Conclusions

The implementation of investment programs by construction companies often uses a mixture of public funding and land use tools, leads to changes in the labor market, creating an additional need for labor in sectors that prepare and carry out investment activities (research-design, construction, production of equipment and work installations, etc.), their economic resources being necessary for the social and economic development.

Schultz-Zehden, Weig and Lukic (2019) showed that blue businesses are a fundamental part of coastal and maritime communities and culture, their inclusion helps to develop the well-being of communities and the conservation and sustainable use of coastal and marine resources.

When planning the maritime space, it is necessary to take into account commercial stakeholders, because MSP involves risks, but can also provide opportunities to reduce vulnerability (Jentoft and Knol, 2014).

We believe that the involvement of the construction business sector in MSP from the perspective of contributing to coastal investments is appropriate; for the elaboration of the maritime spatial plan for the Black Sea cross-border area, the economic component must be taken into account, which represents an impetus for a wider development along the coastal area (Vintilă et al., 2017).

The present study, like other concerns, proposes an extensive area of analysis presenting a comparative empirical study of the structure of assets at the level of a field and can be corroborated with a series of efficiency indicators in the near pre-Sars-Cov-2 period (Aivaz, 2018a). The research area is also interesting from the perspective of the fact that the chosen geographical area, the territory of Constanța County, includes a substantial part of the coastal area, focusing on infrastructure, especially since Romania is a country with an emerging economy, in which fluctuations financial indicators can sometimes take on unexpected values (Aivaz, 2021).

Future studies will introduce, for comparison, in the analysis the financial data of construction companies from 2020, the year in which the Covid-19 pandemic began. This is because recent studies (Perillo et al., 2021) on the influence of the Covid-19 pandemic on coastal development and implicitly the construction sector state that the pandemic response and sustainable coastal development planning must take into account this complexity and the associated uncertainties which shape political provisions and processes.

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Impact of Actions of ex-Soviet Cross-Border Organized Crime Groups on Regional Economic Development

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Abstract

In this paper, I will demonstrate that the actions of cross-border organized crime networks (especially in the former Soviet Union) influence, from an economic point of view, the development of policies to combat transnational terrorism. The research starts from the idea that extremist-terrorist organizations are criminal groups that have a specific organization, logistics, specific training and education systems that can function without material and financial resources. However, the impact of the actions taken by these entities is devastating on national/regional economic development. Consequently, one of the most effective ways to neutralize the actions of cross-border crime group /terrorist organizations is to combat the financing of these entities. Within the European Union (where Romania is a member), the main responsibility for combating the financing of terrorism lies with the member states.

Key words: cross-border organized crime, Romania, economic development, regional development.

J.E.L. classification: F0, N4, O1 Economic

1. Introduction

Terrorism is the premeditated use or threat of use of violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience, beyond that of the immediate victim.

This research aims to find out the opinion of experts on the following objectives: establishing the way of "selection" of those suspected of involvement in cross-border organized crime, the institutional organization of our country to combat organized crime (smuggling, money laundering, tax evasion, etc.) and ways to achieve prevention in Romania. The experts also made proposals for institutional efficiency in the fight against cross-border organized crime.

The paper is structured in 3 parts. The first part aims to describe the characteristics of the phenomenon of cross-border organized crime in Romania, as well as how the "selection" of those suspected of involvement in such actions is made. The second part will present the institutional organization of our country to combat the phenomenon (smuggling, money laundering, tax evasion, etc.). The third part presents the views of experts on how to achieve prevention in Romania. The paper will continue with the presentation of some examples of "good practices" (from Europe, USA, etc.) that should be assimilated / implemented by the competent institutions of our country in the line of combating cross-border organized crime. In conclusion, proposals will be inserted on institutional efficiency in the fight against this phenomenon.

The research was conducted using a questionnaire distributed among experts and aimed to identify: "what is the opinion of experts on how to make the "selection" of those suspected of involvement in cross-border organized crime", "what is the opinion of experts with on the institutional organization of our country to combat this phenomenon", "what is the opinion of experts on how prevention is achieved in Romania".

The opinion of the experts converges to the fact that the allocation of resources for prevention activities and the non-eradication of the corruption that allowed the penetration of the structures are the main vulnerabilities of the Romanian state.

Most of the interviewees indicated that the "selection" of those suspected of involvement in cross-border organized crime acts targets all social sufferings, from the poor to the political environment.

Regarding the institutional organization of our country to combat cross-border organized crime, experts indicated as solutions: the need to adopt effective laws (Law No. 39 / 21.01.2003 on preventing and combating organized crime) and simplifying procedures to amend the legislation (implementation of the integrated border security system). The experts pointed out that they have been adapted to the specifics of Romania, starting from the socio-economic situation (quite poor population compared to the rest of the European Union, high unemployment, etc.) to Romania's geographical position (located east of the European Union border).

Although the fight against cross-border organized crime has become increasingly complex and difficult to counter, experts believe that Romania has specialized institutions in the fight against cross-border organized crime, cooperation works well between authorized services / structures, and the results can be quantified both nationally and European level.

Regarding the way in which prevention is carried out in Romania, the experts appreciated that the adoption of effective laws and a more determined mode of action of the institutions involved (including criminal prosecution bodies) would significantly contribute to increasing the degree of prevention against actions generated by this phenomenon.

Although the participants in the research consider that Romania has specialized institutions in combating cross-border organized crime and the cooperation works well between the authorized services / structures, there are still many things to do that have been improved in terms of preventing this phenomenon. In this regard, the experts made, in conclusion, a series of proposals for institutional efficiency in the fight against cross-border organized crime, starting from examples of "good practices" that should be assimilated / implemented by the competent institutions of our country on this line.

2. Literature review

Organized crime refers to transnational or local groups involved in various criminal activities, whose main purpose is financial benefits.

As for the states detached from the former Soviet Union, the vast majority of them, organized crime has penetrated all levels of government. With such pervasiveness and with such infiltration into the society it ceases to be a crime problem but a phenomenon that will help determine the future course of development of the Soviet successor states. Moreover, as an international as well as a domestic phenomenon, its consequences are already being felt not only in Eastern Europe but also in Western Europe, the United States and parts of Asia (Makarenko T., 2004).

The existence and pervasiveness of organized crime may preclude the transition to democracy, may limit personal freedom, legitimate foreign investment and open market economies. Since organized crime has already partially supplanted many of the weak governments of the successor states, the citizens may be trading one form of control for another. Domination by the Communist Party, may be replaced by the controls of organized crime. As in other societies, organized crime will limit free elections and freedom of the press and media'. Labor markets once controlled by state planning and submissive trade unions will instead be subject to the intimidation of organized crime which is already a major employer. State ownership of the economy will be exchanged for control of the economy by organized crime groups with a monopoly on existing capital.

The history of cross-border organized crime networks from ex-Soviet sources

The current phenomenon of organized crime in the former Soviet republics has not appeared on a barren terrain, as it is the result of a time evolution of the activity of the smuggling groups, thieves and robbers who have dominated the interloping world of the previous regimes in Russia.

The founders of the Soviet state not only admired the ethos of the criminal gangs mentioned, but they also used the members of some of them in their revolutionary actions, being involved in blackmail, kidnapping, robbery and other criminal acts/acts, for the purpose of fundraising.

The centralized planned economy from the ex-Soviet republics, through the shortcomings created in the supply of goods of strict necessity for the population, favored the development of the phenomenon of the "black market" and implicitly of the criminal gangs. In turn, the "perestroika" initiated by former President Mikhail Gorbachev not only did not disrupt the activity of criminal networks but, on the contrary, by destroying the mechanisms of political, economic and social control, it facilitated the association of the exponents of the interlocking world of the Soviet states. The collapse of the Communist Party, together with the Soviet states, also affected the criminal justice system. At the same time, the end of the cold war has made it possible for criminal organizations in the former Soviet republics to engage in specific transnational activities of large scale.

Former Soviet authorities officially recognized the existence of organized crime during the communist regime only at the end of 1988, when they mentioned its three stages, namely: primitive, middle-level and mafia-type.

Criminal groups, located mainly in Russia, are present in most of the former Soviet republics, their proliferation and expansion rate being quite impressive. Thus, according to experts, in 1994, there were 5,691 criminal groups in Russia, their number reaching 9,500 in 2000, compared to 750 in 1990. Russian criminal organizations have a true "army", with over 150,000 members for which about 3 million people work. Also known as the "criminal revolution", the organized crime phenomenon, considered as the most explosive force resulting from the collapse of the communist system, a by-product of the current settlements and prefaces, acts practically in all young democracies, in every class, blanket or social category, as well as at the level of the entire central and local administration of the former Soviet republics in the process of restructuring.

Relevant, regarding the power accumulated by the criminal groups at the level of the Russian Federation, are the data and information from official sources, according to which 40% of the private companies and 60% of the state companies are under their control (over 2,000 economic units with capital state, 4,000 joint stock companies, 7,000 small businesses, 7,700 markets and fairs), half of the number of commercial banks and stock exchanges, 50-80% of shops, hotels, restaurants, casinos, warehouses and public services in Moscow and the whole commercial network from St. Petersburg. Russian criminal organizations have reached 30-40% of Russia's GDP, controlling, almost entirely, the market of this country and expanding its operations in the rest of Europe, especially in the eastern and central area, as well as on other continents, especially in North and South America.

After the fall of the Soviet Union, criminal-political formations expanded drastically in the newly emerging Balkan democracies (including Romania). The weak government structures, the deteriorating domestic economy and the vulnerable government institutions made the Balkan region a safe haven for war profiteers, career criminals and fundamental Islamists (Arsovska and Basha, 2012).

The particularities of ex-Soviet crime and the financing of terrorist actions

The origin of resources that allow terrorist groups to act does not come exclusively from money laundering. In the matter of terrorism, money laundering is considered a directly related crime. By common sense, money laundering is understood as masking and concealing the origin of the values and assets obtained with illicit activities introduced into the financial economic system with an appearance of legality. This perception is somewhat consensual in the academic field.

Maia (2004) defines the expression "the complex of operations integrated through the stages of transformation, dissimulation and integration of goods, rights and values in order to make legitimate goods derived from criminal offenses."

In Welter's lesson (2001), it is a process by which the illicit origin of certain goods is hidden for their introduction into the legal market. "

The value of the damages caused by the crimes against the environment is between 91 USD and 258 billion USD annually, and the growth rate of these crimes is 2-3 times higher than the growth rate of the world economy. They rank fourth in the world in importance, after drug trafficking, counterfeiting and human trafficking. Experts believe that the sources of the fabulous financial

funds currently available to Russian criminal organizations are generally the same as those of traditional Mafia gangs, being involved in the whole spectrum of acts and facts specific to organized crime, from pimping, extortion, blackmail, robberies and attacks by "rackets", up to drug trafficking, illegal trade in weapons, explosives, ammunition, radioactive substances, falsification of various documents and means of payment, sale of counterfeit goods, trafficking in persons abroad and operations money laundering.

Following the consolidation of the position on the illicit market of the Russian Federation, the Russian Mafia organizations gradually expanded the scope of influence, initially in the Baltic republics and the countries of Central and Eastern Europe (whose economic, social, political and legislative structural reforms provide favorable conditions. organized crime), and subsequently in the southern, western and northern states of the continent, where there were already indigenous groups or networks of the Italian and Chinese mafia with which, during the course, they concluded a series of secret agreements and agreements.

The following characteristics regarding the presence and activity of Russian criminal groups in Europe are derived from the reading of the specialized literature:

- the use, to a greater extent, by the Russian mafia organizations, of the territory of Poland, Czech Republic, Slovakia, Hungary, Bulgaria, Romania and Albania as storage points for drugs destined for the West;
- transforming the cities of Prague and Warsaw into bases of operations of both the Russian and Italian mafias for the introduction of drugs in the western European countries;
- the use by the networks of drug traffickers, under the control of the Russian mafia organizations, of the airports in Prague, Bucharest and Sofia, from where the "cargo" is then transported by land to Western Europe;
- the control exerted by the Russian mafia organizations, in cooperation with the Ukrainian, Belarussian, Armenian, Georgian and Azeri, on the trafficking of weapons and radioactive substances, the trade in counterfeit consumer goods, as well as the trafficking in counterfeit means, practiced in the countries from eastern and central Europe;
- the Russian Mafia's exercise of the monopoly on trafficking stolen cars from the West, towards the Eastern European countries and the Middle East area;
- taking over the control of the Russian mobsters of the majority of the prostitution networks operating underground in Hungary, Poland, Czech Republic, Slovakia, Romania and Bulgaria;
- a phenomenon that causes increasing anxiety is the extension of the influence and operations of the Russian mafia organizations in the western states, in the USA and in the countries of the third world.

All these illegal methods, whose main purpose is to finance organized crime activities, constitute a threat to the national security of Romania, the organizations of ex-Soviet origin also aiming to obtain funds by carrying out activities, licenses (trade, import-export) or illicit (drug, arms trafficking, illegal migration, smuggling, etc.) in our country.

The next step of the offensive of the Russian mafia organizations will be the investment of illegally obtained money in state and private companies in the West, in actions and areas belonging mainly and traditionally to the international mafia, such as the construction of houses, offices and hotels, recycling of residues and toxic substances of any kind nature, purchasing restaurants, casinos, tolerance houses and shops.

3. Research methodology

This research involved consulting experts in fields related to the phenomenon studied. The experts were recruited from the representative institutions responsible for preventing and combating organized crime. Thus, an e-mail was sent to 50 selected persons from a database with which SRI collaborates institutionally, with the invitation to participate in a discussion on the involvement of organized crime and cross-border crime, requesting them, at the same time, to complete a questionnaire entitled "Cross-border organized crime. Forms, evolution and its impact on regional economic development ", which aimed to obtain the opinion of experts on the following objectives: establishing the way in which the "selection" of those suspected of involvement in cross-border organized crime is carried out, the institutional organization of our

country to combat the phenomenon and what is prevention / how can it be achieved in Romania. Experts were also asked for proposals on institutional efficiency in the fight against cross-border organized crime. 21 out of 50 experts responded to the request (shown in Table no. 1). The research started in August 2020 (with the invitation by e-mail to participate in the study) and ended in November 2020, when the final questionnaire was received.

The questions have been interpreted using "paper & pencil" methods (Björk&Kauppinen-Räsänen, 2012), as the answers were rather short and the number of responses was not too large.

Table no. 1 Experts participating in the research

Institution	Function	Number of experts
SRI (Romanian Secret Service)	officer	6
DIICOT (Directorate for the Investigation of Organized Crime and Terrorism)	officer	3
STS (Special Telecommunications Service)	officer	2
IGPR-DCCO (The General Inspectorate of Romanian Police-Directorate for Combating Organized Crime)	officer	3
University "Carol I"	professor	2
ULIM (Free International University of Moldova)	professor	1
Baroul Olt	lawyer	2
Court Slatina	judge	1
Court Râmnicu Vâlcea	judge	1

Source: own research (panel of experts)

The questions that substantiated this research was structured on 3 themes: 1. the characteristics of the phenomenon of cross-border organized crime in Romania, as well as how the "selection" of those suspected of involvement in such actions is made; 2. the institutional organization of our country to combat the actions specific to the phenomenon (smuggling, money laundering, tax evasion, etc.); 3. what is prevention / how can it be achieved in Romania. Moreover, the topics presented also show the objectives (as presented in Table no. 2):

Table no. 2 Research themes and objectives

THEMS	OBJECTIVES
1. The characteristics of the phenomenon of cross-border organized crime in Romania, as well as how the "selection" of those suspected of involvement in such actions is made.	What is the opinion of experts on how to make the "selection" of those suspected of involvement in cross-border organized crime.
2. The institutional organization of our country to combat the actions specific to the phenomenon.	What is the opinion of the experts regarding the institutional organization of our country to combat this phenomenon.
3. What is prevention / how can it be achieved in Romania.	Identifying the views of experts on how prevention is achieved in Romania.

Source: own research (panel of experts)

4. Findings

The first theme ("The characteristics of the phenomenon of organized crime and cross-border crime in Romania, as well as how the "selection" of those suspected of involvement in such actions is made") included the following question: "How is the "selection" of those suspected of involvement in such actions?".

To this question, most experts believe that selection is made from all walks of life (from the poorest to politicians). 7 of 21 considers that the selection is made according to the mode of operation / methods of money laundering obtained from criminal activities, 6 out of 21 considers that the selection is made according to the severity of the consequences produced / the value of the damage and 4 out of 21 consider that the selection is made according to the degree of threat / imminence of the crime. There were also opinions (2 for each statement) according to which the selection is made with the help of all institutions with responsibilities in combating the phenomenon (especially with criminal prosecution bodies), but also depending on the personal and organizational interests of decision makers.

The second theme (“The institutional organization of our country to combat the actions specific to the phenomenon”) was the following question: „*How do you see the institutional organization of our country to fight organized crime (smuggling, money laundering, tax evasion, etc.)?*”.

The answers given by the experts who participated in the research were the following: “it is efficient, the systems are structured according to the branch of organized crime (for each scourge there are units responsible for gathering information / preventing / combating / prosecuting)” (8 of 21) , “It is important to have cooperation between institutions with responsibilities in combating the phenomenon, and existing relationships must be maintained and developed” (6 of 21), “it is necessary to specialize staff in combating cross-border organized crime in each institution with responsibilities along these lines” (3 of 21), while the answers “need to be improved because the actions specific to organized crime (tax evasion, smuggling, money laundering) are detected late and the recovery of damages is negligible in relation to the damage and” although there is an institutional organization at European level , there are also incompetent and bad “elements” intended (proven in decision-making functions through relationships without principles), each had 2 mentions.

Regarding the third topic (“What is prevention / how can it be achieved in Romania”), it consisted of 2 sequences in a single question: “*From your point of view, what is prevention / how can it be achieved in Romania?*”.

For a start, I found out the opinion of the experts on what prevention means, later they expressed their opinion on how to improve this process in Romania. The experts also provided examples of “good practices” from more developed countries, which could be implemented in our country.

Thus, regarding what prevention means in Romania, the experts mainly offered the following answers: ” it is closely related to the process of documenting, making a decision” (8 of 21), ”starts from the information and is applied according to several criteria (including relevance and / or opportunity)” (6 of 21), ” the impossibility of reaching the bodies / institutions empowered to fight this phenomenon by the exponents of cross-border organized crime” (4 of 21) and ” increased attention from state institutions and signaling any clues to the competent organisms” (3 of 21).

Regarding how this process can be improved in Romania, the experts provided the following answers (inserted in Table no. 3):

Table no. 3 How prevention can be achieved in Romania

through a more determined action of justice	14 experts out of 21
placing a special emphasis on the specialization of services	11 experts out of 21
by increasing the penalties arising from the commission of crimes related to cross-border organized crime	
by intensifying the means of controlling banking transactions	10 experts out of 21
by increasing the role of the informative element	
by reconsidering the information by the decision makers	
through better monitoring and analysis of statistics on the evolution of cross-border organized crime in Romania	9 experts out of 21

by logistical support of the state apparatus with powers of control and prevention of cross-border organized crime	7 experts out of 21
by increasing the qualification of the staff	7 experts out of 21
by carrying out propaganda measures through the media / media in order to make the population aware of the negative effects that organized crime produces	5 experts out of 21

Source: own research (panel of experts)

The experts also offered some examples of "good practices" (implemented in other states facing this phenomenon) that could be assimilated by the Romanian state to increase the effectiveness of measures to combat cross-border organized crime. Thus, the most relevant were the following: adoption of anti-mafia laws (as in Italy), granting extended powers to the "tax" (as in Western European countries), adopt legislation to simplify the procedure for prosecuting and prosecuting criminals (as in the USA), implement "extended confiscation" to leave organized crime without financial support, Establishment of institutions such as Eurojust, the European Judicial Network or Europol, with very good results in the fight against cross-border organized crime and Creation of an entity to fight cross-border organized crime (separate from DIICOT), integrating all data and information collected by all institutions involved in this process of combating the phenomenon.

At the end of the questionnaire, the experts provided a series of proposals for institutional efficiency in the fight against cross-border organized crime. The most relevant proposals, which should be considered in the future, were: simplification / improvement of legislation, promoting active cooperation and developing an exchange of information between administrative services, private entities and authorities, including at transnational level, attracting funds and allocating resources (financial, human and logistical), adapted to the dynamics of the phenomenon, in the intelligence services, police and justice, improving the internal protection departments of the institutions empowered to fight corruption in institutions, reducing bureaucracy in terms of cooperation between competent institutions, developing the investigative capacity of the competent institutions, facilitating the exchange of good practice with the competent authorities of other Member States of the European Union, strengthening the capacity to identify suspicious transactions, in order to improve the procedures for confiscating funds resulting from crimes, ongoing risk assessment in relation to existing possibilities, formulating medium and long-term objectives.

5. Conclusions

The main conclusions of this study on cross-border organized crime are:

1. is a large phenomenon, with a very high degree of risk, which requires, from the competent institutions, a permanent adaptation in order to discover the best means and methods to combat it;
2. affects, in particular, the fields of activity in which large sums of money are circulated (economic-financial, tourism and / or real estate), but also the foreign policy of Romania and the states in the region;
3. the intensification of this phenomenon influences the decision-making capacity of the Romanian state institutions (and of those who face such actions);
4. the perpetuation of cross-border organized crime in Romania and in the region affects the image and credibility of our country and neighboring states at the level of international organisms.

Regarding the opinion of experts on how to "select" those suspected of involvement in cross-border organized crime most experts consider that the selection is made according to the mode of operation / methods of money laundering obtained from criminal activities and according to the severity of the consequences produced / the value of the damage.

Regarding the institutional organization of our country to combat the specific actions of the phenomenon, most of the interviewees indicated that it is effective and the systems are structured according to the branch of organized crime (for each scourge there are units responsible for collecting information / preventing / combating / prosecution). However, there have also been

opinions that it needs to be improved because actions specific to organized crime (tax evasion, smuggling, money laundering) are detected late and the recovery of damages is negligible in relation to the damage.

Regarding the opinion of the experts on prevention and how this can be done in Romania, the majority opinions expressed were that prevention is closely linked to the process of documenting / making a decision and that in order to be effective in Romania a more determined intervention of justice.

In addition to the conclusions reached, it should be noted that in the absence of strong political will at all levels, the spread of organized crime, corruption and money laundering will divert the legal cycle of activity through the accumulation of illicit funds and financial acquisitions.

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Section III

Economic and Social Studies

Managing Students’ Attention and Dealing with Cognitive Fatigue during Online Business Communication Courses

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Abstract

Given the unprecedented circumstances of the global pandemic, emergency remote teaching was adopted in universities around Romania and around the world, this unique perspective created numerous investigating opportunities for academics around the world, adopting and adapting systems, methods, strategies at an unimaginable scale and testing solutions, designing and issuing new methods were routine activities. All educational systems were challenged to turn into giant didactic laboratories with billions of subjects. In this context, our present study aims to investigate at a small scale the behavioral engagement of students in the online environment in terms of their motivation to continue their studies, attention and cognitive fatigue, personal involvement, as well as their unique personal experiences and personal responses that they are willing to share.

Key words: business communication teaching, cognitive fatigue, ESP teaching, motivation, strategies

J.E.L. classification: Z13

1. Introduction

Our present study investigates the impact of online education during an unprecedented context, we consider that introducing this context would offer a better understanding of its findings and its conclusions. The outbreak of the COVID-19 apart from its medical, social, economic and political challenges, brought an even longer impact (than initially foreseen) on educational systems. According to United Nations, (2020, , 94% of the world's student population, (meaning 1.6 billion learners were affected) and sent almost overnight, in some cases, from a traditional face-to-face learning system to online learning. Mastering and developing an adequate response to this unexpected situation was not an option, it was mandatory. This new form of teaching was first associated (and even called for a while) blended learning, it is true that distance education existed before, as well as blended forms of distance learning, however, in a short period of time, educators realized that these new contexts required more than placing educational content on various platforms and supervising synchronous and asynchronous forms of learning, it was about continuing and enhancing the previous face-to-face educational efforts, maintaining and strengthening students’ motivation and keeping them alert. Obviously a refined and complex form of education which in most cases required considerable efforts and new forms of adaptation, planning and lengthy preparation- emergency remote teaching (ERT)- as the new concept was coined, is meant to offer an alternative way for providing quick and temporary resources for educational purposes during an emergency or a crisis.

The conceptual framework sounds easier and better than reality, as according to UNESCO (2020, pg. 2) - 50% of the learners lacked a personal computer and 43% lacked an internet connection. Proper technological resources and a physical place to study represented a problem not only for students coming from disadvantaged families but also for students coming from multiple-children families. This was not the only facet of the problem, instructors were also forced to develop online teaching skills or at least to improvise/mime them overnight, in an unrealistic timeframe, and even more, they were transformed into their own course designers and tutors of online content.

Synchronous forms of education on ZOOM, WebEx, Microsoft Teams or other similar platforms were offered. Asynchronous forms were also developed on Google Classroom, Moodle Canvas. In numerous cases synchronous and asynchronous forms were blended in order to maintain students' engagement and interest in the learning process. Institutions around the world invested into and found various solutions with different outcomes. Was it a success? Was it a failure? Only time will tell...

Online education with its two main components - online teaching and online learning is not a new concept. It has decades of study and development behind and therefore, various studies proposed models, standard methods and course design suggestions. Careful planning and considerations on the impact of design and methods being used are a key to the quality of the instruction. An important feature of emergency remote teaching is represented by the decision on the design options the instructor makes meaning whether, how, what and when to teach (Barbara Means, 2014).

Students' motivation to accomplish their goals is tightly connected to their future success in professional life. In many circumstances, as we all know, learning tends to become more of a "compulsion" than an intrinsic drive, this situation leading to a lack of mental presence and involvement in the course. The learning process should be correlated with students' willingness and need which derive from their internal motivation mechanisms.

2. Literature review

Motivation theory basically differentiates two types of motivation- intrinsic and extrinsic. Intrinsic motivation is activated by internal mechanisms and disinterested in external rewards (such as prizes, acclaim, admiration or any form of external gain). Internal rewards such as happiness, intellectual interest and positive emotions in general give a sense of individual progress. In "Making Learning Fun: a Taxonomy of Intrinsic Motivation for Learning", Thomas Malone and Mark Leeper (2005, pp.230-231) discuss different ways in which learning environments can be perceived by students as intrinsically rewarding. The activities should be perceived as interesting, captivating, fun, enjoyable, in order to trigger intrinsic motivation of learners. Intrinsic motivational factors include being challenged to pursue a personal goal, helping others, feeling included in a group, cooperating and competing with other members of the group, possessing the ability to compare their outcomes to that of other fellows, sensory cognitive curiosity also plays an important role, as well as the feeling of having a personal intellectual accomplishment appreciated by others.

If external rewards are granted as "motivational" factors for an activity the entire intrinsic result of the process can be compromised triggering the so-called over justification effect. The intrinsic enjoyment or intrinsic enjoyment should be considered as a sufficient fuel for the entire behavior, while adding the extra extrinsic factors. The tendency of a person is to perceive the task as overjustified, (Richard A. Griggs, 2019, p. 231).

The period of online courses has been dominated by asynchronous learning tasks, which coupled with synchronous learning tasks led to a certain fatigue and, in students' views to an overwhelming intellectual effort of adaptation. This effort can be ultimately translated in a mental or cognitive tiredness which turns into a barrier against successful learning. In time, as the level of tiredness increases it leads to a decrease in cognitive and physical performance, a perpetual dissatisfaction and impacts on, sometimes dramatically, students' motivation to pursue their educational goals.

In terms of fatigue two types can be differentiated- mental and physical. The physical aspect is described as the incapacity of a muscle to optimally perform a given task, while the mental aspect is a more complex and subtle combination between psychological and biological factors which lead to a loss of mental performance. Mental fatigue is determined by several factors as: sleep deprivation, a depletion of internal resources and a lack of desire to perform- a fatigue motivation (Grillon C., Quispe-Escudero D., Mathur A., Ernst M., 2015, pp. 383-389)

Behavioral engagement in the online environment is concerned with the tasks students perform in their learning activities and it is in a tight correlation with another concept vital to learning outcomes- cognitive engagement, which assesses the degree of involvement that students activate in their learning efforts, it triggers deep learning strategies and the regulation of cognitive processes involved in learning. An accurate assessment of this would provide a more comprehensive image of the educational processes and issue more adequate responses from tutors. Student engagement is of

vital importance and it represents an indicator in persistence, performance and even in the retention of students enrolled in higher education.

Numerous theories on emotion and its role in learning come to offer a diverse and complex field of research, it is worth mentioning that in this case the investigations cross the traditional academic field of research, conducting it into more subtle layers of personal life and deep affective internal structures. A more comprehensive view on the role of the affective dimension in higher education would probably provide a further step to be investigated.

Creating a learning community supposes the development of human relationships that are function based on the principles of reciprocity. Instructor’s positive attitude triggers a positive productive learning environment and encourages students’ socialization, positive attitude being based on genuine communication, respect, trust and support. Communication is in many cases easier to be enunciated than performed and even harder to be defined, as it is a multi-faceted and multi-leveled concept, encompassing not only the verbal but also the non-verbal message to be transmitted. Poor communication leads to a difficult class management, anxiety, confusion, misunderstandings, and disruptive behavior. Based on our personal observations, we rooted our present study on a number of assumptions- clear and concise structures and procedures need to be developed on a routine bases in order to avoid organizational stress and to meet students’ as well as instructors’ expectations. A set of rules to follow all along the course would be of great help and would enable students regain their focus. It would also provide a framework easy to anticipate and to follow, as mental structures depend on rehearsal and on routines. Visual representations are more captivating and illustrate better the theoretical concepts. Involving students into the discussion more often than in face-to-face environments and including humorous remarks, word games adapted to their linguistic preoccupations can grab their attention and dynamise the entire interactive process. Mini breaks are also a good useful tool in relaxing the body and the mind and in allowing the group to function as a group (as some students need longer periods to reflect or to perform a task than others, as their learning rhythm is different). A strategy which can bring a serious engagement even during the small breaks proposed above is to open a discussion topic based and to ask them to reflect on or search more information during the break and continue the discussion after.

3. Research methodology

In order to investigate students’ views the present study adopted a quantitative descriptive design based on an online questionnaire, conducted at the end of the second semester of the academic year 2020-2021. The online survey comprised a number of 63 undergraduate students enrolled in the 1st year at the Faculty of Economic Sciences, “Ovidius” University of Constanța, with a componence of 9.2% male students and 90.8%female students. Their average age was 20. They were 1st year and 2nd year students majoring in Business Administration (5.2%), Banking and Finance (82.3%) and Marketing (12.5%). The online questionnaire was given to students during online activities and it was meant to measure undergraduate students’ motivation to pursue their learning goals during online courses. All answers were anonymous and students were offered the possibility to avoid answering uncomfortable questions in the survey. The average time to complete the 10 questions included in the questionnaire was 7:06 minutes. The questionnaire contained scales from strongly agree to strongly disagree, as well as closed and open questions. The open questions are meant to offer a deeper insight into students’ personal perceptions and allow them an increased degree of freedom of opinion.

4. Findings

When asked about the capacity to concentrate during online courses, the survey results indicated that a number of 17 respondents found it easier to focus during online courses, 25 opted for “No”, while 21 students were indecisive and opted for “Maybe”.

The second question asked about the difficulties encountered during remote learning, in this case most of them indicated that more time had to be allotted to study and 35% of them complained about having encountered frequent technical issues which prevented them from being as active as they would have liked. It is worth noticing the fact that only 10% of them complained about the lack of

appropriate technical equipment and 3% about not being able to understand the instructions they received.

Figure no. 1 Remote learning difficulties encountered

2. Difficulties encountered during remote learning:

[More Details](#)



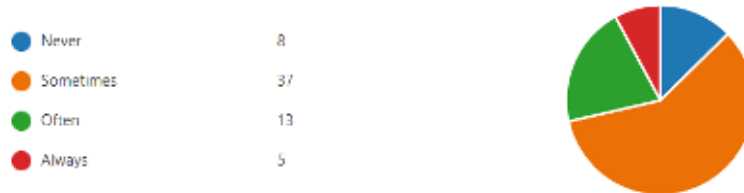
Source: Generated on Microsoft Forms, based on students' responses

A demotivation is an important internal factor with subtle mechanisms which determines a decrease in the learning involvement of students, in a direct relationship with their attention and at the same time a direct cause of a learning fatigue, coupled with a more general factor affecting larger masses of people, a pandemic fatigue (affecting more than half of the world's population, according to statistics). When asked about feeling tired and demotivated during online courses - 5% chose "Always", 21 opted for "Often", 59% indicated that this "Sometimes" affected them, while only 13% said that this "Never happened".

Figure no. 2 Students' answers on feeling tired and demotivated during online courses

4. I felt tired and demotivated during online courses

[More Details](#)



Source: Generated on Microsoft Forms, based on students' responses

The questionnaire included open questions, one of them being dedicated to the best method/methods they have experienced for ESP learning. The predominant type of activities indicated interactive communication (coupled with listening, watching, playing games, debates etc.) as top of the range, an interesting comment, which is worth investigating, indicated the Pomodoro method as being ideal, some other answers even suggested smaller test to be given more often. An introvert student suggested individual work or study, as he/she felt intimidated and inhibited by group activity. These answers which indicate interactive communication as a preferred method anticipated another question included in our investigation: "Doing communicative activities is the best way to learn English more accurately?", in this case 83% of the respondents agreed, 16% opted for "Maybe", while only 2% chose "No".

The question which investigated the worst methods for learning ESP revealed that most students weren't able to point any by saying "I didn't experience any...", while those who elaborated an answer indicated- online classes, memorizing grammar rules, lengthy exercises, reading activities, or the fact that there is no bad method and that after all it only depends on the person being taught and his/her mental structures, skills or personal preferences.

Considering the fact that mistakes are a source of understanding and improvement, since we all learn from our mistakes and we are motivated by the fear of not making any mistakes to pay more attention and to enrich our knowledge, we chose to investigate whether students consider the opportunity to find and correct their mistakes immediately after they were made and the activity is completed as having a positive impact on their motivation or not – "I find it helpful when the

professor corrects my mistakes after an activity is completed” - 61 students (97% of the respondents) opted for “Yes”, while 2 (3%) for “No”.

When asked if they consider that online learning is appropriate for a foreign language course, students’ options were mainly divided between “Strongly agree” (13%) and “Agree” (51%) on the one hand and “Disagree” (32%) and “Strongly disagree” (5%) on the other.

5. Conclusions

Considering the results of the finding section of our present research, would like to bring into discussion a number of ideas which could help improve the online educational process and the understanding of students’ needs in terms of motivation and attention. A careful planning of the timing, the content and the amount of information is necessary. Smaller slots of times, compared to face-to-face activities, should be dedicated to proposed activities, in order to avoid cognitive fatigue and boredom. A bigger variety of activities should be designed and included, alternating with theoretical presentations of the concepts under discussion. As suggested by our students, more stress should be placed on communicational activities (listening, speaking, free talks, case study discussions, free talks, individual and group presentations, role play etc.) and on digital games, testing under the form of digital competitions. If possible, the activities proposed should take less time, they should be more dynamic and more entertaining than during face-to-face courses. More stress should also be placed on the positive attitude of the instructor. Socio-emotional factors should also be carefully investigated in order to be able to improve students learning and more practical advice on learning techniques and individual guidance should be offered when required. A key to preserving students’ motivation and attention all along their educational experience resides in the adaptability of instructors to a large student population emotional needs and the capacity to foresee their lifelong learning needs in the context of perpetually changing employability requirements.

More in-depth views on the role of the affective dimension in motivating and retaining students enrolled in higher education would be worth investigating in future studies. Given the fact that special social circumstances require special adaptive techniques, instructors should be able to recognize and carefully exploit the boundary between academic and personal life in the benefit of their students.

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Markov Switching Model for Financial Time Series

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Abstract

Modeling financial time series is an important step for its forecast and risk evaluation when financial assets are involved. In this context, this article presents a Markov Switching Model for BET series recorded during the period Oct-2000 - Sept-2014. It is shown that the model captures two phases in the series variation, even if the series is not stationary.

Key words: Markov Switching Model (MSwM), time series, BET

J.E.L. classification: C32, C58

1. Introduction

An important research area especially during the decades is represented by financial time series analysis, aiming at explaining the laws governing the series evolution in the context of a continuous change of financial markets. Stock markets are characterized by complex nonlinear dynamics that cannot be described by simple deterministic models. The stochastic component plays an essential role in determining their variability and evolution.

Finding a high-performance model of the process that generates financial series is essential for an accurate prediction of its future behavior, supporting the decisions for profitable trading strategies (Sinclair *et al*, 2008; Wagner *et al*, 2007).

Therefore, in this article, we propose a model for the evolution of the BET close monthly index for a period of 168 months that takes into account the stochastic component. This is a Markov Chain Monte Carlo (MSwM) that emphasizes the existence of two states in the series evolution and can be further used for forecasting the series behavior in the context of the continuous change of the capital market.

2. Theoretical background

The deterministic approach of data modeling is based on equations that completely describe the process evolution from which the data are taken, without the intervention of random factors. Unfortunately, the economic and financial systems cannot benefit from this approach since they can experience chaotic behavior due to dynamically generated internal and external noise (Chakraborti *et al*, 2007).

Before the publication of the research of (Mandelbrot, 1963) and (Fama, 1965), the financial data normality has been assumed as well as the markets' efficiency. Later, their studies on asset price series found some statistical properties of the asset prices random variations, common to different assets, markets, and different periods (Mandelbrot, 1982; Fama, 1998; Chakraborti *et al*, 2007).

Starting with the work of Fama (1965), different critiques of the financial market efficiency theory appeared, showing that the decisions taken by the players are not always rational and not all have access to the same information (Bărbulescu and Băutu, 2012; Degutis and Novickyté, 2014).

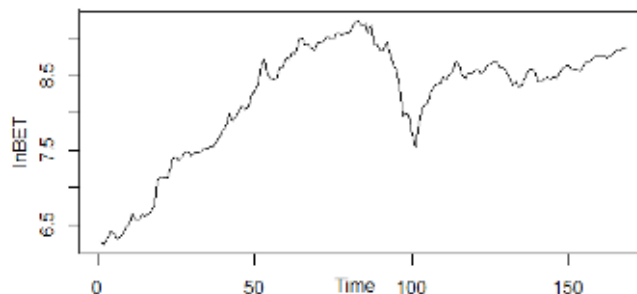
Therefore, the Adaptive Market Hypothesis, based on Darwin's evolution theory, has been proposed (Lo, 2004). It brings the evolving market idea into light, showing that the model followed by the market is evolutionary, based on competition, adaptation, and natural selection.

In this context, different approaches for modeling financial time series appeared, like artificial neural networks (Chen *et al*, 2006; Bărbulescu, 2018; Dragomir, 2017; Tache, 2009; Tache et al. 2010), gene expression programming (Cheng *et al*, 2018; Lee *et al*, 2014), support vector regression (Chen *et al*, 2006; Simian *et al*, 2020), hybrid (Bărbulescu and Băutu, 2012; Alhnaity and Abbod, 2020), all of them being based on the hypothesis of the financial series stochastic behavior. Therefore, we present an alternative model, MSwM, for financial time series, that captures the stochastic nature of the data.

3. Research methodology

The study series consists of BET monthly closed data, collected between Oct. 2000 and Sept. 2014. The logarithm of the data (Figure 1) has been taken to reduce the series variability, as recommended by the econometrics methodology. The new series is denoted by lnBET.

Figure no. 1. lnBET series



Source: Figure drawn by the authors after processing data from
<https://www.quandl.com/data/BUCHARESTSE/INDICES-Bucharest-Stock-Exchange-Indices>

Statistical analyses have been performed for the lnBET series to determine its properties: the Shapiro - Wilk (normality test), the KPSS test (for stationarity in level and trend), and the Mann-Kendall test (for trend existence). The autocorrelation presence has been emphasized by the correlogram.

The tests have been performed at a 95% confidence level using the R software.

Secondly, we proposed the use of a Markov Switching Model (MSwM) of first-order for modeling the evolution of the study series.

The model takes the form:

$$X_t = \begin{cases} \alpha_1 + \varphi_1 X_{t-1} + a_{1t}, & \text{if } s_t = 1 \\ \alpha_2 + \varphi_2 X_{t-1} + a_{2t}, & \text{if } s_t = 2 \end{cases} \quad (1)$$

where $a_{it} \sim \text{IID}(0, \sigma_i^2)$, independent of each other, s_t is an unobservable state variable following a first-order Markov chain that has a matrix of the transition probabilities $(p_{ij})_{1 \leq i, j \leq 2}$, with:

$$p_{ij} = P(s_t = j | s_{t-1} = i) \text{ and } p_{11} + p_{12} = p_{21} + p_{22} = 1. \quad (2)$$

A small transition probability p_{ij} shows that the system tends to stay longer in state i .

4. Findings

The Shapiro-Wilk test found enough evidence to reject the lnBET series normality (p-val = 3.924e-11). The Mann-Kendall trend test could not reject the hypothesis of a trend existence. The Sen slope found is 0.01114, and a corresponding p-value of 2.2e-16. The correlogram shows a high

autocorrelation with an exponentially decreasing shape.

The results of the KPSS test do not support the trend stationarity and the level stationarity hypotheses since the p-values are smaller than 0.01. But, after taking the logarithm and the first-order difference, the stationarity hypothesis could not be rejected.

Therefore, a Markov Switching Model with two states has been built. The coefficients and the corresponding significance tests are presented in Table 1.

Table no. 1 Coefficients in MSwM

Regime 1			
Estimate	Standard error	t-val	p-val
0.1025	0.0537	1.9088	0.05629*
0.9901	0.0066	150.0152	<2E-16***
Residual standard error: 0.05589244			
Multiple R-squared :0.9953			
Regime 2			
Estimate	Standard error	t-val	p-val
0.8812	0.4597	1.9169	0.05525*
0.8832	0.0553	16.1519	<2E-16***
Residual standard error: 0.1458123			
Multiple R-squared:0.9322			

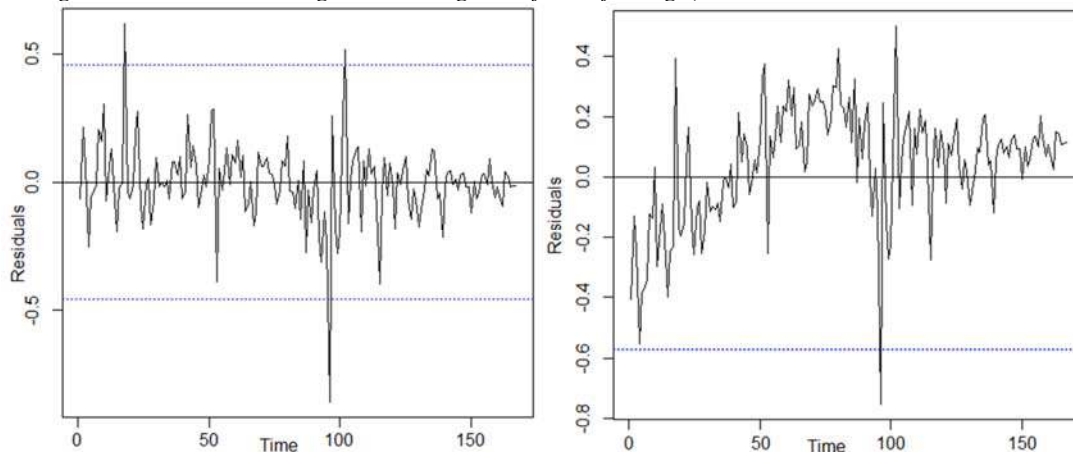
Significance codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Source: Output of the modeling the data series using the R software

For both regimes, the estimates are significant at a 0.05 significance level and the multiple R squared is very high, showing that the model explains more than 99% of the variance, in the first regime and more than 93% of the variance in the second one.

The residuals for regimes 1 and 2 are presented in Figure 2. A small variation of the residual series is noticed in both regimes.

Figure no. 2. Residuals in regime 1 and regime 2 (from left to right)



Source: Own results from the MSwM

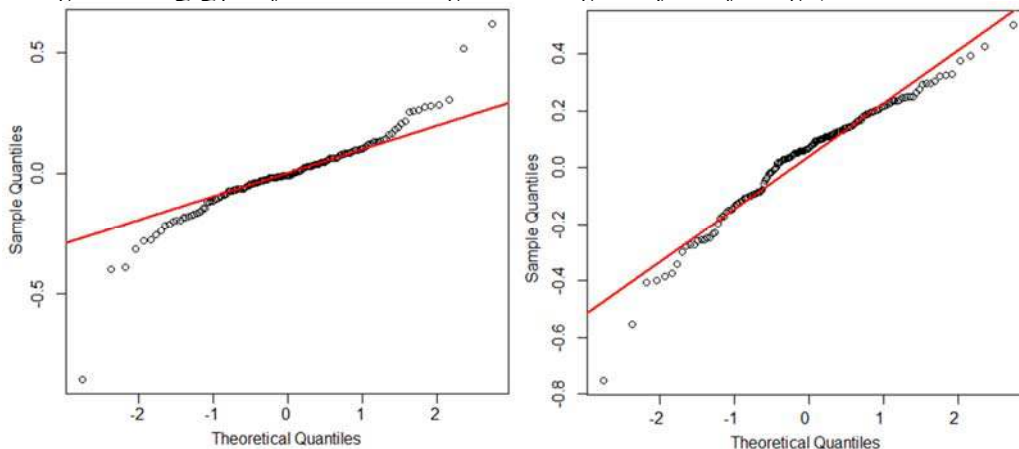
The Q-Q plots of residuals for both regimes are presented in Figure 3. The residual series are Gaussian only for the model in the second regime (right-hand side of Figure 3).

The charts of autocorrelation (ACF) and partial autocorrelation functions (Partial ACF) of the residuals are presented in Figure 4. Whereas the residuals are not correlated in the first regime (Figure 4 (a, b)), they are correlated in the second regime.

Figure 5 contains the smoothed probabilities for both regimes, while Figure 6 presents the variation of lnBET vs. the smoothed probabilities. Both prove that the model emphasizes regime changes. Significant probabilities inhomogeneity is emphasized in regime 2, where one can notice the alternation of high probabilities and very low ones. Since the majority of the probability values

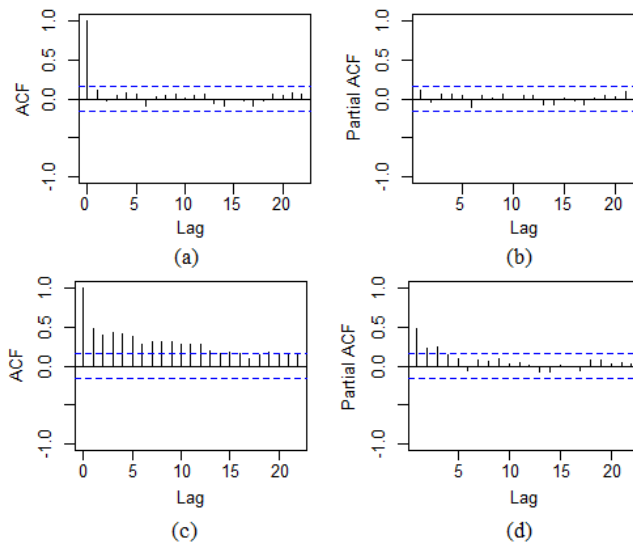
in the second regime are very low, it results that the system tends to remain longer in that state.

Figure no. 3. Q-Q plots for residuals in regime 1 and regime 2 (from left to right)



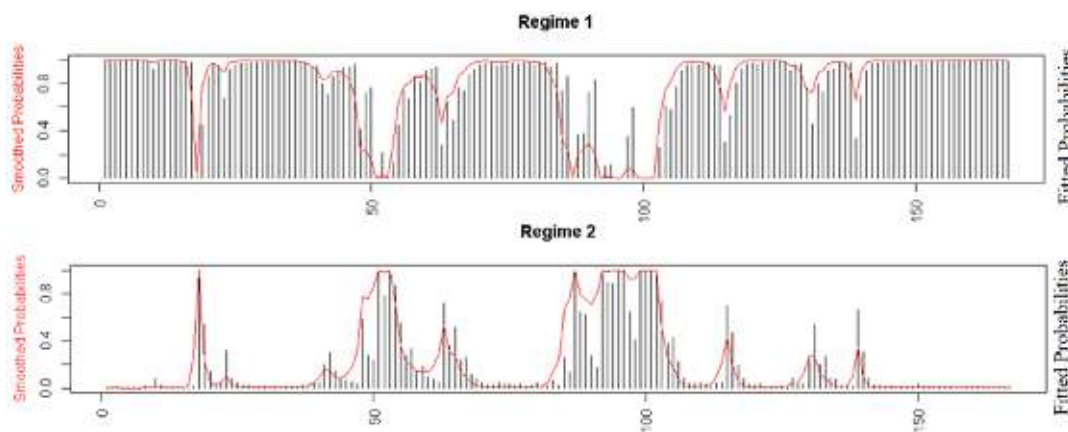
Source: Own results from the MSwM

Figure no. 4. ACF and Partial ACF plots of residuals for (a, b) regime 1 and (c, d) regime 2



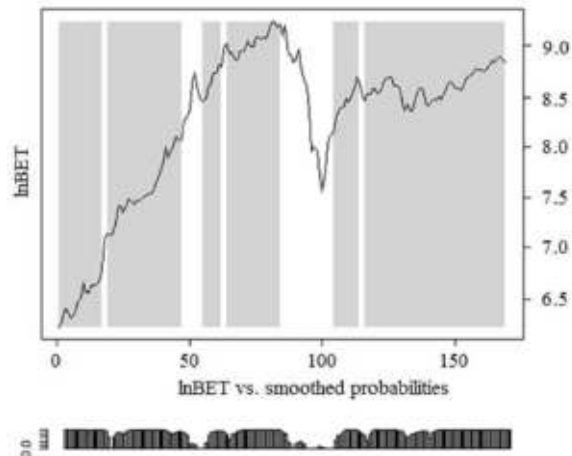
Source: Own results from the MSwM

Figure no. 5. Smoothed probabilities for both regimes



Source: Own results from the MSwM

Figure no.6. lnBET vs. smoothed probabilities for regime 1



Source: Own results from the MSwM

5. Conclusions

The MSwM model built captures the data series variability since R^2 is 0.9953, for regime 1 and 0.9322, for regime 2. Comparison of the MSwM with the GEP and hybrid models on lnBET series shows better performances of the Markov Switching Model in terms of R^2 . The advantage of this kind of approach against the artificial intelligence methods is that the distinct change phases in the process evolution are emphasized. Moreover, the number of phases can be adapted function of the series complexity and the equations can be modified using, for example, second-order polynomials.

As a further study, we aim at improving the model to obtain uncorrelated residuals in both regimes and to use it in forecasting problems.

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Insights from Companies Research: Sustainability Matters

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Abstract

This research examines in an exhaustive manner state of the art in the field of financial sustainability, with a focus on global companies, over the period 2011-2020. We aim to identify both micro and macroeconomic factors that influence the companies' financial sustainability by applying a Bibliometric analysis. This research methodology provides relevant evidence on the topic and the trends in research outputs.

Key words: financial sustainability, corporate performance, government policy

J.E.L. classification: G32, G38, G30

1. Introduction

This research examines in an exhaustive manner state of the art in financial sustainability, with a focus on global companies, over the period 2011-2020. Companies' economic sustainability exhibits a significant connection with the socio-economic environment in the 'new reality, marked by digitalization and circular trends. How the intrinsic and extrinsic barriers to digitalization affect Industry 4.0 adoption by the firms; how these barriers influence the linkage between digitalization and the firm's performance regarding its supply chain competency and operational performance. Study the influence of digitalization in companies from all over the world.

We want to offer a clear perspective on the plurality of conceptual foundations in research and to identify the principles associated with organizational change processes and how business transformation is achieved. In this regard, we have examined a wide variety of relevant indicators that can support the method of quantifying their impact on financial sustainability.

2. Theoretical background

The field literature indicates the theoretical pillars of the corporate sustainability concept, namely: sustainable development (which implies the study of micro and macro elements) and the stakeholder theory, creating the connection with corporate governance domain (including ethics/accountability) and C.S.R. approaches).

Hermelinmeier V., in a recently published article, 2021, mentions the B.T.S., which allows the identification of learning principles associated with business transformation. Three principles are the starting point for triggering the company's transformation processes. Thus, the managerial strategy evolves beyond organizational boundaries.

The utility of research in the economic area is for improving the companies' sustainability. Another point that caught our attention is the usefulness of research in the economic area to improve companies' sustainability. Therefore, the focus is on Industry 4.0, which improves operational performance and supply chain competence and exemplifies the evolution of the new reality.

3. Research methodology

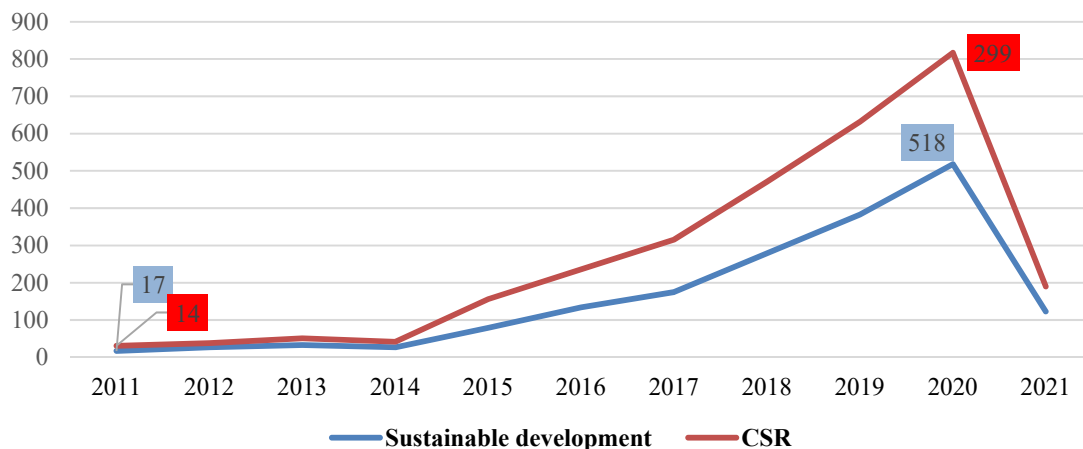
We aim to identify both micro and macroeconomic factors that influence the companies' financial sustainability by applying a Bibliometric analysis. This research methodology provides relevant evidence on the topic and the trends in research outputs.

From over 3100 articles generated following the searches of the four keywords, considering criteria such as open access, publication year, language, document type, we analyzed 90 articles. The relevance of the selection of the articles was analyzed through the determination of the search criteria, considering concepts underlying corporate sustainability. More than seventy articles extracted from Web of Science – Core Collection were reviewed. The analysis was complemented by analyzing documents extracted from scientific Web browsers such as Wiley Journals, Scopus, Academic Google, ScienceDirect, and MDPI, summing up a total of ninety-five documents. The relevance of the selection of the articles was analyzed through the determination of the search criteria, considering variables factors with potential influence on the company's financial sustainability. Our study includes a wide selection of independent variables as controls, covering issues from all areas of business. Furthermore, we applied a Bibliometric analysis methodology that provides relevant evidence on the topic and the trends in research outputs. We covered all areas of business over the period 2011-2020.

4. Findings

As we mentioned earlier, our research is based on over 3100 scientific articles selected according to interest criteria. As a result, analyzing the publication period, we have the following products:

Figure no. 1 Publications evolution in time



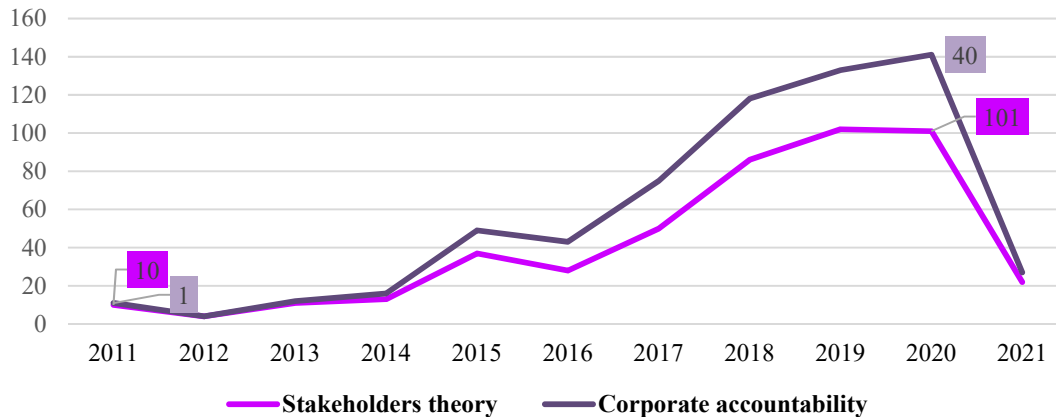
Source: Graph made by the author based on the analyzed articles, 2021. Articles extracted from Web of Science – Core Collection, Wiley Journals, Scopus, Academic Google, ScienceDirect, and MDPI.

As figure 1 indicates, research (scientific article) related to Sustainable development topic has registered a sharp evolution (increasing), namely from 17 articles published in 2011 to 518 articles published in 2020. Also, the C.S.R. topic has an increasing evolution from 14 articles published in 2011 to 299 articles published in 2020.

Considering over 90 papers from the Web of Science Core Collection, categorized as research articles and book chapters, results indicate that research is mainly focused on two areas. First, a significant number of papers refer to financial performance measures relating to financial sustainability, using performance methods and internal procedures of the companies. The results indicate that methods of enhancing corporate performance rely on factors such as the scope of activity, firm size and age, leverage, social environment, corporate governance variables: board competency, gender, age.

Secondly, a considerable part of the literature is based on macroeconomic factors towards sustainable development, such as country financial stability, efficiency and stability of fiscal and monetary policies, and their impact on the private sector, inflation rate, interest rate, gross domestic product (G.D.P.) growth rate, and the exchange rate. The approach used in the paper could be of practical benefit to young researchers, corporate specialists, and even public decision-makers for building national or regional strategies for implementing sustainability programs.

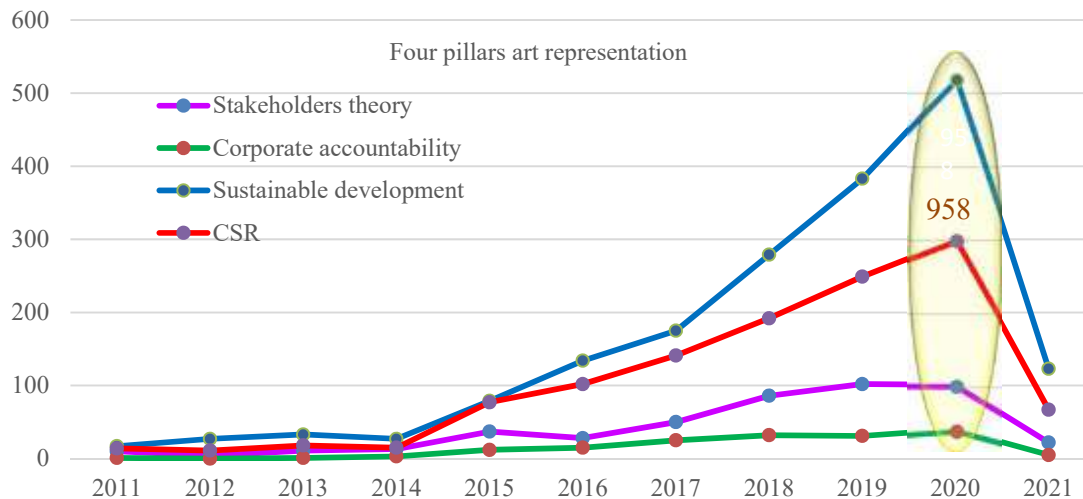
Figure no. 2 Publications evolution in time.



Source: Graph made by the author based on the analyzed articles, 2021. Articles extracted from Web of Science – Core Collection, Wiley Journals, Scopus, Academic Google, ScienceDirect, and MDPI.

As figure 2 indicates, research (scientific article) related to the Stakeholders theory topic has registered a sharp evolution (increasing), namely from 10 articles published in 2011 to 101 articles published in 2020. Also, the Corporate accountability topic has an increasing evolution from 11 articles published in 2011 to 40 articles published in 2020.

Figure no. 3 Publications evolution in time, height.



Source: Graph made by the author based on the analyzed articles, 2021. Articles extracted from Web of Science – Core Collection, Wiley Journals, Scopus, Academic Google, ScienceDirect, and MDPI.

Of the 3,100 articles, a total of 958 articles were published in 2020. As can be seen, the evolution of publications is upward and much more accurate. As a parenthesis, already in 2021, 217 articles were published for the four pillars, given that 2011 has no more than 42 articles.

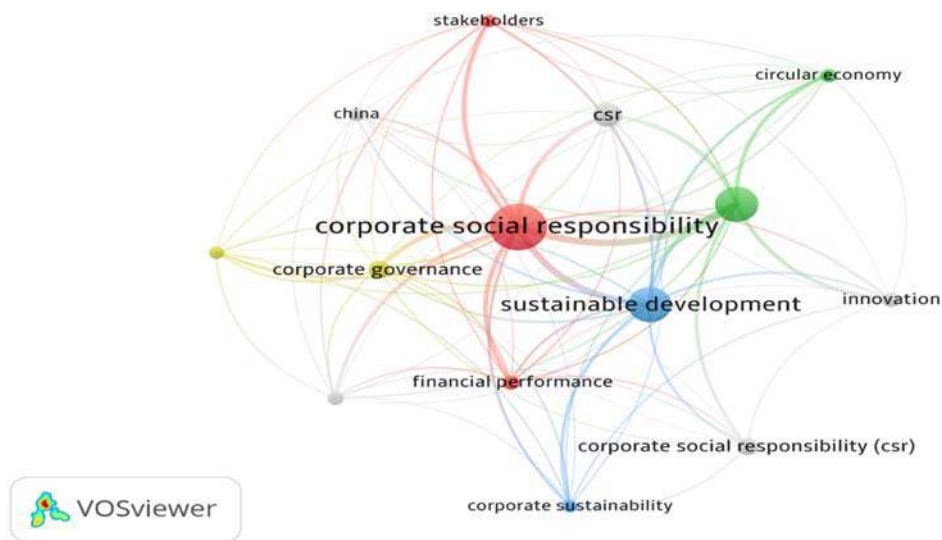
The article we analyzed used various methodology research to evaluate the determinants of firm performance in the North American S.M.E.s/probit model. Regression analysis, Another method that caught our attention is the one used by the author Buer, S.-V. It uses the two-way analysis method by sending questionnaires to 212 Norwegian companies. Emphasizing that large companies have a much higher level of digitalization than small and medium-sized companies (S.M.E.s). We see the difference between production environments and digitalization aspects.

We study the article published in 2018 conducted by Beleiu H. G. on electricity management. This study case on electricity management is a point of view on companies in the production sector made for eight companies from the EU during two years. Thus, several variables were taken into accounts, such as equipment failures, power outages, low energy efficiency, low productivity, indirect costs, and other process disruptions with significant economic effects.

The Mamdani Fuzzy Controller and the financial risk analysis was the one that caught our attention in the article published by Bolos, M. I. in 2019, regarding a simulation on the ski slopes. According to his data, any activity is subject to individual risk of sustainability, so the risks must be measured individually using the fuzzy controller, and financial sustainability will be indirectly affected. Investments will have to be made that no longer add value to the company.

Aharon, D.Y. et al., in the article published in 2019, emphasizes the financial impact on the systematic risk of shareholders. They developing a hypothesis about the estimates of the consumer market and the accounting measurements for them, proposing the continuation of the research towards an evaluation of the debt market.

Figure no. 4 The most used keywords.

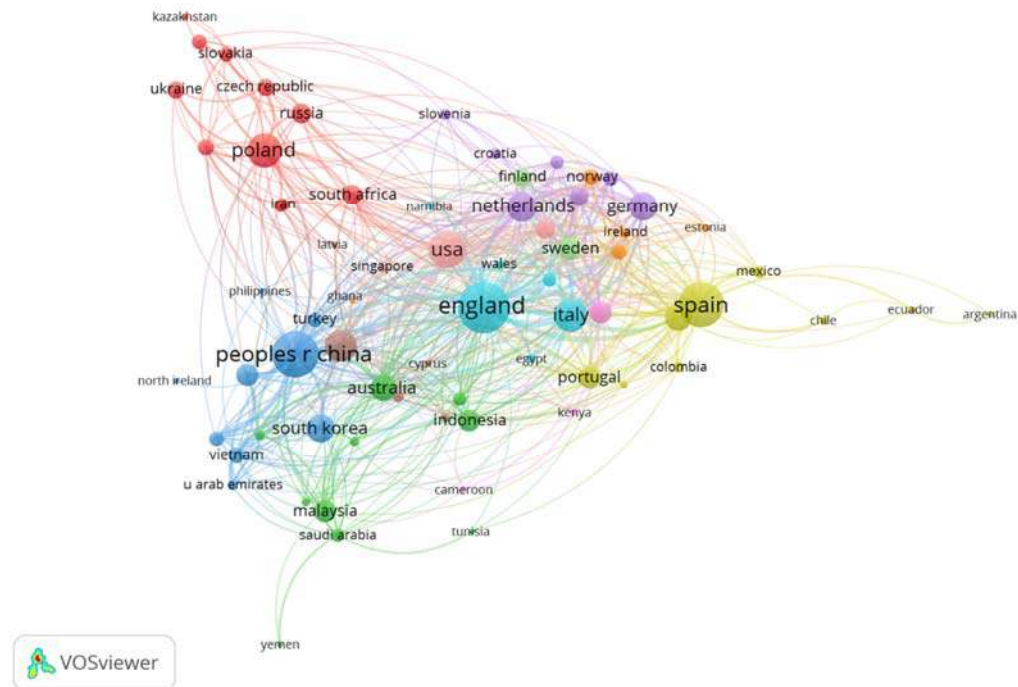


Source: Graph made by the author based on the analyzed articles using the VOSviewer, 2021.

With the help of VOSviewer, we created maps to understand the connection between the targeted items. Using the method of co-occurrence with the Author keywords, we set a minimum number of occurrences of a key to 50. From 8654 keywords, 409 meet the threshold, and we reduce to the top 14 keywords. In figure 4. we have the most used keywords in articles such as Corporate social responsibility (C.S.R.), sustainable development, corporate governance, stakeholders, innovation, circular economy.

A significant number of papers refer to firm performance measures relating to corporate sustainability, using the companies' performance methods and internal procedures.

Figure no. 5 Citing connections between countries.



Source: Graph made by the author based on the analyzed articles using the VOSviewer, 2021.

Figure number 5 indicates the citing connections between countries. From 514 links and 39 items, it results in 12 clusters. The most recent cited papers are from countries like China, Spain, Poland, England, U.S.A., Italy, Germany, Netherland.

5. Conclusions

Considering the four main pillars of corporate sustainability, namely: human, social, economic, and environmental, we aim to identify both micro and macroeconomic factors that influence the companies' financial sustainability by applying a Bibliometric analysis. The results indicate that methods of enhancing corporate performance rely on factors such as the scope of activity, firm size and age, leverage, social environment, corporate governance variables: board competency, gender, age. Secondly, a considerable part of the literature is based on macroeconomic factors towards sustainable development, such as country financial stability, efficiency and stability of fiscal and monetary policies, and their impact on the private sector, inflation rate, interest rate, gross domestic product (G.D.P.) growth rate, and the exchange rate.

Digital and environmental orientation positively affect product and process innovation; companies need to invest in sustainability procedures and processes so that the complementary financial effects are positive. Regardless of the sector of activity, each company must have a long-term strategy of gradual implementation and alignment with foreign policies. Therefore, future studies can continue the examine articles more deeply and see the impact of each fact for every country.

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Highlighting Readability Issues by the Content Analysis of a Legal Text, for Translation Purposes. Case Study

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Abstract

In a globalized world, linguistic harmonization leads to complex translation issues. Globalization contributed to the intricacy of the economic, social and political background, and triggered urgent requirements regarding the harmonization of legislation, which, in turn, entailed the necessity to tackle legal terminology and terminological differences. In the first part of the paper, we have briefly presented some features of the technical language and several issues caused by its intricacy. The second part of the work analyzes a specialized text in terms of lexical density, dealing with aspects such as text statistics, frequency and top words, frequency of word structures, as our main purpose has been to contribute to an enhanced understanding of specialized texts. Both jurists and translators should approach legal concepts carefully when transposing them into the target-language, in order to avoid misunderstandings. Moreover, multicultural knowledge and flexibility are only some of the requirements of a faithful legal translation.

Key words: English legal language, translation, specialized terminology, readability, lexical density
J.E.L. classification: Z13

1. Introduction

Since law is deeply influenced by the society where it functions and it cannot be strictly explained and defined as a set of organized rules, not only does a better understanding of a particular legal culture imply the focus on issues such as legal terms and norms, but also on the wide range of distinct customs and social concepts typical of the respective legal system, an interdisciplinary approach being therefore imperiously necessary. For instance, the translator may deal with terms that have different meanings in different law branches in the target language or that express several different meanings and sometimes s/he needs either specialized knowledge in the legal field or the assistance of a specialist for a better understanding and appropriate translation of the respective terms. Moreover, the translator may encounter specialized terms with no corresponding legal meanings or interpretations in the target language and, in such circumstances, s/he can use either neologisms or retain the word as it is (in the source language) (Onufrio, 2007, p. 4), accompanied by a translator’s note.

2. Theoretical background

Since different legal systems have been created against the background of diverse cultures (in this respect, the translation process being understood as a form of cultural interaction, where the translator functionally replaces cultural elements and changes the source text based on the cultural norms and concepts of the target language) (see Botezat, 2011, p. 229) in order to meet the necessities of different nations, this led to inadvertences and incongruities of a great number of legal terms and of their understanding, in various national systems. Consequently, many translation theorists agree that “absolute equivalence” is nothing more than a utopia, i.e. something that cannot

be achieved. In this sense, for example, when discussing the fact that every legal system is deeply influenced by its country’s historical, cultural and socio-economic background, being equipped with its own conceptual system, the scholar Susan Sarcevic asserts that “legal terminology of different legal systems is, for the most part, conceptually incongruent” (Sarcevic, 1989, p. 278), because law and legal language are social constructs and the quest for perfect identical concepts in many languages is dangerously misleading and even impossible (Heikki, 2006, p. 122).

Having in view that all languages function according to certain standardized rules – which can vary in terms of registers – the translator’s mission is even more difficult. As Duszak (1997, p. 9) argues, “Recent insights into academic writing have shown considerable variation in text characteristics across fields, languages and cultures. [...] Among the most notable differences are field-and culture-bound disparities in global organization schemata of texts”. For instance, technical language is dominated by special characteristics, such as the use of short sentences, specialized vocabulary (typical of the debated/ presented topic), nouns referring to actions, long and complex noun phrases, simple and direct structures, rare adverb use, impersonal, formal style, avoiding figures of speech, metaphorical meanings, colloquial words and phrases, etc. (see Eggins 1994; Martin, 2000; Alcaraz Varó, 2000; Duque García, 2000). According to Duszak (1997, p. 2), all these features draw “the image of a dehumanized language of science, and likewise the image of a dehumanized writer (...) uniformity of academic writing styles was taken for granted and was accounted for in terms of objectivised research standards”. Moreover, as stated by Alcaraz Varó (2000, pp. 138-139), all these features – to which high semantic density, frequent use of impersonal forms and structures, impersonal, objective style are also added – distinguish this register from the others. Among others, these rules play two opposing roles, i.e. guiding second language speakers for a better understanding and adequate use of specific language items triggering the acquisition of native-like fluency, but also hindering natural communication.

3. Research methodology

Since this paper aims to contribute to an enhanced understanding of specialized texts, the practical section, which is a corpus-based research inspired by Teubert and Čermáková’s work (2007, pp. 65-77), analyzes a specialized corpus in terms of lexical density, dealing with aspects such as text statistics, frequency and top words, word length, syllable count, frequency of word structures.

For the purpose of our research, excerpts from a representative legal text, i.e. *articles 1-11* of the *United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules)*, has been chosen in order to perform the analysis focused on lexical density. This Convention regulates the international transport of goods, in an endeavor to homogenize and balance the legal background for the dispatch of freight by sea.

It is noteworthy that this research is a continuation of a previous analysis published in 2016 (see Nădrag and Buzarna-Tihenea (Galbeaza), “Aspects of Legal Translation in Contracts of Carriage”, “*Ovidius University Annals, Economic Sciences Series*”, Ovidius University Press, XVI(1), 2016, pp. 35-40) and it also completes another article that will be sent for publication together with the present work, in the same journal (i.e. Nădrag and Buzarna-Tihenea (Galbeaza), “Translation Issues in the Legal Field of the European Union. Case Study on Specialized Terminology”).

The analysis of the chosen legal corpus has been performed by means of three specialized software, i.e. *Analyze My Writing* (see <https://www.analyzemywriting.com/index.html>), *Seoscout* (see <https://seoscout.com/tools/keyword-analyzer?lang=en#analysis>) and *Text Analyzer* (see <http://www.roadtogrammar.com/textanalysis/>), which include a series of text analysis tools providing automatically valuable pieces of information regarding lexical density – which deals with measurements of the structure and intricacy of human communication, i.e. linguistic complexity (Halliday 1985) – and content analysis – word count, number of characters, syllables, sentence count, average sentence length, average number of syllables per word, lexical density, lexical diversity, readability.

By analyzing the quantitative data furnished by the three specialized software, some important features of the legal specialized language will be highlighted, having in view that the corpus-based techniques play an essential part in quantifying them. The quantification of linguistic phenomena

contributes to the identification of those language items often encountered in the analyzed register, which will allow the formulation of statistical suppositions with respect to specialized language use. Therefore, by correlating these data provided by the specialized software with the lexical profile of the legal language, certain specialized language patterns will be identified.

4. Findings

As already mentioned in the previous section, the practical part of our paper focuses on several aspects related to the lexical density and readability of the analyzed corpus (i.e. text statistics/content analysis, frequency and top words, word length, syllable count, frequency of word structures). The results of the analysis are highlighted in Tables 1, 2, 3, 4 and 5 below.

The data on the lexical density of the analyzed excerpts, calculated by dividing the number of lexical items (i.e. nouns, adjectives, verbs and adverbs) by the total number of words, have been generated by *Analyze My Writing*, which revealed the following in terms of the predominant parts of speech identified in the excerpt:

Table no. 1 Lexical Density: Parts of Speech

Part of Speech	Percentage
Nouns	30.54%
Adjectives	4.3%
Verbs	8.92%
Adverbs	2.34%
Prepositions	19.28%
Pronouns	1.17%
Auxiliary Verbs	4.17%

Source: authors' own processing using Analyze My Writing

Table 1 shows that almost one third of the words in the analyzed excerpts are nouns (30.54%), followed by verbs (8.92%), adjectives (4.3%) and adverbs (2.34%); in total, almost half of the words (46.1%) are lexical items. Having in view that the less dense a text, the easier to understand it, the lexical density shown by the specialized software suggests that the analyzed corpus is of upper-intermediate difficulty. As far as the grammatical or the functional items are concerned, whose main role is to connect lexical items (see Halliday 1985), prepositions hold the greatest share (19.28%), followed by auxiliary verbs (4.17%) and pronouns (1.17%). Overall, functional items represent almost a quarter (24.59%) of the total number of words in the analyzed excerpt, which highlights their importance in content creation.

It should be noted that lexical density is directly connected to the individual's age, education level, communication style, context, creativity and even medical condition (Yoder 2006) and influences text readability and one's understanding of the respective text (To et. al. 2013). Moreover, it affects the memorability and retentivity of the message conveyed by the text (Perfetti 1969).

In its turn, *Seoscout* provided data on content analysis (see Table 2) and readability (see Table 3), which, among others, underlined a lexical density of 46% (almost identical to the one shown by *Analyze My Writing*), a reading ease index of 48% and a grade level of 12.5, which suggests that the difficulty level of the corpus is upper-intermediate and that it can be understood by experienced readers.

In addition, according to the data provided by *Text Analyzer*, the corpus corresponds to the C2 (Advanced) level of “The Common European Framework of Reference” and to the 8+ IELTS level (i.e. very good user of English) (see Tables 2 and 3 below).

Table no. 2 Content Analysis

Word Count	2908
Character Length	16252
Letters	13078
Sentences	121
Syllables	4421
Average Words/Sentence	24.0
Average Syllables/Word	1.6
Lexical Density	46%
Lexical Diversity	17%
Reading ease	48%
Grade level	12.5

Source: authors' own processing using Seoscout

Table no. 3 Readability

Reading Ease	48%
Grade Level	12.5
Gunning Fog	16.2
Coleman Liau Index	10.7
Smog Index	12.1
Automated Reading Index	11.8

Source: authors' own processing by Seoscout

The upper-intermediate difficulty level of the analyzed text is also revealed by the data provided by *Seoscout* in terms of word length, frequency and top words, frequency of two-word structures (see Tables 4, 5 and 6 below):

Table no. 4 Frequency and Top Words

Keyword	Words	Uses	Uses (%)
Carrier	1	79	2.7%
Goods	1	47	1.6%
Article	1	45	1.5%
Carriage	1	42	1.4%
Loss	1	29	1.0%
Contract	1	26	0.9%
Sea	1	25	0.9%
Delay	1	25	0.9%
Damage	1	24	0.8%
Convention	1	23	0.8%
Delivery	1	22	0.8%
Provisions	1	20	0.7%
Liability	1	18	0.6%
Actual	1	17	0.6%
Paragraph	1	16	0.6%

Source: authors' own processing using Seoscout

Table no. 5 Word Length

Word Length (characters)	Word count	Frequency
2	711	24.5%
3	517	17.8%
4	305	10.5%
7	266	9.2%
5	255	8.8%
6	204	7%
8	202	7%
1	153	5.3%
9	134	4.6%
10	94	3.2%
11	33	1.1%
12	12	0.4%
14	7	0.2%
13	5	0.2%
15	3	0.1%

Source: authors' own processing using Seoscout

Table no. 6 Frequency of Two-Word Structures

Keyword	Words	Uses	Uses (%)
loss damage	2	24	0.8%
delay delivery	2	20	0.7%
damage delay	2	19	0.7%
contract carriage	2	18	0.6%
carriage sea	2	18	0.6%
actual carrier	2	16	0.6%
provisions convention	2	9	0.3%
carriage goods	2	8	0.3%
bill lading	2	8	0.3%
article transport	2	7	0.2%
servants agents	2	7	0.2%
carrier liable	2	7	0.2%
goods sea	2	6	0.2%
provisions paragraph	2	6	0.2%
liability carrier	2	6	0.2%
carrier servants	2	6	0.2%
limits liability	2	6	0.2%

Source: authors' own processing using Seoscout

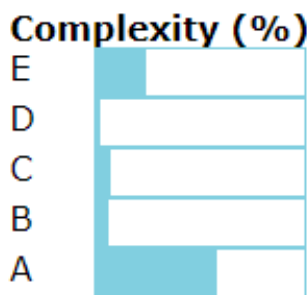
The medium difficulty level of the text is also highlighted by the average number of words per sentence (24) and the average number of syllables per word (1.6). The shortest word has only one letter (“a”) and the longest word has fifteen letters (i.e. “notwithstanding”), used only 3 times. There are 306 words made of one, two and three letters (usually determiners, prepositions or auxiliary verbs, e.g. “a”, “on”, “to”, “by”, “in”, “or”, “the”, “has”, “any”, “are”), 187 words made of four, five, six and seven letters (e.g. “this”, “that”, “port”, “means”, “order”, “person”, “actual”, “purpose”, “carrier”), 105 words made of eight, nine and ten letters (“contract”, “optional”, “applicable”, “discharge”, “character”, “evidencing”, “Convention”, “uniformity”), and only fifteen words made of eleven, twelve, thirteen, fourteen and fifteen letters (“contracting”, “regulations”, “nationality”, “respectively”, “nevertheless”, “consequences”, “international”, “circumstances”, “responsibility”, “interpretation”, “notwithstanding”). It should be noted that the great majority of

the words consisting of five or more letters are technical terms that belong to the legal field.

As far as collocates – “the words which occur in the neighborhood of your search word” (Duan, 2007, p. 26) – and clusters – “words which are found repeatedly in each other’s company [which] represent a tighter relationship than collocates” (Scott, 1996: 35) – are concerned, they were identified in concordance lines and helped us highlight the meanings and uses of the tackled terms.

The classification of words provided by *Text Analyzer* also confirms the above-mentioned findings about the difficulty level of the corpus. Figure 1 shows that more than half of the words in the excerpt are simple (A level), while almost one quarter are complex (E level):

Figure no. 1. Shares of Word Complexity

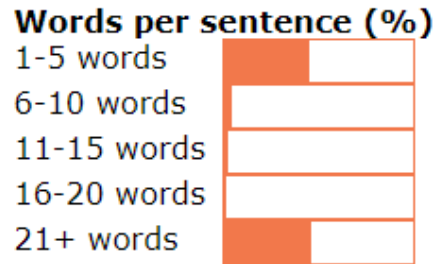


Source: author’s own processing using Text Analyzer

According to the above-mentioned specialized software, A level (simple) words include mostly prepositions (“on”, “by”, “to”, “for”, “of”, “in”, “with”, “against”, “from”, “over”, “between”, “without”, “under”, “at”, “through”, “into”), determiners (“the”, “a”, “this”, “any”, “some”, “an”, “that”), conjunctions (“and”, “or”, “if”), auxiliary verbs (“have”, “has”, “been”, “are”, “is”, “be”, “had”, “does”, “were”, “do”), modal verbs (“must”, “could”, “may”, “would”, “can”) pronouns (“they”, “it”, “them”, “he”, “itself”, “himself”) but also nouns (“person”, “name”, “part”, “place”, “case”, “life”, “party”, “days”), adjectives (“different”, “general”, “good”), adverbs (“well”, “probably”, “far”) and verbs (“live”, “take”, “made”, “need”, “took”, “report”, “put”, “said”, “make”, “held”, “used”). It should be noted that these words belong to general English and their meaning is easily accessible to readers. At the opposite pole, there are the complex words (E level), which include mostly nouns (“desirability”, “convention”, “provisions”, “purposes”, “payment”, “bearer”, “contracts”, “legislation”, “nationality”, “holder”, “charterer”, “charter-parties”, “shipments”, “interpretation”, “uniformity”, “disposal”, “reference”, “discharge”, “claimant”, “freight”, “claims”, “tort”, “consignee”, “pursuance”, “shipper”, “prejudice”, “recourse”, “proceedings”, “carriage”, “liability”, “delivery”), verbs (“conclude”, “follows”, “relates”, “undertakes”, “surrender”, “includes”, “constitutes”, “govern”, “covers”, “occurs”, “mitigate”, “proves”, “founded”, “acted”, “referred”, “deemed”, “insert”, “entrusted”, “aggregate”), adjectives (“optional”, “pursuant”, “applicable”, “diligent”, “consecutive”, “inherent”, “reasonable”, “equivalent”, “attributable”, “payable”, “aforesaid”, “non-contractual”, “separate”, “contrary”, “statutory”, “recoverable”, “liable”, “judicial”, “competent”) and adverbs (“solely”, “recklessly”, “respectively”, “reasonably”, “expressly”, “explicitly”). All these E level words are specialized (legal) terms that can be properly understood by an experienced reader with knowledge in the legal field. The important share held by these terms in the excerpt (approximately one quarter) highlights the overall difficulty level of the corpus.

Figure 2 below, processed by *Text Analyzer* also shows the contrast that characterizes the corpus, as almost half of the excerpt is made of 1–5-word sentences and the other half – by 21+ word sentences, which encumbers its readability. In order to improve the readability of the text, the sentences should be shorter and complex phrases should be avoided.

Figure no. 2. Shares of Sentences per Length



Source: author's own processing using Text Analyzer

The data furnished by the three specialized software tools in terms of readability, content analysis and lexical density highlighted several differences between the standard language and the specialized register, the latter being characterized by the preponderance of specialized lexical items (complex words), longer and encumbering sentences, upper-intermediate/ advanced readability levels, higher grade levels (which involves the fact that the reader should have some knowledge in the legal field in order to understand the legal text properly).

5. Conclusions

In a globalized world and in a continuously harmonizing Europe, where European legal instruments are mandatorily translated into more and more official languages, the lack of, and the vain efforts to achieve linguistic harmonization has led to complex and costly translation issues. Therefore, those working both in the legal field and in other specialized languages should not treat legal translations as an approximating process, focusing merely on the linguistic side. They should pay close attention to the understanding and transposition of legal concepts from the source-language system into the target-language system, with the subsequent employment of elements of comparative law. Thus, a translator should be equipped with flexibility, attention to details, multicultural knowledge and interdisciplinary abilities when s/he tackles the intricate network of legal terminology and translation.

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Corporate Law’s Legal Relationship

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Abstract

Legal relationship is a social relationship established between two or more natural or legal persons, regulated by a specific legal norm (for example: sale-purchase, exchange of goods, provision of services, performance of works, etc.).

Given the particularities of corporate law, we consider that, from the definitions of legal relationship found in the specialized literature, a very high adaptability in also defining corporate law’s legal relationship is the one according to which legal relationship is a social relationship which aims at satisfying material interests or interests of a different nature, regulated by legal norm, in which the parties appear as rights-holders, and correlatively, of mutual obligations, met, if necessary, with the support of public force. The professionals bring particularity to legal relationships, which become corporate law’s legal relationships.

The research would like to examine the characteristics of corporate law’s legal relationships and the legal position of the professionals in this relationships.

Key words: corporate law, norms, legal relationships, law subjects, professionals

J.E.L. classification: K22

1. Introduction

The creation of any legal relationship is conditioned by the simultaneous existence of the following premises: legal norm, subjects of law and legal facts. The first two are considered general or abstract premises, and the third, respectively the existence of a legal fact, is considered a special, specific or minor premise.

Legal norms regulate the conduct of the subjects, either by conferring a right or by imposing an obligation. Thus, legal norm makes a major contribution to the creation of corporate law’s legal relationships, determining the capacity of the participating subjects of law, their rights and obligations and the circumstances in which the legal relationship is triggered.

Legal relationship involves making a connection between the general and impersonal plan of the legal norm and the concrete plan of reality, in which the parties are determined and have certain well individualized rights and obligations (Boroi *et al*, 2011, pp.34-35).

The subjects of law are represented by the natural and legal persons participating in the legal relationship, rights and obligations holders having a legal capacity. In order to create a legal relationship, the participation of at least two persons who, thus, become rights and obligations holders in the respective relationship is necessary. Generally, in private law, the rights holder is called a creditor, while the obligations holder bears the name of debtor. There may also be legal relationships characterized by the fact that one of the subjects is the exclusive rights holder, while the other becomes the exclusive obligations holder. It is worth mentioning the relationship of corporate law formed in the field of taxation, in which the creditor is always the fiscal body, with the right to collect taxes, and the debtor is the taxpayer, who is obligated to pay the taxes.

2. Theoretical background

The theoretical concepts presented in this paper deal with the general regulatory framework of business law, namely: the New Romanian Civil Code, special commercial laws, the Constitution, commercial practices, principles of law, doctrine and the judicial precedent. The synergetic approach in humanitarian knowledge has found its theoretical reflection in the works of researchers cited.

3. Research methodology

The analytical method has become the main method of the given research which is related to the legislative changes. The purpose of this analysis consists in presenting the novelties to the regulation of the business law legal relations generated by adopting the New Romanian Civil Code dealing with the relations between the professionals and the other business partners.

The following interpretation methods of such rules of law were used: the synergetic method and the teleological interpretation method.

4. Findings

4.1. Characteristics of corporate law’s legal relationship

A corporate law’s legal relationship cannot be created only by the existence of subjects of law between which it is formed and of the legal norms that regulate it. The creation of such a legal relationship also depends on a legal fact, respectively the existence of a circumstance triggering it.

Such a circumstance may depend on the will of the subjects of the legal relationship (human actions) or it may be independent of it (events).

Human actions are classified into actions performed with the intention of producing legal effects, i.e. to create, modify or terminate a legal relationship (legal acts - the conclusion of a contract, the registration of a company, etc.) and actions performed without the intention to produce legal effects, but which the law nonetheless links to the production of such effects. Legal facts, in their turn, may be lawful legal facts (for example, the creation of a scientific work that gives rise to a copyright) or unlawful legal facts.

Events represent the facts produced in the absence of any human will, to which the law attaches legal significance, their production being linked to the creation of legal relationships. In the doctrine, events are subclassified into biological facts (birth, death, a natural person reaching a certain age) and physical facts (floods, earthquakes, thunderbolts, earth displacements).

The legal relationship has a social character in the sense that it can be established only between natural persons, between legal persons or between natural and legal persons (Pop *et al*, 2020, p.21)

Not all social relationships are legal relationships, as not all are regulated by legal norms. For example, the religious, political, friendship or collegial relations do not fall into this category.

Even if it is subject to legal norm, legal relationship retains its social character, considering that legal norm has precisely the role of guiding human behavior.

Legal relationship has a double volitional character, since, on the one hand, it is regulated by a norm promulgated on the basis of the will of the state expressed by the legislative body, and, on the other hand, the legal relationship is born out of the will of one or all of the parties, to the extent that they express their willingness to create, modify or terminate this relationship.

For example, a legal relationship having as its premise a sale-purchase contract will be created as a result of the express manifestation both of the concurrent will of the buyer and the seller, and of the will of the state, expressed in the legal norms on the matter. The will of the parties must, however, be fully consistent with the will of the state expressed in the legal norm.

Corporate law’s legal relationship is characterized by the fact that the parties may have a position of legal equality, when we refer to relationships governed by private law norms, in the situations in which business relationships are concluded, modified or terminated (for example, contracts). (Căzănel, 2019, p.6).

At the same time, in a corporate law's legal relationship we may talk about a position of legal subordination of the parties when we refer to the relationships governed by public law, respectively the legal relationships in which one of the parties is the state or its representative bodies (Trade Register Office, Fiscal Administration, etc.).

For example, the natural or legal person professional trader cannot operate an enterprise legally or start his/her activity without registering in the trade register, without fiscal registration and payment of the taxes generated by his/her business activity.

Also, subordinate legal relationships are established between certain companies with special status and public, administrative, regulatory, supervisory and control authorities, established in specialized fields, such as the Insurance Supervisory Commission, which has the duties of authorization and supervision of insurance companies, the National Securities Commission, which is the competent authority in the field of the capital market, the National Bank of Romania.

A corporate law's legal relationship contains the following elements:

The subjects of the legal relationships are represented by persons who are rights and obligations holders between which these relationships are established. The subjects may be natural persons (each individual) or legal persons (collective of individuals, who have their own organization, their own patrimony and a purpose in accordance with the general interests of the society).

The content of the legal relationship is made up of all the subjective rights and obligations that the subjects of the respective legal relationship have.

The object of the legal relationship is the conduct of the parties, i.e. the actions or inactions to which the parties are entitled or obligated (Terré *et al*, 2005, pp.9-11).

Within a legal relationship, two categories of subjects of law may participate: natural persons and legal persons. The quality of natural person belongs to the man, viewed individually, as rights and obligations holder.

In addition, subjects of a legal relationship may also be the collectivities of individuals, i.e. the legal persons. For example, the (ex-commercial) companies established under Law no. 31/1990 on companies, state institutions in the field of education or culture, political parties, unions.

In order for a collectivity of people to have the quality of legal entity, it must cumulatively fulfill the following three conditions:

a) to have its own organization, i.e. to have specified: its internal structure, the organization of the governing, administration and control bodies, as well as their duties, the way in which it is created and in which it can be terminated as a subject of law;

b) to have its own patrimony, distinct from that of the natural persons that make up the legal person;

c) to have a determined, lawful and moral purpose, in accordance with the general interest, which corresponds to the object of activity of the legal person.

4.2. Subjects specific to corporate law

Until October 1, 2011, the date of entry into force of the current Romanian Civil Code, the main subjects of corporate law were the traders, as defined by art. 7 C. com./Commercial Code.

With the entry into force of the current Civil Code/ C. civ., the legislator extends the sphere of corporate law subjects, the main category of participants in business life being, at present, professionals.

According to art. 3 paragraph (2) C. civ., "all those who operate an enterprise" are considered professionals, and according to paragraph (3), "the systematic exercise, by one or more persons, of an organized activity consisting of the production, administration or transfer of goods or provision of services, whether or not for profit, constitutes the operation of an enterprise".

By business we mean any organized or accidental economic activity, exercised for the purpose of generating profit.

The notion of business *lato sensu* includes both organized businesses themselves ("business enterprises"), including certain enterprises of some non-trader professionals (freelancers), and occasional businesses that are not conducted in an organized and continuous manner.

Stricto sensu, by business we mean only those economic enterprises established in order to make a profit. As a result, we thus exclude the activity of non-governmental organizations (associations and foundations), occasional businesses and, arguably, freelance enterprises (Nemes *et al.*, 2020, pp.25-26)

Considering the difficulty of using the legal criterion for determining the sphere of professionals, the legislator, by Law no. 71/2011 on implementing the Civil Code, indicates the main categories of professionals.

Given the importance of an accurate identification of professionals, in art. 8 paragraph (1) of Law no. 71/2011 on implementing the Civil Code the categories subordinated to the notion of "professional" provided by Article 3 C. Civ. are listed as examples: traders, entrepreneurs, economic operators, as well as any other persons authorized to carry out economic or professional activities, as stipulated by law.

As one can notice, the Romanian legislator indicates a very diverse range of categories of professionals, the sphere of professionals having a much broader content than that of traders.

The most important category of professionals is that of traders, whose typology is indicated by art. 6 of Law no. 71/2011 and art. 1 of Law no. 26/1990 on the trade register. From the corroboration of these legal texts it follows that traders are considered to be those who have the obligation of registering in the trade register, namely: the natural persons who trade as a profession, individually or within an individual or family enterprise, (ex-commercial) companies, autonomous authorities, cooperatives, state owned enterprises and corporations, interest groups with an economic character.

However, professionals are not limited to the category of traders. An example is given by the liberal (or regulated) professions reserved by law to persons authorized to practice such professions (lawyers, notaries, insolvency practitioners, mediators, doctors, tax consultants, accounting experts, architects, etc.). These professions and occupations are enterprises, and their holders are professionals, under the Civil Code (Căzănel, 2014, p.277)

In the category of professionals "any other persons authorized to carry out economic or professional activities" are incorporated, including those that are not for profit. Therefore, enterprises that are not for profit, NGOs (associations and foundations), sports clubs, religious cults, professional societies with legal personality, entities with or without legal personality exercising liberal professions, are found in the category of professionals. These entities may be employers, may be subject to (most of them) the insolvency procedure, may be subject to competition law and consumer law, similarly to a trader.

In the category of professionals not only natural or legal persons are included, but also certain entities without legal personality, such as joint ventures or economic interest groups, civil societies without legal personality.

5. Conclusions

The new Civil Code uses a concept of absolute novelty to separate the typically civil legal relations (relations between non-traders) from the commercial legal relations (the former patrimonial relations between two traders or between a non-trader and a trader). It is about "professional", a concept that we consider correct because it is comprehensive and covers all situations in which we deal with activities performed by individuals or legal entities that operate a business, whether it is profitable or not.

The exploitation of an enterprise is the systematic exercise, by one or more persons, of an organized activity that consists in the production, administration or alienation of goods or in the provision of services, regardless of whether it has a lucrative purpose or not.

The Civil Law, mainly the new Civil Code, is the source of commercial obligations. The civil law is also the core substance for commercial contracts. In order to refer to commercial obligations, the new Civil Code regulates "the activities performed by professionals" or "the activities carried out within an enterprise". Thus, the new Civil Code establishes rules for determining the price between professionals (art.1233), as well as criteria for assessing guilt in the case of professionals (art.1358). In addition, this normative act establishes a presumption of solidarity between the debtors of an obligation contracted in the exercise of an enterprise (art.1446), as well as the legal

delay in the execution of an obligation to pay a sum of money, assumed in the exercise of an enterprise activity (art.1523 paragraph 2 letter d), issues derogating from the rules regulated in civil obligations.

Other specific rules applied to professionals can be found as regards privileges (art. 2339 NCC) or the mortgage of the universality of goods (art. 238 NCC). In terms of contractual law, particular rules applicable to professionals occur in the sale-purchase contract (2 day-deadline for denouncing latent defects), in the rental contract, in the storehouse contract (the professional depository who must take extra care of the goods stored according to art.2107 NCC).

Systematizing the above said, professionals, business owners, may be:

a) natural persons who carry out economic activities independently, respectively the traders - authorized natural persons, the entrepreneurs within the individual enterprise and the entrepreneurs within family enterprises, as well as the persons who exercise liberal or regulated professions;

b) private law legal persons: (ex-commercial) companies, cooperatives, autonomous authorities, civil societies with legal personality;

c) entities without legal personality: civil societies without legal personality (pension funds, investment funds, law firms, notaries, court executors), groups of companies.

Therefore, the obligations of professionals are, in fact, civil obligations, which have particularities specially provided by law.

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The Traders - Subjects of Private Law's Legal Relationship

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Abstract

Given the importance of an accurate identification of the professionals, in art. 8 of Law no. 71/2011 the categories incorporated into the notion of "professional" stipulated in art.3 of the Civil Code are: traders, entrepreneurs, as well as any other persons authorized to perform economic or professional activities.

The most important category of professionals is that of traders, whose typology is indicated by art. 6 of Law no. 71/2011 and art. 1 of Law no. 26/1990, from the corroboration of these wich it follows that traders are considered to be those who have the obligation of registering with the trade register, namely: the natural persons who carry out the trade as a profession, individually or within an individual or family enterprise, state owned enterprises, corporation etc.

In the category of professionals "any other persons authorized to carry out economic or professional activities" are incorporated, including those that are not for profit: non-governmental organizations, sports clubs, religious cults.

This research would like to examine the features of the professionals in this private law's legal relationships.

Key words: enterprise, traders, civil law, owner, trade register

J.E.L. classification: K22

1. Introduction

Prior to the entry into force of the Civil Code, the trader was defined by art. 7 C. Com./Commercial Code. According to this text of law, traders were all those who practiced trade as a profession and the companies. Also, art. 1 para (2) of Law no. 26/1990 regarding the trade register defined as traders the natural persons and the family associations that usually carry out trade activities, companies (ex-commercial), state owned enterprises and corporations, autonomous authorities, economic interest groups with a commercial character, European groups of economic interest with a commercial character and cooperatives.

Art. 6 para. (1) of the Law of implementation shows that in the normative acts applicable at the date of entry into force of the Civil Code, the references to traders are considered to be made concerning the natural persons or, as the case may be, the legal persons subject to registration with the trade register, according to the provisions of art. 1 of Law no. 26/1990 regarding the trade register. Simultaneously, the content of art. 1 para. (2) of Law no. 26/1990 regarding the trade register was modified, so that, at present, it has the following content: "Before starting the economic activity, the following natural or legal persons are obligated to request the registration, or, as the case may be, the registration with the trade register: authorized natural persons, individual and family enterprises, companies, state owned enterprises and corporations, European companies, autonomous authorities, European economic interest groups with headquarters in Romania, cooperatives, cooperative organizations, European cooperative companies, as well as other natural and legal persons as stipulated by the law". By the implementation law, the categories of traders are given as examples without giving a definition of the trader. Also, the texts of the law do not clarify what distinguishes the trader from other professionals. These entities may be employers, may be subject to (most of them) the insolvency procedure, may be subject to competition law and consumer law, similarly to a trader.

However, professionals are not limited to the category of traders. An example is given by the liberal (or regulated) professions reserved by law to persons authorized to practice such professions (lawyers, notaries, insolvency practitioners, mediators, doctors, tax consultants, accounting experts, architects, etc.).

2. Theoretical background

The theoretical concepts presented in this paper deal with the general regulatory framework of business law, namely: the New Romanian Civil Code, special commercial laws, the Constitution, commercial practices, principles of law, doctrine and the judicial precedent. The synergetic approach in social knowledge has found its theoretical reflection in the works of researchers cited.

3. Research methodology

In this study, we used the analytical method of the legislative changes which have intervened over time. The purpose of this analysis consists in presenting the novelties to the regulation of the business law legal relations generated by adopting the New Romanian Civil Code dealing with the relations between the traders and the other business partners.

4. Findings

4.1. Aspects regarding the natural person trader

The core of the matter is represented by the provisions of art. 1 para. (2) of Law no. 26/1990 regarding the trade register, Government Emergency Ordinance no. 44/2008 on the practice of economic activities by authorized natural persons, individual and family enterprises, Law no. 359/2004 regarding the simplification of the formalities in the registration of natural persons with the trade register, family associations and legal persons, their fiscal registration, as well as the authorization of the functioning of legal persons. Government Emergency Ordinance no. 44/2008 does not apply to liberal professions, as well as to those economic activities whose practice is organized and regulated by special laws. (Cârpenaru, 2014, pp.25-26)

Natural persons can carry out economic activities:

- a) independently and individually, as authorized natural persons (PFA);
- b) as owners of an individual enterprise;
- c) as members of a family enterprise.

The economic activity is the industrial, commercial activity, carried out in order to obtain goods or services whose value can be expressed in money and which are intended for sale or exchange on organized markets or to determined or determinable beneficiaries, in order to obtain a profit.

In order for a person to be able to access the status of an authorized natural person, an entrepreneur, owner of an individual enterprise, member or representative of a family enterprise, he/she must fulfill a number of conditions.

- a) Conditions regarding the natural person:
 - be a Romanian citizen, a foreign citizen or a stateless person;
 - not to have been sanctioned by a definitive decision for committing an offense provided by the financial, customs law and financial-fiscal discipline of the nature of those who are registered in the fiscal record;
 - have the training or professional experience necessary for the activity envisaged;
 - be at least 18 years old, respectively at least 16 years old, in the case of members of the family enterprise who do not have the quality of being a representative.
- b) Conditions regarding the economic activity:
 - to choose the practice of an activity included in the CAEN Code (Classification of Activities in the National Economy) that is not the subject of a special practice framework or restrictions;
 - to fulfill all the functioning conditions provided by the specific legislation in the sanitary, environmental protection and labor protection fields.

The stages of the acquisition of the quality of authorized natural person, entrepreneur owning an individual company, member or representative of an enterprise, entrepreneur

a) The procedure for the registration with the trade register and the one for the authorization of the practice involves filling-in the application form for registration with the trade register and authorizing its practice and its submission, accompanied by a set of supporting documents, at the Trade Register Office in whose territorial jurisdiction it will have its professional headquarters.

The registration with the trade register of the authorized natural person, of the individual enterprise and of the family enterprise is made on the basis of the reasoned resolution of the director of the trade register office attached to the court, which shall be operated immediately, on their basis the registrations allowed shall be carried out, without any other formality.

A complaint is submitted to the court in whose territorial jurisdiction the professional headquarters of the applicant is found and is litigated under the conditions of common law.

b) The fiscal registration involves a first stage that takes place simultaneously with the registration with the trade register and the authorization of the practice. For reasons of protection of third parties and mainly of consumer protection, by different normative acts it is necessary to obtain administrative permits to practice the trade, besides the registration with the trade register before starting any trade. Law no. 359/2004 brings together in a single procedure the registration and authorization of the functioning of companies, being applied also to natural persons (Piperea, 2012, pp.58-60)

The Trade Register Office will issue the registration certificate, containing the sole registration code, the confirmation of the company details issued on the basis of the statutory declaration, as well as other documents stipulated by law.

The registration certificate, containing the sole registration code, is the document attesting the registration with the trade register, the authorization of the practice, as well as the registration by the competent fiscal authority.

The change of the professional headquarters, of the main object of activity or the opening of working points is registered with the trade register, with the appropriate implementation of the above procedure.

The authorized natural person, the owner of the individual enterprise and the representative of the family enterprise will use single-entry bookkeeping, according to the regulations regarding the organization and management of single-entry bookkeeping by the natural persons who are taxpayers, according to the provisions of Fiscal Code, with its subsequent amendments and completions. (Căzănel *et al*, 2018, p.301).

4.2. The legal framework of the authorized natural person

The authorized natural person (PFA) is the natural person authorized to practice any form of economic activity allowed by law, using mainly his/her workforce.

According to Law no. 26/1990 regarding the trade register, PFA falls into the category of entities which, before starting their activity, have the obligation to register with the trade register.

In order to carry out the activity for which it has been authorized, PFA can collaborate with other natural persons authorized as PFA, natural persons entrepreneurs of individual enterprises or representatives of family enterprises or with other natural or legal persons, in order to carry out an economic activity. In this situation, PFA shall not be considered an employee of third persons with whom it collaborates, even if the collaboration is exclusive.

PFA can employ, as an employer, third persons with an individual employment contract. In his/her turn, a person can combine the quality of being an authorized natural person with being the employee of a third person.

In order to carry out its activity, PFA may create special-purpose professional assets. The special-purpose professional assets is made up of all the goods, rights and obligations of the authorized natural person reserved for the purpose of practicing an economic activity, constituted as a distinct fraction of the patrimony of the authorized physical person, separated by the general pledge of the personal creditors. (Pop *et al*, 2020, pp.520-521)

The creation of the special-purpose professional assets is optional for the PFA and not an obligation. The special-purpose professional assets are realized, at present, according to the provisions of the Civil Code, to which, where appropriate, the provisions of special laws are added. The constitution of the special-purpose professional assets reserved for the individual practice of an authorized profession is established by the act concluded by the holder, respecting the conditions of form and publicity stipulated by law. The same shall be done in respect to the increase or decrease of individual professional patrimony.

Article 2324 para. (1) C. civ. establishes the principle “according to which the person obligated personally is responsible with all his/her movable and immovable assets, present and future assets. They serve as a common guarantee for its creditors”.

In the case of PFA, the legislator establishes a special framework regarding the special-purpose professional assets, the limits of PFA’s responsibility and the order of tracking its assets.

The goods that are used by a trader for the practice of his/her profession are goods which cannot be tracked by the trader's personal creditors.

It seems that Article 2324 para. (4) C. civ., in opposition to the provisions of the special law, limits PFA’s liability for the obligations assumed in the practice of the profession (trade). The text of the Civil Code invoked clearly shows that the assets that are the object of a division of the patrimony reserved for the exercise of a profession authorized by law can only be tracked by the creditors whose claims were born in relation to that profession.

On the other hand, these creditors will also not be able to track the other assets of the debtor if, by the capitalization of the assets and rights in the patrimony reserved for the exercise of the profession, they will not be able to settle their debt. In other words, PFA’s liability for its professional obligations is within the limits of its professional patrimony. The creditors aimed by art. 2324 para. (4) of the Civil Code also include the state and the fiscal bodies.

Accordingly, the obligations assumed by the PFA during the practice of its professional activity are guaranteed only with the patrimony reserved for the practice of the profession if such a patrimony has been constituted; the special-purpose professional assets represent the limit of PFA’s liability for its social obligations.

In case of insolvency, the PFA will be subject to the simplified insolvency procedure stipulated by the Insolvency Code, if it has the status of trader. The creditors will enforce their claims according to common law, if the PFA does not have the quality of trader.

PFA ceases its activity and is erased from the trade register in the following cases:

- a) death;
- b) its will;
- c) pursuant to a final court decision, under the conditions of art. 25 of Law no. 26/1990 regarding the trade register which stipulates that "(1) Any natural or legal person prejudiced as a result of a registration or a mention in the trade register shall have the right to request the erasure of the damaging registration, in whole or only in respect to certain elements thereof, in cases where by irrevocable court decisions, the documents that were the basis of the registration whose erasure is requested were canceled, in whole or in part, or modified, if by the court decision a mention in the trade register has not been allowed. (2) The application shall be submitted and shall be mentioned in the trade register in which the trader has been registered. Within 3 days from the date of filing, the trade register office submits the request to the court in whose territorial jurisdiction the trader’s office is located, and in the case of the branches established in another county, the court from that county. (3) The court shall rule on the application, citing the trade register office and the trader. (4) The judicial decision of the settlement of the request can be attacked only by appeal, and the term of the appeal starts from the pronouncement, for the present parties, and from the communication, for the missing parties. (5) The Trade Register Office will carry out the erasure and publish the irrevocable court decision in the Official Journal of Romania, Part IV, at the expense of the party who filed the application. For this purpose, the court will communicate the court decision to the trade register office, in a certified copy, with the mention of it staying irrevocable" (final, according to art. 8 of Law no. 76/2012, A/N.).

4.3. The legal framework of the natural person entrepreneur owner of an individual enterprise

The individual enterprise is an economic enterprise, without legal personality, organized by a natural person entrepreneur. The entrepreneur is a natural person who organizes an economic enterprise.

By registering with the trade register the individual enterprise does not acquire legal personality. Instead, from this moment, the natural person entrepreneur who owns the individual enterprise is considered a trader.

For the organization and practice of his/her enterprise, the natural person entrepreneur, as a natural person employer, can hire third persons with an individual employment contract and can collaborate with authorized natural persons, with other natural persons entrepreneurs owning individual companies or representatives of some family enterprises, or with other legal persons, in order to carry out an economic activity. In this case, the natural person entrepreneur who owns an individual enterprise will not be considered an employee of third persons with whom he/she collaborates, even if the collaboration is exclusive.

The natural person entrepreneur who owns an individual enterprise may also cumulate the quality of being an employee of a third person who works both in the same field, as well as in another field of economic activity than the one in which the individual enterprise is organized.

Regarding the liability of the natural person owning the individual enterprise for the obligations assumed during the practice of the profession, those mentioned in PFA's responsibility are valid.

The natural person entrepreneur who owns an individual enterprise ceases his/her activity and is erased from the trade register in the following cases:

- a) death; in this case, the heirs can continue the enterprise, if they so express their will, by an authentic declaration, within 6 months from the date of the inheritance division; within that term they will appoint a representative in order to continue the economic activity as a family enterprise;
- b) his/her will;
- c) pursuant to a final court decision, under the conditions of art. 25 of Law no. 26/1990.

4.4. The legal framework of the family enterprise

The family enterprise is an economic enterprise, without legal personality, organized by a natural person entrepreneur with his/her family.

The family enterprise consists of two or more members of a family. The members of a family enterprise can be simultaneously PFA or owners of individual enterprises. They can also cumulate the quality of being an employee of a third person. In contrast, the family enterprise cannot employ third persons with an employment contract.

The family enterprise does not have its own patrimony and does not acquire legal personality by registering with the trade register. The members of the family enterprise are natural persons traders from the date of its registration with the trade register.

In order to carry out the activity for which it has been authorized, the family enterprise may collaborate with authorized natural persons, natural persons entrepreneurs, owning individual enterprises or representatives of family enterprises or with other natural or legal persons, in order to carry out an economic activity.

In the case of the family enterprise, it is necessary to conclude an incorporation agreement that must respect the conditions of validity, substance and form, provided by Government Emergency Ordinance no. 44/2008. The family enterprise is created by an incorporation agreement, concluded by family members in written form, as a condition of validity. The incorporation agreement will stipulate the surnames and first names of the members, the representative, the drafting date, the participation of each member in the enterprise, the conditions of participation, the percentage shares in which the net income of the enterprise will be divided, the relations between the members of the family enterprise and the conditions of withdrawal, under the sanction of absolute nullity. The empowerment of the representative of the family enterprise to manage the interests of the family enterprise also implies respecting the conditions of validity when issuing the special power of attorney, conditions stipulated by the Civil Code or Government Emergency Ordinance no.

44/2008. The representative appointed by the incorporation agreement will manage the interests of the family enterprise under a special power of attorney, in the form of a document under private signature.

By the family enterprise' incorporation agreement, its members can stipulate the establishment of special-purpose professional assets. In this case, by the incorporation agreement or by an additional act, the participation quotas of the members in establishing the special-purpose professional assets will be decided. If the members of the enterprise agree unanimously, the participation quotas may be different from those provided for the participation in the net income or losses of the enterprise. (Guyon, 2003, p.110)

Decisions regarding the current management of the family enterprise are made by the representative of the family enterprise.

The acts of disposition of the goods reserved for the activity of the family enterprise will be taken with the consent of the simple majority of the members of the enterprise, provided that this majority also includes the agreement of the owner of the good which will be the object of the act.

The documents attesting the acquirement of assets necessary for the activity of the family enterprise will be concluded by the representative without a prior authorization from the members, if the value of the good on which the agreement is concluded does not exceed 50% of the value of the goods that were reserved for the enterprise and of the sums of money available to the company at the date of the act. The acquired assets are co-owned by the members in the quotas provided in the incorporation agreement (Căzănel, 2015, p.230).

According to the regulations of Government Emergency Ordinance no. 44/2008, the members of the family enterprise are jointly and indivisibly liable for the debts contracted by the representative in the exploitation of the enterprise with the special-purpose professional assets, if it was constituted, and, in addition, with the entire patrimony, corresponding to the participation quotas.

Taking into account the rules of art. 2324 para. (4) C. civ. and those exposed regarding the liability of the PFA for the obligations assumed in the practice of the profession (trade), we consider that at present the members of the family enterprise are liable to a limited extent. They will answer jointly and indivisibly for the debts contracted by the representative in the exploitation of the enterprise only with the special-purpose professional assets, if such a patrimony was constituted.

The family enterprise ceases its activity and is erased from the trade register in the following cases:

- a) more than half of its members have died;
- b) more than half of the enterprise members request its termination or withdraw from the enterprise;
- c) pursuant to a final court decision, under the conditions of art. 25 of Law no. 26/1990 regarding the trade register.

5. Conclusions

The New Civil Code's explanatory memorandum states the promotion of the monist conception of the code, by incorporating all the regulations regarding persons, family relations and commercial relations. Thus, art. 2 of the code regulates the object and the content of the code, stipulating that it regulates the patrimonial and non-patrimonial relationships between persons as civil law subjects, including natural persons, legal persons, traders and non-traders.

The Code consists of a set of rules which represent the law common to all the areas it regulates, representing the law also common to commercial matters, except for the provisions regarding companies, insolvency, banking law, transport law, bill of exchange law, which are regulated by special laws.

On the other hand, art. 3 para. 3 of the New Civil Code does not expressly define the enterprise, but deals only with the operation of an enterprise, the development of an activity, and those who regularly perform an activity related to production, trade, or service provision, regardless of whether or not for profit, as we have shown above.

Thus, a new legal framework is established, in accordance with the professional quality, which is different from the objective system that regulated the legal framework of the trader in the Romanian Commercial Code, which was repealed following the entry into force of the New Civil Code. Therefore, the criterion based on the Germanic influence was adopted, based on the person, i.e., a context in which any operation of the professionals is qualified as a commercial operation.

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Silver Population – The New ‘Gold’ for Our Society

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Abstract

Global demographic trends show an ageing population, concentrated mainly in Europe and Asia, in countries such as Italy, China and Japan. This can be seen either as an issue, considering the social protection system, either as a big opportunity in keeping elders active. In both cases, the importance of modernization of social policies has become crucial around the world. In order to avoid major economic issues or social tensions, it is required to identify main areas with big impact for ageing population and consider benefits for them. The purpose of this research is to investigate the opportunities of ageing population in the context of quality of life, based on the nine dimensions proposed by Eurostat, showing that silver (population) is the new gold for society. As a preliminary research, ageing will impact material living conditions, health, leisure and social interactions. For instance, in medicine there will be a challenge to switch from traditional medical checks to tele-medicine based on gadgets that monitor health or can assist persons in their daily life and fight with illness.

Key words: silver population, silver economy, quality of life, active ageing

J.E.L. classification: A13, I10, J14, J00

1. Introduction

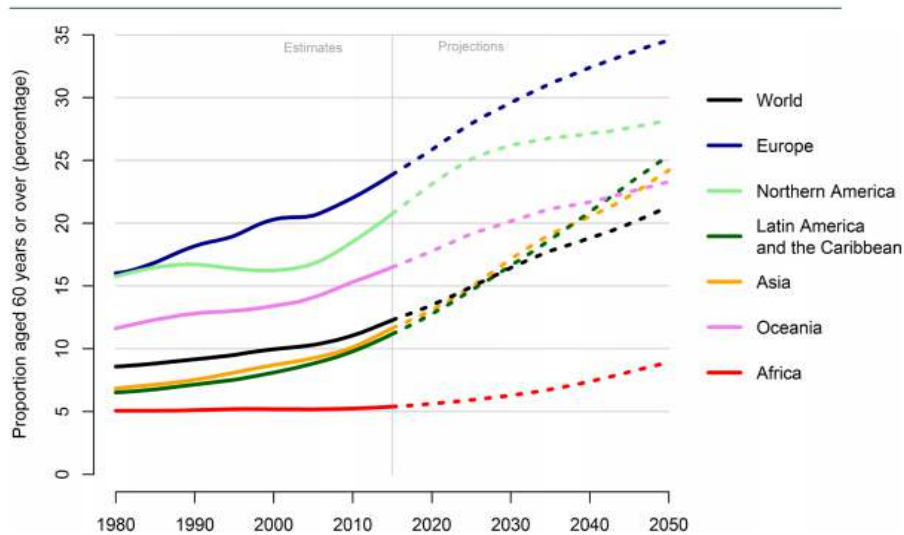
Silver Tsunami also known as age wave, or silver wave is the metaphor used for population ageing. Population ageing is seen as a major success story in terms of medical advancements and social development. As a tsunami, strong wave, this demographic reality is often perceived negatively and toxic from an economic standpoint. The wave has different intensity across the globe and has been fastest in Eastern and South-Eastern Asia. Public spending, workforce and consumption patterns are not only a major challenge, but also an opportunity for growth, new jobs and a more adaptable and flexible society with well-chosen policies.

This trend is being driven by declines in fertility, increased level of education among youngsters, life expectancy increment and overall tendency of reshaping our lives. At global level, countries are seeing population ageing in different ways (Barusch, 2013, p.181-184): Japan is bracing for it, Hawaii is preparing for a coordinated effort, France anticipates ageing society through new legislation laws, Italy is promoting awareness for long term care for elderly and China is facing first warnings of one-baby policy introduced in 1979.

According to data from World Population Ageing 2020, globally there are 727 million persons aged 65 years and over in 2020 (United Nations, 2020). Over the next three decades, the number of elders worldwide is projected to more than double, reaching over 1.5 billion in 2050. All regions will see an increase in the size of the older population between 2020 and 2050. Globally, the share

of the population aged 65 years or over is expected to increase from 9.3% in 2020 to around 16.0% in 2050 (United Nations, 2020).

Figure no. 1. Percentage of population aged 60+ years by region, from 1980 to 2050



Source: United Nations (2017). *World Population prospects: the 2017 Revision*

By 2050, in Europe, based on the population projection done by Eurostat in April 2020 using baseline projections method, top three countries impacted by grey population growth will be Germany, France and Italy.

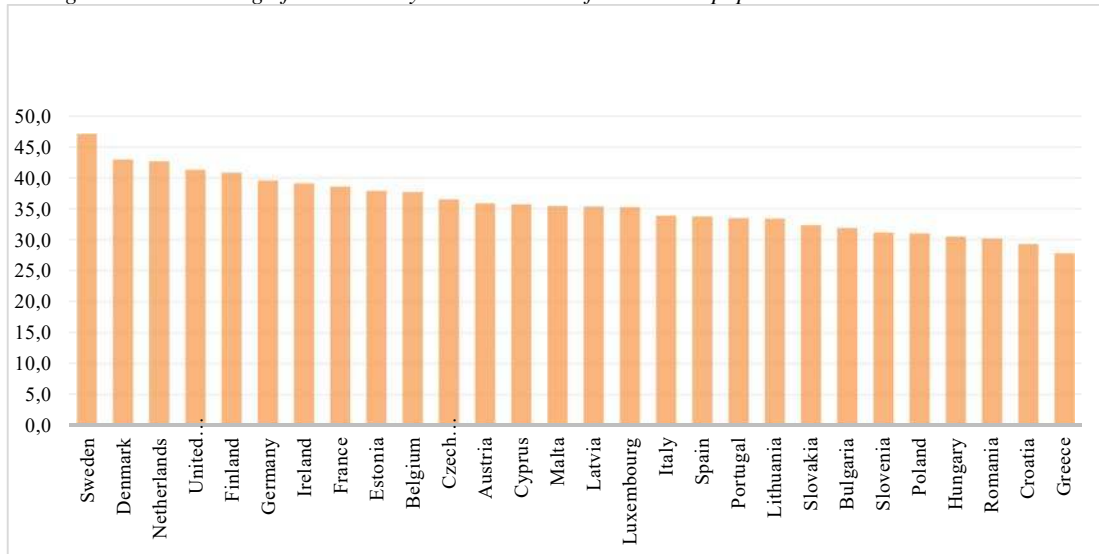
Table no. 1. Population on 1st January by age, sex using baseline projections

Country	Population on 1st January 2050 by age, sex and type of projection
Germany	82.669.724
France	70.010.903
Italy	58.125.032
Spain	49.348.530
Poland	34.102.204
Netherlands	18.142.292
Romania	15.502.837

Source: Eurostat (PROJ_19NP)

In this context, European Commission introduced the Active Ageing Index (AAI), a tool to measure the potential of older people for active and healthy ageing assuring in the same time comparability in time and space across countries. The Active Ageing Index is an aggregation representing four domains: participation in society, employment, independency, healthy and secure living and capacity and enabling environment for active ageing. Sweden obtained the highest overall score of 47.2, followed by Denmark, Netherlands and United Kingdom. At the bottom of the ranking with values around 30 are Greece, Croatia and Romania.

Figure no. 2. Ranking of countries by the overall AAI for the total population in 2018



Source: United Nations Economic Commission for Europe

With the increase in population, there will be an increase in the demand and the senior living industry will need to expand in order to meet the demand, in this context increasing also the care for elderly people quality of life. Quality of life is defined by various factors and aspects and in order to be better comprehended was divided in nine dimensions (Eurostat, 2020). The relationship between age and quality of life is important but not well understood yet.

Silver economy is an economic system oriented on adjusting the spheres of production and distribution of goods and services to the needs of older people and younger generations that are entering the ageing process (Klimczuk, 2012, p.52-56).

Figure no. 3. Quality of life indicators for European Union



Source: Eurostat

According to the official definition given by European Commission (European Commission, 2018), silver economy represents the amount of economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population over 50 years. Basically, silver economy is not a stand-alone economy, but it is a component of the real economy with a well defined target group and clear overview about opportunities and expansion.

2. Literature review

A valuable contribution to understand current challenges by increasing the number of elders across the globe is by seeing the economic dimension of the trend not just the demographical one (Clark, 2004).

Borzaga et al. (2017) define silver economy as being the sum of all economic activity serving the needs of seniors 50+ from both perspectives, products and services they buy direct or the potential of the economic activity that this spending generates.

Eitner et al. (2011) consider 14 market segments which may be recognized as “silver”. In this way, silver economy is analyzed as a topic of production with an adaptable design and marketing. Also, Kryńska (2012) underlines the concept of silver economy as being a bottom-up initiative to approach ageing modern societies. Silver economy is one of the contemporary megatrends and may be recognized as the third world economy after USA and China (Gordon, 2017). In a broad sense, “silver economy” is a sector of the economy focused on satisfying the needs emerging from an ageing population (OECD, 2014)

There are multiple examples of successful international projects or initiatives aimed to improve the quality of life of the elders in Canada (Active Living in Alberta), Spain, Italy (Wellness project), Portugal (In Porto life is long), Germany, Japan, purpose being to promote a healthy ageing.

The widely accepted definition of successful ageing by Rowe and Kahn contains three components: low risk of disease and disability; high mental and physical function; and active engagement with life (Rowe et al, 1997, p.433-440). Gamberini (2006, p.285–308.) mentions a set of objectives that connect technology with seniors.

3. Research methodology

To analyze the influence of development of silver economy concept on quality of life are considered the principal domains of quality of life, the framework for the measurement of well-being developed by Eurostat. The aim for this research is to develop a model of consumer behavior in the segment of silver population using the most relevant domains for quality of life in order to highlight the opportunities for silver tsunami.

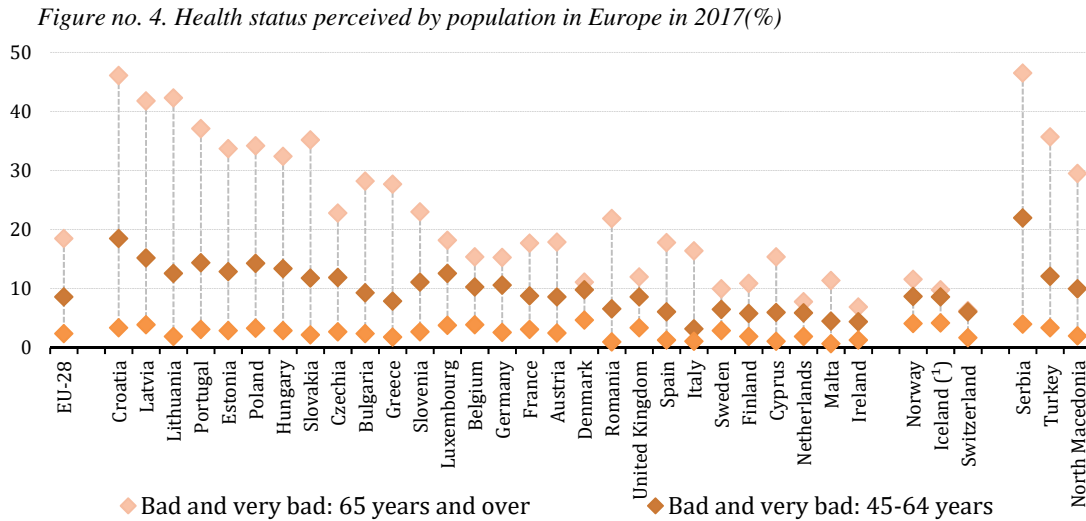
4. Findings

4.1. Living conditions

Material conditions are the most important element of a quality life. Good quality housing is an important determinant of health in older people as it is for the population as a whole. In addition, there are particular factors relating to the impact of housing on the health of older people taking into consideration that they are being forced to spend more time at home. Smart technology is helping them at home longer, give them a more dignified retirement and also bring multiple opportunities from economic standpoint.

4.2. Health and technology

Health is a fundamental human right and an important factor contributing to well-being. Sustainable economic development is based on a well-balanced workforce for young people and the elderly. As this balance shifts in favor of the elderly, productivity tends to suffer, on the one hand, and the older group demands more health services, on the other.



Source: Eurostat

Despite the gloomy forecasts, the future of ageing population is not without hope. More digital technologies already in the healthcare space will become more widespread in the coming years to help reduce costs, making health one of the key areas of quality of life for the elderly. Thus, the embrace of technology is strongly supported by solid arguments in the direction of making everyday life easier with the help of robots.

Pearl's functions:

- Reminding people about routine activities (eating, taking medicine)
- Guiding people through their environment

Paro's functions:

- Sensors, stress reduction, stimulation of interaction

iCat's functions:

- Facial expressions, functional assistant, help with various simple actions such as turning on the light, reading messages, TV guide

Figure no. 5. Different types of robots for enhancing elder life experience



Source: Broekens et al (2009)

Market research companies are forecasting dramatic growth over the next 10 years, largely driven by the public sector in search of efficiency savings, however private consumption is also expected to become more prominent.

4.3. Labor market and education

Work affects the quality of life not only because of the income it generates, but also because of the role it plays in giving people their sense of identity and opportunities for social contact with others. For the elderly, retirement is a turning point in terms of professional life, which is usually

considered the end of working life. Education is the key for both the present and the future, giving to the elders the knowledge, abilities, to participate in society life, to expand the actual skills, to successfully activate, integrate and reintegrate on the labor market. In this way, two dimensions for life quality are overlapping.

Entrepreneurship among older people is an opportunity. In Europe was launched in 2015, 50+ Entrepreneurship Platform Europe, highlighting the importance of elders as an invaluable asset and must be used for the benefit of individuals, economies and society. The benefits are multiple: from the importance of mentors and role models to boosting social-economic development.

4.4. Leisure and social interactions

Participation in leisure activities for seniors is a mean to build social relationships, feel positive emotions, acquire additional skills and knowledge, and therefore improve their quality of life. One of the most interesting activity for elders up to 2020 was tourism. Globally, the 50+ population spend €109b per year on sectors directly related to tourism, close to 3% of GDP, and contributing to 100,000 jobs and inducing further economic growth in other sectors of the economy. Usually, seniors are more flexible with regards travel time, make longer trips, but in the same time are more demanding, need more information and spend rationally.

Thus, we can conclude that the quality of life for silver consumers can be described by the following model, based on the relation with the dimensions described in the J. Stiglitz, A. Sen and J.P. Fitoussi Report on Measurement of Economic Performance and Social Progress.

Table no. 2. Modelling the relationship between silver population and quality of life domains

Area of quality of life	The potential consequences of aging	Needs and changes in consumer behavior
Living conditions	Decrease in income Loss of mobility	Smart homes Home automation Personal and autonomous transport Banking applications
Health	Loss of ability to self-service Decreased physical strength General deterioration of health	Global wearable technology (medical devices, fitness trackers) e-Health services
Labor market	Retirement	Entrepreneurship
Education	Knowledge and new skills developing Desire for self-fulfillment	Age-friendly universities Education stimulates real growth Social contact
Leisure and social interactions	Lack of communication Loneliness Free time Change the usual circle of friends	Travel, Hobbies Creativity

Source: Authors' own research

The model of the relationship between silver population and quality of life domains was proposed on the basis of the analysis of the specific needs of older people. They are willing to pay for products or services that can enhance quality of life. Consideration of the major elements of the model needs will allow for personalized and focused goods and services, which will generate high value to the global economy in the future.

5. Conclusions

To benefit from ageing and make a positive experience, it must be accompanied by continuous opportunities for good health, participation, and security. It's clear that in the future the structure of real economy will involve goods and services production dedicated to ageing people. At the same time it is important to emphasize that the silver economy is not just for the seniors, but also for younger generations and it has the potential to prepare them for old age.

Many challenges are coming with the silver tsunami, but also a lot of new opportunities with potential to reshape private consumption patterns over time with the potential for differential growth rates within and between wide market sectors. An important role in meeting the challenges of ageing are the new technologies. For example, more active and healthy seniors may lead to higher expenditure in areas like technology, digitalization, leisure or smart homes.

The paper highlights the relations between the main dimensions of quality of life and the silver population increase, the major characteristics of the silver market participants and the different experiences across the globe in developing opportunities.

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Incurring Civil Liability towards the Administrator of the Insolvent Company

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Abstract

The responsibility training of the persons responsible for the insolvency of a debtor company is one of the mechanisms typical of the insolvency procedure, whereby creditors can recover the amounts owed to them. This is entailed by the violation of some legal norms in force, through an illegal deed, which requires the guilty person to bear the effects of this conduct. The liability of guilty persons is a special tortious civil liability that takes over the conditions of the civil liability for one's own deed, respectively: the existence of a prejudice, the commission of an illicit deed, the existence of guilt and the establishment of a causal connection between the illicit deed and the damage. The jurisprudence has raised the issue of the compatibility of this action with the request for a guarantee from those persons to whom the concrete exercise of the attributions has been delegated, by the statutory administrator of the debtor company.

The purpose of this analysis consists in presenting the novelties to the regulation of the insolvency law incurring civil liability towards the administrator of the insolvent company

Key words: insolvency law, administrator, damage, litigation process, jurisprudence

J.E.L. classification: K41

1. Introduction

In the Romanian legislation, incurring the civil liability of the persons who caused the state of insolvency of the debtor subjected to the insolvency procedure is expressly stipulated in the provisions of art. 169 of Law no. 85/2014, according to which "At the request of the judicial administrator or of the judicial liquidator, the syndic judge may order for a part or the entire liabilities of the debtor, who is a legal person, which has reached the state of insolvency, without exceeding the damage that has a causal link with the respective deed, to be borne by the members of the management and / or supervisory bodies within the company, as well as by any other persons who contributed to the debtor's state of insolvency, in one of the following ways:

a) they have used the assets or credits of the legal person for their own benefit or for the benefit of another person;

b) they have undertaken production, commerce or service provision activities for their own benefit, under the cover of the legal person;

c) they have ordered, for their own benefit, the continuation of an activity which, obviously, was leading the legal person to the suspension of payments;

d) fictitious bookkeeping; they have arranged for certain accounting documents to disappear or have not done the bookkeeping in accordance with the law. If accounting documents are not presented to the judicial administrator or judicial liquidator, the fault, as well as the causal link between the deed and the damage are presumed. The presumption is relative;

e) they have embezzled or hidden some of the assets of the legal person or have fictitiously inflated liabilities;

f) they have used ruining methods in order to attract funds for the legal person, in order to postpone the suspension of payments;

g) in the month prior to the suspension of payments, they have paid or have ordered for debts to be paid to a certain creditor, to the detriment of the other creditors;

h) any other deed undertaken with intent, which has contributed to the state of insolvency of the debtor, determined according to the provisions of the present title".

2. Theoretical background

The notions presented in this paper deal with the general regulatory framework of insolvency law, namely: the New Romanian Civil Procedure Code, special insolvency laws, the Constitution, commercial practices, doctrine and the jurisprudence. The synergetic approach in legal knowledge has found its theoretical reflection in the works of researchers cited.

3. Research methodology

There were a few general scientific research methods that were used in this paper and methods of legal interpretation; it is based on analysis of legislation and scientific literature. The following methods were used: comparative and legal, logical and legal, the synergetic method and the teleological interpretation method.

4. Findings. The civil liability of the administrator of an insolvent company

The liability of the guilty persons is a special civil liability in tort/ tort liability which takes over the conditions of civil liability for one's own deed, respectively: the existence of a damage, committing a wrongful act, the existence of guilt and the determination of a cause-effect relationship between the wrongful act and the damage.

In judicial practice it has been shown that, in order to attract the personal patrimonial responsibility of the members of the Board of Directors of the debtor company, it is necessary to commit one of the acts expressly and restrictedly provided by law and to prove that all four elements of civil liability in tort are met, since the liability regulated by the insolvency law is a civil liability in tort. (Bufan *et al*, 2014, pp.56-58)

The fault of the administrators, the illicit deed, the prejudice and the causal relationship between the illicit deed and the prejudice must be proved; the law did not establish a presumption regarding them (except for the case mentioned in art.169 paragraph 1 letter d). Therefore, it is necessary to prove that the administrator, by the commission with guilt of one or more of the acts expressly and restrictedly provided by the law, led to the bankruptcy of the debtor company. Both the existence of illicit acts must be determined, as well as the extent to which they contributed to the insolvency, since a judgment can be based only on complete and relevant evidence. At the same time, it is necessary for the respective acts to have been committed for their own benefit or with the intention of obtaining the results stipulated in art. 169 of Law no. 85/2014.

On December 15, 2020, the Meeting of the presidents of the specialized (former commercial) divisions of the High Court of Cassation and Justice and the Courts of Appeal took place, a meeting designed to discuss the aspects of non-unitary judicial practice related to the litigation involving professionals and insolvency.

One of the legal issues subject to the debate referred to the compatibility of the third-party practice/impleader regulated by art. 72-74 of the Civil Procedure Code with the request for liability based on the regulations of art. 169 of Law no. 85/2014 (Cluj Court of Appeal).

At first glance, in the sense of the admissibility of the third-party practice, it was considered that the recourse action is possible in all the cases in which the former administrator is legally responsible for the irregularities found and for the damage thus created, however, in fact, another person delegated to actually carry out the tasks is responsible. An example given in this sense is bookkeeping in violation of the applicable legal provisions, a fact for which the statutory administrator is responsible according to art. 73 of law no. 31/1990, i.e., a text which establishes that the administrators are jointly and severally liable to the company for the existence of the registers required by law and their correct bookkeeping, as well as art. 10 of Accounting Law no. 82/1991, republished, i.e., a text according to which the responsibility for the organization and

management of bookkeeping rests with the administrator. (Luduşan, 2018, p.140)

If, in fact, the bookkeeping is done by an accountant / accounting company, the administrator may use a recourse action for the recovery of the damage he/she was obliged to repair, either by a separate subsequent process or by a third-party claim in the same proceedings.

In contrast, it has been argued that the liability of the guilty party for the state of insolvency of the debtor subject to the procedure is personal, based on legal obligations, and he/she cannot go against another person for a third-party claim in the same proceedings or subsequent to it, in order to recover the amount paid. Such an approach would be synonymous to removing one's own liability.

In the opinion of the National Institute of Magistracy/INM, the issue that needs to be analyzed at this point is that of the admissibility of the third-party claim in the litigation having as object the request for incurring liability for going into insolvency pursuant to art. 169 of Law no. 85/2014, the analysis being similar also in the context of art. 138 of Law no. 85/2006.

According to art. 72 of the Civil Procedure Code, "the interested party may implead a third party, against whom he/she could go with a separate third-party claim or compensation claim".

According to art. 169 para. 1 of Law no. 85/2014: "At the request of the judicial administrator or of the judicial liquidator, the syndic judge may order for a part or the entire liabilities of the debtor, who is a legal person, which has reached the state of insolvency, without exceeding the damage that has a causal link with the respective deed, to be borne by the members of the management and / or supervisory bodies within the company, as well as by any other persons who contributed to the debtor's state of insolvency, in one of the following ways: (...)"

Analyzing the arguments formulated in support of the two opinions conveyed, it can be seen that they focus on identifying specific cases in which the former administrator whose liability is to be incurred could file a claim for damages against another person.

So as to analyze the admissibility of a third-party claim within such a litigation, we consider that it is necessary to verify the compatibility of the provisions of art. 72-74 of the Civil Procedure Code with the insolvency procedure from the perspective of art. 342 of Law no. 85/2014 (art. 149 of Law no. 85/2006).

Although **based on a form of tort liability**, the action of incurring liability for going into insolvency **takes into account a series of special conditions** regarding the objective content of the wrongful act, the justification of the procedural quality, the calculation method of the prescriptive period and, at the same time, it is judged according to a procedure aimed at quickly recovering the damage suffered by the insolvent company, the amount recovered entering the debtor's property and serving to cover the liabilities. (Braşoveanu, 2013, p.145)

The formulation of a third-party claim would broaden the procedural framework by also admitting in the proceedings a possible non-participant in the procedure; this approach would not serve the purpose of the insolvency procedure as it is illustrated in art. 2 of Law no. 85/2014 (art. 2 of Law no. 85/2006), i.e., to cover the debtor's liabilities, but only the interest of the author of the request.

On the other hand, if such a claim were settled within the already initiated litigation, the third-party defendant would follow the specific course of this proceeding, being deprived of a number of procedural rights he/she would have benefited from in the case of an action brought under common law, although incurring his/her liability would not serve the general purpose of the insolvency procedure so as to justify a different treatment. (Cărpenu, 2014, p.258)

At the same time, one should not overlook the fact that the **request to incur liability** according to art. 169 of Law no. 85/2014 (art. 138 of Law no. 85/2006) **can be formulated** not only against the members of the management / administration bodies, **but also against any person who would have caused the state of insolvency** by committing the facts stipulated in the law, so that the respective person, also guilty, should appear in the process as a defendant, not as being impleaded.

In view of the above, we consider that filing a third-party claim is incompatible with the insolvency procedure and, therefore, inadmissible in a litigation having as object the incurring of liability for going into insolvency.

Secondary in importance, it is necessary to emphasize the arguments regarding the personal character of the liability established by art. 169 of Law no. 85/2014 (art. 138 of Law no. 85/2006), resulting from the violation of certain obligations incumbent on certain persons according to the

law and the articles of incorporation, thus contributing to the state of insolvency.

Thus, INM's opinion was that of the inadmissibility of the third-party claim formulated within a litigation regarding incurring the liability for going into insolvency pursuant to art. 169 of Law no. 85/2014, respectively art. 138 of Law no. 85/2006.

The issue was discussed during a division meeting of the **Cluj Court of Appeal** and, unanimously, a **conclusion** was reached on the **compatibility** between the third-party practice and the insolvency procedure. The example given was that of the statutory administrator who impleads the accountant or the de facto administrator who has effectively carried out (totally or partially) the specific tasks of this position. By considering such a request as admissible, the procedural framework would be widened by admitting in the proceedings a possible non-participant in the insolvency procedure, which does not serve the purposes provided by Law no. 85/2014 regarding the insolvency procedure.

The provisions of art. 10 of Law no. 82/1991 - the accounting law, which establishes that the liability lies with the administrator, can also be taken into account. According to the aforementioned legal provisions, the liability for the organization and management of the accounting lies with the administrator, the authorizing officer or another person who has the obligation to manage the respective entity. Consequently, the liability lies with the administrator, who is the one who hires the accountant, who coordinates and approves the documents and takes responsibility for the accounting activity. (Terré *et al*, 2005, p.306)

On the other hand, the option of **such a request** not being considered **inadmissible de plano may be taken into account, i.e., the admissibility or inadmissibility would be analyzed on a case-by-case basis.**

In favor of this solution is the hypothesis in which there is a jointly and severally liability, i.e., there are two administrators who managed the company at the same time and to whom one of the acts among those provided by law could be imputed, but the insolvency practitioner / the other active subjects of the request file(s) the claim only against one of the two administrators.

In this situation, if the liability of the administrator who is sued is incurred, he/she would have the possibility for a separate recourse action against the other administrator, requesting the coverage, in part or in full, of the damage suffered by the latter administrator (even if according to the law the liability is joint). (Nemeş *et al*, 2020, p.230)

In such a situation, there is the possibility of invoking the *exceptio mali processus* (exception for a mistrial), if he/she had been admitted in the litigation which requested incurring patrimonial liability towards the defendant, the guilty person would have paralyzed the plaintiff's claims, through the defenses he/she could put up.

The case of both administrators being sued, and one of them making a third-party claim against the other in order to establish joint liability between them may also be taken into account.

We consider that, through such a claim, the normative framework established by the insolvency law is exceeded, since the third-party claim leads to the introduction of another defendant in the proceedings (another person called to be liable). Consequently, although the insolvency law stipulates that the plaintiff can be represented only by those persons expressly provided by law, an extension of the procedural framework would be achieved.

Given the fact that **there is no text of law that unequivocally establishes the incompatibility of this institution with the insolvency procedure, it cannot be considered, de plano, inadmissible.** To the extent that the insolvency law does not contain clear provisions in this field, the analysis is to be made by reference to the provisions of the Civil Procedure Code.

5. Conclusions

The third-party claim formulated in a litigation regarding the liability for going into insolvency pursuant to art. 169 of Law no. 85/2014 (art. 138 of Law no. 85/2006) is inadmissible; however, the admissibility or inadmissibility must be assessed on a case-by-case basis.

The liability for causing the state of insolvency of the debtor company does not represent either the personal bankruptcy of the statutory administrator or any enforcement on him/her, but a liability to the passive subject of the insolvency proceedings, whereas the amounts recovered would enter the debtor's property, being intended for the payment of the creditors in the creditor's group,

and incurring this form of civil liability does not remove the implementation of the criminal law for the acts which constitute crimes.

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Connection between the Education Strategies and Economic Development

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Abstract

The education strategy implies the development of an accessible, attractive and competitive system that provides high quality education and training services to respond appropriately and quickly to people and the economy's needs by efficiently managing the available resources. The objectives, principles and directions of action of the strategy are based on an analysis of the education and training system and are developed taking into account the major role that training has for the economic and social development of Romania. In this analysis we will establish the link that exists in the economic development of Romania and education and we will propose some strategic measures for education.

Key words: education, economic development

J.E.L. classification: F63 I25

1. Introduction

The Europe 2020 Strategy defines the following main objectives: to increase the employment rate of the population aged 20 to 64 to at least 75%; the allocation of 3% of GDP for research and development; the 20/20/20 target: a 20% reduction in greenhouse gas emissions or 30%, if there are favorable conditions, 20% increase in the share of renewable energy in final energy consumption, 20% of energy efficiency compared to 1990; reducing the school dropout rate to a maximum of 10% and increasing the percentage of people aged 30 to 34 with tertiary education to at least 40% in 2020; EU-28 reduction in the number of people at risk of social degradation and exclusion by 20 million persons by 2020 compared to 2008 (Eurostat, code: t2020_40).

Compared to the European average and Romania's 2020 targets, the following findings are apparent: the rate of early school leaving in Romania, 18.1% in 2014, up 0.8 percentage points over the previous year and 7 percentage points above the average European level of 11.1% is one of the highest in Europe with a sinuous evolution, with no significant progress towards the national target of 11.3% for 2020; the share of tertiary education graduates has made good progress towards the national target of 26.7% for 2020, rising from 16.8% in 2009 to 25% in 2014 (Achimescu, Balica et al., 2010).

The statistical data highlights the low share of investments made by Romanian enterprises for the continuous training of the total labor costs, as the absence of the company-sponsored training activities for 41% of the employees over the age of 40 and with a low level of skills, this rate rising to 50% for people aged 18-24 and low levels of education and skills (Eurostat code:t2020_10).

Research conducted by the employers and managers forecasting method in Romania revealed that in 2013 all employers considered employee training to be important and beneficial, mainly in terms of increasing work productivity, adapting products / services to requirements market and motivation of employees at work. At the same time, employers / managers claim the lack of own funds for professional training courses, lack of information or the difficulty in accessing the funds for such activities, as well as the costs involved in the total or partial cessation of employees' activity. In addition, in the field of agriculture there is a reluctance on the part of employers to take

part in such courses; in the fields of industry and construction, there is fear that employees will be looking for another better job; and in services there are fears about raising wage expectations. Most of the firms surveyed said they had a professional training plan, which in most cases accounts for about 60%, is the responsibility of managers. (NCSMPS, 2014).

The main characteristics of the European and Romanian economic environment are:

- technological innovation: the accumulation of an impressive volume of knowledge in all fields, the increase of competition on the market requires the adoption of the latest technologies;
- occupational instability: employees are forced to change not only their job, but also their profession.
- reduction of taxation: in the long run, as competition increases, the pressures of economic agents on governments will be higher and higher in order to reduce taxation.

This means that in the future the state will either have to withdraw more and more from supporting public services, including education, or to identify other sources of funding for them. The slow pace of economic growth and the difficulty of creating new jobs lead to a low demand for labor, and therefore human capital.

The volume of education expenditures differs not only from one country to another but also from one individual to another and are able to provide an insight into both a country's ability to sustain human capital development as well as on its place in long-term development strategies.

The fact that, at the individual level, the expenditures allocated to education are uncertain and variable, has led to the accentuation of the role of the state, of the governments in the financing of education, either totally or partially.

In Romania, access to education is guaranteed by law to all persons regardless of sex, nationality, religion or socio-familial background.

However, it has become obvious that, in the conditions of a deficient economic situation, the existence of only a favorable legislation for education remains insufficient.

Romania has entered a vicious circle: a low level of development has the effect of limiting investments in education, and therefore in human capital, and diminishes the quality and productivity of work, the main factors of economic growth.

Another aspect related to the financing of education is the one related to the distribution of expenses on educational levels.

It was found that the total financing of primary and secondary education is much more advantageous for society than for the individual: a high level of literacy, increasing the degree of social and economic participation of the population, improving the quality of family life and health, etc.

Therefore, in many countries, primary and secondary education is free, the compulsory duration of schooling being very long.

2. Literature review

The contribution of education institutions to economic development has been the subject of a vast research over the last decades (Bourguignon F., Morrison C., 1990; Dension E.F., 1962; Deraniyagala S., 1995; Grossman G., Helpmen E., 1989).

The returns to primary schooling tend to be greater than returns to secondary and tertiary education according to Psacharopoulos, 1994.

In agriculture some proofs suggest positive effects of education strategies on productivity among farmers using modern technologies and small impact, as should be expected among those using traditional methods. In Thailand, peasantry with four or more years of schooling were three times more likely to adopt fertilizer and other modern inputs than less educated peasantry (Birdsall, N., 1993). Similarly, in Nepal, the completion of at least seven years of schooling increased productivity in wheat by over a quarter, and in rice by 13% according to authors Jamison and Moock, 1994.

Education is also an important helper to technological capability and technical change in industry. Statistical analysis of the clothing and engineering industries in Sri Lanka, according to Deraniyagala, 1995 that showed that the skill and education levels of workers and entrepreneurs were positively related to the rate of technical change of the firm.

Education and abilities and powers of a developing country’s labor force influence the nature of its factor endowment and consequently the composition of its trade. Wood in 1994 argued that even ‘unskilled’ workers in a modern factory normally need the literacy, numeracy, and discipline, which are acquired in primary and lower secondary school.

Advances in education and longer schooling have helped reduce poverty in developing countries. In 1990, a six-year-old child in a developing country should expect to attend school for 8.5 years, up from 7.6 years in 1980 (Ozturk I., 2008).

Many studies have conflicting results regarding the link between education and economic development. E.g Sunde and Vischer (2015) find that there is a weak empirical effect of human capital on economic growth in existing cross-country studies, which is partly due to inappropriate specifications. Previously authors Kalaitzidakis et al. (2001) found a nonlinear effect of human capital on economic growth and Krueger et al. (2001) point out that their evidence “is consistent with the theoretical suggestion that there exist threshold levels of human capital and the growth experience of a country may well differ according to which side of the threshold it finds itself in”.

3. Research methodology

Considering the strategies for education as a key resource for the economic development of Romania, I used the following objectives for the analysis.

The objectives of this methodology are:

O1: Determining the link and the percentage in which education strategies determine economic development at national level;

O2: Determining strategies for the development of education in Romania.

Taking into account our scientific approach, we have resorted to the following assumptions:

General hypothesis: GDP at national level is influenced by education

Hypothesis 1: There is a significant link between GDP and Gross domestic expenditure on R & D;

Hypothesis 2: There is a significant link between GDP and Number of patents.

The study is based on data from 2017-2020, taken from the European Institute of Statistics Eurostat. The nature and characteristics of variables used in the model are summarized in Table 1.

On these data the observation method and the statistical analysis were applied in order to confirm or not confirm the hypotheses of the research.

Table no. 1: The variables used in the econometric model

NO.CRT.	VARIABLE	STATISTICAL EXPRESSION	DESCRIPTION
1	GDP	direct variable	It is defined as the value of all goods and services produced less the value of any goods or services used in their creation.
2	R&D	Indirect variable	The indicator measures gross domestic expenditure on R& as a percentage of the gross domestic product.
3	Number of patents NP	Indirect variable	The indicator measures claims for the protection of an invention

Source: conducted by author

4. Results

Table no. 2 shows that there is a significant link between the variables studied. An increase with a percentage of R & D leads to an economic growth in Romania of 67%.

Table no. 2: Systematization of regression coefficients and Pearson coefficients

GDP	PEARSON	REGRESSION COEFFICIENTS
	COEFFICIENTS	
	Romanian Level	Romanian Level
R&D	0,712	67,431
NP	0,538	52,462

Source: own processing using the SPSS statistical program.19

Certification hypotheses are validated.

In table no. 3 we have proposed several strategic measures for the development of education in Romania.

Table no. 3. Education strategies

STRATEGIES FOR EDUCATION	SPECIFIC MEASURES	ADMINISTRATIVE INDICATORS
IMPROVING PUBLIC AND PRIVATE FINANCING MECHANISMS OF EDUCATIONAL FORMATION	Developing and implementing national strategic projects to provide student support by funding practical training	Number of students supported
IMPROVING PROFESSIONAL ORIENTATION AND CAREER CONSULTING	Developing a coherent national information system, counseling and professional guidance at national / regional / local level, covering both initial and continuing vocational training	Network of information, counseling and vocational guidance centers in education secondary and non-tertiary tertiary education
	Campaigns to inform people able to work in link to existing guidance and counseling services at the level national / regional / local	Number of people
	Development and provision of professional guidance services for 8th grade students	Number of students in the 8th grade
FACILITATION OF ACCESS TO VOCATIONAL TRAINING PROGRAMS FROM YOUTH EDUCATION SYSTEM WITH ACCESS TO THOSE OF VULNERABLE GROUPS	Provide financial support for housing and boarding needs of young people from rural and underprivileged backgrounds, the Roma population, including people with disabilities or deficiencies enrolled in vocational training through vocational education in school / vocational and technical education establishments	Number of students
DEVELOPMENT OF INNOVATION, CREATIVITY COMPONENTS AND THE ENTREPRENEURIAL SPIRIT FROM THE PROFESSIONAL TRAINING PROGRAMS	Expanding learning methods that develop the entrepreneurial skills of participants in training programs through the exercise firm	Number of Exercise Companies

Source: conducted by author

The education and training system must adapt and update its education and training offer, to respond effectively to society's needs and to be oriented towards creativity and innovation, to develop skills to enable, on the one hand, the exercise of active citizenship and personal development and, on the other hand, the integration of graduates into the ever-changing labor market.

5. Conclusions

Economic development is a form of manifestation of macroeconomic dynamics that implies a set of qualitative, quantitative and structural transformations, both in economics and in scientific and technological research, in the organizational mechanisms and structures of the economy, in the way of thinking and behaving people.

Therefore, there can be no economic development without fulfilling social conditions without changing the institutional framework.

The results of the research concur with those of the authors McClelland, Inkeles, Winter, who have demonstrated that the historical periods of economic and social development have been accompanied by an increase in the "need to accumulate" population, which can only be satisfied by education.

There is a significant link between GDP and Gross domestic expenditure on R & D and Number of patents.

As a consequence of the negative effect of lack of education, individuals may face various problems at work: job insecurity, delays in paying for work performed, permanent suspicion of the employer towards them, the obligation to submit a guarantee to employment that often exceeds the income obtained in a few months of work, etc.

In conclusion the individuals without education are affected to a much greater extent by the phenomenon of exclusion from the labor market than those who have received education.

Migration and urbanization have positive effects on a nation's economic development, and any attempt to artificially restrict their influence is ineffective.

In particular, the attempt to control migration to the urban environment through a reform of the rural education system has not been successful in any country, although in some less developed countries the idea is still in vogue. In conclusion,

Therefore we can say that education improves the knowledge and skills of individuals. For this reason, they are inclined to find a job suitable for their training, which will provide them with an adequate income.

To the extent that they find these job opportunities in the environment in which they live, they will work there, contributing to the economic development of the area.

If they do not find these opportunities, then they will migrate to other areas (usually from rural to urban areas), generating the negative effects presented above.

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Learners’ Attitude towards Online Education during the COVID-19 Pandemic with Focus on ESP

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Abstract

This article presents the results of a study that analyzed ESP learners’ perception of the shift to online classes during the academic year 2020-2021, forced under the restrictions of the COVID-19 pandemic. The results emphasize a general positive attitude towards the online format, with some of the frustrations encountered by other similar studies. Most of the negative aspects indicated by the respondents can be mitigated in time and adjustments can be made to rise to the challenge of adapting ESP classes to the online medium, a format that may represent the future of education.

Key words: ESP, online teaching, pandemic

J.E.L. classification: Z13

1. Introduction

The COVID-19 pandemic has forced us all into an experimental academic year 2020-2021 and even though some had more or less experience with online education, nobody was prepared for the sudden transition from face-to-face classes to fully online classes literally overnight. Online education is not a new concept, hybrid learning had been used for many years before 2020, dedicated platforms such as Moodle had also been in use for a long time gaining more and more supporters. However, such tools were only a supplement for the regular in-person classes and no such large-scale use of online platforms for synchronous instruction was implemented, with the exception of certain institutions that had distance learning programs in online format. However, there can be little comparison between the planned classes that occurred in this format before 2020 and what happened after because the pandemic took us to uncharted territories which worked only as a “reminder that learning never occurs in a vacuum” (Le Cor and Couterut, 2020) as the circumstances surrounding this abrupt and en-masse shift influenced the success of the experiment to a considerable extent.

ESP teachers were thrown into this experiment too, each trying to make use of the tools and knowledge they had acquired from their previous experience. Whether the online format is more favorable to ESP or not remains to be determined. Personally, I felt the online format gave me more opportunities to use certain tools than the regular classroom format provided in spite of the commonly encountered disadvantages such as students’ difficulty to focus, engagement and motivation issue alongside others. Despite the extraordinary toll this experiment took on all of us, it was in fact a rare opportunity to test this method on a large scale and see what works and what does not. When we return fully to the in-person classes, the online option will definitely remain a serious contender for various situations in which the face-to-face classes cannot be held, at least temporarily. Therefore, it is important to analyze the results and make adjustments for the future use of this format with better preparation for better outcomes.

2. Literature review

This pandemic year has provided a fertile ground for experimentation in the education domain, with negative as well as positive experiences, and many ESP practitioners took advantage and studied the aspects of online classes for future reference and further research. A study about learners' perception of online classes in general conducted by Nur Agung et al. in 2020 found that enthusiasm about online learning was not high and the learners' preference was for simple platforms such as WhatsApp and Google Classroom, which did not require the best internet connection and could be installed on simpler phones (p. 231). The study concludes that “The students are not accustomed to online learning. Level of IT literacy, limited visualization, the absence of direct classroom communication, and poor internet connection led to unsuccessful teaching and learning.” (p. 233) and that “most English students are not ready for this rapid shift in terms of teaching and learning style” (p. 234), their most common problems being connectivity, accessibility to learning platforms and compatibility of formats.

However, other studies come to more positive conclusions in terms of online classes, especially those that involved ESP learners. Thus, a 2021 study on Ukrainian learners found that teacher's involvement, preparation and capacity for engagement, as well as material availability, are crucial in keeping the learners motivated in online classes (Avsheniuk et al., 2021). Another study, involving Macedonian ESP learners and the use of the Google Classroom platform, shows that students see the inability to focus while being online as the greatest disadvantage of the format, while motivation and the teacher's capacity to create challenging tasks are the main drivers that keep learners engaged in online classes (Kirovska-Simjanoska, 2021). A 2020 study on Argentinian ESP learners found that students generally have a positive attitude towards online classes because of convenience and because the format might help in their career, but they also understand that in-person classes are important for the valuable interaction, both with teachers and classmates (Waicekawsky, 2020). Băcă's 2020 study on Romanian ESP learners questions their perceptions at the very beginning of the pandemic, when the sudden shift intertwined with the psychological impact of the uncertainty felt during the first lockdown for which nobody was prepared, and finds that the main challenges such as access and connectivity as well as distractions and the difficulty to focus in online classes, combined with the psychological impact of the entire situation, made most students reject the distance of online classes when interaction was more needed than ever (Băcă, 2020).

Older studies analyze the learners' perceptions about online classes and find somewhat similar results, namely that avoiding travel is the main driver but lack of interaction with peers is a problem (Horspool and Lange, 2012). A more recent multinational study about distance education finds that motivation is a main issue in online classes and most learners prefer synchronous instruction, therefore they opted for MOOCs (Massive Online Open Courses) rather than asynchronous courses on online platforms (Fidalgo et al., 2020). These two studies were performed for carefully planned classes in times when the word *pandemic* was the stuff of movies. However, even for the nerve-wrecking abrupt transition imposed by lockdowns, the trend is rather clear and the opinions mostly consistent regardless of country, namely that infrastructure is a problem, together with motivation and the lack of interaction with teachers and peers, while convenience and the lack of travel or scheduling issues are seen as advantages. The learners generally have a positive attitude towards online classes as long as they include engaging and motivating activities, which are issues emphasized by most studies.

3. Research methodology

The survey was accomplished by means of a Google Forms questionnaire containing eleven multiple choice questions, where the respondents were asked to choose from a predetermined list of answers (nine single-answer questions and two multiple-answer ones) and two open-ended questions, where the respondents were asked to give their opinion. The participants were 1st and 2nd year Romanian students enrolled in five programs at the Faculty of Natural and Agricultural Sciences, namely biology, ecology, agriculture and horticulture, as well as the part-time education agriculture program. Due to the COVID-19 pandemic restrictions, they all attended the ESP

classes, as well as the other disciplines, in the fully online format during the academic year 2020-2021. For ESP, the Webex platform was used for synchronous instruction, just as it was scheduled in the timetable. Additionally, the Google Classroom platform was used for dissemination of materials and homework, as well as further communication between students and teacher.

Since all communication with the students was remote, using the two platforms mentioned, as well as messenger services (mainly WhatsApp discussion groups), the questionnaire was also distributed and filled out online, contributing to the entire online experience. This may have some implications, namely of control over who participates, whether the students who filled out the questionnaire were actually present during the ESP classes or not, whether they were aware of the conditions during these classes and how they unfolded. In this regard, I included below data regarding the number of students that were present (logged in / camera on) and the number of students who filled out the questionnaire, for comparison.

Table no. 1. Information about the participants

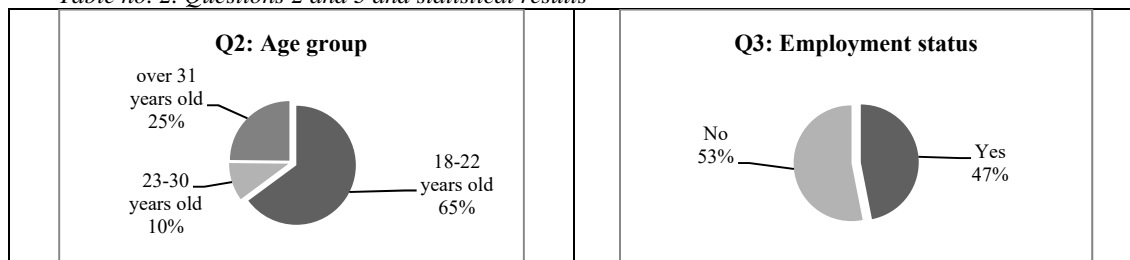
Program	Average no. of students that normally attended the online ESP class	Average no. of students that attended the online ESP class with their cameras on	No. of students that filled out the questionnaire
Biology 1 st year	18	13	15
Biology 2 nd year	20	10	22
Ecology 1 st year	18	9	11
Ecology 2 nd year	10	7	8
Agriculture 1 st year	10	7	20
Agriculture 2 nd year	10	9	14
Horticulture 1 st year	6	5	6
Horticulture 2 nd year	5	4	9
Agriculture (part-time) 1 st year	20	12	27
Agriculture (part-time) 2 nd year	19	10	13
Total	136 (on average)	86 (on average)	145

Source: Processed by the author

4. Findings

Of the eleven questions mentioned above, three are related to basic information regarding age group, employment and program they are enrolled in. The first question, related to the number of participants per program was discussed in the previous section and it displayed a proportional participation compared to class attendance (Table no. 1). The other two questions, regarding age and employment, displayed the results shown below in Table no. 2. A simple correlation between age and employment status shows the expected results, namely that the younger respondents are mostly unemployed and this status changes as the age increases. Thus, while only 27 out of 94 are employed in the 18-22 age group (28% employed), for the other two age groups put together only 10 out of 51 are unemployed (80% employed). This will reflect later in the next questions.

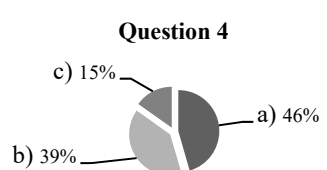
Table no. 2. Questions 2 and 3 and statistical results



Source: Question and chart processed by the author

Question 4 (Table no. 3) deals with online classes in general, irrespective of discipline, and the results are rather surprising, the proportion of those who found the online format more difficult (46%) being close to the proportion of those who found it easier (39%) to follow than the regular face-to-face classes. A small percentage (15%) sensed no difference in the degree of difficulty to follow online classes compared to the regular format. However, per age group the results are rather surprising, with a greater percentage of the respondents in the over 30 group finding online classes easier to follow (58.3%) or sensing no difference (22.2%) compared to a greater percentage of the respondents in the 18-22 age group that find online classes more difficult to follow (56.3%) and only 11.7% sense no difference. In the other age group, 23-30, the results are equally shared with 40% finding online classes easier to follow, 40% more difficult to follow and 20% sensing no difference.

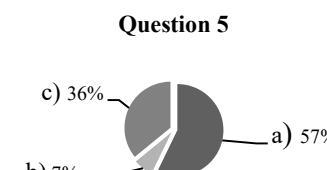
Table no. 3. Question 4 and statistical results

<p>Q4. In general, online classes seem to me:</p> <ul style="list-style-type: none"> a) More difficult to follow than in-person classes b) Easier to follow than in-person classes c) I sense no difference between online and in-person classes in terms of difficulty to follow 	<p style="text-align: center;">Question 4</p>  <p>A pie chart titled 'Question 4' showing the distribution of responses. The largest slice is 'a) 46%' (dark grey), followed by 'b) 39%' (light grey), and 'c) 15%' (white).</p>
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Source: Question and chart processed by the author

Question 5 (Table no. 4) moves beyond the general, requiring an opinion specifically about the online ESP class compared to other disciplines that held online classes, and the results are again surprising in that a considerable majority (57%) found it easier to follow the ESP class online than other disciplines. The percentage that found it more difficult (36%) is comparable to the one that found online classes in general more difficult to follow in the previous question (39%).

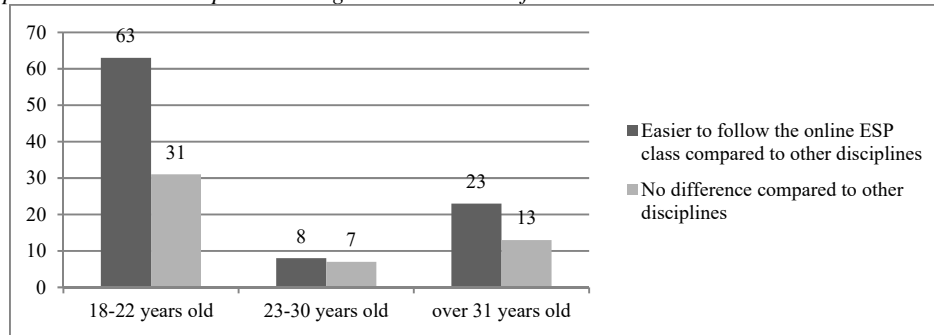
Table no. 4. Question 5 and statistical results

<p>Q5. Compared to other disciplines that held online classes, the online ESP class is:</p> <ul style="list-style-type: none"> a) Easier to follow compared to other disciplines b) More difficult to follow compared to other disciplines c) The same as other disciplines 	<p style="text-align: center;">Question 5</p>  <p>A pie chart titled 'Question 5' showing the distribution of responses. The largest slice is 'a) 57%' (dark grey), followed by 'c) 36%' (light grey), and 'b) 7%' (white).</p>
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Source: Question and chart processed by the author

In terms of age correlations specifically related to the ESP class, things are a bit different compared to the results analyzed for the previous question about online classes in general. This time, it is the younger respondents that find the discipline comparatively easier to follow than other disciplines, although the other ages share similar results, as shown in Graph no. 1. Most respondents chose either easier to follow or sensing no difference, with only 10% choosing more difficult to follow from all age groups put together.

Graph no. 1. Relationship between age and easiness to follow online ESP classes



Source: Graph processed by the author

Questions 6 and 7 delve a little deeper into elements that make the ESP class easier or more difficult in the online format than in the regular format. For Question 6 (Table no. 5), the clear winner (61%) in terms of advantages was the “screen share” function of the Webex platform that was constantly used in class and that facilitated understanding for students with lower levels of proficiency, but not only. Scientific language is difficult in general and this helped everyone with regular problems such as correct spelling. Two other elements considered advantages of the online format shared relatively close percentages: the lack of personal exposure felt in a classroom, which gave some the courage to contribute with more input in class (20%) and the fact that beginners felt the online format was more helpful than the regular one (12%). An interesting, and expected result, in terms of the former percentage is that timidity clearly relates to age because 19 out of the 29 who chose “Lack of personal exposure” as an advantage are young people (18-22 years old).

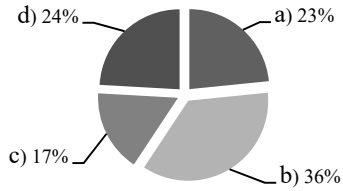
Table no. 5. Question 6 and statistical results

<p>Q6. What is the most advantageous element of the online ESP class?</p> <p>a) Lack of personal exposure; I had more courage to contribute in class than I would have in a regular classroom</p> <p>b) The “screen share” function of the platform, which makes the material more accessible; the fact that the teacher writes with us the activities</p> <p>c) Being a beginner in terms of language proficiency, I found it easier to understand the explanations in the online format</p> <p>d) The specialized language is more difficult in a foreign language, that is why it is easier for me to understand it in the online format rather than in a regular class</p> <p>e) Other issues</p>	<p style="text-align: center;">Question 6</p> <p style="text-align: center;">d) 5% e) 2% c) 12% a) 20% b) 61%</p>
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Source: Question and chart processed by the author

In terms of disadvantages (Question 7 – Table no. 6), the results were rather equally shared among the four options given, with one of them jumping a little higher, namely the one related to the impersonal medium and distance felt in the online format, which does not encourage communication for 36% of the respondents. Of the 24% (35 respondents) that chose option d) Other issues, most of them proceeded to write their opinion in the next section, which was given for this purpose. Ten respondents simply did not write anything, while most of the rest (14) stated that there is no disadvantage to the ESP class held online. There were also other opinions such as “the colleagues’ lack of interaction” (2), simply “online teaching”, which seems to be a disadvantage in itself for two respondents, or the possibility of technical problems (2).

Table no. 6. Question 7 and statistical results

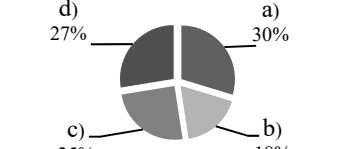
<p>Q7. What is the most disadvantageous element of the online ESP class?</p> <p>a) The specialized language is more difficult in a foreign language, that is why it is more difficult for me to understand it in the online format rather than in a regular classroom</p> <p>b) I am not tempted to contribute in class because of the distance of impersonal medium; other talk before me</p> <p>c) Being a beginner in terms of language proficiency, I found it more difficult to understand the explanations in the online format</p> <p>d) Other issues</p>	<p style="text-align: center;">Question 7</p>  <table border="1"> <thead> <tr> <th>Option</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>23%</td> </tr> <tr> <td>b)</td> <td>36%</td> </tr> <tr> <td>c)</td> <td>17%</td> </tr> <tr> <td>d)</td> <td>24%</td> </tr> </tbody> </table>	Option	Percentage	a)	23%	b)	36%	c)	17%	d)	24%
Option	Percentage										
a)	23%										
b)	36%										
c)	17%										
d)	24%										

Source: Question and chart processed by the author

In Questions 6 and 7, two options were deliberately identical to see what results they would trigger. Thus, the options “The specialized language is more difficult in a foreign language, that is why it is more difficult/easier for me to understand it in the online format rather than in a regular classroom” and “Being a beginner in terms of language proficiency, I found it more difficult/easier to understand the explanations in the online format” provided rather similar results. The difficulty of the specialized language makes it easier to understand in online format for 5% of the respondents and more difficult to understand for 23%. While those who judged themselves as having a lower level of proficiency found the specialized language easier (12%) or more difficult (17%) to understand in the online format in comparable percentages. However, if we are to compare the choices in Questions 6 and 7 with those in Question 5, only 18% of those who found it easier to follow the online ESP class declared themselves beginners.

Question 8 (Table no. 7) asks about the students’ preference in terms of returning to the regular format when the pandemic is over. The results were rather surprising again, in that the expectation was to see a large percentage of respondents looking forward to in-person classes and it seems the situation is not quite so. There were two options for “yes” and two options for “no”, and it appears that the “NOs” slightly exceeded the “YESes”. Whether the reasons are related to employment issues or simple convenience, there are more students that do not want to return (52%) to the regular format than those who do (48%).

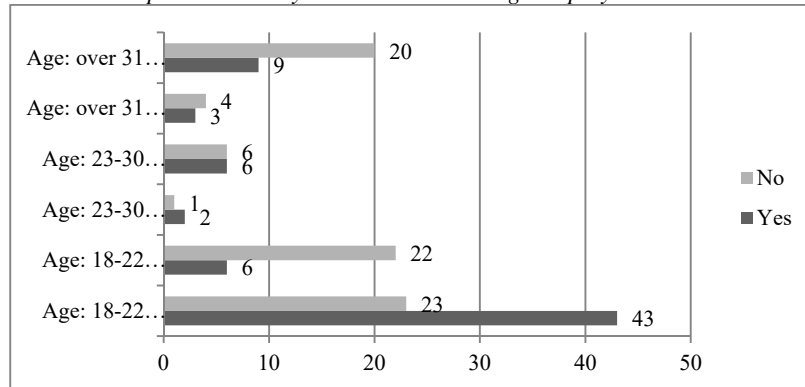
Table no. 7. Question 8 and statistical results

<p>Q8. I prefer to go back to the in-person ESP classes:</p> <p>a) Yes, 100%</p> <p>b) Yes, but I would also prefer maintaining an online component</p> <p>c) No, I prefer online classes because I am employed and this way I can attend classes from other locations</p> <p>d) No, I prefer 100% online classes (for other reasons: it is more convenient, I am not a resident etc.)</p>	<p style="text-align: center;">Question 8</p>  <table border="1"> <thead> <tr> <th>Option</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>30%</td> </tr> <tr> <td>b)</td> <td>18%</td> </tr> <tr> <td>c)</td> <td>25%</td> </tr> <tr> <td>d)</td> <td>27%</td> </tr> </tbody> </table>	Option	Percentage	a)	30%	b)	18%	c)	25%	d)	27%
Option	Percentage										
a)	30%										
b)	18%										
c)	25%										
d)	27%										

Source: Question and chart processed by the author

A more detailed analysis of the responses to this question indicates that the positive and negative answers, regardless of reason, correlate with age and employment status, as illustrated in the graph below (Graph no. 2). Thus, the employed respondents generally preferred online classes, while the younger and unemployed respondents clearly prefer the regular classroom format.

Graph no. 2. Relationship between the yes/no answers and age/employment



Source: Graph processed by the author

As mentioned in the previous section, the Webex platform was used for synchronous classes and the Google Classroom platform for dissemination of materials and homework. The latter or something similar can be kept as a supplement even after the return to in-person classes, for the same purposes. Question 9 (Table no. 8) deals with this issue and it seems that most students (79%) found such a platform useful and necessary. An interesting remark here is that of those who answered *No*, most respondents were in the unemployed 18-22 age group (18 compared to 6 from all the other age and employment status groups).

Table no. 8. Question 9 and statistical results

<p>Q9. In the case of in-person ESP classes, do you think it is helpful to use an online platform in parallel?</p> <p>a) Yes, for the easier dissemination of class or extra materials, for homework and additional interaction with the teacher etc.</p> <p>b) No, I didn't notice any usefulness for such a platform in addition to the regular class</p>	<p>Question 9</p> <p>a) 79%</p> <p>b) 21%</p>
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Source: Question and chart processed by the author

The purpose of the last two questions was to request general information about what the students found difficult or easy about the transition to the online format at the beginning and throughout the pandemic. For each question they were allowed to make two choices. In terms of disadvantages (Question 10 – Table no. 9), the clear winners are the technical problems (44.1%), which we all experienced at the time, and the lack of interaction and impersonal medium (46.2%), which again, we all experienced at the time not only in class, but also in life as most countries were imposing lockdowns and isolation was deeply felt in all aspects of life. These are followed, with equal percentages, by the intrusion in the personal space (22.8%) and the distraction (22.8%) caused by this shift of environment, from formal to informal, from the dedicated classroom to the private home space where other people reside and distracting activities may take place around the students trying to focus on online classes. An interesting result in this regard is that in terms of age, of those who chose “Intrusion in the personal space” as a disadvantage, most were young people in the 18-22 age group (20 out of 32 responders).

Table no. 9. Question 10 and statistical results

<p>Q10. In general, what did you find the most difficult in the transition from the regular format (face to face) to the online format? (2 choices)</p> <ul style="list-style-type: none"> a) Technical problems and the lack of infrastructure b) The fact that I am not very experienced in the online medium c) Intrusion in the personal space d) Difficulty to follow the class in the online medium, the modified teaching methods compared to the regular format e) The lack of interaction with the classmates and the teacher, the distance and impersonal medium f) I cannot focus, I am distracted by things and activities around me; the lack of the structure specific to classroom activities 	<table border="1"> <caption>Question 10 Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>44,1</td> </tr> <tr> <td>b)</td> <td>9</td> </tr> <tr> <td>c)</td> <td>22,8</td> </tr> <tr> <td>d)</td> <td>13,8</td> </tr> <tr> <td>e)</td> <td>46,2</td> </tr> <tr> <td>f)</td> <td>22,8</td> </tr> </tbody> </table>	Category	Percentage	a)	44,1	b)	9	c)	22,8	d)	13,8	e)	46,2	f)	22,8
Category	Percentage														
a)	44,1														
b)	9														
c)	22,8														
d)	13,8														
e)	46,2														
f)	22,8														

Source: Question and chart processed by the author

In terms of advantages (Question 11 – Table no. 10), convenience is the winner by far (66.9%), namely not having to wake up early and go through the trouble of getting ready, maybe catching the bus and going to the university. This is followed by the quick access to materials (48.3%) which are easier to obtain and use in the electronic format. Attendance issues shared similar percentages, regardless of reason (25.5% for employment issues and 29% for other reasons), while the lowest percentage went to the various possibilities to communicate with the teacher (9.7%).

Table no. 10. Question 11 and statistical results

<p>Q11. In general, what did you find the easiest/most advantageous in the transition from the regular format (face to face) to the online format? (2 choices)</p> <ul style="list-style-type: none"> a) Convenience (not having to go to the university) b) I could attend the classes because I am employed c) The various possibilities to communicate with the teacher d) The quick access to the class materials, more convenient and easier to disseminate, read, fill in etc. in the electronic format e) I attended more classes that I would have in the regular format 	<table border="1"> <caption>Question 11 Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>66,9</td> </tr> <tr> <td>b)</td> <td>25,5</td> </tr> <tr> <td>c)</td> <td>9,7</td> </tr> <tr> <td>d)</td> <td>48,3</td> </tr> <tr> <td>e)</td> <td>29</td> </tr> </tbody> </table>	Category	Percentage	a)	66,9	b)	25,5	c)	9,7	d)	48,3	e)	29
Category	Percentage												
a)	66,9												
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c)	9,7												
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e)	29												

Source: Question and chart processed by the author

5. Conclusions

The results are rather in line with those found by other similar studies, with certain distinctions or rather different data. Interesting results show that online classes are equally favored and disliked by an almost identical number of participants and that more younger than older learners find online classes more difficult to follow. A pleasant surprise is the large majority of respondents who indicated that the online ESP classes have been easier to follow and understand than other disciplines also taught online. This may be in part explained by a bias or a desire to please the teacher. However, the survey was purposefully anonymous to encourage honesty, therefore the explanation may lie elsewhere. Most language teachers, unlike other disciplines, are very focused on teaching methods and techniques, as their research proves it. A large majority of the ESP-targeted articles published everywhere in the world is focused on methodology, on teaching methods and course design, always looking for better ways to facilitate language learning.

The difficulty of the specialized language is also an issue for some learners and the online format was not helpful for them, while those with lower levels of English proficiency found that the online format made it both easy and difficult to learn the language in similar proportions. The truly interesting surprise came from the participants' desire to return to in-person classes which was not as overwhelming as expected. The opinions were somewhat equally shared between those who wanted to return to the regular classes and those who preferred the online format, for various reasons, with a slightly higher number for those preferring online classes (52%). These results, together with their clear preference for the future use of online platforms (79%) and the fact that many respondents found it easy to follow the online ESP classes only means that the future clearly

includes the online format to a considerable extent, much more than in pre-pandemic times. Certain issues that represented a disadvantage at the beginning, when the change truly occurred overnight, such as lack of infrastructure, connectivity, compatibility and digital literacy were fixed over time, but they remain tied to economic aspects. Others such as intrusion in the personal space and difficulty focusing may have attenuated over time as people got used to the format. However, important disadvantages such as the direct and much needed interaction with teachers and peers cannot be easily replaced by acceptable surrogates.

The experiment that has been the online academic year 2020-2021 must be regarded as an incredible learning opportunity for us as teachers because we have been faced with a unique situation that closed as well as opened many doors to new opportunities and this requires a challenging effort of adaptation to the new circumstances. What is clear from this and other similar studies is that online education is here to stay to a much larger extent than it was before 2020. When this possibility exists and was tested for over a year, it can no longer be easily rejected, only improved.

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Equestrian Tourism

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Abstract

The work “Equestrian Tourism” contains in its structure information related to the activities carried out in equestrian tourism, the organizations that implement quality standards in the leisure riding and equestrian tourism industry in Romania, as well as the methods and tools used to promote and attract tourists. The central idea of this paper is based on the fact that equestrian tourism creates conditions for restoring work capacity, while having a pleasant and instructive leisure and acquiring new knowledge, information and even skills. We specify that Romania has an extraordinary potential, composed of anthropic natural resources and of state and private studs and wild horses.

We believe that the beneficial effects of equestrian tourism must force decision-makers in this field to create a strong image or brand for this form of tourism, because a compelling message is needed to attract tourists from the country and abroad.

Key words: equestrian tourism, equestrian activities, equestrian centers, recreational riding instructor, riders.

J.E.L. classification: M31, M37, Q13, Q26, Z30, Z32

1. Introduction

Equestrian tourism is a form of tourism that has begun to develop in recent decades and is accessed by more and more people. We specify that this type of tourism is realized due to the existence of natural and anthropic resources, due to the presence of different forms of relief, due to the increasing number of riding centers, equestrian pensions, equestrian tourism guides and state and private stud farms.

Currently, Romania ranks second in terms of per capita horse population in the European Union (8-www.statista.com) and 7th in Europe in terms of wild and semi-wild equine populations (World Horse Welfare and Euro group for Animals).

All these elements lead to the realization of equestrian tourism and to the creation of an attractive offer for tourism. Therefore, equestrian tourism offers various tourist products that contribute to the harmonious development of the body, to the creation of a good mood, to relaxation and spending free time in a pleasant way. In other words, riding in nature, exploring new places, horseback riding in special and unique places, camping in the camp are some of the strengths of equestrian tourism. People's needs and desire to relax in nature have led to the practice of equestrian sports, the offer of horse shows for tourists, the offer of riding lessons, riding lessons for children, sleigh rides or horse-drawn carriages etc. A synthetic analysis of this form of tourism highlights the fact that in Romania tourists can benefit from the services offered by approximately 20 riding centers, a number of over 10 studs located in various places in the country and many destinations for riding.

This infrastructure is supported by the Romanian Equestrian Tourism Federation (FRTE) (9-www.facebook.com) by developing quality standards for centers, specialized courses for professionals and a riding training program for riders. This federation (FRTE) is an NGO made up of equestrian associations and centers and aims to implement quality standards in the leisure riding and equestrian tourism industry in Romania. In the same context, we specify that the federation (FRTE) has a series of basic principles that refer to the safety of the rider and the welfare of the horse.

2. Theoretical background. Promoting equestrian tourism

The existence of equestrian infrastructure and the diversified supply of products have contributed to the increase in demand for weekend programs and equestrian tourism. Also, the promotion in the most well-known travel guides, the existence of leaflets, brochures, magazines, books, posters, banners, billboards, mobile technology, TV / radio / internet commercials have the role of helping the tourist to obtain the information he needs and benefits from such equestrian services. Therefore, the presentation of the equestrian tourism offer helps to develop this form of tourism and related fields.

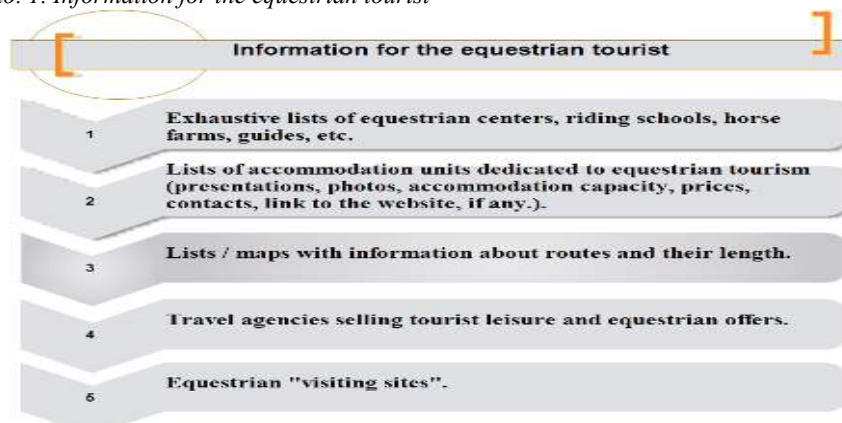
At the same time we specify that a series of actions such as: Leisure Riding Monitor courses - dedicated to the leisure riding and equestrian tourism industry developed by the Romanian Equestrian Tourism Federation (FRTE) and internationally recognized by the International Equestrian Qualifications Group (IGEQ), Leisure Riding Instructor courses, Equestrian Tourism Accompaniment Guide course, Equestrian Tourism Guide courses; equestrian competitions: Transylvania Horse Show, Karpatia Horse Show and Karpatia Pony Show; introduction of the occupation of Equestrian Tourism Guide in the Classification of Occupations in Romania (COR 511313); equestrian destinations (in Dornelor County, Apusenii Mountains, Măcin Mountains or in Rodna Mountains) and trips to studs in the country are methods of promoting equestrian tourism.

Also, in order to promote equestrian tourism, it is necessary to support the local authorities at local and national level (10-www.vacanteleluimirea.wordpress.com), the economic agents, travel agencies and guides, specialists in the field and the entire population. An important role in the promotion of equestrian tourism is played by legislation that must be well developed and with a correct applicability.

Equestrian guesthouses and hotels, country studs and equestrian centers can participate in national and international fairs, specialized conferences, festivals, forums or competitions to make themselves known. At international fairs, it is important to talk about equestrian routes in Romania, and travel journalists and bloggers should publish as many articles about equestrian tourism as possible. The initiation of a National Equestrian Tourism Day in Romania, the organization of equestrian-themed fairs and the establishment of equestrian tourism museums in Romania are ideas and ways of promotion that help to develop the field of equestrian tourism.

In this context, we show that the promotion of equestrian tourism has the role of helping the tourist to obtain in the shortest possible time the following information: (figure no.1)

Figure no. 1. Information for the equestrian tourist



Source: Authors' own construction

An important role in promoting equestrian tourism can also be played by travel agencies - which can deal with incoming and which should promote this niche combined with gastronomic, cultural, wine tourism and others. Equestrian tourism can also be promoted by residents who have this potential in the area and through objects: napkins, calendars, clothing, office supplies, mice, pens, glasses, etc.

The offer can be promoted online, on its own website or third party sites, or at profile fairs. If there is a database with former or potential customers, newsletters can be sent. A form of promotion is also the one that is transmitted through online social networks and various tourist platforms (7,11,12,13- AER, 2017), but also from "word of mouth" from satisfied customers.

In other words, the desire to discover new places in the horse saddle can be supported by elements such as: practicing recreational riding in a responsible way and promoting equestrian tourism as a beneficial activity for the mind and body.

However, equestrian tourism is very little promoted, and the Romanian potential for the development of this tourist product is not intensely exploited.

3. Research methodology

Our methodology is based on theories developed in the field of equestrian tourism, on studies conducted in this field, as well as on existing reviews and comments on social networks. The construction of this study involved knowing the activities that are carried out in this field, getting acquainted with the names of specialists who provide specialized services, as well as marketing information.

We used indirect deduction as a working method, a method that allows us to apply general rules in specific situations. I noticed that Romania has natural and anthropic resources and numerous horse studs, which can help the development of equestrian tourism. Another observation refers to the fact that equestrian tourism contributes to the restoration of work capacity, to the pleasant and instructive spending of free time, to the acquisition of knowledge. Therefore, the deductive method by observation helps us to obtain logical conclusions that will help equestrian tourism service providers.

4. Findings. The effects of equestrian tourism

Equestrian tourism has development potential in Romania, because the practice of this type of tourism is possible in all areas of our country. At the same time, equestrian tourism has an important role in the economy, society and culture. In this context, we specify (1-Constantinescu, 2011) that equestrian tourism contributes to:

- job creation and income growth;
- increasing the competitiveness of Romanian tourism products on current and potential foreign markets;
- increasing the state budget, through the possibility of taxing prosperous economic activities through the development of equestrian tourism;
- promoting the image of certain areas in Romania both nationally and internationally (3,14-Gratzer, 2006);
- the increase of incomes in the areas where this type of tourism is practiced, an increase generated by the capitalization of the local resources and of the local traditional activities;
- protecting and conserving the environment and improving the infrastructure and living conditions of the inhabitants of these areas;
- increasing domestic and international tourist traffic;
- meeting the demands of tourists by developing and promoting tourism
- activities such as: horse riding, equestrian sports, relaxation in nature, carriage rides;
- the increase of the living standard leads to the participation of more and more people in equestrian activities;
- the development of the equestrian tourism offer and infrastructure has helped to increase the demand for this type of tourism;

- promoting and attracting domestic and international tourists by organizing events, horse riding competitions, etc.
- capitalization of anthropic and natural tourist resources through arrangements specific to equestrian tourism.

In the same context, we specify that Romania is affiliated to the International Equestrian Tourism Federation, an affiliation that helps it to be known internationally as a country with a great potential in the practice of equestrian tourism.

Also, the equestrian centers have a diversified offer that includes horseback riding for different categories of tourists:

- beginner riders or inexperienced riders who can benefit from long walks at a slow pace in an attractive natural environment;
- experienced riders or regular riders who can benefit from unique moments obtained by walking on very long routes or endurance.

Therefore, the desire for freedom and relaxation can be satisfied by practicing equestrian activities, and the offer in this field is diversified.

5. "The Cinderella of Tourism"

Equestrian tourism is a niche of tourism but it is little represented in the market and we can call it "Cinderella in tourism". This situation is due to the fact that:

- there is no real and beautiful image in the equestrian tourism market;
- a large part of equestrian pensions do not work with travel agencies in Romania;
- a small percentage of equestrian pensions offer quality services;
- a large part of the equestrian guesthouses are not known by tourists passionate about this type of tourism;
- there are a small number of equestrian tourism guides throughout the country;
- there is no classification of riding centers or riding centers (1,2 or 3 horseshoes);
- there is no list of equestrian pensions and hotels on the Ministry's website.

All these problems can be solved by improving, adopting and implementing marketing strategies for equestrian tourism products.

The conclusions extracted from the information presented, lead me to say that online and offline promotion can be the panacea of equestrian tourism. Thus, the creation of specialized sites, e-mail, Google Ads and social media networks can convey to potential tourists the offer of equestrian centers. These promotions can be achieved through one-off campaigns (holiday packages for children / young people / families, etc.) and long-term campaigns (Teambuilding services / Private events).

Attracting tourists from the online to offline environment can be done through a unique offer and sent regularly through newsletters. These newsletters can keep in touch with those who have benefited from the products offered by equestrian centers and equestrian guesthouses, as well as with those who want to consume equestrian tourism products.

Also, social networks Facebook, Instagram, Tik Tok, YouTube, Pinterest, WhatsApp, Twitter, blogs, etc. offer a number of advantages to equestrian tourism. We can talk about social benefits (defined by expanding online links, debating specific issues, etc.), economic benefits (brand interaction with consumers, cheap and easily accessible transmission environment, market research, financial benefits, etc.), and educational benefits. (direct interaction between teachers and students, etc.). This online environment is beneficial for any form of tourism and not only because these platforms are accessed by individuals of all ages and from all corners of the world.

Statistics show that social networks are accessed because people:

- want to communicate with friends and relatives,
- want to know information;
- want to keep in touch with colleagues from school / high school / college;
- they want to make new friends;
- they want to have fun;
- they want to be up to date with socio-cultural events;

- they want to know the opinions of other people who have benefited from certain services;
- they want to post photos with and about the moments they lived;
- they want to share their experience with others;
- want to meet other people;
- they want to develop their business, etc.

These social networks are beneficial because they reduce communication costs and help maintain thematic groups. Offline promotion is done through prints (magazines, posters, leaflets), media, thematic programs (discover, learn, explore), thematic camps (riding camps for children, riding camps for adults, etc.), organization of festivals etc.

The promotion aims to show that tourism products have a certain value by satisfying human need and that the equestrian tourism service is provided in all its forms through the horse.

The efficiency of this form of tourism results from the fact that the equestrian tourist is involved in carrying out activities involuntarily taking over a part of the functions of service providers and obtaining a double role: that of provider and consumer. Also, the organizational measures necessary for the preparation of tourist consumption and the facilities offered by the material base are factors that contribute to the increase of the demand for such services.

On the other hand, we can show the fact that equestrian tourism offers consumers the opportunity to practice activities specific to leisure (5-Obodinski, 2006):

- interaction with horses (washing them, brushing and combing the mane, weaving, cleaning or priming hooves, mumbling, feeding, guided movement, restraint, harnessing, saddling, etc.);
- admiring the landscapes while riding or during horse-drawn carriage rides or sleigh rides;
- visiting different tourist objectives;
- learning riding practices and riding figures;
- visiting museums with equestrian profile, participation in equestrian festivals or competitions;
- spending time around horses for horse-assisted therapy activities.

We note that equestrian tourism involves ensuring an active rest (2-Cosmescu, 1998) of the tourist that contributes to meeting his physical and mental needs. In other words, equestrian tourism outlines the framework required for "pleasant and instructive leisure" (4-Minciu, 2004).

In order to achieve all these things, it is necessary to apply a leisure development strategy, which takes into account, on the one hand, "the motivations, aspirations and expectations of tourists, and on the other hand, the profile, structure and specifics of the resorts" (6-Savu, 1987).

We consider that equestrian tourism is dynamic, has positive effects characterized by economic, social and cultural benefits to local communities, but also negative effects resulting from its chaotic, uncontrolled exploitation and development. Therefore, there is a need to adopt regulations on environmental protection and to create development strategies related to the tourism development strategy at national level.

6. Conclusions

The conclusions extracted from the information presented, lead me to say that online and offline promotion can be the panacea of equestrian tourism. Thus, the creation of specialized sites, e-mail, Google Ads and social media networks can convey to potential tourists the offer of equestrian centers. These promotions can be achieved through one-off campaigns (holiday packages for children / young people / families, etc.) and long-term campaigns (Teambuilding services / Private events).

Attracting tourists from the online to offline environment can be done through a unique offer and sent regularly through newsletters. These newsletters can keep in touch with those who have benefited from the products offered by equestrian centers and equestrian guesthouses, as well as with those who want to consume equestrian tourism products.

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Sentiment Analysis Using Machine Learning Approach

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Abstract

Customers feedback is a valuable asset for businesses, that can be used in order to improve their performance. One of the fastest spreading areas today in computer science - Sentiment Analysis, helps to extract precious information from textual data, in order to identify the feeling of a statement. This research aims to build a classifier to predict customers' satisfaction, based on Amazon reviews dataset, for different brands of mobile phones. The paper proposes a comparison between four text classification algorithms - Naïve Bayes, Support Vector Machine, Decision Tree and Random Forest, using different feature extraction techniques, such as Bag of words and TF-IDF. In addition, the models are evaluated using accuracy, precision, recall and F-score metrics. Our experiments revealed that Support Vector Machine achieves the best results and is very suitable for classification of the sentiment on product reviews.

Key words: Sentiment analysis, customer reviews, machine learning, text classification

J.E.L. classification: A12, L21

1. Introduction

Online reviews and recommendations have a big impact on customers purchasing decisions, especially now, when people tend to express their opinions and feelings more than ever, on virtual communities and social networks.

According to a survey report, 93% of consumers refer to online reviews before taking their purchase decisions (Kaemingk, 2021). This can be explained by the fact that in general, our decisions are influenced by other opinions, when dealing with something new (Alharbi, 2021).

Purchase is always an interaction between two entities, customers and business owners. Customers can use reviews to make better decisions about what products to buy, while businesses, on the other hand, benefit from reviews in terms of gaining useful information about customers satisfaction on their products. This information can be then used to evaluate their marketing strategies, to improve their products and to enhance their performance (Al-Sheikh, 2018).

Classifying large amounts of unstructured data from Internet is a challenging task. Hence, the sentiment analysis, along with Natural Language Processing techniques, flourished in recent years, to provide a framework for analysis of textual data obtained from reviews. These techniques predict the polarity of the opinions (positive, negative, or neutral), assisting customers to have a conclusion about a product. On the other hand, companies can understand in this way the level of satisfaction of their customers (Alharbi, 2021).

Sentiment analysis is a natural language processing problem, which implies the detection and retrieval of knowledge from textual data. The sentiment analysis follows a sequence of steps such as the reviews collection, the lowercase conversion, punctuation and additional spaces removal, stop words removal, tokenization, lemmatization, feature extraction and finally classification (Dadhich, 2021).

Amazon is one among the most important e-commerce retailers, used every day for online shopping. The Amazon ranking system ranges from 1 to 5, where "1" is the worst rating and "2" is the highest rating (Roshan, 2020).

In order to assess the overall semantics of consumer feedback, this paper explores the sentiment classification into positive or negative feelings, for online reviews, using specific methods applied in this domain.

This research aims to build a classifier to predict consumers satisfaction, whose performance will be evaluated, based on the dataset of the mobile phone reviews. This has the potential to help companies to improve their products and on the other hand, to help potential customers to make better purchasing decisions.

The paper is structured as follows. This paper begins with the introduction. Section 2 discusses the related work in the previous literature. Section 3 explains both research methodology and implementation respectively. Section 4 reports the experimental results in terms of performance metrics for various classifiers. Lastly, section 5 concludes the findings of the paper and exposes the future scope.

2. Literature review

Various studies focused on the problem of identifying customers opinions on different products using Amazon reviews.

In the following, these papers are reviewed in terms of pre-processing techniques, feature extraction methods, proposed methodologies, and evaluation metrics.

(Guia, 2019) applied supervised machine learning algorithms such as Naïve Bayes, Support Vector Machine, Decision Trees and Random Forest, to predict the reviews sentiment, based on Amazon Reviews: Unlocked Mobile Phones dataset. In the classification process, the authors used only Rating and Review attributes and removed the instances with neutral reviews. After applying preprocessing steps such as converting the dataset into lowercase, tokenization, removal of punctuation and stop words, the data was splitted into 80% for training and 20% for test. The results for the application of classifiers, show that the Support Vector Machine classifier is the most accurate, with the highest values for all metrics, followed by Random Forest classifier. The authors presented also a statistical study in terms of the impact of brand and price in the reviews polarity. They concluded that ZTE has the most positive reviews rate with 82,9 % positive reviews and in terms of price, more positive reviews were obtained for higher prices, which can be explained by the quality of the phones.

The research conducted by (Aljuhani, 2019), studied the performance of different machine learning algorithms, such as Logistic regression, Naïve Bayes, Stochastic gradient descent and convolutional neural network respectively, using different features extraction techniques such as BOW and TF-IDF, each of them with three variations depending on the number of grams used. The authors divided the data into 70% for training, 15% for testing and 15% for development. The results revealed that convolutional neural network provided the best results.

In their papers, both (Aljuhani, 2019) and (Bansal, 2018), used unbalanced and balanced datasets. While (Aljuhani, 2019) categorized both balanced and unbalanced data into, five and four stars as positive rating, one and two stars as negative rating, and three stars as neutral rating, (Bansal, 2018) categorized balanced and unbalanced data separately. (Bansal, 2018) used balanced data, meaning that the number of negative reviews (1 and 2 stars) is equal to the number of positive reviews (4 and 5 stars) and removed neutral reviews. For unbalanced data, they categorized (1 and 2 stars) as negative reviews and (3, 4 and 5 stars) as positive reviews. (Bansal, 2018) applied deep learning methods such as, CBOW and skip-gram, with different machine learning algorithms: SVM, Naïve Bayes, Logistic Regression and Random Forest. The experimental results showed that Random Forest using CBOW achieved the best accuracy.

(Shaheen, 2019) performed a sentiment classification on mobile phone reviews dataset, using seven different classifiers and based on their results, the Random Forest classifier outperformed all other classifiers, with an accuracy of 85% for the given dataset, followed by LSTM and CNN. The authors also exposed the distribution of reviews with respect to their ratings, showing that most reviewers have rated 4 stars and 3 stars. Also, the study concluded that there is a direct correlation between rating and price.

(Ravi, 2019) implemented four algorithms, Naïve Bayes, Support Vector Machine, Random Forest and K-Nearest Neighbor, using different sizes of training and test data. They concluded that Random Forest classifier produced the best accuracy metrics.

(Qaiser, 2021) focused on the comparison of machine learning methods applied in Sentiment Analysis such as Naïve Bayes, Decision Tree, Support Vector Machine and the modern method, Deep Learning. The ML techniques were applied to a dataset of 4289 rows, about technological impact on employment, remaining with 1047 rows, after completing the preprocessing steps (Qaiser, 2021). They concluded that the deep learning method performed the best, with an accuracy of 96,41%, followed by Naïve Bayes and Support Vector Machine with 87,18% and 82,05% respectively.

(Tan, 2018) conducted a study on a dataset of 34660 instances, from customer reviews of Amazon products. The dataset was divided into a training set of 60%, a validation set of 20% and a test set of 20%. They implemented machine learning algorithms such as Naïve Bayes, Support Vector Machine with Linear Kernel, Support Vector Machine with RBF Kernel, KNN-4, 5, 6 and deep neural networks, such as Recurrent Neural Network. They concluded that the Long Short-Term Memory generates the most accurate predictions.

3. Research methodology

This section presents the methodology and techniques used for the classification of mobile phone reviews. Figure no. 1 illustrates the phases of this research, starting with the dataset of Amazon reviews, until each review is classified into positive or negative.

Figure no. 1. Phases of research



Source: Author preelucration

A. Dataset

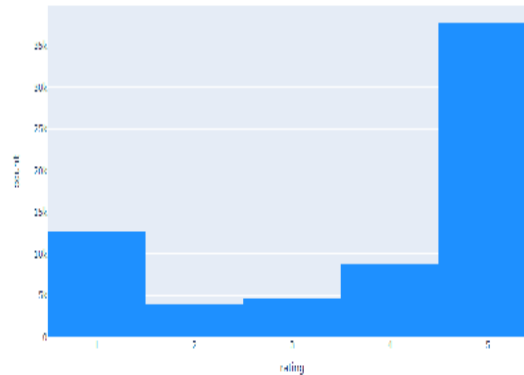
Our dataset (Amazon Cell Phones Reviews | Kaggle, 2019), consists in 67986 instances, fetched between 24th November 2003 to 25th December 2019. The data was retrieved from Amazon.com and focuses on reviews for both unlocked and locked carriers, related to ten brands: Apple, ASUS, Google, HUAWEL, Motorola, Nokia, OnePlus, Samsung, Sony and Xiaomi.

The dataset contains the following attributes:

1. "asin": ID of the product
2. "name": name of the reviewer
3. "rating": rating of the product
4. "date": date of the review
5. "title": title of the review
6. "review": text of the review
7. "helpfulVotes": rating of the review's helpfulness

In our analysis, we will focus only on the rating and review features, as these are the most useful and relevant for model building. In order to have an overview of the reviews dataset, the ratings distribution is shown in Figure no. 2. The classes are imbalanced, as classes 2, 3 and 4 have very small amount of reviews, compared to class 5.

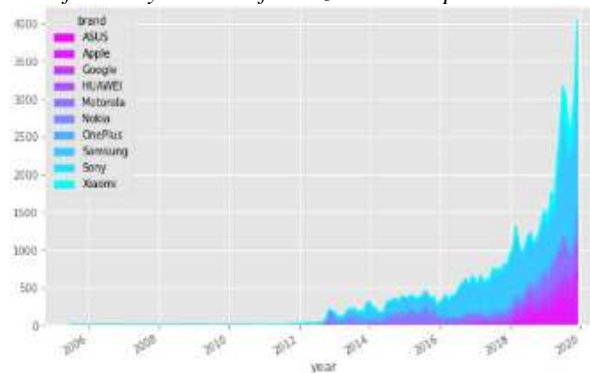
Figure no. 2. Rating distribution for Amazon reviews dataset



Source: Author computation

In terms of popularity, Xiaomi and Samsung are the most rated brands, over the years. (Fig. 5)

Figure no. 3. Distribution of monthly number of Amazon reviews per brand



Source: Author computation

Before applying the preprocessing tasks, we are going to label the dataset, as follows:

1. Rating with a value less than 3, is labeled as "Negative".
2. Rating with a value greater than 3, is labeled as "Positive".

In a 5-star rating scale, 3-star ratings are considered as neutral reviews, which means that the reviews are neither positive nor negative. So, we remove the 3-star rating reviews from our dataset.

B. Data Preprocessing

The performance of a classifier can be highly increased by preprocessing the data. Considering this, the preprocessing phase, applied to our dataset, included the following steps:

1. Convert the uppercase letters into lowercase.
2. Remove all the URLs starting with HTTP.
3. Remove all the special characters.
4. Remove all single characters.
5. Remove single characters from the start.
6. Substitute multiple spaces with single space.
7. Remove all the punctuation.
8. Remove the stop words, such as "the", "a", "in", using Stopwords Corpus for English words, from NLTK library.
9. Tokenization, the process of splitting the original text in the form of sentences into words.

- **Random Forest** is an integration of several decision trees. Random Forest builds several decision trees in the training phase, the final prediction being a prediction based on the result of the predictions of all decision trees. Each time a division into a new decision tree is considered, a random selection of m predictors is made, as potential candidates, from the total number of trees.

The equation of the Random Forest classifier is as follows (Guillot, 2017):

$$f^B(x) = \frac{1}{B} \sum_{b=1}^B T_b(x) \quad (4)$$

G. Evaluation Metrics

Evaluation metrics play an important role to measure the classification performance. In order to evaluate the results of the four algorithms four of the most popular measures are used: Accuracy, Precision, Recall, and F1 score. These four metrics are explained in the following.

- **Accuracy** predicts how often the classifier makes the correct prediction. Accuracy is the ratio between the number of correct predictions and the total number of predictions. (Martin, 2017):
- **Precision** measures the exactness of a classifier; how many of the return documents are correct. A higher precision means less false positives, while a lower precision means more false positives. Precision is the ratio of numbers of instance correctly classified from total. (Martin, 2017)
- **Recall** calculates the sensitivity of a classifier; how many positive data it returns. Higher recall means less false negatives. Recall is the ratio of number of instances accurately classified to the total number of predicted instances (Martin, 2017).
- **F-score** is the weighted harmonic mean of precision and recall (Martin, 2017).

4. Findings

In our research, the reviews have been classified as positive and negative, based on the star rating.

There were several machine learning algorithms employed in this paper such as Multinomial Naïve Bayesian, Support Vector Machine, Random Forest and Decision Tree. Different feature selection techniques were applied on classifiers, such as TF-IDF and Bag of Words. For both BOW and TF-IDF we used three variations of grams, unigrams, bigrams and trigrams. Firstly, BOW was applied for each machine learning algorithm. Then, TF-IDF, was applied, with parameters $min_df=5$ and $max_df=0.8$, which means to ignore terms that appear in less than 5 documents, respectively to ignore terms that appear in more than 80% of documents. Lastly, we used the Scikit-Learn Pipeline method, which chains together TfidfTransformer and the CountVectorizer (Bengfort, 2018).

Tables no. 1, 2, 3, 4 and 5 show the results for all mentioned classifiers, using different features extraction techniques.

Table no. 1 Results of Naïve Bayes for Amazon reviews dataset (train split)

	Accuracy	Recall	Precision	F-score
BOW + U	0.903	0.903	0.902	0.902
BOW + B	0.896	0.896	0.897	0.891
BOW + T	0.834	0.834	0.844	0.812
TF-IDF + U	0.891	0.891	0.892	0.886
TF-IDF + B	0.881	0.881	0.885	0.872
TF-IDF + T	0.784	0.784	0.794	0.737
Pipeline (BOW + TF-IDF)	0.866	0.866	0.875	0.853

Source: Author's computation

Table no. 2 Results of Support Vector Machine with RBF kernel for Amazon reviews dataset (train split)

	Accuracy	Recall	Precision	F-score
BOW + U	0.857	0.857	0.850	0.829
BOW + B	0.842	0.842	0.854	0.822
BOW + T	0.747	0.747	0.799	0.656
TF-IDF + U	0.926	0.926	0.925	0.926
TF-IDF + B	0.887	0.887	0.888	0.881
TF-IDF + T	0.777	0.777	0.783	0.728
Pipeline (BOW + TF-IDF)	0.927	0.927	0.926	0.926

Source: Author computation

Table no. 3 Results of Support Vector Machine with linear kernel for Amazon reviews dataset (train split)

	Accuracy	Recall	Precision	F-score
BOW + U	0.849	0.849	0.820	0.821
BOW + B	0.862	0.862	0.858	0.857
BOW + T	0.775	0.775	0.782	0.723
TF-IDF + U	0.917	0.917	0.916	0.916
TF-IDF + B	0.877	0.877	0.876	0.871
TF-IDF + T	0.780	0.780	0.783	0.734
Pipeline (BOW + TF-IDF)	0.927	0.927	0.926	0.926

Source: Author computation

Table no. 4 Results of Decision Tree for Amazon reviews dataset (train split)

	Accuracy	Recall	Precision	F-score
BOW + U	0.853	0.853	0.853	0.853
BOW + B	0.826	0.826	0.823	0.824
BOW + T	0.792	0.792	0.786	0.763
TF-IDF + U	0.859	0.859	0.859	0.859
TF-IDF + B	0.832	0.832	0.828	0.829
TF-IDF + T	0.769	0.769	0.750	0.736
Pipeline (BOW+TF-IDF)	0.861	0.861	0.861	0.861

Source: Author computation

Table no. 5 Results of Random Forest for Amazon reviews dataset (train split)

	Accuracy	Recall	Precision	F-score
BOW + U	0.909	0.909	0.908	0.906
BOW + B	0.866	0.866	0.863	0.860
BOW + T	0.788	0.788	0.802	0.743
TF-IDF + U	0.914	0.914	0.912	0.912
TF-IDF + B	0.865	0.865	0.862	0.859
TF-IDF + T	0.778	0.778	0.769	0.740
Pipeline (BOW +TF-IDF)	0.913	0.913	0.912	0.910

Source: Author computation

For Naïve Bayes, we can see in Table no. 1 that Bag of Words with unigrams achieved the highest accuracy with a value of 90,3%. As seen in Table no. 2 and Table no. 3, both types of kernel, RBF, respectively Linear kernel, were used to evaluate the Support Vector Machine. Both experimental evaluations demonstrate that the classifier obtains the best performance when using the pipeline approach, achieving 92,7% for accuracy and recall and 92,6% for precision and F-score. TF-IDF with unigrams achieved an accuracy of 92,6% for RBF kernel and 91,7% for linear kernel, which can be considered very good results.

Decision Tree achieved its highest accuracy of 86,1%, with the pipeline technique, followed by TF-IDF with unigrams, where an accuracy of 85,9% was obtained.

As shown in Table no. 5, the best performance for Random Forest was 91,4% for accuracy and recall and 91,2% for precision and F-score. So, the performance of the classifier is very high.

TF-IDF achieved the highest performance of 92,6% accuracy and recall, for unigrams. On the other hand, Bag-of-words obtained its highest accuracy of 90,9%, with unigrams. In contrast, overall lower results were obtained for bigrams or trigrams, compared to unigrams, when applied to both BOW and TF-IDF.

From all the experiments the best results of all four algorithms are obtained by Support Vector Machine and Random Forest.

5. Conclusions

Reviews are essential for both customers and companies. From consumers point of view, reviews help them to make better decisions when buying products. On the other hand, companies benefit from reviews, by knowing the level of consumers satisfaction about their products and acting accordingly. In this paper, we proposed a machine learning approach for text sentiment analysis.

We performed the sentiment analysis on mobile phone reviews dataset, using different types of machine learning algorithms, such as Naïve Bayes, Support Vector Machine, Decision Tree and Random Forest. We used different feature extraction approaches such as Bag of words and TF-IDF with unigrams, bigrams and trigrams and analyzed the classifiers results, based on four performance metrics: Accuracy, Precision, Recall and F1 score. We also proposed the Latent Dirichlet Allocation (LDA) model for topic extraction, which shows document topics along with the most relevant words for each topic. We described the basic theory behind the models, approaches used in our research and the performance metrics for the conducted experiments. We went through different research papers on sentiment analysis over text-based datasets.

Overall, we were able to achieve promising results for classifiers, based on the performance metrics obtained. We found that the pipeline approach, which combines TfidfTransformer and CountVectorizer, achieves the highest metrics results, for almost all the classifiers. We can also observe that, the unigrams applied to Bag of Words and TF-IDF, gives better results compared to bigrams or trigrams, for all classifiers. The highest accuracy is 92,7 %, obtained by Support Vector Machine classifier, for both types of kernel: inear and RBF. Even if Random Forest has its highest accuracy of 91,4%, it can be considered the most complete classifier, with high values for all the metrics. Our results show that Naïve Bayes is also a classifier to consider, being just slightly lower than the Random Forest classifier, with its highest accuracy of 90,3%.

As future work, we plan to continue to study other algorithms applied in Sentiment Analysis field and to evaluate them. Also, another future direction would be to collect more data, in order to test the performance of classifiers on a massive dataset and see if there are improvements in results. Another point to consider in the future, would be to adjust and explore more parameters for the classifiers, which could contribute to even better results. And not lastly, in the future we intend to explore more methods of linguistic analysis, such as semantic analysis.

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The Main Particularities of A. D. Xenopol’s Economic Thought

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Abstract

Alexandru Dimitrie Xenopol (1847-1920) was a historian, a economist, a sociologist and a philosopher with a vast scientific and publishing activity in the field of economics. Interested in the analysis of the Romanian economic situation in his times, he came up with a series of economic policy recommendations meant to accelerate progress. He believed that the main cause of the lesser development of the country was the mainly agricultural character of its economy, and that the solution was to firstly develop the manufacturing industry that processed agricultural raw materials through an internal protectionism (incentives from the government). The purpose of this paper is to identify the specific features of Xenopol’s thought in the context of the debates of his time, as well as his major economic ideas that place him amongst the most renowned Romanian economists.

Key words: nationalism, protectionism, agrarian issue

J.E.L. classification: B31

1. Introduction

Alexandru Dimitrie Xenopol was born and studied in Iași. He attended the *Academic Institute* where Titu Maiorescu, Grigore Cobălcescu, Petru Poloni taught. After his Baccalaureate, he got a scholarship and went to study at university in Germany, where he got his PhD in philosophy in Gissen and in law in Berlin, where he was the student of the German socialist philosopher and economist E. K. Düring. (Răducanu, 2001, p. 51) Upon returning to the country, he became a prosecutor, then a lawyer. In 1883 he became a Romanian history professor at the University of Iași. He was the Rector of this university for four years, between 1898 and 1901. Ten years later, he was elected as a member of the Romanian Academy.

Author of the first major synthesis of national history, A. D. Xenopol was “the only great historian to fundament his analyses on the determinist theory the necessary link and of the causal conditioning, governed by laws, of the social events and phenomena”. (Murgescu, 1994, p. 221)

Apart from history, A. D. Xenopol was also interested in the analysis of the economic problems for almost half a century (1868-1915). He used instruments of economic analysis (historic documentation, statistics information, direct observation) and stated solutions. In his work *Istoria românilor* / The History of Romanians he constantly related historic aspects to the level of economic development. He looked into the economic phenomenon, as a component of the social one, after the independence of 1877, when people such as Dionisie Pop Marțian, Mihail Kogălniceanu or Bogdan Petriceicu-Hașdeu had already asserted the need to create a national industry.

2. Theoretical background

A. D. Xenopol’s work was vast and diverse and led to the publishing of numerous books, studies, and articles that are dedicated to him. Amongst those that especially emphasize the economic area, by far the most important is Alexandru Zub’s 1973 work titled *A. D. Xenopol. Bibliografie* / A. D. Xenopol. Bibliography. In 1965 N. Gogoneață and Z. Ornea published the book *A. D. Xenopol. Concepția social și filozofică* / A. D. Xenopol. Social and Philosophical View,

which present Xenopol’s socio-economic views, his development theory, as well as his view on the history of society. The two authors also wrote a complex and complete introductory study for the 1967 volume *A. D. Xenopol – Scrieri sociale și filozofice* / A. D. Xenopol – Social and Philosophical Writings. The Academy of the Socialist Republic of Romania published the volume *A. D. Xenopol. Studii privitoare la viața și opera sa* / A. D. Xenopol, studies on His Life and Work in 1972. The volume was coordinated by L. Boicu and Al. Zub and it was a collection of 39 various studies that covered all the issues that A. D. Xenopol was interested in.

Other significant studies were signed by I. Veverca and V. Ioța. The former was published at the beginning of the 1967 volume *A. D. Xenopol. Opere economice* / A. D. Xenopol. Economic works, while the latter was published in the 1968 work titled *Din gândirea economică progresistă românească* / From the Romanian Progressist Economic Thought, coordinated by N. Ivanciu.

After publishing her PhD thesis titled *Gândirea economică a lui A. D. Xenopol* / A. D. Xenopol’s Economic Thought, Florica Ștefănescu wrote the introductory study for the 2004 *A. D. Xenopol. Publicistică economică* / A. D. Xenopol. Economic Articles, which includes a group of thematically selected economic studies written by the Romanian economist.

In 1972 G. Zane published a research paper at the R.S.R. Academy titled *A. D. Xenopol și ideile sale economice* / A. D. Xenopol and His Economic Ideas. Economist Ion Ghica made a review of the most prominent of A. D. Xenopol’s works and published *Studii economice* / Economic Studies in 1879.

3. Research methodology

In writing this paper we had a repertoire of the specialized literature regarding A. D. Xenopol’s economic work as well as numerous bio-bibliographical sources. We used the comparative method to emphasize on the one hand the originality of Xenopol’s views, and on the other hand the filiation of his economic ideas.

4. Findings

4.1. Nation and Nationalism

In the foreword of the 1880 work *Războaiele dintre ruși și turci* / The Wars between the Russian and the Turks, A. D. Xenopol pointed out the importance of the foreign factor in our country: “Ever since the beginning of our country we have been exposed to the actions of the neighbouring countries, much more powerful and much larger than us. Our life has not been ours, but the result of what has been going on between the powers that surrounded us”. (Boicu (coord.), Zub (coord.), 1972, p. 108) Romania’s relation to the European countries is yet one-to-one: “Romanians have especially protected the western civilization against the Turkish conquest, and this is their great significance in the history of Europe”. (Boicu (coord.), Zub (coord.), 1972, p. 109) In the same study A. D. Xenopol shows his patriotism once more and warns about the fact that “Western Europe must not forget that it partly owes its comfort and its cathedrals to the heroic fight fought in the Carpathians and the Danube region over the centuries”. (Boicu (coord.), Zub (coord.), 1972, p. 439)

A. D. Xenopol marked the transition from the Junimist paradigm to the cultural-national one. He used the concept of national culture, which is at the border between psychology (as a constant element) and history (as a dynamic element). The particularities of a people’s national culture are determined by three elements: the natural element (geographical setting, climate), the individual’s physical constitution (race), and the way the “soul” of a people shapes the outside world. (Xenopol, 1967, p. 81)

Critically analyzing Gustave Le Bon’s book *The Psychology of the Masses*, A. D. Xenopol drew a series of conclusions: race represents a constant factor which conditions evolution; the historical character, the effect of repetitive events, is a dynamic factor that conditions different stages of development; moral norms can favour or hinder development; evolution is merely influenced by race, historical character or morals, it is in fact determined by “the movement of the spirit”; race and national character condition one another. (Xenopol, 1999, p. 13-14)

When he referred to nation, the author meant a political community which has its roots in a certain territory: climatic and geographic factors define national physiology, alongside the historic character (based on ethnic mixture) and the geopolitical vector. Situated at the meeting point of civilizations, the Romanian nation is perceived and analyzed by A. D. Xenopol as an ethno-psychological concept, especially since the author was keen on history and the psychology of peoples.

4.2. The Agrarian Issue

Alongside C. Stere, C. A. Rosetti, and Constantin Georgescu, A. D. Xenopol was a principal collaborator to the magazine *Viața românească* / Romanian Life (1906-1916) in which aspects concerning the agrarian issue were debated at large: the unfair distribution of the land, the misery of the peasantry, the deficiencies in activity of large land ownership, the solutions for the agrarian issue (expropriation, land allocation).

Within the history of economics, A. D. Xenopol considered that the analysis of the agrarian issue deserved the central spot. Small ownership, the way it came into being and worked, was the fundamental institution of the Romanian people. Supporter of N. Bălcescu’s ideas, A. D. Xenopol believed that large ownership (which was born through the ruin of the small ownership, which the author perceived as true “economic gangrene that fundamentally vitiated the process) came into being in several ways: loss of the right of property through a relation of social subjection to the nobility, selling the land to avoid going to war on their own expense, selling to the boyars or the monasteries.

The author concluded that “large ownership is the result of progressive and repetitive swallowing of small plots of land owned ab antique by yeomen or resulted from the successive division of properties; this swallowing disguised in lack of coercion and pressure, always hid a forced renouncement”. (Xenopol, p. 473)

In this context, there were two major transformations going on: a large part of the boyars became state officials and got rich, while most of the peasants became serfs and went into serfdom.

4.3. Industrialism and Modernization

A. D. Xenopol also got involved in a major ideological debate in his times, that regarding the causes of the lesser development of the country. The poverty of the people was generated both by the poor remuneration of the brute labor and by the fact that foreigners collected most of the profit from the brute labor of the Romanian people. (Xenopol, 2004, p. 68) Moreover, there was the lack of the spirit of saving (“parents saved and children spent”) and the tendency towards unproductive jobs. (Xenopol, 2004, p. 70-71)

As a result of the one-sided economy, exclusively based on a still backward agriculture, the general level of development was very low in comparison with the foreign countries. The solution was for the state to protect the manufacturing industry which processed domestic raw materials, especially agricultural ones, through tax facilities and government orders. (Xenopol, 2004, p. 115) In his opinion, Romania had neither enough mineral resources nor the appropriate technology to process them, so that those industrial branches had no perspective in our country.

A. D. Xenopol was one of the representatives of the current that favored industrialization, alongside D. P. Marțian, B. P. Hașdeu, M. Kogălniceanu, P. S. Aurelian. In his major economic paper titled *Studii economice* / Economic Studies, published in 1879, Xenopol analyzed the shortcomings (or the “perils” as he called them) that a country based solely on agriculture faced:

1. Its balance of trade will be negative because the country will sell cheap and buy expensive objects that are necessary for living, because of the transport expenses that are deducted from the price of exported goods and are added to the price of the imported manufactured goods;

2. The emergence of office workers due to the diminished social solidarity, as it is always based upon the existence of a variety of jobs. Once again Xenopol proved to be a subtle observer when he stated that the final outcome will be the “falsifying of democracy”;
3. The population decline due to the low living standard and the extension of celibacy (his analysis is highly Malthusian).

The conclusion he reached 16 years later regarding the long term effects of Romania’s focus on agriculture was as it follows: “Amidst European peoples, Romanians will carry out the manual, brute labor which is poorly paid and little sought after, as it can be carried out by anyone; and the reward for this hard intense labor will be the crumbs that fall off the table of the civilized countries”. (Xenopol (2), 1967, p. 247)

He was among the first to state a theory according to which industrialized countries exploited agricultural countries through foreign trade. The correctly identified cause by Xenopol was the difference in productivity between agricultural labor and industrial labor: “The labor of the farmer, who produces raw produces, is brute and can be done by anyone with a little practice and no studying. Industrial labor, being intelligent, requires studying, it is more difficult, more accurate, and therefore better paid. (Xenopol (2), 1967, p. 85)

Xenopol was against free trade which favored industrial powers and works against less developed countries: “England and France’s political economy do not deserve the name of science; it is a theory which serves a practice, and since practice is profitable in those countries, the theory must come and support, based on some so-called principles, the purely material interest of those countries”. (Xenopol (2), 1967, p. 95)

A. D. Xenopol believed that the government should not adopt a protectionist customs policy in the Listian sense of the term (in order not to defy well developed countries), but rather a prudent policy to encourage the establishment of the domestic industrial market. In this respect, he put forward three measures:

- Reforming the educational system;
- Granting state loans to encourage the development of industrial businesses;
- Leasing certain industrial activities to Romanian entrepreneurs.

Referring to this view of Xenopol’s, Ion Ghica wrote at the end of his article dedicated to the publishing of the *Economic Studies*: “Let anyone be assured that it is impossible for a people that labors, produces and saves not to prosper, be it subjected to free trade, be it subjected to protectionism”. (Ghica, 1937, p. 140)

5. Conclusions

A. D. Xenopol excelled in all three directions of his research: historiography, philosophy of history, and economics. Deeply concerned with the modernization of his country, Xenopol tried to identify the particular features of the Romanian evolutionary process in order to point out the true sense of development. Be it that it “imported” the influence of the more advanced civilizations, be it that it developed its own civilization, Romania had to develop itself starting from its own needs. The economic factor insured the material resources for development and modernization. Solving the agrarian issue came first and foremost. Yet, the decisive role came to the education of the people.

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Constantin Dobrogeanu-Gherea’s Economic Writings – Between Tradition and Modernity

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Abstract

Constantin Dobrogeanu-Gherea (1855-1920) was an economist, a philosopher, a sociologist and a literary critic who had a major contribution to the spread of Marxism in Romania and who studied the relations in our country through this current of thought. Amongst his most relevant preoccupations was the study of the agrarian issue, which led him to formulate the theory of the neo-serfdom. He painted a very realistic picture of the European economic world of his time and worked out the thesis of development from forms to the roots in the less developed countries. The purpose of this paper is to emphasize the specific features of Gherea’s economic thinking and the historical context of his main ideas.

Key words: socialism, nationalism, neo-serfdom, development theory

J.E.L. classification: B31

1. Introduction

Constantin Dobrogeanu-Gherea was born in Slavianka (Ekaterinoslav region in Tsarist Russia). Some biographic sources indicate the fact that his name was Solomon Katz, which points out to his Jewish origins. He was a student in Harkov, but eventually he did not graduate any systematic training in any field of study. At the age of 20 he came into conflict with the Tsarist authorities and found refuge in Iași, in Romania. There he contacted the representatives of the local revolutionary social movement (Eugen Lupu, Nicolae Codreanu, Gh. Marinescu, C. Stăuceanu). During the Russo-Turkish War he was arrested and taken back to Russia, where he was imprisoned in Mezen, in the Arhanghelsk region. After escaping from there, he stayed for a period of time in Paris before coming back to Romania in 1879.

He carried out an intensive socialist revolutionary activity, but, in order to support himself, he received a concession from the Romanian government to administer the restaurant in Ploiești railway station, and Titu Maiorescu did not miss on the opportunity to call him a “saloon keeper”/ *birtaş*. Meanwhile, he published a lot and helped edit some magazines such as *Contemporanul* / The Contemporary, *Revista socială* / The Social Magazine) and *Critica socială* / The Social Critique.

At the end of the 19th century and at the beginning of the 20th century, Constantin Dobrogeanu-Gherea was considered to be the most prominent personality of the socio-political thinking and social ideological activity in Romania. He initially had crossed paths with another current of thought, revolutionary populism, and had gotten himself involved into it in his early youth.

After over four decades of activity, Gherea left behind a collection of works that is impressive not only through its extent but also through its contents. Constantin Dobrogeanu-Gherea was a dominant personality of the Romanian socialism who clashed with representatives of the main currents of thought of those times: conservatism, junimism, liberalism, semanatorism, and poporanism. The Romanian socialist thinker permanently kept in touch with important representatives of the international socialist movement: F. Engels (whom he personally met in 1893), G.V. Plehanov, V. Zasulici, K. Kautsky and C. Racovski.

Nowadays there are two major directions in terms of the options Romania has got to evolve: one towards its communist and state-controlled past, under the Russian influence, and the other towards a European economic model and towards the democratization of society. Similarly, at the end of the 19th century and the beginning of the 20th, there was an ideological and doctrinaire polemic between Constantin Dobrogeanu-Gherea and Titu Maiorescu, which was the expression of the bipolarization of the Romanian elites of those times: one towards the past, towards the ideal of the agrarian and the patriarchal, which opposed the progressist bourgeoisie, and one towards the future, towards the economic and political modernization of the country through European integration.

Constantin Dobrogeanu-Gherea tried to apply the Marxist analysis to the realities in Romania and wrote a series of studies.

Karl Marx și economiștii noștrii (1884) (Karl Marx and Our Economists) is a study in which he presented the Marxist economic theory and examined the main political economy concepts (value, labor, capital, rent, profit, etc) from a Marxist perspective. Yet, he did not neglect presenting the ideas of the representatives of classical economic liberalism (D. Ricardo, J.-B. Say, F. Bastiat).

Ce vor socialiștii români? (1885-1889) (What Do Romanian Socialists Want?) is yet another study of his, in which he presented the principles of scientific socialism, but also emphasized the need for the proletariat to fulfill certain practical duties, such as class conflict or struggle.

In his study titled *Robia și socialismul* (1884-1886) (Servitude and Socialism) he looked into the concept of freedom, having H. Spencer's *De la libertate la robie* as a starting point.

Anarhia cugetării (1892) (The Anarchy of Thinking) is an article that the author considered as a “monography of anarchism” in which he rebutted this current of thought that he labeled as “metaphysic simplism” (Dobrogeanu-Gherea, 1976, p. 452) as well as individualism taken to extremes and the utopist idea of “absolute freedom”.

Gherea carried on his antithetic analysis of anarchism in his 1901 study *Deosebirea dintre anarchism și socialism* (The Difference between Anarchism and Socialism) and showed that anarchism in those days represented the individual's interests against society. He placed the individual higher than society, deified him and by doing so annihilated and dissolved society itself (Dobrogeanu-Gherea, 1977, p. 344).

Concepția materialistă a istoriei (1892) (The Materialist View on History) was an article that probably best illustrates the essence of Gherea's Marxism in that the author clearly stated that the decisive factor in the historical evolution of mankind were the natural resources, the means of production and the distribution of the goods necessary for living. Other factors such as intellect, urges, passions, religion, morals, in his opinion, they all have their importance, but are not decisive.

2. Theoretical background

Constantin-Dobrogeanu-Gherea was both a sociologist and a literary critic. As such he published extensively and his works have been analyzed and commented upon in numerous specialized papers. Probably the most significant of them are the two volumes by Zigu Ornea, *Viața lui C. Dobrogeanu-Gherea* / The Life of C. Dobrogeanu-Gherea (1982) and *Opera lui C. Dobrogeanu-Gherea* / The Work of C. Dobrogeanu-Gherea (1983). Zigu Ornea also published the article *Opera sociologică a lui Gherea – reevaluări necesare* / Gherea's Sociological Work – Necessary Re-evaluations in the volume *Studii și cercetări* / Studies and Research, in 1972.

Another well researched paper is Damian Hurezeanu's *Constantin Dobrogeanu-Gherea* published in 1973, which presents the main characteristics of the economic, social and political thought of the Romanian sociologist's leader. The historian D. Hurezeanu also wrote the introductory study for the 1968 volume titled *C. Dobrogeanu-Gherea. Scrieri social politice* / C. Dobrogeanu-Gherea. Social and Political Writings.

A quite literary bibliographical brochure was written in 1947 by Felix Aderca, titled *C. Dobrogeanu-Gherea. Viața și opera* / C. Dobrogeanu-Gherea. Life and Work.

Cristian Preda was yet another author to thoroughly look into Gherea's writings and in 2002 he wrote the volume *Staulul și sirena. Dilemele unui marxist român* / The Stable and the Siren. Dilemmas of a Romanian Marxist. In 2003 he wrote the chapter *Constantin Dobrogeanu-Gherea* in the paper *Contribuții la istoria intelectuală a politicii românești* / Contributions to the Intellectual History of the Romanian Politics. This is a landmark paper that analyzes two other great classic

thinkers in the Romanian politics, Ștefan Zeletin and C. Rădulesu-Motru.

Marcel Crihană wrote a PhD thesis titled *Opera lui C. Dobrogeanu-Gherea* in 2003 and in it he emphasized the literary side of Gherea's writings.

3. Research methodology

The methodology of our research paper was predominantly analytical and it mainly implied a documenting activity during which primary and secondary sources such as encyclopedias, economic, historic and philosophical dictionaries have been thoroughly explored.

4. Findings

4.1. Evolutionist sociology of development and orbiting theory

According to some authors from a comparative historical perspective, historical processes unfold neither in similar economic environment nor in the same historical moment (Madgearu, 1999, p. 99). The moment the bourgeois revolution started in Romania was the beginning of the 19th century, after the industrial revolution in England, when there had appeared a supplementary need for raw materials and markets. Once the Peace Treaty of Adrianopol was signed in 1829 and the commercial routes were opened, the demand for Romanian grain increased and so did the price.

As a consequence, landowners tried to restrain the rights of the peasants to use the land. Through the *Regulamentul organic* / Organic Regulations issued in 1831-1832, the right to use the land was set to be two thirds of the surface of the entire agricultural land. For over two decades, between 1830 and 1854, western capitalism created its own private property institutions that were necessary for its development (transport, credit, a new law order).

The 1866 *Tocmeli agricole* / Agricultural Agreements *manu militari* (through the power of the military) forced the peasants to work on the landowner's land thus establishing a *neo-serfdom regime*, according to Gherea's terminology. Madgearu called it *neo-feudal*.

The English, French, Austrian and German manufactured goods that invaded the Romanian markets destroyed the local classical industry. In the neo-serfdom stage, landowners constantly tried and succeeded in increasing their profits at the expense of the peasants who got poorer and poorer, especially since they kept on cultivating the same crops, since the population was growing and the properties were divided through inheritance. The normal stage evolution of capital (commercial capital, industrial capital, financial capital) was affected by the persistence of the feudal relations and the increasing influence of the guilds. Commercial capital was prevented from turning into industrial capital. It was used to commercialize the household industry and town crafts and therefore favored the emergence of manufactures.

In well developed countries, given the bourgeois revolution carried out under the conditions of an "enlightened absolutism", the development of the economic life generated a series of revolutionary social transformations that progressively wore down the very juridical and social basis of feudalism, which led to the establishment of a state apparatus that ensured the conditions for the development of capitalism.

Gherea noticed that when the bourgeois juridical institutions were introduced in Romania, there were no social structures within the economic life to allow the disappearance of feudalism. The result was the consolidation of a political oligarchy, a "bureaucratly parasite" class, as he called it. This approach was similar up to a certain point to that of the Junimists.

Gherea carried on Titu Maiorescu's theory of *forms without roots* which condemned the "import" of western revolutionary ideas which did not fit local realities. But in a very different way: he did not place the totally inappropriate application of concept at the basis of forms (neo-serfdom), as the 1848 revolutionaries had done, but rather the effect of the development laws of the capitalist system. Thus, Romania was drawn to the economic orbit of western European capitalist markets as part of the emergence process of the world capitalist market.

In his 1908 article titled *Post-Scriptum sau Cuvinte uitate* / Post-Scriptum or Forgotten Words, Dobrogeanu-Gherea pointed out the fact that Romania was a "socio-national organism" in close relation with other countries which decisively determined its evolution in the context of a certain

historical capitalist epoch. Moving on the orbit of well developed countries, less developed ones developed due to a fundamental determinism: “Given this choice, they are forced to do in years what the others, which are so far ahead, did in centuries”. (Dobrogeanu-Gherea, 1977, p. 481)

Well developed capitalist countries drew on their orbit less developed countries that would start a slower capitalist development, waiting for the moment when “capitalist countries in the west become socialist and the countries on their orbit move to socialism”. (Stahl, 2001, p. 200). Constantin Titel Petrescu was another author to quote Gherea, who claimed that once the well developed capitalist countries become socialist societies themselves, then the less developed semi-capitalist countries will be influenced by them and will adopt the socialist organization for their societies. (Petrescu, 1945, p. 29)

Gherea proved clairvoyant when he correctly interpreted the course of history. He pleaded for the economic modernization of his adoptive country and expressed that a less developed country such as Romania could shorten its path towards socialism only by getting on the orbit of the developed European capitalism. He did not agree with those who “isolated it from other countries and forgot the fact that, even if our country was a socio-national organism, it was part of a superior social organism, it was closely connected with more developed countries in terms of social life and conditions, and this mostly determined the conditions for national life” (Dobrogeanu-Gherea, 1977, p. 482)

In his analysis of the article titles *Ce vor socialiștii români* / What Romanian Socialists Want, Ilie Bădescu claimed that Gherea was the first Romanian to make the difference between the concepts of stage of evolution (going from one stage to another) and historical stage (going from one historical stage to another as a process). (Bădescu, 1996, p. 104)

4.2. The Agrarian Issue and Neo-Serfdom

In their debates on the agrarian issue, the socialists offered essential landmarks and solutions. Constantin Dobrogeanu-Gherea must have been aware that it was not the Marxist doctrine that appealed to the peasants but rather a solution to the agrarian issue. Therefore, referring to the socialist current, he wrote that “in its literature, this current showed more understanding of our social and agrarian issues than all the others currents of thought put together.” (Dobrogeanu-Gherea, 1910, p. 6)

According to Constantin Dobrogeanu-Gherea, the development of capitalism in Romania had two particular features: firstly, it had as its cause the developed countries’ evolution towards capitalism; secondly, the order of actions to lead to development was reverse as compared to the west, beginning by introducing the liberal institutions that were therefore meant to consequently create the appropriate material resources. From an economic and sociological perspective, Dobrogeanu-Gherea’s central concern was to analyze the agrarian issue, especially between 1864 and 1920. His absolute conclusion was that once our country started orbiting capitalism, the situation of the peasantry worsened considerably.

In his study titled *Socialismul în România* / Socialism in Romania (the second part of the study *Ce vor socialiștii români. Expunerea socialismului științific și Programul socialist* / What Romanian Socialists Want. Presentation of the Scientific Socialism and the Socialist Agenda) Gherea claimed that our country was a poorly developed capitalist country, a mainly agricultural, with semi-feudal agrarian relations one. Even though it had not gone through all the middle stages of capitalism that Europe had gone through, Romania was a “country with capitalist development, a capitalist society still not developed, with certain medieval remains” in which the large industry (including the mining industry), the middle industry as well as the household industry “of the semi-proletarians who worked for the shops on the market” were dominated by capital. (Dobrogeanu-Gherea, 1976, p. 50-51)

As far as the reasons for this lesser development were concerned, in comes the opposition between Junimists (supporters of the *forms without roots* theory) and socialists. While the former insisted that the lesser development of the country could be explained by the unjustifiable rush to introduce western institutions in our country, the latter, especially their most important representative, Constantin Dobrogeanu-Gherea, considered that the poor development was due to the existent economic organization, especially the nature of the production relations, that generated

negative moral, cultural, juridical and political consequences. (Dobrogeanu-Gherea, 1910, p. 127)

For instance, in agriculture, the existing situation was justified in a disguised manner either by the moral state of the peasant (illustrated by a mentality centered on the saying *It is God's will!*, which can be generalized and brought to the present as an equally fatalist but more atheist saying *That's it!*) or by the struggle for profits among landowners who increased rent and landholders who were greedy and made agreements harsher. (Dobrogeanu-Gherea, 1910, p. 237) Constantin Dobrogeanu-Gherea believed that it was not the peasant's moral and cultural inferiority that negatively impacted social relation, but quite the opposite: the existing regime generated the peasant's economic and moral impoverishment. (Dobrogeanu-Gherea, 1910, p. 220)

It was possible to reform the agrarian regime in Romania in two ways. Firstly, through freeing the peasants without them being given the right of property. As a factor of production, land would have become capital, and the former corvée peasants would become employees. Lenin called this the “Prussian way”. Secondly, the peasants would become owners and the country would develop as a rural democracy based upon the small and medium peasant property, the “American way” as Lenin called it. Romania adopted a third way, a *sui generis* one, which generated a major contradiction between the country's economic resources and its political and juridical *super-structure*. It meant giving the peasant small pieces of land and condemning most of them to poverty and exploitation, in the Marxist sense of the word.

Constantin Dobrogeanu-Gherea noticed that the effect of the *Agrarian Reform* of 1864 - a year he said carried the significance of the terrible year of 1907 (Dobrogeanu-Gherea, 1910, p. 57) - mastered mainly by Alexandru Ioan Cuza and Mihail Kogălniceanu, was an intensification in the exploitation of the peasants since they all received small plots of land that were insufficient for a decent survival: “The hidden but quite clear purpose of this first allotment was in fact to make it impossible for the small landowners to live off their lands and one way or another to be forced to be dependent on and work for the large landowners”. (Dobrogeanu-Gherea, 1910, p. 54-55) The reason for the misery of the peasantry was its double exploitation, by the landowners and by the capitalist landholders.

K. Marx analyzed the provisions of the *Regulamentul organic* / Organic Regulations and discovered that the peasant owed the landowner 42 labor days per year plus 14 days of so-called serfdom (services owed to the landowner for extraordinary needs of production). For a total of 140 labor days, Marx calculated a 66.66% value added ratio (number of labor days for the owner divided by necessary labor days) (Marx, 1957, p. 261). In his theoretical considerations on overtime work, Marx showed the similarity between the situation of a slave owner and that of a Wallachian boyar.

The agrarian issue had become the main topic for political and ideological debates and had been extensively written upon both for propaganda and scientific purposes. In this context, Constantin Dobrogeanu-Gherea published *Neoiobagia. Studiu economic-sociologic al problemei noastre agrare* / Neo-Serfdom. Economic and Sociological Study of our Agrarian Problem in 1910. It was one of the most representative works of the Romanian socialist thinking. It is highly ideological and polemical and focused on analyzing the state of affairs and on coming up with a solution to transform Romania into an economically developed country, with a civilization keyed on western European patterns.

Gherea identified the main problem to be the contradiction (“the profound disagreement, the abyss”) between the real and the formal state of affairs. (Dobrogeanu-Gherea, 1910, p. 131). The result was a situation that was specific to Romania – we might even speak of an **economic endemism** – that Constantin Dobrogeanu-Gherea called *neoiobagie* / neo-serfdom, meant to indicate a mixture of serfdom and a corpus of capitalist elements (having a definite anti-feudal character) and synthetically determined by four main features: (Dobrogeanu-Gherea, 1910, p. 369-370)

1. The predominance of certain feudal agrarian relations;
2. The existence of a constitutional state that apparently was liberal and bourgeois but that let the peasant be at the mercy of the landowner/landholder;
3. The perpetuity of the peasant's lands;
4. The land shortage for the peasant little owner who attempted to provide for his family.

Neo-serfdom had two dimensions: a socio-economic one (as a hybrid between remnant feudalism and emergent capitalism) and a socio-political one (which minimized the rights of the peasants).

After 1864, as the incipient capitalist relations started to appear, Romania had a “sick” social organism:

1. The state organization was “antagonist and contradictory”, with institutions that had transformed into “make-believe and lie”;
2. The political organization was “full of feudal remains which refused to die and based upon modern capitalism which could not live”;
3. The economic organization was precarious and dependent on the outside and generated a national product that was insufficient and ill-distributed. (Dobrogeanu-Gherea, 1910, p. 475-6)

Constantin Dobrogeanu-Gherea constantly tried to invalidate the main thesis of *poporanism* (a Romanian version of nationalism and populism), according to which socialism was an *exotic plant* for Romania. Confident in the future shift towards socialism, he tried to prove the falsity of the poporanist assertion and claimed that socialism would eventually develop in our country, but only after an intense and sustained industrialization.

Even though poporanists maintained that Romania (because it had neither a well-developed industry nor a proletarian class) did not have the right “climate” for the development of such a plant as socialism, Gherea showed that the development of industry was a factor for progress: “social-democracy tends toward the industrialization of the country, since an industrial country generates human relations superior to less developed countries, such as ourselves; within the industrial society there are created better living standards for the workers, better material, moral, intellectual conditions and better conditions to fight for work emancipation”. (Dobrogeanu-Gherea, 1977, p. 492) Industrial development is important because it insures the increase of agricultural productivity as well as extension of the possibilities to enhance cultural and social intellectual standards. Refuting the poporanists who believed that the peasantry was the main vector for the development of the country and that Romania was and had to remain a *peasant country*, a solely agricultural country, Gherea stated that: “Nothing could be more wrong. If this is the future of the country, the country has no future. A solely agricultural country is a solely poor country, both economically and culturally behind the times”. (Dobrogeanu-Gherea, 1910, p. 478)

After arguing how necessary the development of industry was for agriculture and for the integration of the national economy, Gherea showed that it was necessary for the great-scale modern industry to develop, not the household industry, as poporanists claimed at that time. The consolidation of the domestic market was looked upon as a decisive factor for economic development, provided that the feudal remains be eliminated and the state apparatus be rid of bureaucracy. We cannot help but notice that his plea for industrialization had a solid ideological basis: even though he claimed that this was the only way to develop the country’s economy, the upsurge of industry would have led to having a well-established proletariat which would have been the prerequisite for the development of socialism in Romania: “Less developed societies which are solely agricultural, with their poor production, with their underdeveloped cities, their small villages, face not only material but also cultural and intellectual misery”. (Dobrogeanu-Gherea, 1910, p. 483)

For Gherea, the development of the industry was a *national ideal*. The closing paragraph of his work *Neoiobagia* / Neo-Serfdom is a sample of his unique literary talents as well as his acute sense of economic foresight: “Where life and fight are alive, where the wail of the siren calls the workers to work, where passions burst in gigantic cities, where ideas clash, where the huge fight between labor and capital boils, only there can our ideal and our country’s ideal be”. (Dobrogeanu-Gherea, 1910, p. 494)

5. Conclusions

Given the times, Constantin Dobrogeanu-Gherea believed that once drawn to the orbit of capitalist well developed countries, less developed countries would go from forms to the roots: they would initially adopt or create the society’s political and juridical forms and the social and

economic roots of those forms would appear later on. In the second half of the 19th century and the beginning of the 20th century the juridical and political forms existed in Romania ahead of the “roots” (the type of existing agrarian relations). His interpretation of the social phenomena in Romania from a historical perspective played an essential role in establishing the Romanian scientific sociology.

Dobrogeanu-Gherea’s economic thinking had two particular features. Firstly, his ideas had affinities with liberalism. In fact, it so happened that the so-called socialist “generous young men” joined the liberals to help create capitalism in the name of a socialist future, even though their deed had a highly political reason. On this topic Caragiale wrote to Gherea telling him that even though he “made” many socialists in Romania, he could not keep any of them (Caragiale, 1999, p. 471). Secondly, his ideas had affinities with conservatism and revolutionary populism. Gherea accepted going from forms to roots as a natural and necessary process. As a socialist, Gherea believed in the idea of historical process seen as passing from one historical epoch to another through revolution, while conservatives believed in evolution seen as passing from one stage to another.

The West first had technological and economic development and then adapted its social, political and cultural structures, while the East often first imported ideology. In Marxist terms, in highly developed countries material resources determined the *super-structure*, while in less developed countries it is the other way around, social roots came after social forms.

V. Madgearu considered Gherea the brightest representative of the socio-democrat current (Madgearu, 1999, p. 99) who imbibed the ideals of socialism, synthetically described as “everyone’s cooperation for everyone’s profit” (Petrescu, 1945, p. 5).

Constantin Dobrogeanu-Gherea fought for a fair and more humane cohabitation amongst people through solidarity and human fellowship and thus wrote an essential chapter in the critical thinking in Romania. He looked into the features and the characteristic processes of the Romanian economic, social and political life from a predominantly Marxist perspective and thus proved himself to be one of the greatest personalities of our culture.

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Financial Ethics in the Usage of Public Funds. Evidence from the Romanian Higher Education

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Abstract

There is always a battle of principles when discussing public sector funding, with a special focus on education. This particular field calls for attention as Governments tend to consider it strategic in their planning, however not always sufficiently funded, nor sufficiently scrutinized despite numerous control mechanisms. While this study focuses on the Romanian context, findings may indicate similar practices in other national systems. An investigation of the unusually high vacancy rates in Higher Education, combined with the cost per hour for teaching activities related to these vacancies reveals a combination of mixed competencies, at a diluted staffing cost, which produces differential outcomes in regard to quality standards. The teaching act suffers and negative consequences can already be foreseen. A replicated pattern, found in all census data provides evidence that practice is widely spread, raising ethical issues. After depicting the findings, the conclusion speculates on the broader outcomes.

Key words: higher education, ethics, staffing cost

J.E.L. classification: I23, I28, J21, H52

1. Introduction

Romania has been discussing the underfunding of national education for more than two decades now. Annually, after the approval of the budget of the Ministry of Education, it is emphasized that the allocation has a significant percentage gap compared to other EU countries. Those involved in the debates represent all categories of experts, however the university environment experts are deemed more significant and visible. Noticeably, their discussion is focused on funding university activities, emphasizing the existence of a shortage of financial resources (Tilak, 2006; Jongbloed, 2008) with a major impact in generating the academics' demotivation.

In this general macroeconomic context marked by an approach with a strong political overtone, an even extremely superficial documentation generates a series of question marks related to the real situation. On the one hand, it can be seen that there is a positive trend in the teachers' income, especially academics. Given this trend, as well as other material signs regarding universities' activity- in contradiction with the claimed shortage, a research of the financial mechanisms of universities appears as a logical approach to explain those signs. On the other hand, a series of dilemmas are generated by the lack of studies dedicated to these mechanisms and, in particular, to the ethical issues that run alongside the financial management of public institutions. We must not lose sight of Friedmann's (1970) idea on the responsibility of the for-profit organization, the idea that it is possible to alter the behaviour of some public institutions, such as state universities. Even if the profit is not explicitly targeted, the issue of significant budget surpluses accumulated by the universities in the conditions of the claimed shortage remains to be discussed, in contradiction, however, with the positive signals of financial comfort for the academic staff in tenured positions.

Focusing our interest on the problem of public funding, with an emphasis on the universities' financial management and its ethical implications, we find at first glance that the activity of these institutions is carried out under many regulations, including ethical ones. All universities have codes of academic ethics, although the latter do not have an explicit impact on operational financial

management, except for aspects of the use of so-called European funds, i.e. projects based on European Union (EU) funds.

The overlap of interest concerning the ethics of financial management over the one regarding the observance of the traditional standing in society and of the mission of the public universities generates the direction of the present study.

2. Current theoretical background

Given the general concern to ensure a financial balance that allows for the universities to function, in case of insufficient income the generic solution is to reduce costs. O'Neil (2016), in his book "Weapons of Math Destruction", states, referring to funding from US universities: "An approach that is already gaining popularity is to reduce the number of tenured teachers by replacing [...] expensive professors, as they retire, with cheaper instructors or associate professors".

In terms of maximizing income, universities tend to implement specializations whose graduates are better paid in the labour market, which justifies charging them higher tuition fees. The consequence is that from the point of view of the specialization portfolio and subsequent curricula, and in the conditions of the so-called university autonomy - which translates in them selecting this portfolio - the Science, technology, engineering, and mathematics (STEM) specializations are preferred instead of humanist ones (O'Neil, 2016; Segal, 2011; Bybee, 2013).

This predilection seems to be in contradiction with the explosive development of private universities in Romania focused precisely on humanities specializations, because they responded to a high demand after 1990 and involved the lowest investment and operational cost levels (i.e. human resource costs and material costs). The costs' reduction sources are not numerous: on the material apportionment there is not much management can do, while, on the Human Resources (HR) side more opportunities arise. And even there, savings cannot theoretically come from the "primary funding" source, as the national PayScale for the public institutions staff, including academic personnel is an immutable framework that must be observed by law.

Therefore, saving was and still is based precisely on the usage of alternate teaching staff, commonly known as "associate" teachers.

In comparison, studies of the funding of universities in the USA and UK show that their managers are concerned with creating "surpluses". Their role is explained as follows: "Without surpluses, universities would be unable to deliver the scale of investment required to meet student demands, remain internationally competitive and continue to be financially sustainable" (Universities UK, 2016). In fact, surpluses are the difference between current income and expenditure on education and research activities. It should also be noted that "while less than 20% of income for teaching comes in the form of direct government grants, 66% of income for research comes from government. In total, only around 25% of the income that universities receive comes directly from government sources" (Universities UK, 2016). In association with these figures related to government funding, it is found that over 50% of education revenues come from fees paid by students; studies on this source aim at attracting students through sophisticated marketing programs focused on university rankings (QS World University Rankings 2022 Report).

In the case of public university systems such as USA and UK, the ethics issues of tuition fees-based funding have a main root in the way those programs are managed and only secondarily in the way management is done with financial implications on the faculty. However, it remains of utmost interest that the management, which implicitly aims to reduce costs with the human resource (mainly teachers), involves ethical issues related to the evaluation of the activity of their staff (Drumea, 2013; Anton, 2009; Bratucu *et al.*, 2017.). In addition, the practice of using doctoral students in the teaching process is another source of savings.

Using these western theoretical landmarks to guide the research of the theoretical elements of the Romanian context, we can immediately observe that the funding of public universities is made in a proportion of at least 80% of governmental sources, dedicated to education and calculated yearly as part of the national budget allocations (Bacanu, 2014; Orellana, Szeles, and Barrera, 2016). Revenues from student fees represent a fraction of the remaining 20%. As the portion of the budget dedicated to research through projects is minor, below 10%, and part of the research is implicitly funded by the education allotments, the solution of reducing costs with staff carrying out educational activities

seems to be lifesaving. The funding mechanisms are regulated by a series of laws, among which L1/2011 (Education Law) and L53 / 2003 (Labour Code) are the most significant.

L1/2011 stipulates that universities can operate with the long-term maintenance, in fact with a permanent maintenance of a significant vacancy rate. Although the teaching process associated with these positions has the same regime of realization and delivery to students as that related to the posts occupied by the incumbents, the related remuneration represents only a fraction of that for a tenured teacher. If for the positions of incumbents there is a national standardization set by L153/2017 (the law on the remuneration of staff paid from public funds, called the Law on Unitary Remuneration), for the vacancies' situation changes radically. Each university can decide its own hourly rate for the teaching process related to vacancies.

Obviously, both the so-called autonomy and its mode of operation in practice, as well as the transition from a generic decision-maker of the “university” type, to a concrete one of the “board of directors”, “senate” or “rector” type - will inevitably generate dilemmas, at least, of an ethical nature. It is more likely to generate major ethical issues at the institutional and national levels.

In this specific context of the Higher Education in Romania, the western practice of using doctoral students to reduce the costs of the teaching process immediately raises problems related to the quality management of the educational act, given that the *de facto* lawful standard requires the use of staff (already) holding such scientific title.

3. Research methodology

Discussing the financial management of a university with explicit benchmark to quality standards and ethical norms in the field is based on a series of official documents (e.g. Charter, various Reports, rules, regulations) of the respective organization. Financial management activities in the universities are carried out in accordance with legal regulations valid at national level. Also, the legal provisions are complemented by internal provisions, which, although they are created under the umbrella of the so-called university autonomy, must respect both the existing legal framework and the specific normative. For our topic, the reference is given by the regulations of the system of accreditation for the Romanian universities (ARACIS).

According to L1/2011, the rector of a university must produce an annual report on the state of the organization. The form of this report is compulsory by law. It must contain data on the status and use of human resources. From this section we have conducted our data collection on the balance between the positions filled by competition and the vacancies, which are filled by external individuals. The data on the use of funds for salaries are collected from the financial section of the same report and the annual financial result can be ascertained. Following a trivial calculation, the ratio between the total salaries paid to external incumbents (associated staff) and the ones destined to the holders staff that is used for vacancies can be obtained. Similarly, the nature of the annual and then the overall financial result can be seen.

A first assessment that can be related to the usual ethical norms is made by assessing the transparency of the rector's report and the way in which the data we associate with this study are exposed. The respective assessment is corroborated with the one regarding the transparency regarding the salaries according to L153 / 2017.

In the continuation of the research scheme, an identification of the legal provisions that have an impact on the subject must be made. In L1 / 2011 there are provisions regarding the remuneration of the staff filling the vacancies. These provisions must be logically correlated both with those regarding the remuneration of the holders of the same law, and with the general provisions regarding the remuneration of L 153/2017 and L52 / 2003. Beyond these aspects, it is necessary to report the findings to the ethical and quality standards (Quinn *et al.*, 2009) of the field.

4. Data collection, results, and discussion

A review of public universities in Romania shows a census of 46 organizations. In reference to the portfolio of specializations, and for the purpose of the analysis, they can be divided into the following 6 groups:

- 16 comprehensive universities,
- 6 "classic" universities,
- 6 polytechnic universities,
- 4 agronomic universities,
- 5 medical universities *and*
- 9 arts universities.

Given the small size of the staff of art universities compared to other universities, the study excludes them and only focuses on the rest of 37 universities. The study explores data from all the 37 universities, without sampling.

The process of searching and reading the rectors' reports revealed that in the list of 37 universities there are only a few problematic cases, where the lack of up-to-date data (e.g. Polytechnic Bucharest and SNSPA) or their exaggerated schematization (Bucharest Construction University) does not offer a sufficient image for the present study. On the contrary, the advanced transparency practiced among medical universities is noteworthy.

Although it does not have a direct impact on the research in the current study, the review of the way in which the 37 universities complies with the provisions of Law no.153/2017, regarding PayScale for the personnel in the public sector, shows that the number of those who show a low transparency and prove ingenuity in circumventing the law is much higher than in the previous case, forming a majority. Only a few universities, especially medical ones, comply with transparency requirements. For all non-compliant universities, the fact that such data is available on the intranet of that organization can be accepted, thus minimizing the ethical significance of non-compliance.

The focus of the study on the situation of vacancies provides a quasi-complete picture of the situation to date (academic year 2020-2021). Without oversimplification, but only by averaging the proportion of vacancies, we emphasize that the vacancies rate in the Romanian academia ranges between 30% and 50%. This is a significant proportion, and difficult to explain or to justify by lack of funding (not at all the case if we look at the budgetary allocations for Education sector in the last 5 years). Some universities exceed 50% vacancy rate, if we take as reference data from 2019. This being stated, we cannot ignore the possible effects on the overall quality of the teaching process given the undersupply with qualified personnel in the Romanian academia.

The merit rankings which induce differences in the personnel PayScale, based on merits and special achievements on a 4 years period deserve a special line of discussion. As rectors increase the number of staffing tables positions in the cyclic years in which merit rankings are awarded, the number of vacancies is expected to exceed more frequently a 50% barrier for those years in particular. In the comprehensive universities, 10 of the 16 entities have over 40% of the positions in the vacant category. In the "classic" universities group, all 6 universities are close of the 50% threshold by 3-4%, and 2 universities even cross it over. Medical universities are in the range of 30-40%, with values closer to 30%, averring the most fitted occupancy rate among the assessed organizations.

Based on this data, it can be immediately assessed that there are major issues related to compliance with the claimed quality standards of the educational process. Romanian academia holds a position in the international rankings based, among other criteria, on the business continuity and quality standards' endurance, while a brief analysis of the teaching staff structure (in terms of incumbents-temporary teaching staff ratio) show less than auspicious terms. Why is this a possibly significant issue? If we start from the presumption that the legal provision on a holder's possibility to undertake an additional maximum number of teaching hours is equivalent to one norm, it can be inferred that a significant number of positions are covered, inevitably, by external staff. For these, there is no quality verification and validation procedure at the national level. The problem of covering teaching activities with appointees that have not passed the same quality standard checks as the incumbents is of obvious concern; additionally, issues like discrimination, lack of fair and equal admissibility filters, and lack of equal expectations between temporary replacements and incumbents - are to be pointed out. Also, from the point of view of the paying students (but also from the scholarship ones – through indirect funding via supporting parents' taxation), irregularities on the teaching capacities of their educators are to be at least disclosed, if not remediated.

The negative consequence of the vacancy situation is accentuated by the correlation with the ratio between salary expenses for incumbents and those for vacancies. As the latter represent only about 20% of the other (or less even in a number of the assessed universities), it can be reasoned, in conjunction with the vacancies' rate, that the unit price per teaching hour for an activity related to a vacancy position represents only 25% of that of a holder.

From the consultation of the legislation on the cost/hour in question, it can be seen that – legally – this is to be set by each university. Moreover, in the sense of constructing a dilemmatic ethical context of this hourly cost, L1/2011 stipulates that it is established by the board of directors of each university. Knowing the composition and the way of selection of the staff for this council (all appointees being in a direct dependent relationship with the appointor), it can be presumed that the respective decision is ultimately taken by the latter, the rector. Even if the decision is based on data provided by the financial department, its subjective and discretionary nature cannot be ruled out.

On the other hand, the budgeting of the activities of a Romanian university is based on the number of students, not on the number of positions needed to support the activity related to that number. Under these conditions, the balance of income and expenditure that is formed by utilizing as human resource for teaching activities holders for 50% of the positions only, while for the other 50% the cost per hour is 4 times less, will leave at the rector's disposal a supplement of public resources, that become thus over-allotted. This is without counting the extrabudgetary resources that come rounding this budgetary snowball.

Finally, and in order to close the research circle of the topic and to properly assess the principles of the managerial ethics, it remains to study the financial result of the universities, included in the same report of the rector. Surprisingly, but in line with the above observations on the differentiated PayScale for incumbents vs. temporary staff, we find that most universities have annual budget surpluses. These are substantial, and as we observe that the current legislation allows their retention by universities and that these surpluses are not taxed as profits, obviously the accumulated "reserves" are more significant each year.

The existence of these surpluses, correlated with the way the salaries for vacant positions are set up via pay-per-hour tool, thus become a consistent and disturbing ethics issue. It is clear that the source of these surpluses is the low cost for the hourly teaching activities, provided by external temporary staff, under existing vacancies.

5. Conclusions

The corroborated existence of anomalies in the public funding policies and the financial management of the universities creates the conditions for the violation of the quality standards in the educational process. These breaches generate a series of specific ethical issues, subsumed to the main one, which consists in accepting an inferior quality engendered by the way human resources are managed. Thus, maintaining a quasi-permanent segment of an oversized vacancy segment, even without discussing the financial implications, is dilemmatic.

An even more important ethics issue is the human resources management model guided by an objective to obtain a budget surplus; this is achieved by using the pay-per-hour method, using a much lower cost of service for vacancies activities than a position held by an incumbent. The ethical aspects related to the motivation of teachers who perform activities in the "pay-per-hour" regime are as complex as those related to the use of external (temporary) staff not validated by any national academic professional competition.

Finally, the present research highlights the major ethical dilemma associated with the option of rectors through which universities accumulate substantial surpluses, which have no justification for the normal conduct of the annual budget of a public institution. The accumulated surpluses are even more difficult to justify from an ethical point of view, as the Romanian legislation does not allow, naturally, their use for investments, which have a separate governmental allocation regime. The circumstances of the salary management for the vacancies aggravate the justification of the surpluses. In fact, this way of transferring resources from the natural recipient to doubtful objectives associated with dilemmatic beneficiaries presents complex legal issues, which for the moment, are ignored or tolerated by the public funds' dispensers.

A thorough verification of these practices would be advisable not only from a technical (accounting) point of view, but mainly from an ethical perspective, for all the reasons stated before. As such, in the words of the former US presidency candidate A. Stevenson “[...] Bad administration, to be sure, can destroy good policy, but good administration can never save bad policy”. The adage is, once more, demonstrated by reality in the most corrosive way.

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The Printed Travel Guide in the Analysis of the Tourist Discourse. The Presentation of the Travel Guide in Romanian and French

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Abstract

Given the diversity of travel guides on the market, it would be difficult to try to get a complete picture of them. Thus, the travel guides in Romanian and French, which we have in view for our analysis, are volumes that contain practical information (itineraries, means of transport, traditions and art, fauna and flora, accommodation and catering, etc.), images, positive descriptions regarding the destinations presented and information that promotes the tourist product. Although they are part of the category of practical and cultural guides, their presentation is at the heart of our analysis in order to highlight both the similarities and differences between the guides in Romanian and French. The aim of this paper is to show that, although at first glance they seem quite homogeneous, printed travel guides have both common features and differences (Faccin 2015: 16) regarding the content and structure of these promotional materials.

Key words: travel guide, discursive regularities, informative character, axiological dimension, textual genre

J.E.L. classification: Z39

1. Introduction

Despite the assertion of the Internet, the rapid dissemination of new methods and behaviors of using the content of tourist information, paper (or book) guides continue to have, to some extent, a privileged position on bookstore shelves, their offer remaining still wide and diverse.

The printed tourist guide is a means of tourist information used by the traveler-reader, a textual tool with which the reader is introduced to discover an unknown or insufficiently known space and which promotes places and the imagination of future travelers (Stock 2014: 6). These material supports are works published in collections that aim at the exhaustive enumeration of “what must be seen” (Boyer & Viallon 1994: 55). Although at first glance, they seem quite homogeneous, presenting both common features and differences (Faccin 2015: 16), these material supports differ from each other depending on the target audience and the organization of the materials presented to readers (Devilla 2013: 59).

2. Literature review

The paper is part of a wider research, regarding the analysis of the written tourist discourse, in Romanian and French. For this research, we stopped at the printed tourist guides, trying to study how the tourist destinations in Romania and France are described, and how they are presented to the reader, future tourist. In choosing them, we sought to be reference guides, not to be translated, and to be as recent as possible. Regarding the choice of publishers, we decided to keep only the major collections of guides, namely Ad Libri for the Romanian language and Le Routard and Le Michelin, for the French language.

These are volumes that include practical information (itineraries, means of transport, traditions and art, fauna and flora, accommodation and catering, etc.), images, positive descriptions of the destinations presented and information that promote the tourist product, being a true cultural mediator between two different partners. Thus, the sender seeks to create a link between the reader and the unknown destination, between the traveler and the places that are presented as elements typical of the "exotic" world.

3. Research methodology

From a methodological point of view, we chose a corpus that can be compared, related to the tourist field, namely the printed travel guides. We performed this analysis using documents in two languages, Romanian and French, convinced that the multilingual aspect will allow us to gain a universal vision of the subject. First, we described each corpus separately, then we compared them to show that, although they are published in different cultures, they have points of approach and distance.

4. Findings

4.1. Guides in Romanian

The guides in Romanian are distributed by Ad Libri Publishing House in Bucharest, and include two collections, namely: "Travelers on the World Map" and "Go and see". The "Travelers on a World Map" collection is based on an original formula, inspired by travel guides and photo albums. The chapters, organized according to areas and presented in different colors, provide information about the top galleries: for example: "The 10 most beautiful places in Romania" or "The 10 most beautiful tourist attractions in Bucharest", about the objectives of interest, and a column «Did you know that ...?» which includes anecdotes or short interesting stories about past events or personalities who marked the life of a city or who remained in the memory of the Romanian people. Other guides, belonging to the same "Go and see" collection, are dedicated to different geographical areas of Romania. They invite readers to discover the most beautiful regions and cities in our country.

Made in an attractive format, with suggestive photos and maps accompanied by a legend of the symbols used in the guide, they present, in an accessible way, a large amount of information related to the history, architecture, community culture, car routes, variants of walks, traditions and people of those areas. After the Introduction section, the presentation of the localities in the order of geographical location, not in alphabetical order, where the most picturesque areas in the described region are described, follows. They offer the reader a walk sprinkled with historical information, with details about the architecture of the buildings, with stories, bringing back the atmosphere of the villages that preserve the beauty of the traditions that recommend enrolling in the tourist circuit.

"So let us set out on our journey ... But not before we get acquainted, as befits a traveler, with the geographical and historical data of this land" (GTON: 14).

Also in these guides we find good quality photos, suggested routes (by car), marked paths and a map of the area, accompanied by a legend with the symbols that appear in the guide. In a rather dry style, sometimes close to enumeration, the presentation of a precise circuit provides the reader with information about the state of the route, duration and degree of difficulty (for example: «*route 5: Busteni-Gâlma Mare-Valea Jepilor-Cabana Caraiman- Cabana Babele- Hotel Peștera [..], lasting 5 hours, inaccessible in winter, is recommended only to **trained and well-equipped tourists***»)(GTVP: 35), recommending what to see, the direction he/she should look in and, less often, the impression he/she should make. The indications regarding the traveler's itineraries are really very precise: everything is specified (route, marking, duration, etc.), the route becoming remarkable by the way in which time and space are rationalized. The structure of the page is the classic one, ie the text appears on the whole page, while in the first guides described, the text is structured in two columns.

Unlike the other guides described above that belong to the same collection, the latter are distinguished by the fact that their real plan is not as organized because, according to the mentioned sections (Introduction and listing of localities), we find different sections specific to a single guide. For example, in the *Bucovina Tourist Guide* (2008) it appears: «*Small dictionary of regionalisms*»;

The Prahova Valley Tourist Guide (2006) ends with an appendix containing "*Practical tips for hikers*", and *Northern Oltenia Tourist Guide* (2006) has a caption entitled "*Holidays, fairs and popular festivals in the North Oltenia area*".

Others have a mini bibliography such as the *Rucăr-Bran Corridor Tourist Guide* (2006), and two of them contain attached mapped maps (*Bistrița – Nasăud Tourist Guide* [2006] and *Neamt County Tourist Guide* [2006]). Unlike the guides in French and those in the Top Collection, there is no practical information about accommodation, meals, transport, currency, prices, etc. in these guides.

Following a careful analysis of the corpus in Romanian, we can say that, regardless of the collection they belong to, the guides of Ad Libri Publishing House are structured in clear chapters, easy to consult, which provide information about exact data (tourist attractions, forms of entertainment etc.), detailed maps, impressive photos that take a complete picture of each destination.

Like the travel guides in French, the ones in Romanian offer a precise and complete ranking of the places worth visiting. For example, we cite the sections entitled "*The 10 most beautiful places in Romania*" or "*The 10 most interesting Romanian experiences*" (*Romania Tourist Guide* 2014), sections that reveal to the reader the main areas of Romania worth visiting. Along with "Contents", the first pages also contain a list of the icons that appear in the guide, as well as a legend with their meaning (GTRo 2015: 2).

The name of the chapters emphasizes the fact that the editors structured their presented material according to some main themes, such as: *Introduction, Historical landmarks, a top of the most beautiful destinations / most interesting experiences, the Regions of Romania and General Index*. The themes regarding the regions in Romania (GTRo) are classified, in their turn, according to the geographical location, where we find the following sub-themes: *Bucharest, Muntenia and Oltenia, Dobrogea and Danube Delta, Moldova, Transylvania, Banat and Crișana, Maramureș*. The cities and main tourist attractions bear an attractive historical and geographical description, and titles such as: *Recommendations* (on culture and entertainment, excursions, hiking, holiday activities, festivals and cultural events, recommendations) and *Practical information* including data on transport, telecommunications, banks, currency, climate, address of bars, restaurants and cafes, etc.) and a *General Index* that includes the names of the localities and attractions presented in alphabetical order can be found in them. In addition to the information on precise tourist itineraries, on holiday activities, related to neighborhoods, museums or monuments, there is also a detailed presentation of regional traditions, extremely well preserved.

Made in an attractive format, with good quality photos and colorful maps, they offer, in an accessible way, tips and recommendations regarding the tourist objectives in the area, where you can eat well, places where you can shop, etc. The editors of these guides recommend itineraries in well-known places, but also in places that are usually ignored by tourists, mentioning legends and stories that trigger curiosity and attract the reader's attention. Along with the description of tourist destinations, the village world present through folk costumes and dances, the description of various almost forgotten professions, religious holidays, important moments in the lives of the inhabitants contribute to the idyllic image of a fairytale world. In his imaginary itinerary, the traveler-reader is invited to meet the host population together with its customs and traditions through culinary tastings, by discovering the natural areas and the activities specific to those lands. So the rural universe and the stories from the stove, the old habits, delight the reader with their charm, strengthening the connection between him and the guide-writer even trying to attract other travelers.

In Romanian guides, the iconography is abundant because the typographic space has been reduced in favor of the one dedicated to photographs or advertising space. For example, the *Romania Travel Guide* (2015) contains over 170 photos of all sizes, some the size of a page. These photographs, representing various buildings (cathedrals, churches, hotels, institutions, etc.), landscapes, activities or traditions, are mostly accompanied by comments. The language used, the rigor of the presentations and the simplicity of the graphics are distinctive features of the style used in editing these guides. At the same time, the special attention paid to local traditions is a specific feature of Romanian texts. Thus, the travel guide, more than ever, appears as a cultural mediator between two different entities, namely: the guide-writer tries to create a link between the reader and the unknown destination, between the traveler and the places that are presented as typical elements of the „exotic” world. (Faccin 2013: 17) If the guides in French have up to 700 pages, the ones in Romanian are a bit voluminous. They contain between 80 and 280 pages. In general, their texts are composed in medium

characters and, in order to provide readers with accurate and useful information, the editors use only one type of text, namely the normal format (full page), while those in the Top Collections respect the structure of those in French. Although both types of guides have largely the same features, there are still some differences in graphics. In general, the characters of the letters are simple, easy to read, but in Romanian, the body of the letters is larger than in French. In terms of colors used and contrasts created, Le Routard uses titles in black and red, while Le Vert Michelin, in black and green. The same cannot be said about the guides in Romanian, where we find titles written only in black. Starting from the discursive characteristics of cultural guides, pointed out by Seoane (2013a: 33-43), namely: "hyperstructure moins segmentée, style plus littéraire, recours à l'hypotaxe, choix lexicaux plus soutenus" we can classify the guides in Romanian in the category "Cultural" or "literary" guides as the author calls them.

4.2. Guides in French

4.2.1. Le Guide du Routard

In our analysis, we stopped at Le Guide du Routard because it seemed to us one of the most widely used guides in French and the best-known travel guide since 1973, providing all the information readers need to discover, they themselves, a tourist product. Written in 1973 and published by Hachette since 1975, this collection of travel guides is primarily aimed at people who want to travel on a limited budget and who are trying to escape the routine of organized travel. Among the printed guides, "Le Guide du Routard", renamed Le Routard in 2013, remains the guide for totally independent tourists who like adventure. It has maintained this goal even though it is currently consulted by the vast majority of travelers. It owes its enormous success to the many practical information it provides. With a green cover ("vert tofu"), impossible to miss, Le guide du Routard is present in all cities and regions of France. On the fourth cover of this guide, the image of a young traveler with a backpack (the publisher's logo) appears, a symbol that has become the guarantee of a good price-quality ratio, valid for all restaurants and hotels included in the guide. The "Le Routard" guide offers a wide space for practical information such as: cultural places, travel preparation, hotels, campsites, restaurants, means of transport, events, etc. In addition, it provides readers with other useful addresses such as: the schedule of various means of transport: bus / subway / train, museum schedules, maps of subway stations, etc.

In Le Routard guides, we will find a first part with maps and color images for discovering the two chosen destinations and for locating the favorite places «nos coups de coeurs»; then itinerary suggestions and practical information for organizing stays; original cultural visits "off the beaten track"; detailed maps and plans. The following section entitled "*Bons à savoir avant le départ*" contains useful information on accommodation, money and bank, budget, cards, administrative formalities, etc. The section that represents the guide itself describes the regions of Corsica - for Le Routard Corse - presented according to a route starting from Bastia, continuing with Cap Corse, Saint-Florrent and the surroundings of Grand Sud Corse reaching Costa Verde, Castagniccia and Casinca, and the 20 districts of Paris - for Le Routard Paris - presented clockwise, starting from the center, to the north, east, south and west. In these practical guides, it is important to mention the existence of the following sections that we find in each region or city: *Useful Adresses, Transports, Where to sleep? Where to eat? Where to have a drink? Where to listen to music? See and do* for small and medium budgets.

The last part entitled "Hommes, culture, ambiente" provides detailed information on architecture, gastronomy, fauna and flora, history, cinema, economics, etc. This part of the guide contains practical information that helps the reader in choosing the services, the places worth visiting, where you can dine or stay. In the guide Le Routard Paris, there is a section entitled "Plans et cartes en couleurs" which contains maps of the boroughs of Paris along with some useful information such as: *Where to sleep?? Where to eat, where to go out? Wine bar etc.* In addition to concise descriptions, photographs, computer graphics (schemes, maps, itineraries), advertising are witnesses to a "mixture of genres" within the hyperstructure of this tourist material (Seoane 2013: 33-43). Browsing this guide, we notice the small number of maps, the almost total absence of images. The layout, the structure of the chapters and the organization of the paragraphs are the same in both versions (history, information, holidays and festivals). Section *À voir. À faire* appears in the description of each neighborhood, each

region, and sections such as: *Arrival-Departures, Useful Adresses, Where to sleep, Where to eat nearby? Where to have a drink? Where to listen to music? ,Manifestations, etc.*) make Guide du Routard a real point of reference in the eyes of the readers. More recently, to seduce the general public, publisher Hachette has recently invested in good quality paper, adopted an airy layout, and used a larger number of photographs.

4.2.2. Le Guide Michelin

Le Guide Michelin is one of the oldest travel guides since it appeared in France, in 1900. It stands out for its sobriety and referential function, features that characterize this guide designed for a cultivated audience with a good material situation, working in -a wide variety of areas. We owe to this guide the remarkable cultural content that covers all areas, namely: political history, flora, monuments, curiosities, landscapes, etc. As a peculiarity of this type of guide, we can emphasize the special attention paid to the presentation of the natural and cultural heritage of a country. This work - in which we find practical information depending on the destination, about the best time to go on a trip, with the formalities to be completed before departure or with the useful addresses once you arrive at your destination, with tips about restaurants, accommodation, etc. - is appreciated for the seriousness and rigor of its presentation (Margarito 2010: 19).

Michelin guides are characterized by the elongated format in height, by the presence of photographs and the large number of maps, drawings and colorful reproductions of art objects, advertising posters. Like the one presented above (Le Routard), it is structured in sections, each of them dealing with information from the respective city / region or country. For example, four sections are grouped in the Alsace Michelin Guide. The first section entitled "Nos incontournables", which includes a selection of the most beautiful places listed with stars, is made up of images representative of the places worth visiting. The second section called "Organizer son voyage" includes suggestions for itineraries as well as thematic itineraries. The sub-category "Aller dans la region" lists practical information useful to the traveler with reference to: means of transport, weather, useful addresses, accommodation, meals and prices. The third section, entitled "Comprendre L'Alsace et les Vosges" presents the history, art and architecture, the artistic and cultural universe of the region, nature and landscapes. The last section "Découvrir la région", which is the actual guide, describes each sub-region in Alsace.

Also here are presented all the information useful to the reader, the points of interest to visit, the operating hours of various institutions, restaurants and accommodation, the most attractive activities. The maps that accompany each area in the Alsace region help to guide the reader, and the images, which fuel his curiosity, have the role of triggering the desire to buy. At the end of the Michelin Guide are some important sections for the reader such as the "General Index". This includes the names of cities and places in alphabetical order. Then another section entitled "Legends of Maps and Plans" explain the symbols used in the travel guide. As mentioned above, the attractions of tourist places, tours not to be avoided, activity ideas (for two, with family or friends, numerous maps and Michelin plans), are rated from one star to three. A star means that the tourist attraction is interesting (The Pont Neuf, although the name does not indicate, is the oldest bridge over the Seine) (GVMP: 78); Two stars indicate that the objective is worth a detour to see it (Blue fire Megacoaster ** propels you in 2.5 seconds at a speed of 100km / h) (GVMA: 452), and three stars tell us that the tourist attraction is worth the trip (Champ-Élysée ***, From the Place de la Concorde to the Arc de Triomphe) (GVMP: 4). The Michelin Green Guide *Paris* has the same structure as the one presented above (4 sections). The first three are identical to those of the *Vert Alsace Guide*, while the fourth section describes the 20 districts of Paris, whose overview appears on a double page: starting with a plan, the main elements are indicated by a photograph, following to be described in the following pages. Therefore, the content of the guide is very innovative and its function as a *marketing actor* is put at the service of the tire, because this guide is dedicated primarily to readers-travelers who will explore unknown or lesser known places, traveling by car. The comprehensive information provided by the "*Michelin Green Guide*" is one of the key points that differentiates it from previous guides, and for which the guide becomes indispensable. It contains hundreds of addresses selected by authors in the field (restaurants, bars, hotels, shops) for all tastes and all budgets. The main cities and locations have a historical, geographical presentation and sections related to accommodation,

restaurants, shops, attractive activities for the reader-traveler. The text is completed by maps, plans, photos, sketches and eloquent and easy-to-read rankings. Thus, the French cultural guide remains a reference for presenting the different possibilities of visiting a city, a region, a country, etc. In the Green Michelin guides, the hyperstructure is marked by a special caption (titles, subtitles, intertitles), by the existence of spaces, by a two-column arrangement of the text, by the presence of color photographs, by highlighting places to visit. The didactic objective of this guide is achieved by its visualization and content.

The two types of guide are voluminous and expensive, containing between four and six hundred pages and even more. In small print, lowercase characters are used, probably for reasons of economy, where full-page text alternates with two-column text. In this case, we have to make the following observation: in order to provide information, the scriptwriters adopt the texts in two columns, while for the description of the destinations they resort to the text in full page. Michelin guides are "singularized" by the large number of maps they make available to readers. Some take the form of topographic images, necessary in locating the evoked places.

From a communicative perspective, the travel guide is interactive and proposes an agreement between the scriptwriter-guide and the reader-traveler. In the process of receiving the message, the reader will look for landmarks that will guide him and facilitate his understanding (Mareş 2004: 88). These landmarks are paratextual elements such as titles, subtitles, side notes, cover, illustrations, etc. which provide information about the text and act as an anticipator, preparing the reading for the reader. In this regard, Seoane (2013b: 8) points out that *Le guide du Routard* makes it possible to read it by proposing a ranking "*par puces ainsi qu'une fragmentation accentuée par polices en gras ou majuscules*", while *Le Michelin guide* "*privilégie un classement par localisation géographique*" clockwise. Also here we must add the presence of the iconic photographic and infographic elements that provide major information for the reader-traveler, the detailing of the information being far above that offered by other tourist materials with advertising character.

One of the innovative ideas present in the two guides is the collaboration between publishers and tourists through the white pages. These pages dedicated to the reader and entitled "*Notes personnelles*" in *Le Guide du Routard* (GRP: 620-624) or "*Notes*" in *Le Guide Vert Michelin* (GVMA: 472-475) invite readers to speak on their own behalf. But Hachette Publishing House goes even further. It is not satisfied only with arranging a possible space for the production of the discourse, but requests the collaboration of the reader in the production of information (Faccin 2015: 5): "*À vous ahora de nous faire partager vos impressions*" (GRC: 359). In other words, publishers invite readers to check the information provided and to participate in any changes or inaccuracies. The guides, which propose to readers-travelers to become mediators, disseminating "*leurs bons plans*" et "*leurs adresses*" achieve a mediation that defines the experience as "*un fait vécu*" as Vergopoulos and Flon (2012: 3) point out. Example:

«Faites-nous part de vos expériences, de vos découvertes, de vos tuyaux. Indiquez-nous les renseignements périmés. Aidez-nous à remettre l'ouvrage à jour» (GRC: 440).

«Il n'est pas totalement exclu que certaines [informations pratiques] ne soient plus, à la date de parution du guide, tout à fait exactes ou exhaustives. N'hésitez pas à nous signaler toute omission ou inexactitude que vous pourriez constater, ainsi qu'à nous faire part de vos avis et suggestions sur les adresses contenues dans ce guide» (GVMA: 485).

The collaboration between the publishing houses (the editorial group) and the tourist-readers can also be found in the guides in Romanian. Thus, in «Romania Tourist Guide» (2015), from the second page of the guide, the reader is warned that:

«The publishing house tries to provide readers with complete and up-to-date information. We apologize for any inaccuracies and are grateful to all who will report them to us. Any other comments and new information on the subject of this guide will be considered welcome »(GTRo: 2).

Following the analysis of the two categories of guides, practical and cultural, we can mention that "*Le Guide du Routard*" most often emphasizes practical information and the axiological dimension of discourse, while "*Le Guide Michelin*" focuses more less on these practical aspects, insisting on the historical and cultural aspects of the destinations. Aceste diferențe evidențiază faptul că locutorul fiecărui ghid se adresează unui cititor model diferit «*tablant sur les attentes et le profil socioculturel que celui-ci est supposé avoir*» (Seoane 2013b: 12). If "*Le Guide Michelin*" builds its relationship

with the reader on a rather cognitive and intellectual dimension, "*Le Guide du Routard*" uses a more subjective tone, in a familiar and relaxed style.

The large number of maps available in the two types of guide allows locating the localities or places presented. Both offer a selection of addresses of all types and at all prices and more or less detailed information about heritage and history. The tone and style of writing are a matter of taste, because the methodology used by publishers matters. Some guides use freelance journalists (*Le Petit Futé*, *Le Michelin Guide*), while others send their journalists to the field for a few weeks to bring a new breath to the guide (*Le Routard*).

5. Conclusions

Referring to travel guides, we can say that the differences appear in terms of format, number of pages and in terms of graphic adaptation. In contrast, in terms of content and structure, these media are almost similar, the differences being more important between practical and cultural guides than between guides in Romanian and French. These are volumes that contain practical information (itineraries, means of transport, traditions and art, fauna and flora, accommodation and catering, etc.), images, positive descriptions regarding the destinations presented and information that promotes the tourist product.

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Critical Thinking – Impressions of Students from High School Level

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Abstract

The current article presents the influence of critical thinking on the students' development. The research has been applied in two forms: secondary analysis and primary research, based on survey. Secondary research analyses the evolution of the number of high school students and school units at regional, county and city level.

The primary research was performed using the quantitative method; the survey was applied to 102 students from senior high school level. The questionnaire was implemented during the period May - June 2019 in Râmnicu Sărat, Buzău county, Romania. The quantitative research was chosen due to its fulfilment of the objectives of data collection regarding a problem of general interest.

Key words: communication, students, critical thinking, ways of teaching, teachers

J.E.L. classification: H75, I21, I24

1. Introduction

Education is a process which leaves some remarkable signs on individuals. Those signs are tools that can enable people to cope with difficulties during their life. Schools are effective to the extent to which they form students' abilities. Although it is impossible to measure directly the consequences of those effects, they can become visible and impact the quality of life.

At all education levels, it is important to understand the needs of the students, to captivate their interest during courses and motivate them to be more interactive in classes. The teachers have the main responsibility regarding the way in which the classes are organized and the means by which students accumulate information during courses.

For these reasons, the quality of education in schools is a milestone in providing social justice (Çubukçu and Girmen, 2006). A school is an organization that can be of service to society in numerous ways. However, the most important duty of schools is teaching and learning. Therefore, what makes a school effective is the level of achievements of its students.

In order to boost the degree of achievement, schools must be improved. Before taking certain steps in the improvement process, the performance level should be accurately measured with respect to certain criteria. (Schildkamp et al., 2009).

Recent research shows that the classical method of school inspections does not effectively contribute to school performance (Gaertner et al., 2014). On account of changing paradigms, there is a strong global tendency towards new performance appraisal systems – where performance is assessed by quality improvement measures, in accordance with both qualitative and quantitative databases (Grek et al., 2009).

2. Literature review

In their study, Urwick and Kisa point out that the lack of specialist teachers for disciplines considered essential (mathematics, science - biology, chemistry, physics) contributes to the creation of discrepancies between students (Urwick and Kisa, 2014). These discrepancies also exist due to the background of the students: Talaslampi et al. emphasize in their research that children from placements (such as special schools for children with behavioral problems) have poor educational training and do not complete high school or vocational courses (Talaslampi et al., 2019). If these children are forced to work to support themselves or their family, the educational system should also offer them the chance to get an education, but also to benefit from as many opportunities, programs (available to other students) which could encourage them to complete their studies (Shoshana, 2020). Sammons et al state that the individual characteristics of students, the family and neighbourhood they come from are significant predictors of students' academic and behavioural results (Sammons et al., 2018). Jagnani and Khanna emphasize that investment in infrastructure contributes to increasing access to schools and lowering the dropout rate (Jagnani and Khanna, 2020). Other researchers claim, without clear scientific evidence, that the environment or learning setting can influence education in a beneficial way. (Van den Bogerd et al., 2020). Moreover, the existence of a curriculum that will provide students with a clear knowledge of the field for which they obtain the diploma can contribute to increasing interest in learning (Coll Ramis, 2020).

Casteleyn and Mottart note that the way in which lessons are taught in class impact their usefulness. The authors found no significant difference between the abstracts presented in the form of slides and the abstracts presented in the form of animations (Casteleyn and Mottart, 2012). Popta et al mention that students appreciate feedback; in its written, online form, feedback contributes to the active participation in the learning process, helps to develop time management skills, self-criticism and to enrich students' knowledge (Van Popta et al., 2017). The study conducted by Baars et al highlights that students are sensitive to the degree of difficulty of the tasks they have to solve and, as such, careful supervision can contribute to better learning outcomes (Baars et al., 2018). However, Van der Veen and Peetsma found that students in their free time (especially during holidays) focus more on recreation and less on learning (Van der Veen and Peetsma, 2011). This situation is most likely caused by overwork during the semester. Yet, according to a study, over 60% of students experience a low level of overwork by the end of the school year, this being valid for both 8th and 10th graders. (Salmela-Aro and Upadyaya, 2014).

Other authors focused on the emotions experienced by students during the educational process. Niculescu et al emphasize that the intensity of emotions can be increased or decreased depending on internal experiences and such situations as tests, assessments, or evaluations (Niculescu et al., 2016).

The needs in the Romanian educational system

The Romanian educational system comprises two levels (National Education Law, 2011): pre-university and higher education. Within the pre-university level we find: preschool education (3 years), primary education (5 years including grades 0), secondary education (4 years), high school education (4/5 years), vocational education (3 years), post-secondary education (between 2 and 5 years). In Romania, education is compulsory for young people up to the 10th grade. There is also a 5-year part-time program intended for those who dropped out of high school in their adolescence but still want to attend it.

Successful completion (with a baccalaureate exam passed) of any type of high school in Romania allows access to higher education, including both state or private universities.

Establishing effective communication between teachers and students is not always easy. Civikly-Powell considers that the basis of effective learning is effective communication, which requires more than making yourself understood (Civikly-Powell, 2002). In Griffin's opinion, efficient communication represents the relational process of creating and interpreting messages by generating desired or undesired responses (Griffin, 2012). In the attempt to make communication effective, teachers must carefully choose the content and form of their message, as well as the optimal channel for transmitting it (Fofana, 2016). Good communication contributes to the involvement of students in educational activities and can help students to better cope with, or

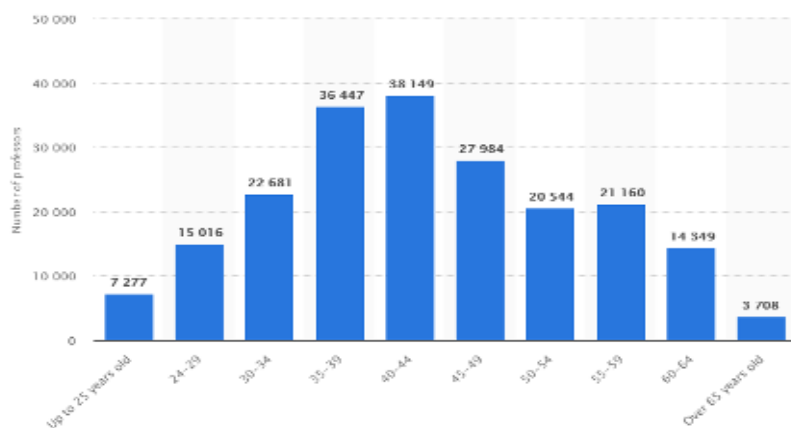
build resistance against age-specific depressions. Thus, the teacher is seen by specialists as one of the key factors in combating the latter (Whitehill et al., 2013).

Finn (2018) points out that students have different needs which vary depending on their place of origin, while Duta et al. (2015) emphasize that without effective communication the teaching and learning process cannot take place. Teachers communicate ideas, information and expectations using a variety of ways, including speech, gestures, body language and last but not least, writing. Majid et al. (2010) state that teachers must have a degree of satisfaction as regards their activity, in order to be effective in their student modelling efforts.

Panisoara et al. argue that effective communication involves not only the correct use of language but also the use of other forms of communication, such as interpersonal communication (Pânișoară et al., 2015).

According to the education index, Romania occupies the 52nd place as of 2018, a position slightly improved since 2012, when Romania was ranked 54th (United Nations, 2020).

Figure no. 1. Number of professors who work in secondary education in Romania in 2018, by age group



Source: (Sava, 2020)

In Romania, most secondary school teachers were between 40 and 44. It is also noted that 7,277 teachers were under the age 25. Furthermore, many teachers were aged between 60 and 64 years, while 3708 teachers were carrying out teaching activities even when retired - in Romania, the retirement age is 65 for men and 61 for women (European Commission, 2020). At EU level, in the same year 2018, there were 17.7 million high school students, respectively 1.57 million teachers (Eurostat, 2020).

Feedback and its role in modern education

Renowned entrepreneur and philanthropist Bill Gates emphasize the importance of feedback in the personal training of individuals: "We all need people who will give us feedback. That's how we improve" (Gates, 2017). The educational process is a complex one in which the individual should learn from mistakes, in which he should be able to try/test and find solutions. Unfortunately, the realities of today's education system contradict these ideals (The Graide Network, 2020). According to a study by the University of Michigan, students who perform at school benefit from more opportunities than those who do not perform, but the same study showed that often, students who perform better are not necessarily the smartest, but rather more adaptable to the given conditions (University of Michigan Institute for Social Research, 2002). An educational system based on feedback and not on grading would be more suited to motivating students to develop new skills and increase their potential. Feedback is an essential component of the educational process. Through it, students gain a better understanding and command of the disciplines studied, and further obtain clear instructions on the educational process. Feedback improves students' confidence, contributes to increasing both responsibility and the desire to learn (University of Reading, 2020).

3. Research methodology

In this article, a primary and secondary research were undertaken. The purpose of the research is to identify the influence that critical thinking methods have on the pupils’ development, on the one hand, and on didactic activities, on the other hand.

The secondary research is an exploratory one, with the aim to find more information and to provide a base for the primary research.

The secondary research consisted in conducting an analysis in the city Râmnicu Sărat, at both county regional levels, in order to observe the evolution of the indicators which are examined in the article.

The method applied for the primary research is the survey. The research was performed by the questionnaire tool, and the survey was applied to 102 high school students.

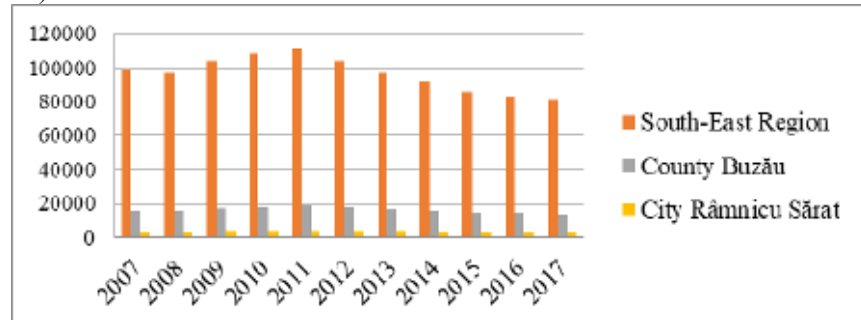
The questionnaire was implemented during the period May – June 2019 to students from urban and rural areas, in Râmnicu Sărat, Romania.

4. Findings

Secondary research

The number of high schoolers at the regional level had an oscillating tendency in the period 2007-2017, in period 2011-2017 could be observed the gradual decrease of the number of high schoolers. Thus, compared to 2007, in 2017 number of high schoolers at the level of locality is 0,9 times lower, decrease from 2.788 to 2.388 high schoolers.

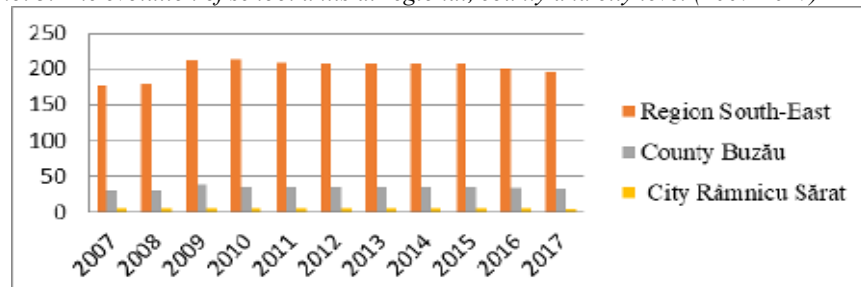
Figure no. 2. The evolution of the number of high school students at regional, county and city level (2007-2017)



Source: Figure done by the authors

Number of high schools at the regional level had an bent oscillation in period 2007-2017. Thus, at the level of locality, in comparison with 2007, in 2017 number of high schools are 0,9 times lower, fall from 2.788 to 2.388.

Figure no. 3. The evolution of school units at regional, county and city level (2007-2017)



Source: Figure done by the authors

Information about the target group

All pupils included were from the Râmnicu Sărat city and their age were between 14-18 years old.

Regarding the areas where the pupils come from, the situation presents as it follows: they are from rural and urban areas.

Primary research

Descriptive statistical indicators

Table no. 1. Measuring the central tendency

		Statistics			
		Q1	Q2	Q3	Q4
N	Valid	102	102	102	102
	Missing	0	0	0	0
Mode		1.00	1.00	2.00	1.00
Minimum		1.00	1.00	1.00	1.00
Maximum		5.00	3.00	3.00	5.00

Source: done by the authors

Mode - Presents the maximum frequency in the data series.

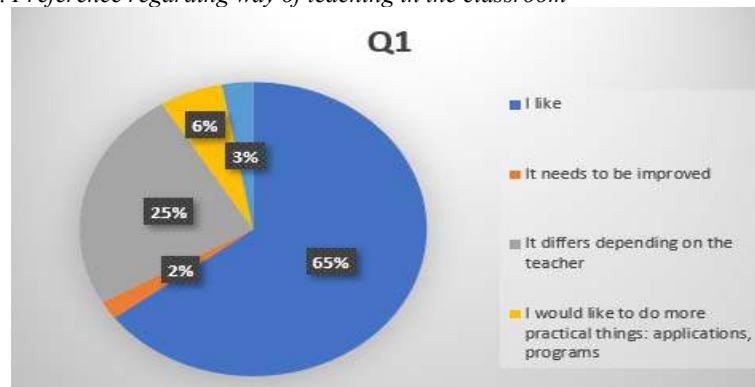
Table no. 2. Students' opinion regarding the way of teaching used by professors in the classroom

		Q1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I like	66	64.7	64.7	64.7
	It needs to be improved	2	2.0	2.0	66.7
	It differs depending on the teacher	25	24.5	24.5	91.2
	I would like to do more practical things: applications, programs	6	5.9	5.9	97.1
	I do not know	3	2.9	2.9	100.0
	Total	102	100.0	100.0	

Source: done by the authors

It is observed that most students are satisfied with the way professor teach (66 out of 102, representing 64.7%). Of these, they consider that the teaching method differs depending on the teacher (25 out of 102, representing 24.5%).

Figure no. 4. Preference regarding way of teaching in the classroom



Source: done by the authors

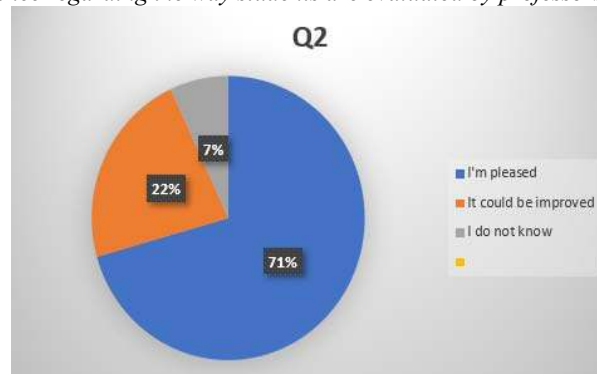
Most of the students are satisfied with the evaluation method applied in high school (70.6%) and 22.5% think that it should be improved.

Table no. 3. Students' opinion regarding the way they are evaluated in classroom by professors

Q2				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I'm pleased	72	70.6	70.6
	It could be improved	23	22.5	93.1
	I do not know	7	6.9	100.0
	Total	102	100.0	100.0

Source: done by the authors

Figure no. 5. Preference regarding the way students are evaluated by professors



Source: done by the authors

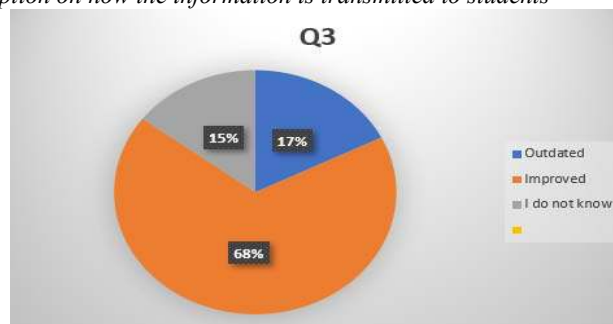
Regarding the way teachers communicate and transmit information, 67.6% of students believe that the way information is transmitted has improved.

Table no. 4. Students' opinion regarding the way the knowledge is transmitted to students

Q3				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Outdated	18	17.6	17.6
	Improved	69	67.6	85.3
	I do not know	15	14.7	100.0
	Total	102	100.0	100.0

Source: done by the authors

Figure no. 6. Perception on how the information is transmitted to students



Source: done by the authors

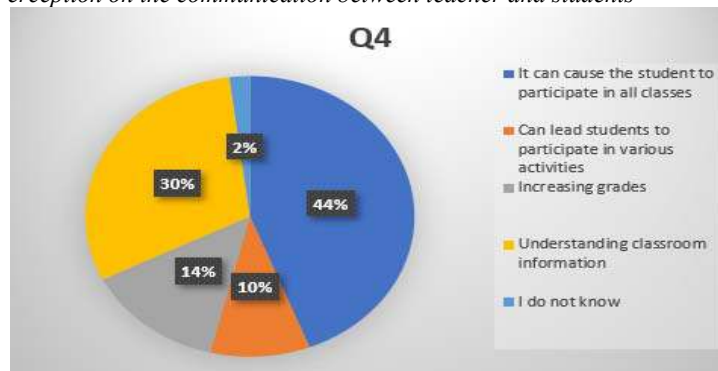
The importance of communication between student and teacher is underlined by the following aspects: the student is involved in the classes (44.1%), determines the student to pay attention to what the teacher teaches, so that he understands the information from the classroom (30.4%), at the same time leads to the increase of students' grades (13.7%) and the involvement of students in various high school activities (9.8%).

Table no. 5. Students' opinion regarding communication between teacher and students

		Q4			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	It can cause the student to participate in all classes	45	44.1	44.1	44.1
	Can lead students to participate in various activities	10	9.8	9.8	53.9
	Increasing grades	14	13.7	13.7	67.6
	Understanding classroom information	31	30.4	30.4	98.0
	I do not know	2	2.0	2.0	100.0
	Total	102	100.0	100.0	

Source: done by the authors

Figure no. 7. Perception on the communication between teacher and students



Source: done by the authors

NPar Tests

Goodness of fit, this test compares the observed frequencies with the expected frequencies of the values of the same categorical variable to see the match between them. So, the Chi-square test compares a real distribution of data with a theoretical, reference distribution.

Ho: population distribution coincides with research distribution.

H1: data distribution does not follow the specified theoretical model.

Chi-Square Test

For all 4 questions there is a statistically significant link, because in the Test statistics table p values is less than 0.05 (p values is lower than 0.05), it has a value of 0.00.

Thus, it can be concluded that the observed frequencies are different from the expected frequencies.

Table no. 6. Chi-Square Test

	Test Statistics			
	What do you think about the teaching method applied in high school	What do you think about the evaluation method used in high school	Do you consider that the way teachers communicate, and present information is	In your opinion, how important is the communication between a teacher and a student
Chi-Square	144.569 ^a	67.471 ^b	54.176 ^b	59.078 ^a
df	4	2	2	4
Asymp. Sig.	.000*	.000*	.000*	.000*

*correlation is significant at the .05 level

Source: done by the authors

5. Conclusions

The continuous change in education, determine an increase effort by the teacher's sides in order to be able to meet the new requirements. The present research aimed to highlight the influences of the application of new teaching techniques that emphasize the critical thinking of students. Thus, we found that students perceive favorably the new ways of teaching and evaluation used by teachers. The students especially appreciated their involvement in the teaching activity but also the increase of the degree in which they better understand the information transmitted by their teachers. This research confirms a well-known aspect, namely that the use of critical thinking is applicable to both students and teachers, all depending on the ability of teachers to adapt to the new recommendations, as students are open on using the new ways of teaching.

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The Analysis of the Impact of National Governance Quality on European Consumer Conditions

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Abstract

Empowering consumers and effectively protecting their safety and economic interests have become key objectives of the European Union which promotes a holistic approach in this regard, by taking into account the various consumer issues in developing all its important policies and implementing them in the Member States. In this context, this paper aims to analyze the impact that the quality of national governance has on consumer conditions in the Member States, including United Kingdom.

J.E.L. classification: D18, H80, L38

Key words: consumer conditions, national governance, European Union

1. Introduction

European consumers expect to take full advantage of the benefits of the single market, to have the ability to make informed choices and to play an active role in the European economy, anytime and anywhere. They expect to have free access to goods and services throughout the European Union and to be guaranteed that their rights as consumers will be protected, regardless of the challenges, known or not, that may arise.

To this end, the European Union proposes a holistic approach, which includes various Union policies of particular relevance to consumers, in the development of which it becomes very important to take into account consumer protection obligations (European Commission, 2020). The success of this approach will depend on an extensive partnership involving all relevant interested parties, in strong cooperation between European and national authorities, in order to ensure efficient coordination of actions and the optimal use of relevant funds available at EU level and nationally.

2. Theoretical background

The quality of consumer environment at EU and national level is regularly monitored through two surveys conducted by the European Commission among the consumers and retailers in the Member States, the results of which are synthesized in the **Consumer Conditions Index (CCI)**, a composite indicator based on a set of key indicators grouped under three main pillars:

- ✓ consumers' and businesses' *knowledge of consumer rights, their trust* in institutional actors, product safety and environmental claims and their confidence to trade online;
- ✓ *compliance with consumer laws and enforcement* by different institutional and market actors; and
- ✓ *consumer complaints and the resolution of disputes* between consumers and traders. (European Commission, 2019)

The quality of governance at global and national level is regularly monitored through different surveys conducted by the World Bank Group among a large number of enterprise, citizen and experts in over 200 countries all over the world. The results are synthetized in the **Worldwide Governance Indicators (WGI)**, that aggregate indicators of six broad dimensions of governance:

- ✓ *Voice and Accountability* indicator gives relations on the participation of citizens in democratic elections, complemented by freedom of expression, association, etc.;
- ✓ *Political Stability and Absence of Violence/Terrorism* indicator reflects perceptions of the political instability and/or politically-motivated violence, including terrorism;
- ✓ *Government Effectiveness* measures the quality of public/civil services and its independence from political pressures, the quality of policy formulation and implementation, and government's commitment to such policies;
- ✓ *Regulatory Quality* envisages the capacity of the government to develop and implement strong policies and regulations that encourage private initiative;
- ✓ *Control of Corruption* gives relations on the ability of the government to keep the public power away from private interests interference and reduce such corruption;
- ✓ *Rule of Law* reflects the trust of the citizens in the rules of society and the extent to which they are respected and enforced by different institutions. (Kaufmann *at all*, 2010)

Given the holistic approach proposed by the European Commission to capitalize on the potential of the internal market for the benefit of consumers, we will further analyze the impact that the national conditions of government have on the consumer conditions in the Member States with the help of the relation between CCI and WGI (see Table no. 1).

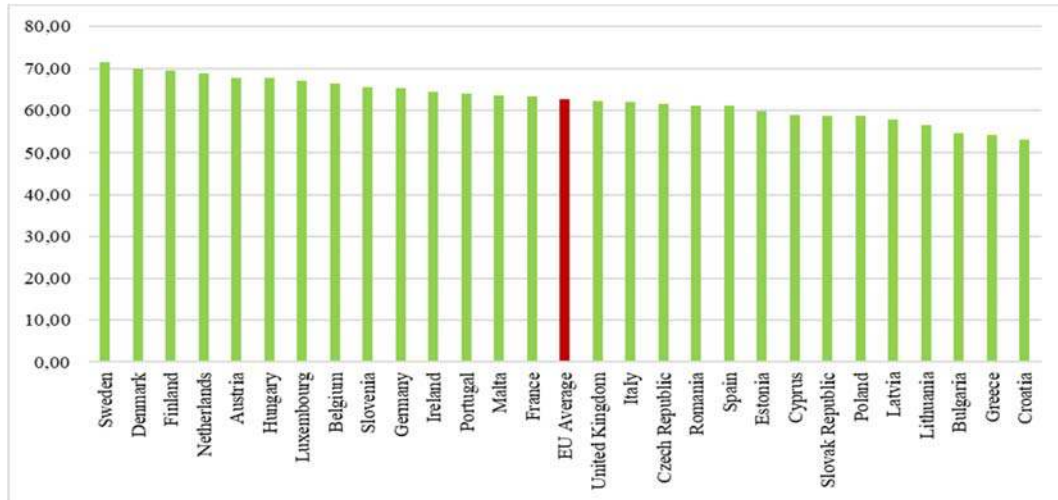
Table no. 1 The values of Worldwide Governance Indicators and Consumer Conditions Index for EU Member States including United Kingdom

EU Member State	Voice and Accountability	Political Stability and Absence of Violence/ Terrorism	Government Effectiveness	Regulatory Quality	Control of Corruption	Rule of Law	Consumer Conditions Index
Austria	1,33	0,98	1,49	1,46	1,55	1,88	67,70
Belgium	1,37	0,48	1,03	1,29	1,55	1,36	66,30
Bulgaria	0,38	0,54	0,34	0,53	-0,16	0,04	54,80
Croatia	0,53	0,76	0,41	0,59	0,13	0,37	53,20
Cyprus	1,08	0,52	0,99	1,01	0,60	0,76	58,90
Czech Republic	0,94	0,95	0,89	1,25	0,51	1,05	61,50
Denmark	1,58	1,01	1,94	1,57	2,11	1,90	69,80
Estonia	1,21	0,64	1,17	1,59	1,54	1,28	59,70
Finland	1,59	0,91	1,93	1,85	2,15	2,02	69,40
France	1,14	0,31	1,38	1,44	1,30	1,41	63,20
Germany	1,34	0,58	1,59	1,72	1,90	1,62	65,20
Greece	0,94	0,29	0,41	0,53	-0,01	0,20	54,30
Hungary	0,22	0,73	0,50	0,60	0,00	0,49	67,70
Ireland	1,34	0,97	1,28	1,60	1,46	1,39	64,30
Italy	0,97	0,46	0,46	0,95	0,24	0,28	62,00
Lithuania	1,02	0,84	1,04	1,16	0,68	1,02	56,40
Luxembourg	1,52	1,36	1,73	1,70	2,11	1,79	67,10
Latvia	0,88	0,45	1,11	1,19	0,48	1,01	57,70
Malta	1,11	1,09	0,86	0,96	0,24	0,95	63,40
Netherlands	1,56	0,86	1,80	1,86	2,00	1,81	68,70
Poland	0,70	0,52	0,60	1,01	0,60	0,45	58,60
Portugal	1,24	1,13	1,15	0,97	0,76	1,14	64,00
Romania	0,49	0,53	-0,28	0,46	-0,13	0,36	61,10
Slovak Republic	0,91	0,78	0,67	1,01	0,33	0,56	58,70
Slovenia	1,01	0,82	1,08	1,01	0,91	1,12	65,50
Spain	1,09	0,32	1,00	1,05	0,65	0,98	61,00
Sweden	1,59	1,05	1,83	1,80	2,12	1,91	71,40
United Kingdom	1,26	0,52	1,44	1,63	1,77	1,60	62,10

Source: (European Commission, 2019) and (World Bank, 2021)

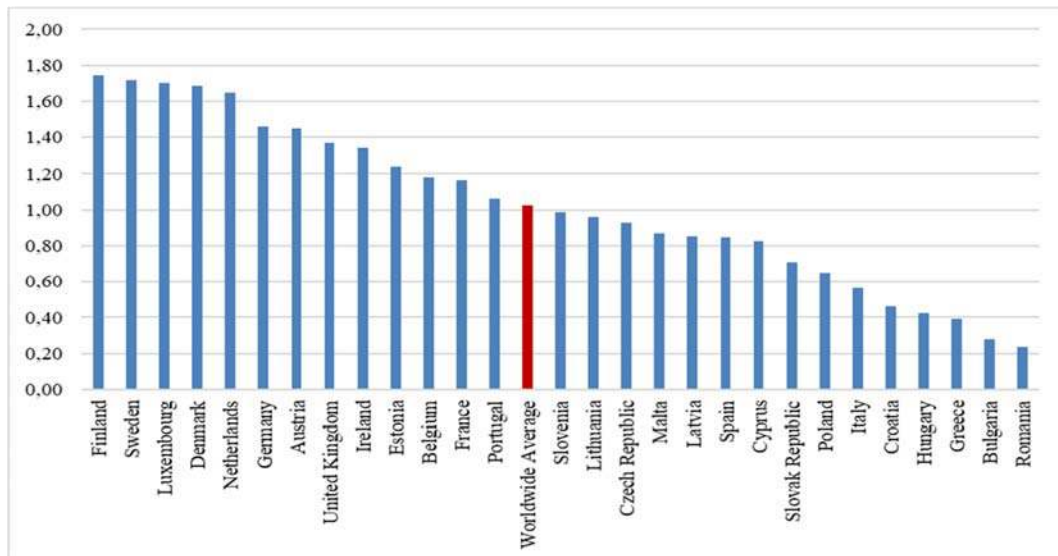
Following the graphical representation of the values recorded by the two index (see Figure no. 1 and 2), it can be noted that the Member States with the best performance in the field of governance are also those that ensure the best conditions for their consumers (these are countries such as Finland, Sweden, Denmark or Netherlands).

Figure no. 1 National Consumer Conditions Index for EU Member States including United Kingdom, in 2019



Source: Graphical representation made by the authors according to Table no. 1

Figure no. 2 The Average of Governance Indicators for EU Member States including United Kingdom, in 2019



Source: Graphical representation made by the authors according to Table no. 1

3. Research methodology

This paper uses data provided by the European Commission and the World Bank Group on the Consumer Conditions Index and World Governance Indicators (available for 2019) to determine the degree of statistical dependence between their values reported for European Union member states, including United Kingdom, with the help of the Excel Data Analysis application.

4. Findings

Following the determination, using the Excel application, of the Pearson correlation coefficient between the CCI and each of the WGI components (see Table no. 2), we found an important positive correlation between CCI and all the Governance Indicators (>50%), the highest degree of common variation being recorded between the CCI and Rule of Law in the Members States (77%), followed, in descending order, by Control of Corruption (74%), Government Effectiveness (69%) and Regulatory Quality Indicators (65%).

Table no. 2 The values of Pearson Correlation Coefficient calculated between Consumer Conditions Index (2018) for EU Member States including United Kingdom and Worldwide Governance Indicators (2019)

Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Control of Corruption	Rule of Law
0,64	0,51	0,69	0,65	0,72	0,77

Source: Authors’ computation using Excel Data Analysis

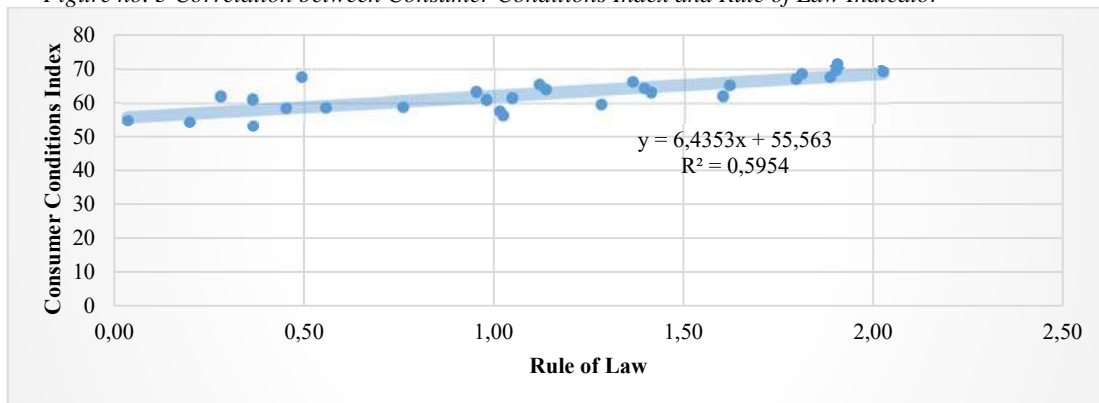
We will further analyze these particular correlations with the help of the Regression function offered by the same application. The results are summarized presented below.

Table no. 3 Summary Output from the Regression Analysis performed between CCI (2018) and different WGI (2019) calculated for EU Member States including United Kingdom

Regression Statistics	Rule of Law	Control of Corruption	Government Effectiveness	Regulatory Quality
Multiple R	0,7716	0,7199	0,68726	0,650643
R Square	0,5954	0,5182	0,47232	0,423336
Adjusted R Square	0,5798	0,4997	0,45203	0,401157
Standard Error	3,2053	3,4975	3,66035	3,826481
Observations	28	28	28	28
P-value/ Significance F	1,53E-06	1,57E-05	5,35E-05	0,0002

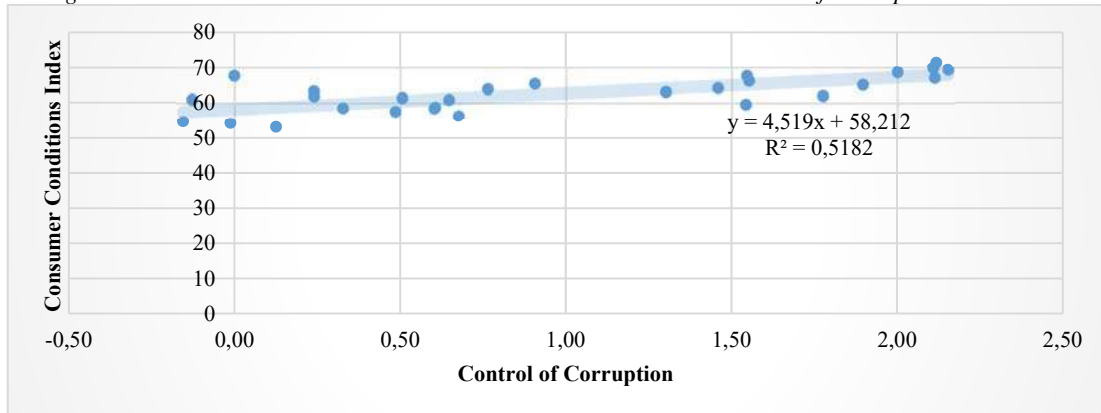
Source: Authors’ computation using Excel Data Analysis

Figure no. 3 Correlation between Consumer Conditions Index and Rule of Law Indicator



Source: Graphical representation made by the authors using Excel Data Analysis

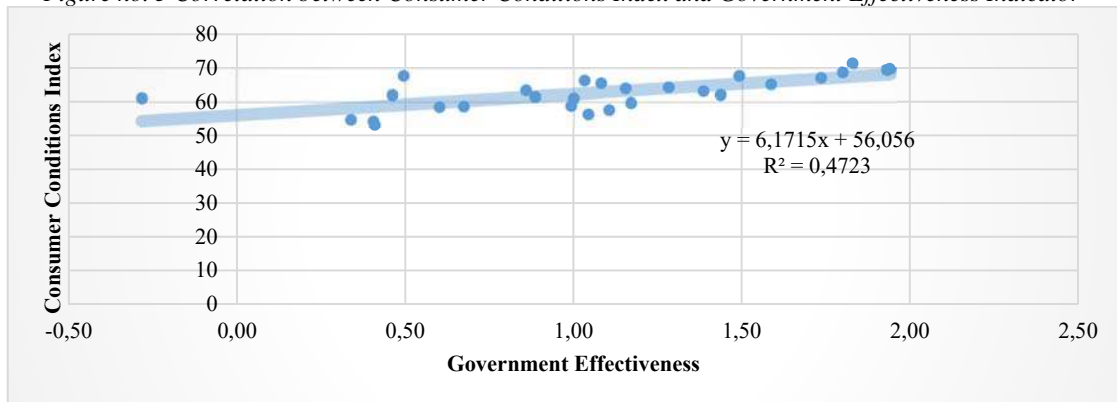
Figure no. 4 Correlation between Consumer Conditions Index and Control of Corruption Indicator



Source: Graphical representation made by the authors using Excel Data Analysis

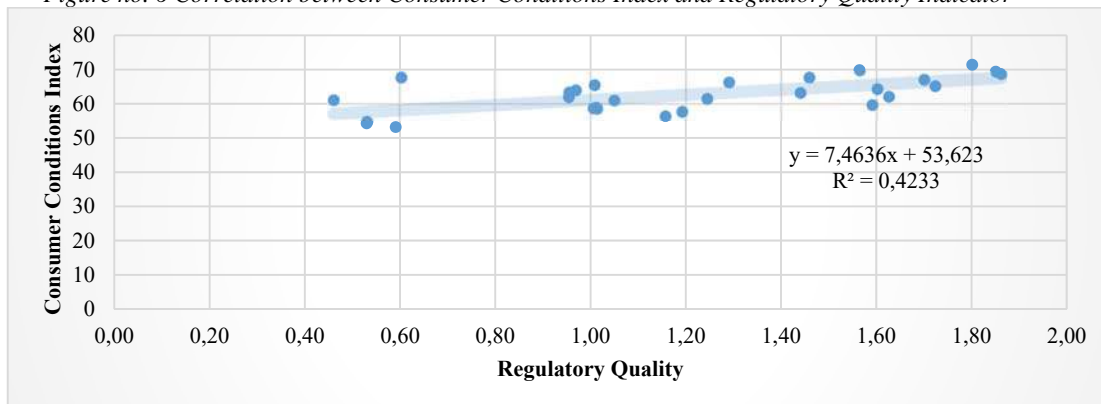
The very small P-value associated with the F-value from above regression models (1,53E-06 for Rule of Law Indicator and 1,57E-05 for Control of Corruption Indicator) show a statistically significant correlation translated into a positive impact (R square values) of the first two Governance Indicators analyzed above (59% and 52%) on the Consumer Conditions Index and calculated for EU Member States including United Kingdom.

Figure no. 5 Correlation between Consumer Conditions Index and Government Effectiveness Indicator



Source: Graphical representation made by the authors using Excel Data Analysis

Figure no. 6 Correlation between Consumer Conditions Index and Regulatory Quality Indicator



Source: Graphical representation made by the authors using Excel Data Analysis

Also, the very small P-values associated with the F-value from above regression models (5,35E-05 for Governance Effectiveness Indicator and 0,0002 for Regulatory Quality Indicator) show a statistically significant correlation translated into a positive impact (R square values) of the last two Governance Indicators (47% and 42%) analyzed above on the Consumer Conditions Index calculated for EU Member States including United Kingdom.

5. Conclusions

Opinion polls conducted among European consumers and traders increasingly show that the discrepancies between different regions of the EU in terms of consumer conditions are shrinking, with consumers increasingly aware of the role they play in the single market. In this context, the development of efficient rules on consumer protection in particular, but also the implementation of coherent policies in general, contribute to strengthening consumer confidence in the single market.

In conclusions, as we showed in the analysis undertaken in this paper, the national governance, and especially the quality of rule-making and related enforcement play an important role in providing high quality consumer conditions for Europeans.

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The Impact of Covid-19 Pandemic on Romania’s Trade Balance

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Abstract

In the past year the whole world was affected by the Covid-19 pandemic, Romania was not excepted from that, the economy changed after being impacted by Covid-19 pandemic. Although the impact was visible in small business most and in the sanitary domain, Romania having a major sanitary crisis, the impact also affected the trade balance and enlarged the trade deficit even more. This paper plans to analyse the changes from before the pandemic and after, by observing the commercial balance fluctuations from 2010 until March 2021, with the latest data available.

Key words: import, export, commercial balance, trade balance

J.E.L. classification: F30, F14

1. Introduction

The trade balance represents the total of exports and imports for both goods and services, for a given period. The Balance of trade or BOT is the biggest component from Balance of payments or BOP. Balance of trade is also called commercial balance, or net exports. The formula for the calculation is: Exports-Imports. It is used to determine a country’s relative strength. If a country imports more goods and/or services than it exports has a negative balance or also called trade deficit. The vice versa applies, a country that is exporting more than importing has a positive trade balance hence a stronger economy. The BOT alone is not a strong indicator about a country’s economic health therefore it should be taken in consideration when regarding the business cycle. A country that has a large deficit, must borrow money to further buy goods and services (Investopedia, 2021).

In the past year Romania was also affected by Covid-19 Pandemic. The impact of this, is yet to be evaluated, but certain aspects can be seen already, the economy went through some irreversible changes both micro and macro. Some of the micro economically changes that are going to be analysed are:

- The growth of online commerce – hence the orientation of the small business to go digital.
- Working from home switch – most of the companies changed their work arrangements towards working from home.

As for the macro economical level – the commercial balance evolution for the period 2010-2021. Regarding 2021 – only the first three months will be taken in consideration, the data for the whole year being an estimation calculated by the authors, as there is no data available at the time being.

2. Theoretical background

Romania switched in the past 30 years from a communist regime towards a market-oriented economy. The question asked by many researchers is if the economy is ready to face further challenges. The Covid-19 pandemic came with many issues and struggles for the business sector.

This paper aims to analyse the changes that arose since the start of pandemic and how did Romania handle it.

3. Research methodology

This paper will analyse the effects of pandemic, using comparative methods, building a before and after the pandemic —by analysing the series of data from the Trade balance – 2010-2021. The data was collected by authors from National Institute of Statistics and compiled for further usage.

4. Findings

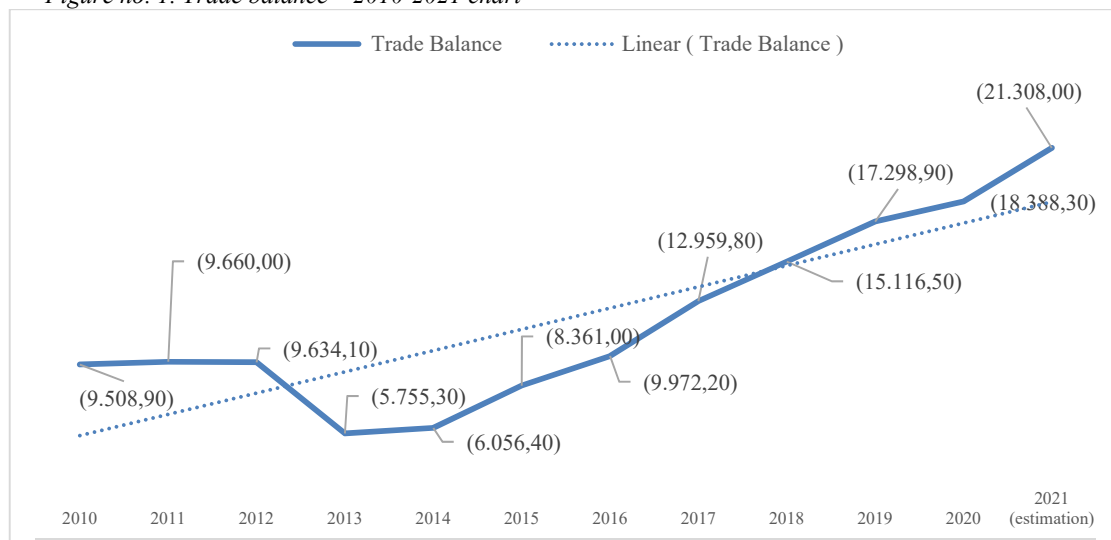
4.1. Analysis of the commercial balance

As the data compiled shows in figure 1 below, Romania has a negative trade balance since 2010, the yearly average for 2010-2019 being 11,155.58 million EUR.

The lowest value was in 2013 and totalled 5,755.3 million EUR.

The trend might look as positive, but the amounts are negative and show with every false growth an actual growth of imports for Romania. As it can be observed the peak year is 2021, but the data is still incomplete at time being.

Figure no. 1. Trade balance – 2010-2021 chart



Source: Authors’ own work based on INSSE data

The value of exports has an ascending trend since 2010, the amounts going almost double in 2020. Compared to the imports that registered a growing trend also, the exports have smaller growing rate than imports. The peak for exports was in 2019 with almost 68,998.10 million EUR, unfortunately in that same year Romania registered the highest deficit for trade balance since 2010 – 17,298.9 million EUR.

In 2020 the value of exports had the first descending trend since 2010, the exports totalling only 62,175.6 million EUR, 6,822.50 less than in 2019. On the other hand, the value of imports decreased also with 5,733.10 million EUR.

Since for 2021 there is no data available for the whole year, the comparison with 2019 and 2020 will be made on an average. The average for 2021 is 5,906.5 for exports and 7,682.17 million EUR. If comparing just monthly, in March 2019 the imports value was 7,426.90 million EUR, in 2020 7,282.80 mil. EUR while in the same month of 2021 was 8,782.70 million EUR. March was chosen as it is the last value of 2021 and in 2020 it is the month when pandemic started. After following a statistic conducted by INSSE in the month of March 2020, where a number of 1796 companies were

surveyed, and over 50% of responders that held almost 62% of exports (compared to march last year) had a decrease in exports. (INSSE, 2020)

Figure no. 2 Exports in Romania - FOB (2010-2021)



Source: Authors' own work based on INSSE data

Figure no.3 Imports in Romania - CIF (2010 -2021)



Source: Authors' own work based on INSSE data

Table no.1 Commercial balance 2010-2021 (January - June)

Year Month	2010					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	2,290.80	2,570.60	3,034.50	2,899.50	3,057.90	3,377.20
Imports (CIF)	2,781.40	3,217.30	3,974.90	3,780.60	4,011.50	4,300.00
Gap FOB-CIF	(490.60)	(646.70)	(940.40)	(881.10)	(953.60)	(922.80)
	2011					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,422.90	3,528.00	4,128.10	3,421.70	3,872.60	3,802.00
Imports (CIF)	3,628.80	3,932.60	4,991.10	4,387.20	5,048.80	4,687.90
Gap FOB-CIF	(205.90)	(404.60)	(863.00)	(965.50)	(1,176.20)	(885.90)
	2012					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,488.40	3,520.70	4,063.80	3,537.20	4,020.10	3,756.10
Imports (CIF)	3,948.20	4,032.40	4,813.20	4,463.60	5,053.10	4,696.90
Gap FOB-CIF	(459.80)	(511.70)	(749.40)	(926.40)	(1,033.00)	(940.80)
	2013					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,702.30	3,873.50	4,005.90	4,088.00	4,022.30	4,023.40
Imports (CIF)	4,004.80	4,082.00	4,576.40	4,689.20	4,514.30	4,392.40
Gap FOB-CIF	(302.50)	(208.50)	(570.50)	(601.20)	(492.00)	(369.00)
	2014					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,936.70	4,340.90	4,481.30	4,170.60	4,346.50	4,240.90
Imports (CIF)	4,189.40	4,655.90	5,031.70	4,814.30	4,878.60	4,796.80
Gap FOB-CIF	(252.70)	(315.00)	(550.40)	(643.70)	(532.10)	(555.90)
	2015					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,187.30	4,396.40	4,800.90	4,399.70	4,489.30	4,767.60
Imports (CIF)	4,364.30	4,782.20	5,613.80	5,047.90	5,037.60	5,490.00
Gap FOB-CIF	(177.00)	(385.80)	(812.90)	(648.20)	(548.30)	(722.40)
	2016					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,118.50	4,813.20	4,929.60	4,704.60	4,675.20	4,941.80
Imports (CIF)	4,498.30	5,425.10	5,895.00	5,547.90	5,663.60	5,637.60
Gap FOB-CIF	(379.80)	(611.90)	(965.40)	(843.30)	(988.40)	(695.80)
	2017					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,679.40	5,070.60	5,727.80	4,773.70	5,579.00	5,065.60
Imports (CIF)	5,284.40	5,724.60	6,768.00	5,822.10	6,682.20	6,433.90
Gap FOB-CIF	(605.00)	(654.00)	(1,040.20)	(1,048.40)	(1,103.20)	(1,368.30)
	2018					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,424.40	5,456.60	6,107.20	5,234.00	5,870.80	5,883.60
Imports (CIF)	6,201.40	6,339.00	7,166.10	6,250.30	7,143.40	7,185.80
Gap FOB-CIF	(777.00)	(882.40)	(1,058.90)	(1,016.30)	(1,272.60)	(1,302.20)
	2019					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,509.20	5,893.90	6,129.90	5,531.00	6,270.80	5,560.70
Imports (CIF)	6,782.30	7,048.20	7,426.90	6,924.40	7,753.70	6,692.10
Gap FOB-CIF	(1,273.10)	(1,154.30)	(1,297.00)	(1,393.40)	(1,482.90)	(1,131.40)
	2020					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,687.00	5,937.00	5,433.00	2,931.30	3,758.50	4,843.00
Imports (CIF)	7,005.40	7,232.70	7,282.80	4,569.70	5,015.20	6,166.00
Gap FOB-CIF	(1,318.40)	(1,295.70)	(1,849.80)	(1,638.40)	(1,256.70)	(1,323.00)
	2021					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,407.10	5,786.20	6,526.20			
Imports (CIF)	6,586.40	7,677.40	8,782.70			
Gap FOB-CIF	(1,179.30)	(1,891.20)	(2,256.50)			

Source: (INSSE)

Table no.2 Commercial balance 2010-2021 (July- August)

Year	2010						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		3,392.40	2,792.90	3,535.10	3,515.60	3,626.70	3,267.10
Imports (CIF)		4,050.90	3,419.00	4,354.90	4,280.80	4,563.10	4,134.80
Gap FOB-CIF		(658.50)	(626.10)	(819.80)	(765.20)	(936.40)	(867.70)
	2011						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		3,823.30	3,475.00	4,217.40	4,138.80	4,165.50	3,296.20
Imports (CIF)		4,489.70	4,360.00	5,048.30	4,920.80	5,090.20	4,366.10
Gap FOB-CIF		(666.40)	(885.00)	(830.90)	(782.00)	(924.70)	(1,069.90)
	2012						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		3,795.80	3,504.00	3,835.30	4,196.80	4,202.30	3,148.70
Imports (CIF)		4,547.50	4,515.60	4,672.60	5,307.30	4,625.70	4,027.20
Gap FOB-CIF		(751.70)	(1,011.60)	(837.30)	(1,110.50)	(423.40)	(878.50)
	2013						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		4,482.20	3,829.10	4,454.20	4,701.70	4,523.80	3,855.70
Imports (CIF)		5,055.20	4,479.00	4,872.20	5,348.80	4,946.30	4,356.80
Gap FOB-CIF		(573.00)	(649.90)	(418.00)	(647.10)	(422.50)	(501.10)
	2014						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		4,775.60	3,864.30	4,906.50	4,932.90	4,665.90	3,803.90
Imports (CIF)		5,299.50	4,306.40	5,392.20	5,499.90	5,104.20	4,553.50
Gap FOB-CIF		(523.90)	(442.10)	(485.70)	(567.00)	(438.30)	(749.60)
	2015						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		5,043.30	3,923.50	4,915.10	4,993.40	4,751.30	3,942.00
Imports (CIF)		5,690.60	4,775.20	5,659.50	5,866.50	5,530.10	5,113.10
Gap FOB-CIF		(647.30)	(851.70)	(744.40)	(873.10)	(778.80)	(1,171.10)
	2016						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		4,811.00	4,445.90	5,241.10	5,086.70	5,311.40	4,313.20
Imports (CIF)		5,450.50	5,470.50	6,023.60	6,064.50	6,176.90	5,510.90
Gap FOB-CIF		(639.50)	(1,024.60)	(782.50)	(977.80)	(865.50)	(1,197.70)
	2017						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		5,226.10	4,920.90	5,557.10	5,762.90	5,785.80	4,495.20
Imports (CIF)		6,214.90	5,985.60	6,583.80	7,088.60	6,910.50	6,105.30
Gap FOB-CIF		(988.80)	(1,064.70)	(1,026.70)	(1,325.70)	(1,124.70)	(1,610.10)
	2018						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		5,899.10	5,130.70	5,839.70	6,336.90	5,937.50	4,602.90
Imports (CIF)		7,172.00	6,531.10	6,812.70	8,223.60	7,500.70	6,313.80
Gap FOB-CIF		(1,272.90)	(1,400.40)	(973.00)	(1,886.70)	(1,563.20)	(1,710.90)
	2019						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		5,849.50	5,000.50	6,104.10	6,328.00	5,995.50	4,825.00
Imports (CIF)		7,629.80	6,362.40	7,289.50	8,299.10	7,489.80	6,598.80
Gap FOB-CIF		(1,780.30)	(1,361.90)	(1,185.40)	(1,971.10)	(1,494.30)	(1,773.80)
	2020						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)		5,552.40	4,599.20	6,070.40	6,260.80	6,031.60	5,071.40
Imports (CIF)		6,876.50	6,113.30	7,612.30	8,060.70	7,605.40	7,023.90
Gap FOB-CIF		(1,324.10)	(1,514.10)	(1,541.90)	(1,799.90)	(1,573.80)	(1,952.50)
	2021						
	Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)							
Imports (CIF)							
Gap FOB-CIF							

Source: (INSSE)

4.2. Analysis of Romania’s government debt from 2010 – 2021

A country debt is in tight connection with the trade balance, as it was stated before by Investopedia’s articles (Investopedia, 2021 and 2020). Romania’s debt had the smallest value in 2010 and since then is having an ascending trend, peaking one year after the pandemic with 506,755.88 million RON and almost half of PIB – 48 %, according to the data provided by the Ministry of Public Finance. (Ministry of Public Finance, 2021)

To further explain, the exchange rate is impacted by commercial balance, meaning that a country that has desirable good has a better exchange rate than one that relies more on imports. The appreciation and depreciation of currencies is based on the supply and demands value for a country’s good for a given period. Therefore, a country that has a lower demand for its goods, tends to import more than exports, decreasing the demand for its currency (Stucka, 2004; Lioudis, 2020).

Table no. 3 Public debt (2010 -2015)

Million/ RON						
Public Debt	2010	2011	2012	2013	2014	2015
Amount	157,410.40	191,035.30	219,761.53	238,882.31	262,195.22	269,151.30
% PIB	29.7%	34.0%	36.9%	37.5%	39.2%	37.8%

Source: (Ministry of Public Finance, 2021)

Table no. 4 Public debt (2016 -2021)

Million/ RON						
Public Debt	2016	2017	2018	2019	December 2020**)	March 2021**)
Amount	284,998.60	300,750.40	330,518.67	373,496.85	499,152.91	506,755.88
% PIB	37.3%	35.1%	34.7%	35.3%	47.3%	48.0%

Source: (Ministry of Public Finance, 2021)

In tables no. 3 and 4 above, there is the public debt as it is provided by Ministry of Public Finance.

In the charts below is it visible the connection between trade deficit, exchange rate and public debt. Public debt’s structure is mostly in EUR by the 2021 data, and for each year has been converted also to EUR by using the average exchange rate between EUR and RON. The data for the average exchange has be provided by National Bank of Romania.

To summarise the data the following table will be provided:

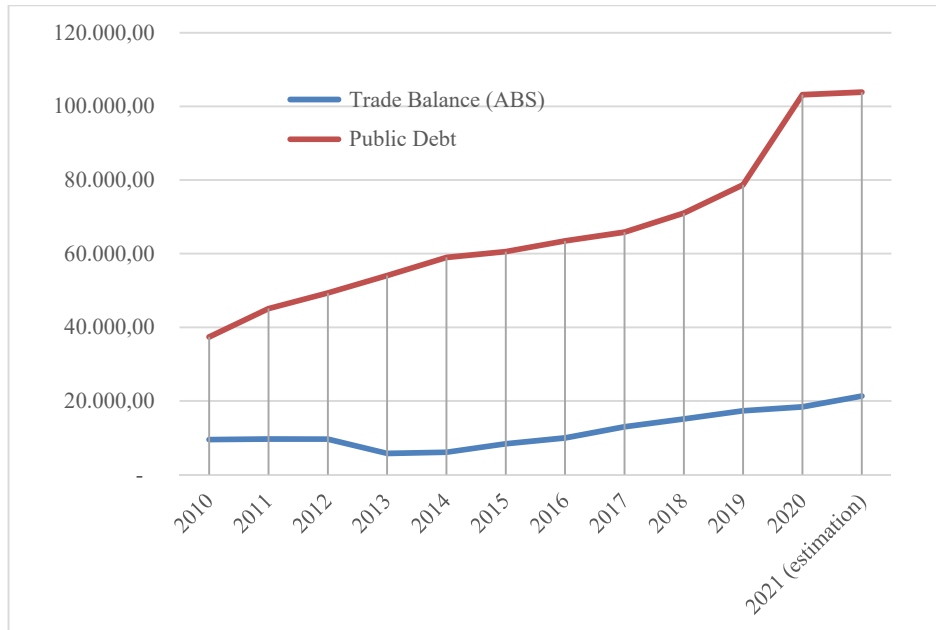
Table no. 5 Summarisation of data

Year	Trade Balance	Public Debt	Exports (FOB)	Imports (CIF)	Average EUR exchange rate
2010	(9,508.90)	37,390.53	37,360.30	46,869.20	4.2099
2011	(9,660.00)	45,077.82	45,291.50	54,951.50	4.2379
2012	(9,634.10)	49,318.12	45,069.20	54,703.30	4.456
2013	(5,755.30)	54,058.00	49,562.10	55,317.40	4.419
2014	(6,056.40)	58,991.86	52,466.00	58,522.40	4.4446
2015	(8,361.00)	60,551.47	54,609.80	62,970.80	4.445
2016	(9,972.20)	63,462.77	57,392.20	67,364.40	4.4908
2017	(12,959.80)	65,837.09	62,644.10	75,603.90	4.5681
2018	(15,116.50)	71,025.82	67,723.40	82,839.90	4.6535
2019	(17,298.90)	78,710.45	68,998.10	86,297.00	4.7452
2020	(18,388.30)	103,192.60	62,175.60	80,563.90	4.8371
2021 (estimation)	(21,308.00)	103,881.03	70,878.00	92,186.00	4.8782

Source: (Authors’ work of compiled data from all cited sources)

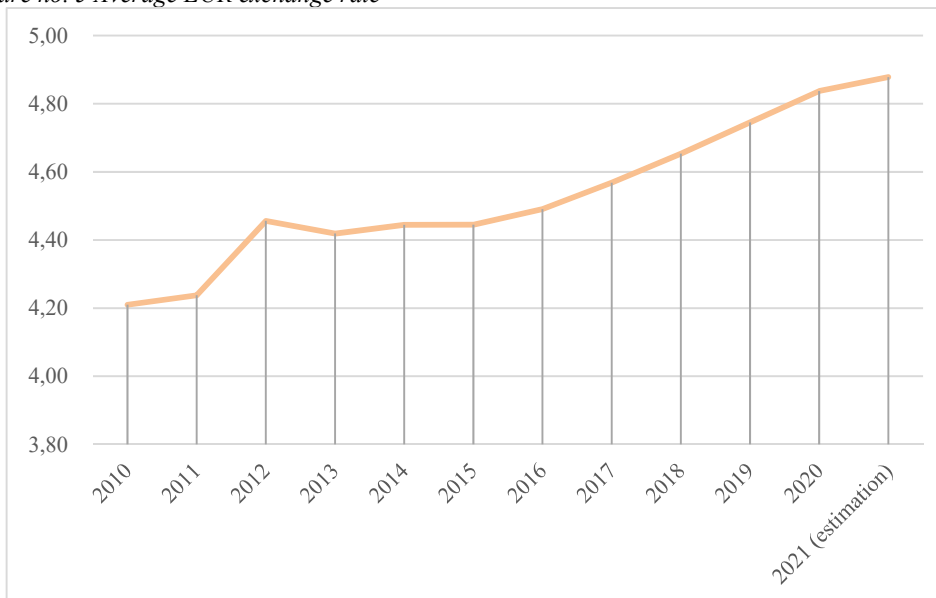
As figure no. 4 shows, the correlation between Trade balance (in absolute values) and public debt is the following – when the trade balance had a negative deficit, the public debt grew also. In figure no. 5 is the average exchange rate as per National Bank of Romania’s data, if compared both graphics, the conclusion is that when the public debt and commercial balance deficit grew, the yearly average exchange rate grew, or in other words the Romanian Leu depreciated.

Figure no. 4 Trade Balance and Public Debt



Source: (Authors’ work of compiled data from all cited sources)

Figure no. 5 Average EUR exchange rate



Source: (National Bank of Romania, 2021)

5. Conclusions

Since the value of imports also decreased in 2020 – being only 80,563.9 million EUR, compared to 2019 when the value totalled 86,297.00 million EUR, this can only mean that the request for imported goods and services decreased with the pandemic and the purchasing power of the population decreased against the background of the layoffs and Covid-19 crisis.

In 2020 both Trade balance and public debt peaked having the highest values since 2010, reaching negative 18,388.30 million EUR respectively 103,192.6 million EUR. The exchange rate for 2020 was 4.8371, the highest value until now. In 2021, the trends continue to ascend for the first three months of the year, the exchange rate having an average of 4.8782 EUR, also higher than 2020. This shows that Romania exported less and at lower prices than before the pandemic, and relied more on imports, this widening the public debt even more. Another cause for currency depreciation is the lack of investments and dependencies on foreign capital. This was aggravated by the pandemic and the bankruptcy or decrease in activity for many businesses due to lockdown measures and/or lack of demand. The population tendencies were to consume less and save more due to uncertainty of their jobs, many Romanians being laid off or sent in technical unemployment.

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Accommodation Service and its Importance in the Hospitality Sector

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Abstract

The accommodation service is a basic tourist service that is the essence of the hospitality sector and without which the notion of tourist would not be possible, because the tourist status involves at least one night accommodation which reflects the importance of accommodation in the hospitality sector.

This paper aims to highlight the importance of the accommodation service in the hospitality sector. Therefore, the notions regarding accommodation are addressed and in order to demonstrate the importance of this service in the Romanian economy, an analysis is performed using statistical data on accommodation capacity and the number of tourists staying in accommodation units, under the influence of the COVID-19 pandemic crisis.

Key words: accommodation service, tourism, hospitality

J.E.L. classification: L80, L83

1. Introduction

The accommodation service is a basic service for the hospitality sector, respectively for the tourism industry. This service is closely dependent on the tourist infrastructure and human resources specialized in providing services related to the hospitality sector. Therefore, the quality of accommodation services is determined both by the quality of human resources and the quality of the technical-material base specific to tourism. Accommodation involves accommodation in a hotel-type unit.

2. Theoretical background

An important role for the accommodation service is played by the front office and the housekeeping service. The front office provides a place for guest registration and room sales, guest mail service, telephone calls and messages, reservations and referrals, and requests and complaints. A bright, clean room is the best way to supplement a cordial welcome (Pood & Lesure, 1964, p. 236 and p. 249). The front office and housekeeping services represent the accommodation department, and in the situation where it integrates other services - laundry, swimming pool, and hairdresser - it is a hotel services department (Lupu, 2010, p. 58).

Accommodation as a service and the hotel as equipment, are part of a much more extensive tourist product, in which accommodation is the main element of concern for the client, once a precise destination has been chosen (Nita and Butnaru, 2008, p. 21). Accommodation involves establishing contractual relations between the hotelier, the travel agency and the tourist. These relations generate the reservation, which is materialized in the accommodation contract. It can be verbal and written, the written form being preferred to avoid various disputes (Nita, 2004, p. 49).

3. Research methodology

In order to highlight the role that accommodation services play in the hospitality sector, systemic analysis of the notions related to accommodation services is used as research methods, but also the use of indirect methods based on statistical data to provide relevant information on trends

in the hospitality sector from Romania, from the point of view of accommodation capacity and consequently highlighting the importance of accommodation services.

4. Accommodation service - an essential component of the hospitality sector in Romania

In Romania, the accommodation service has a decisive role in the hospitality sector, being a decisive factor, which influences the tourist demand both nationally and internationally.

The accommodation service is influenced by two essential elements, namely: the technical-material base specific to tourism (accommodation units) and the labor force specialized in the provision of tourist services, including the provision of accommodation services. These two elements have evolved differently determining the volume and quality of accommodation services in the hospitality sector, as an essential element of tourism in Romania.

Thus, if the accommodation capacity in Romania has continuously increased, which is a positive factor for the hospitality sector, the tourism workforce is deficient, currently there is a shortage in the hospitality sector, which has a negative effect on accommodation and consequently on the entire hospitality sector.

In order to observe the evolution of the accommodation capacity in operation in Romania before and after the COVID-19 pandemic, we consider the data from Table no.1

Table no. 1 Accommodation capacity in use in Romania during 2018-2020

Types of accommodation units	2018		2019		2020	
	Number of beds - days	%	Number of beds - days	%	Number of beds - days	%
Hotels	51345975	57,64	51352048	57,83	37906152	59,2
Motels	2720100	3,05	2679202	3,01	1837507	2,87
Tourist inns	36173	0,04	28580	0,03	22237	0,03
Hostels	3465482	3,89	3365230	3,8	2243057	3,50
Tourist villas	3738166	4,2	3753539	4,23	2780569	4,34
Bungalows	424529	0,48	401346	0,45	334319	0,52
Tourist chalets	1508188	1,69	1494759	1,68	995642	1,55
Holiday villages	109663	0,12	114390	0,13	66680	0,10
Camping sites	753037	0,84	903792	1,02	697035	1,08
School and pre-school camps	1167990	1,31	1020800	1,15	209945	0,33
Tourist halting places	360368	0,40	315469	0,35	187105	0,29
Tourist boarding houses	10644927	11,96	10454735	11,8	7290415	11,4
Agro-tourist boarding houses	12498050	14,03	12615982	14,20	9195563	14,36
Houselet-type units	230040	0,27	230114	0,26	225344	0,35
Ship accommodation places	73203	0,08	59670	0,06	49025	0,08
TOTAL	89075891	100	88789656	100	64040595	100

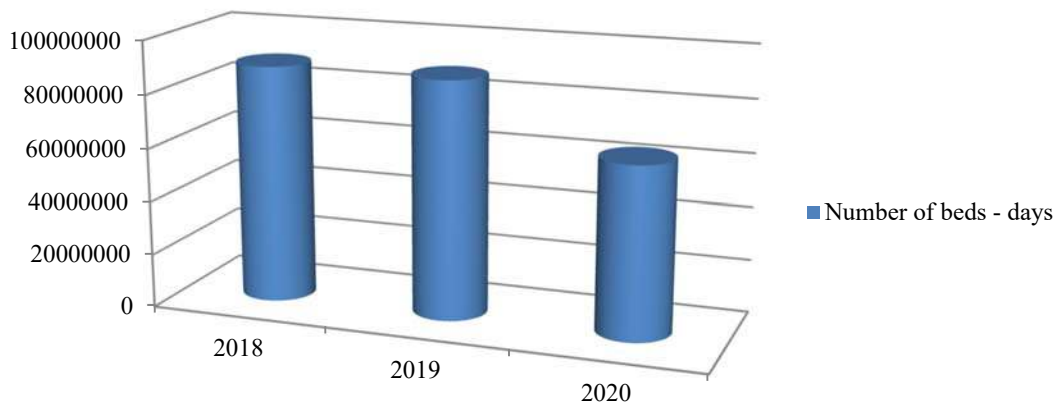
Sources: National Institute of Statistics, www.insse.ro - Romanian Tourism Statistical Abstract, 2021, p.36

From the analysis of the data in the table Table no. 1, the following trends emerge:

- The existing accommodation capacity in Romania is superior to the accommodation capacity in operation, which indicates a partial use of the accommodation capacity, determined by certain factors, among which the sanitary factor is essential for the analyzed period.
- There is a decrease in the use of accommodation capacity from 89075891 in 2018 to 64040595 in 2020, which is a decrease of 28.1% in 2020 compared to 2018 (see also Figure number 1). The main cause of this decrease is not the reduction of the existing accommodation capacity or the number of hospital units but this decrease is due to the decrease of the tourist demand materialized in the decrease of the number of tourists, due to the crisis caused by COVID-19.

- Decrease in accommodation capacity in days expressed in number of beds - days registered for all types of accommodation units
- The reduction of the accommodation capacity in use expressed in number of beds - days was registered for all types of accommodation units, during the analyzed period
- In the case of hotels there was a reduction in accommodation capacity used by 26.2%
- In the case of Holiday Villages, there was a decrease of 39.2%, being the largest decrease in 2020 compared to 2018, compared to other hospital units. This decrease is based on the reduction of freedom of movement due to the restrictions imposed by the pandemic
- Tourist boarding houses registered a decrease in accommodation capacity in use by 31.5%, and in the case of agritourism pensions a decrease by 26.4% in 2020 compared to 2018
- If we consider the share by accommodation units in the total accommodation capacity in use, it is found that in the analyzed interval the hotels have the highest share (between 57.64% and 59.2%). Thus, there is an increase of this share by 1.56 percent in 2020 compared to 2018, which means an increase in total accommodation capacity, due to anti-COVID-19 safety measures taken in hotel units as main units of accommodation.
- High weights in the total accommodation capacity in use are also found in the case of agro-tourist boarding houses (14%) but also in the case of Tourist boarding houses (11-12%). The other types of accommodation units have small shares in the total accommodation capacity in operation (see Table no. 1)

Figure no. 1. Accommodation capacity in use in Romania during 2018-2020



Source: Table no.1, National Institute of Statistics, www.insse.ro

Consequently, the decrease in the use of accommodation capacity in operation in 2020 compared to 2018, due to the COVID-19 pandemic crisis generated significant financial losses for the owners of accommodation units in the hospitality sector in Romania.

Table no. 2 Tourists accommodated in the establishments of tourists' reception with functions of tourists' accommodation in Romania, during 2018-2020

Tourists	2018	2019	2020
Romanians	10108509	10691195	5944775
Foreigners	2796622	2683748	453867
TOTAL	12905131	13374943	6398642

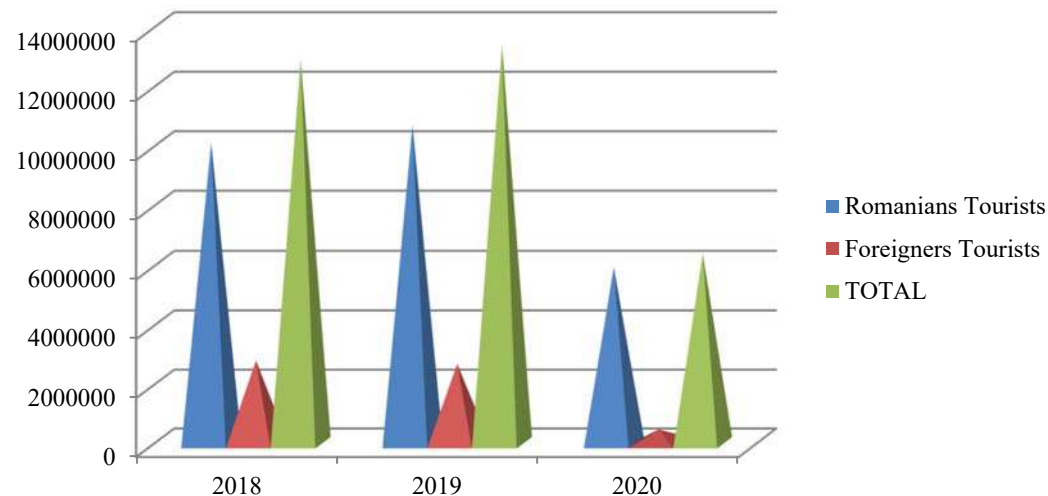
Source: National Institute of Statistics, www.insse.ro - Romanian Tourism Statistical Abstract, 2021, p.36

A relevant image for the role of accommodation in the hospitality sector in Romania is the capitalization of accommodation capacity, through the number of tourists accommodated in hospital units.

Thus, according to the data in Table number 2, the following elements can be deduced:

- In the case of accommodated Romanian tourists, there is an increase of 5.8% in 2019 compared to 2018 and a decrease of 41.2 percent in 2020 compared to 2019.
- In the case of foreign tourists staying in Romanian hospital units, there is a decrease of 4% in 2019 compared to 2018 and a decrease of 84% in 2020 compared to 2018
- If we consider the total number of tourists who used accommodation services in Romania, there is an increase of 3.6% in 2019 compared to 2018 (due to the increase in the number of Romanian tourists and not the increase in the number of foreign tourists); in 2020 compared to 2019 there was a decrease by 50% of the number of tourists accommodated in hospital units in Romania (see Figure no.2)

Figure no. 2. Tourists accommodated in the establishments of tourists' reception with functions of tourists' accommodation in Romania, during 2018-2020



Source: Table no.2, National Institute of Statistics, www.insse.ro

5. Conclusions

The analysis highlights the drastic decrease in the number of Romanian and foreign tourists staying in accommodation units in Romania during the analyzed period. The largest decrease (84%) was registered among foreign tourists, which indicates the proportions in which the hospitality sector was affected internationally, respectively the hospitality sector in Romania.

The main cause is the health crisis caused by the COVID-19 pandemic, which has profoundly affected tourism services, including accommodation services as a basic component of the hospitality sector.

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Analysis of Market Services Compared to Public Services in Romania

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Abstract

Market services are services specific to a market economy that aim at both meeting the needs of consumers of services and making a profit for providers of such services. These services can be market services provided to the population that seek to meet the needs of the population as consumers of services, as well as market services for businesses that are part of the business sector generating profit for entrepreneurs.

But a society also needs public services, especially services financed from the state budget.

In Romania, at present, these services have an important role. Although they have seen an upward trend, both market services and public services have been severely affected by the crisis caused by the COVID pandemic 19.

Key words: services, market services, public services

J.E.L. classification: L80

1. Introduction

Regardless of the type of services, they have a special role in society both to meet consumer needs at individual or collective level and at the micro-economic level, respectively at the level of service providers, as an essential component of the tertiary sector. The dimensions of the service sphere are constantly changing both as a result of the increase in the need for services and due to the material production of the transformations that take place in its structure determined by the primary sector and the secondary sector (Criveanu, 2007, p.14).

That is why market services along with public services are essential for the smooth running of economic and social life in a society, including in a country like Romania.

2. Theoretical background

In economic theory, services can be divided according to different criteria. Thus, according to their sources of procurement, the services are divided into market services and non-market services, market services being the services procured through acts of sale and purchase through the market, while non-market services are services that circumvent market relations and which include public services, primarily collective public services that provide services for the general benefit of the community - army, police, justice (Ioncica, 2003, p.83). Other authors consider that non-market or public services are distributed by institutions and bodies located outside the market, and these services can be collective public services - army, police, justice, fire or public services directly benefiting individuals - education, protection and social assistance, the consumption of non-market or public services being a socialized consumption decided by the community (Zamfir, 2011, p.71).

The classification of services is based on their ability to be traded on the domestic market or the international market as a separate commodity, unlike those services that are offered for consumption on a non-commercial basis, this type of service includes some public services (Cristureanu, 2009, p.30).

In other words, from an economic point of view, but also from a social point of view, it is necessary to have both market-type services and public services that are not part of the market sphere.

3. Research methodology

For the study of market services and public services in Romania, indirect research methods are used, methods that involve the analysis and interpretation of statistical data that are provided by official institutions in Romania.

This analysis aims at detaching some tendencies, causes and factors that determined the positive or negative evolutions of these services in Romania during the analyzed period.

4. Results. Market services and public services in Romania

As in any market economy and in Romania, at present, the functioning of the market economy implies the existence of market services but also of public services, especially of services financed from the central or local state budget.

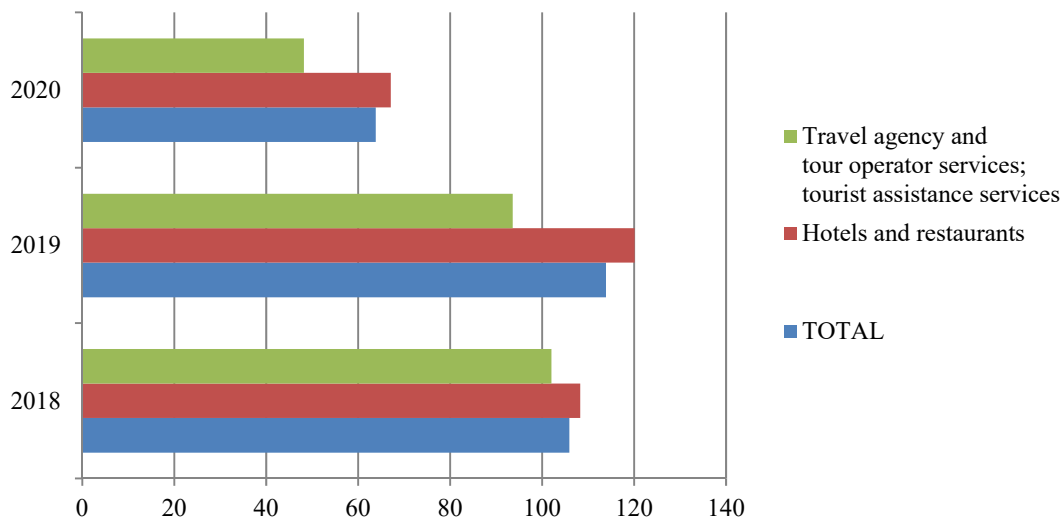
Table no. 1 Turnover volume indices of market services mainly rendered to the population - previous year 100

	2018	2019	2020
TOTAL	105,9	113,9	63,8
of which:	108,3	120,1	67,1
Hotels and restaurants			
Travel agency and tour operator services; tourist assistance services	102,0	93,6	48,2

Sources: National Institute of Statistics, www.insse.ro, Romania in Figures Statistical Abstract 2021, p.81-82

The analysis of the data in table number 1 highlights the evolution of market services provided to the population between 2018 and 2020.

Figure no. 1. Turnover volume indices of market services mainly rendered to the population



Source: Table no.1, National Institute of Statistics, www.insse.ro

Thus, it is found that in the period 2018-2019 the turnover indices for market services provided to the population increased from 105.9 to 113.9, which represents an increase of 8%, but in 2020 compared to 2019 it took place a sudden decrease from 113.9 to 63.8%, ie a decrease of 50%.

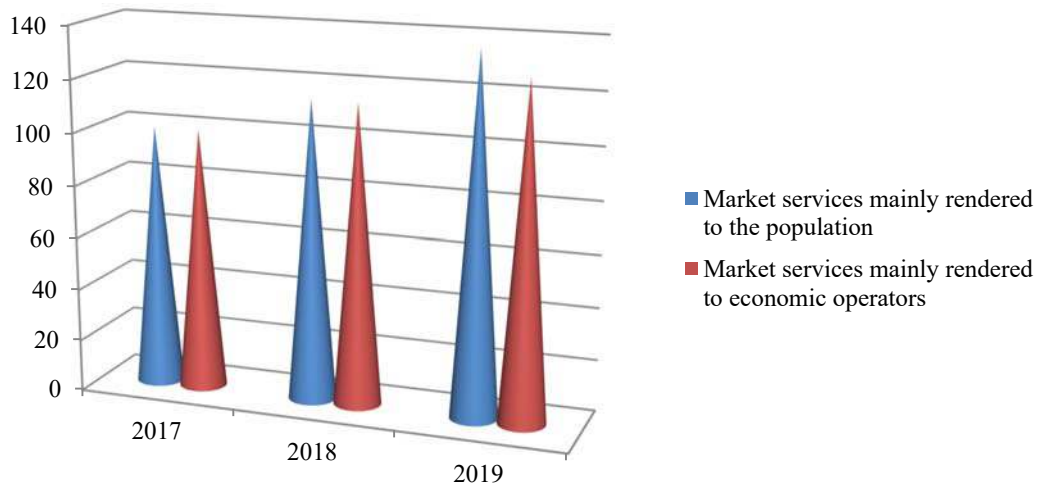
Among these services, an important role is played by the services provided in hotels and restaurants, but also by the services provided by travel agencies.

In the case of these two types of market services provided to the population, there were drastic decreases in 2020 compared to 2019, namely:

- Hotel and restaurant services decreased from 120.1% in 2019 to 67.1% in 2020, indicating a decrease of 53%;
- The services provided by travel agencies decreased from 93.6% in 2019 to 48.2% in 2020, representing a decrease of 45.4%
- In 2019 compared to 2018 (see also Figure number 1), the services in hotels and restaurants increased by 11.8%, which highlights the positive trend registered by the demand for services on this market, and the services of travel agencies decreased from 102 % to 93.6%, a decrease due to the reduction in demand for such services under the impact of economic and non-sanitary factors.

These decreases are due to the negative impact that the health crisis caused by COVID-19 had, deeply affecting the services market and consequently the demand for services, but also the supply of services for these types of services.

Figure no. 2. Income from market services activities



Source: Table no.2, National Institute of Statistics, www.insse.ro

The importance of market services in Romania is reflected by the data in table number 2, data that highlight the revenues obtained from this type of services.

Table no. 2 Income from market services activities – lei million current prices

	2017		2018		2019	
	million Lei	%	million Lei	%	million Lei	%
Market services mainly rendered to the population	27649,1	100	31663,1	114,5	37778,3	136,6
Market services mainly rendered to economic operators	274306,2	100	313848,8	114,4	349662,0	127,4

Sources: National Institute of Statistics, www.insse.ro, Romania in Figures Statistical Abstract 2021, p.81-82

Consequently:

- In the case of market services provided to the population, there was a continuous increase in revenues brought by these services, which means an increase in 2018 compared to 2017 by 14.5% and in 2019 compared to 2017 by 36.6%.

- In the case of enterprise services, the same upward trend is registered, although at a slower pace, respectively by 14.4% in 2018 compared to 2017 and by 27.4% in 2019 compared to 2017
- If we consider the structure of these services in total revenues, it is found that the services provided to the population had a higher share than those provided to enterprises (see also Figure no. 2)

These increases of the revenues brought by the market services are based on the high economic growth registered by the Romanian economy during this period as well as the high incomes of the population that generated the increase of the demand on this market of the services.

If we consider public services, an important role belongs to social assistance services. In this sense, in order to exemplify this type of services we consider the data from Table no. 3

Table no. 3 Tickets for balneary treatment and rest granted by means of social insurance

	2018	2019	2020
Balneary treatment - thou	171,2	164,4	67,2
Expenditure on treatment and rest- thou Lei	294512,0	274475,0	120,8

Sources: National Institute of Statistics, www.insse.ro, Romania in Figures Statistical Abstract 2021, p.40-42

These data indicate the major negative impact of the crisis caused by the COVID-19 pandemic, which led to a decrease in the number of spa treatment tickets from 164.4 thousand in 2019 to 67.2 thousand tickets, ie a decrease of approximately 60 %.

In the case of spending on rest and treatment, there is a decrease in 2020 compared to 2019 of 2019 of 99%, which means the magnitude of the health crisis that has affected public services in Romania.

5. Conclusions

Market services and public services are services that are very important in the normal functioning of a company, including in Romania.

The analysis of the statistical data regarding these types of services in Romania highlights the importance of these services that they have in Romania from an economic point of view but also from a social point of view.

At the same time, it highlights the negative impact that the health crisis has had during this period, both on the market services provided for enterprises and on the market services provided for the population, but especially on public services, especially on public services financed by to the state budget.

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Assessment of Innovative Sustainable Businesses in Europe. A Case Study in the field of Renewable Energy

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Abstract

Sustainability and innovation are both significant for the development of the business environment. Moreover, sustainable innovation creates a new generation of businesses worldwide that provide products and services characterized by resource efficiency. This paper aims to emphasize an assessment of innovative sustainable businesses in Europe. The identification and analysis of businesses that focus on sustainability and innovation are currently necessary since the future of all economies depend on how companies are using the existing resources. Innovative sustainable businesses provide new competitive green solutions that meet human needs. In addition to economic performances, businesses around the world should focus also on social and environmental performances. The methodological approach included a comparative analysis of the Global 100 most sustainable companies and a case study of the most sustainable European business in the world in the field of renewable energy. The index of the Global 100 most sustainable businesses in the world is reported by Corporate Knights, a Canadian research company. The results of the research highlighted that European countries have the most sustainable businesses in the world. The company included in the case study can become best practice for the other European countries that were not included in the Global 100 ranking. Innovative sustainable businesses are the future of Europe because they provide socio-economic and environmentally performances.

Key words: sustainable innovation, businesses, case study, renewable energy

J.E.L. classification: L25, L21, O30, O50, Q01

1. Introduction

The rapid evolution of technology in the last years has resulted in more and more competitive companies worldwide. In the context of the present issue concerning sustainable innovations, many companies are forced to develop their activities sustainably. Likewise, sustainability requires more innovative business models.

In addition to economic performances, companies have to include in their strategies social and environmental issues. How resources are used within companies determines their future in the global market. Sustainable innovation is more than innovation, it involves more efficient and competitive businesses around the globe.

This paper aims to emphasize an assessment of innovative sustainable businesses in Europe. The performances of many companies depend on the current and future challenges concerning sustainability and innovation. Internal and external stakeholders have attempted in the last years to design new innovative solutions for developing the business environment in a manner that incorporates economic, social and environmental issues.

2. Literature review

Evidence shows that many companies invest in technological innovations to achieve sustainable competitive advantage. The actual global challenges demand the identification of solutions and opportunities that enable sustainable innovation in companies even though the Covid-19 pandemic has affected the strategies of many companies (Avrămescu, 2020). Therefore, the future success of businesses depends on sustainable innovation.

The concept of sustainable innovation is currently at an initial stage of research. Until now, companies have been influenced by globalization (Brătășanu, 2020). The new challenges nowadays for many companies are sustainability and innovation. Some authors state that sustainable innovation involves the development of sustainable technologies and processes (Cillo *et al.*, 2019). On the other side, other authors have argued that sustainable innovation concerns more than new technologies and products, incorporates the organizational culture of the company and the social values of society (Pellegrini *et al.*, 2019).

For supporting the process of sustainable innovation, governments should establish an open innovation environment through the regulatory framework and intensive research and development. (Costa and Matias, 2020) Furthermore, the development of strategies for sustainable innovation could create advantages for companies such as cost reduction and more efficient production (Aldieri and Vinci, 2019). Future generations of entrepreneurs will benefit from the results of these policies and strategies by identifying new market opportunities.

To increase sustainable innovations, entrepreneurs could develop particular business models that generate economic, social and environmental performances (Cillo *et al.*, 2019; Ardito *et al.*, 2019). Therefore, nowadays managers and entrepreneurs must include in their business strategies social and environmental aspects besides economic issues.

Costa and Matias (2020) suggested that the creation of an innovative ecosystem can produce multiple advantages such as digitalization, technological developments and continuous innovation. To succeed in the creation of an innovative ecosystem, it is necessary to involve multiple stakeholders such as governments, businesses, educational institutions, research institutions, and the community.

Sustainable innovation for companies involves energy and waste management, environmental pollution prevention, and new recycling techniques (Adomako, 2020). All the results of the implementation of sustainable innovation have an impact on the employees, suppliers, and customers (Ardito *et al.*, 2019). On the other side, change towards sustainable innovation could come also from internal stakeholders who are interested in long-term development, not only from the exterior. For instance, the employees could propose innovative ideas for sustainably developing the business.

Some authors associate the concept of sustainable innovation with human resources (Grabar *et al.*, 2020). In their study, they investigated in which way sustainable human resources from university contribute to sustainable university development. The results of their study underlined that the sustainable innovation activities that human resources have initiated have generated positive effects on the sustainable development of the university.

3. Research methodology

The research methodology included (1) a comparative analysis of the Global 100 most sustainable companies and (2) a case study of the most sustainable European business in the world in the field of renewable energy. The index of the Global 100 most sustainable businesses in the world is available for the year 2019. Furthermore, the case study comprised an assessment of Orsted, a Danish business that was ranked the most sustainable business in the world in 2019.

4. Findings

This chapter will include a comparative analysis of the Global 100 most sustainable companies in the world and a case study of the most sustainable European companies in the world in the field of renewable energy.

4.1. Comparative analysis of the Global 100 most sustainable companies in the world

The index of the Global 100 most sustainable companies in the world is conducted by Corporate Knights, a research Canadian company. Every year since 2005, the company performs research concerning the most sustainable companies in the world resulting in a ranking with the first 100 most sustainable companies. The ranking is conducted by following a total of 21 indicators related to resource management, human resource management, financial management, clean revenues, and performance of suppliers (Corporate Knights, 2021). Some examples of indicators are innovation capacity, supplier sustainability score, energy productivity, waste productivity, and water productivity. (Corporate Knights, 2019) The database used for research comprises public data reported yearly by the companies.

The top ten companies included in the ranking are from Europe (Denmark, Finland, Netherlands, and Italy), North America (Canada and USA), and South America (Brazil). Therefore, the top ten ranking includes the following companies: Orsted (Denmark), Chr. Hansen Holding (Denmark), Neste Oyj (Finland), Cisco Systems (USA), Autodesk (USA), Novozymes (Denmark), ING Groep NV (Netherlands), Enel SpA (Italy), Banco do Brasil (Brazil), and Algonquin Power & Utilities Corp (Canada).

As it can be noted, the European companies own a large percentage of the top ten most sustainable companies. Moreover, out of six European companies, four companies are located in northern Europe. Consequently, the northern countries of Europe are the most competitive in the field of sustainability and innovation. The fields of activity of the companies are wholesale power, chemical engineering, oil industry, and banking.

Table no. 1. Classification of Global 100 most sustainable companies by continents and countries of provenance

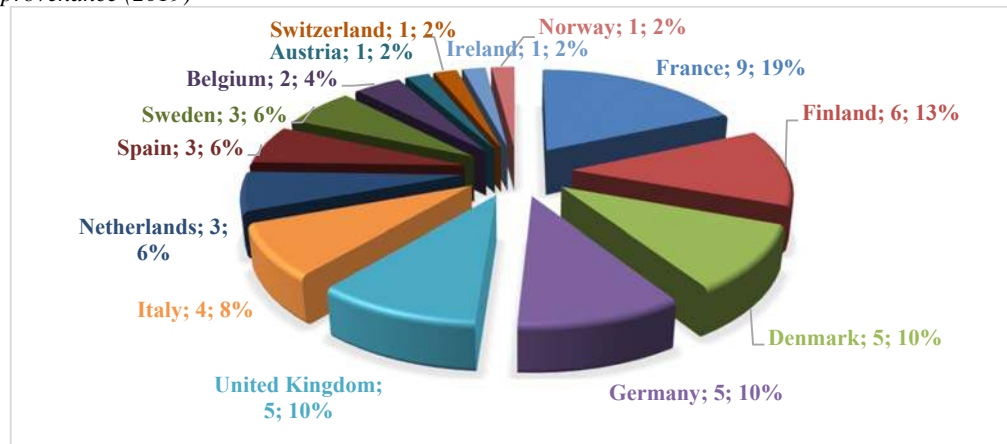
Continents and countries	No. of companies	Continents and countries	No. of companies
<i>Africa</i>	1	<i>Europe</i>	49
South Africa	1	France	9
<i>North America</i>	29	Finland	6
USA	17	Denmark	5
Canada	12	Germany	5
<i>South America</i>	3	United Kingdom	5
Brazil	3	Italy	4
<i>Asia</i>	16	Netherlands	3
Japan	6	Spain	3
Singapore	3	Sweden	3
China	2	Belgium	2
South Korea	2	Austria	1
Taiwan	2	Switzerland	1
Hong Kong	1	Ireland	1
<i>Australia</i>	2	Norway	1
Australia	2		

Source: own elaboration after Corporate Knights reports (Corporate Knights, 2021)

The classification by continents and countries of provenance provides the following situation: 49 companies in Europe, 29 companies in North America, 16 companies in Asia, 3 companies in South America, 2 companies in Australia, and one company in Africa. From the perspective of the most competitive continents in the world in the field of sustainability and innovation, can be distinguished Europe with 14 countries included in the ranking. Europe is followed by Asia (with 6 countries), North America (with 2 countries), South America (with 1 country), Africa (with 1 country), and Australia (with 1 country).

In terms of the European companies included in the Global 100 ranking, the research emphasises that most sustainable companies are located in France (9 companies), followed by Finland (6 companies), Denmark (5 companies), Germany (5 companies), United Kingdom (5 companies), and Italy (4 companies), Netherlands (3 companies), Spain (3 companies), Sweden (3 companies), and Belgium (2 companies). Moreover, Austria, Switzerland, Ireland, and Norway have one company. The evidence underlines that all the European countries included in the ranking are highly developed countries with a competitive business environment worldwide.

Figure no. 1. Number of sustainable European companies included in Global 100, by country of provenance (2019)



Source: own elaboration after Corporate Knights reports (Corporate Knights, 2021)

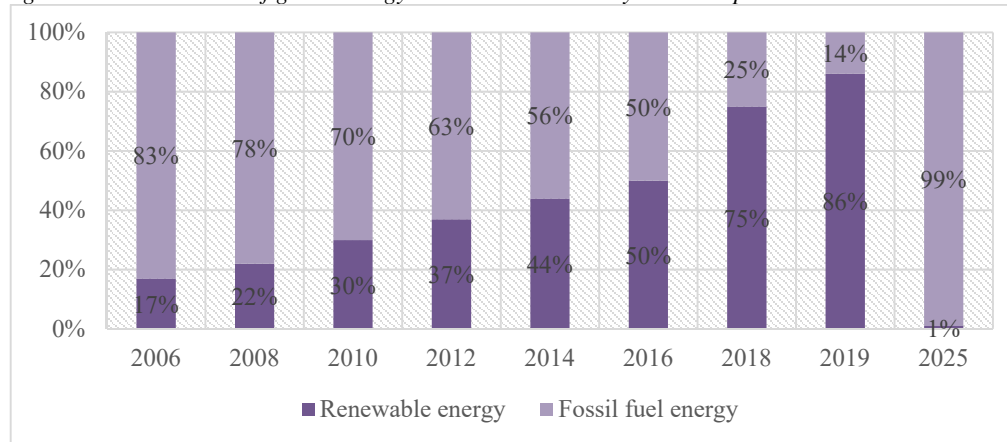
To summarize, the European countries are the most competitive in the world in the context of sustainability and innovation. A large number of European companies have implemented in their strategies innovation and sustainable development measures as an opportunity for environmental protection, move towards renewable resources and development of R&D activities.

4.2. Case study of the most sustainable European company in the world in the field of renewable energy

The case study includes an analysis of the most sustainable European company in the world. According to the reports released by Corporate Knights in 2019, Orsted ranked first in their research named Global 100 most sustainable corporations in the world. As it was mentioned in the previous part, Orsted is originally from Denmark. Over the last few years, the Danish company developed all the activities sustainably.

Orsted is operating in the field of renewable energy. From 2006 to the present time, renewable energy has started to overcome fossil fuel energy. The predictions reported by Orsted state that renewable energy will comprise almost 99% of the company's electricity and heat production until 2025. The company intends to develop the field of the green economy to reduce CO₂ emissions.

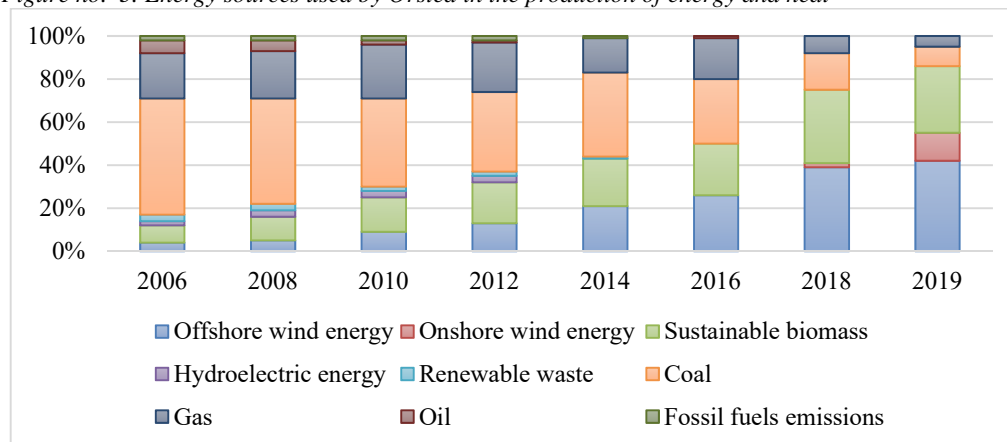
Figure no. 2. The share of green energy in Orsted’s electricity and heat production



Source: own elaboration after Orsted data (Orsted, 2021)

The energy sources used for energy and heat production within the Danish company were characterised by intense changes for the period 2006-2019. In 2006, the company used coal and gas as primary energy sources. However, the share of coal and gas has started to decrease over the next few years. On the contrary, in 2019, Orsted used as primary energy sources for energy and heat production offshore wind energy, sustainable biomass, and onshore wind energy. It can be noted that nowadays economies should implement renewable energy sources.

Figure no. 3. Energy sources used by Orsted in the production of energy and heat



Source: own elaboration after Orsted data (Orsted, 2021)

Among the green solutions, the company implemented include offshore wind energy, onshore wind energy, bioenergy, and solar energy. All these energy sources will be detailed hereinafter.

• **Offshore wind energy**

Evidence shows that Orsted is a global leader in constructing and developing offshore wind farms. The company has built offshore wind farms across three continents: Europe (Netherlands, Denmark, Germany, and United Kingdom), North America (USA), and Asia (Taiwan). In the four European countries (Netherlands, Denmark, Germany, and United Kingdom) the offshore wind farms have met the electricity needs of more than one million households, which is more than in the other countries. The evolution of offshore wind energy has recorded an upward trend since countries have begun to implement more and more renewable energy sources.

Table no. 2. Offshore wind farms constructed by Orsted

Countries	No. of offshore wind farms
Denmark	5
United Kingdom	16
Germany	5
Netherlands	1
USA	9
Taiwan	4

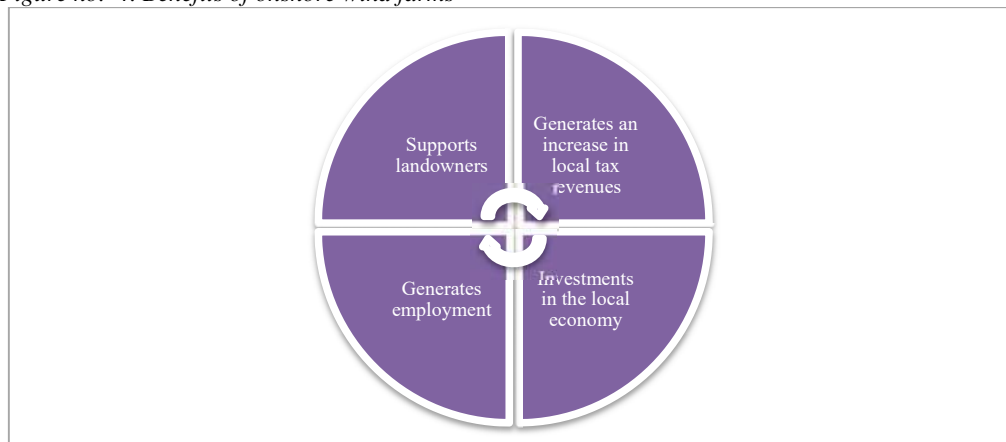
Source: own elaboration after Orsted data (Orsted, 2021)

Furthermore, the Danish company focuses on innovation in the development of offshore wind turbines, as a tool to develop new sources of renewable energy. Another action within Orsted is the cooperation with universities and research institutions. Orsted provides data relating to offshore wind turbines to these institutions to encourage the development of this sector through innovation.

- **Onshore wind energy**

Onshore wind energy is another renewable energy source that Orsted produces. The Danish company possesses onshore wind farms in multiple states from the United States of America (USA). Orsted has constructed onshore wind farms in the United States of America: in Texas, South Dakota, and Nebraska. The onshore wind farms provide electricity and heat energy to more than 400,000 households.

Figure no. 4. Benefits of onshore wind farms



Source: own elaboration after Orsted data (Orsted, 2021)

The establishment of new onshore wind farms provide multiple advantages for local communities: (1) supports the landowners to accommodate onshore wind farms for a long-term rent; (2) generates high tax revenues from property tax that can result in investments related to infrastructure education, health; (3) generates investments in the local economy that contribute to an increase in people’s revenue; (4) generates employment for the local communities.

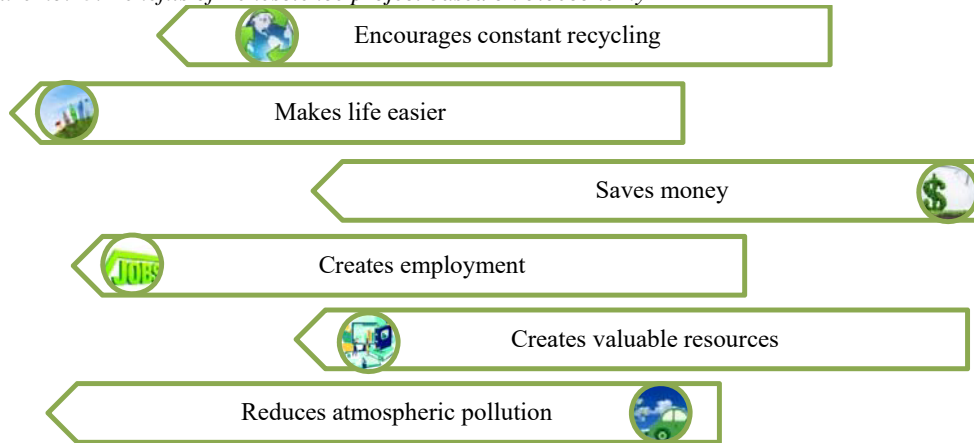
- **Bioenergy**

Bioenergy is integrated within the activities of Orsted and provides CO2 neutral electricity production. The company uses fuelwood chips and pellets produced from sustainable sources. In terms of electricity and heat services, the customers benefit from green sources which are obtained through particular methods.

Renescience is a bioenergy project within Orsted and envisages the identification and design of innovative technologies to transform household waste into a reusable material. The idea of the project is based on the assumption that there is a very large amount of waste worldwide and this situation requires a new solution for this problem to be solved: the construction of a landfill on the edge of the cities or the burning of waste. These two approaches are not effective from the

viewpoint of the scarcity of resources and demand other modalities such as the recycling of waste and the reuse of it for producing new products. For instance, the project data emphasises that the amount of recycled metal could annually generate the production of 3,700 cars.

Figure no. 5. Benefits of *Rescience* project based on bioeconomy



Source: own elaboration after Orsted data (Orsted, 2021)

The solutions implemented within the *Rescience* project have important implications for the quality of people’s lives: makes life easier, saves money, creates employment, creates valuable resources, reduces atmospheric pollution, and encourages constant recycling.

- **Solar energy**

The production of solar energy is another solution for renewable energy that Orsted has developed. Globally, solar energy is in a continuous process of development since it provides energy by harnessing solar power. Therefore, solar energy is a renewable source that contributes to the reduction of other polluting energy sources. The Danish company owns three solar and storage centres in the United Kingdom and the USA.

Table no. 3. Solar and storage centres constructed by Orsted

Countries	Solar and storage centres	Characteristics
Liverpool / United Kingdom	Carnegie Road storage project	3 lithium battery system
Texas / USA	Permian Energy Center	1.3 million panels; 100,000 homes powered
Alabama / USA	Muscle Shoals	670.000 panels

Source: own elaboration after Orsted data (Orsted, 2021)

To summarize, European companies have evolved considerably in the last year in terms of sustainability and innovation. The northern countries are a model of best practice for all European countries since their companies have followed an efficient process of development in the field of sustainability. These circumstances result from a large investment in innovation and research. Also, companies are supported by governments through various policies and benefits.

6. Conclusions

To summarize, the concept of sustainable innovation has started to become crucial for many companies since the new global challenges involve social and environmental issues. However, the implementation of sustainable innovation requires the creation of a network to support and harness this process. Sustainable innovation will create the future generation of entrepreneurs worldwide.

Furthermore, the results of the research underlined that European countries have the most sustainable businesses in the world in terms of sustainable innovation.

The case study of the European company considered to be the most sustainable in the world, according to Corporate Knights, can constitute a model of best practice for other European countries. Innovative sustainable businesses are the future of Europe because they provide socio-economic and environmentally performances.

7. Acknowledgement

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The Importance of Financial Communication in the Investment Decision

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Abstract

The paper addresses the importance of integrated reporting for financial communication. Given that investors make decisions based on the information presented in the financial statements, they should be given special importance in terms of how to prepare and disseminate them, in order to reduce uncertainties and increase their usefulness. Issuers that provide information in financial reporting need to be aware of their significant impact on investment strategies, liquidity and the level of market capitalization. Financial reporting is undergoing a profound transformation from the perspective of new processing and dissemination techniques in the digital environment, while increasingly diverse information needs are on the rise, generating pressure from users. Thus, we seek to observe to what extent investors are influenced by the general market trend and the financial performance of issuers. Trading price volatility may warrant increased attention on behalf of the investor to preliminary financial reporting in the absence of other significant events that occurred around the reporting period.

Key words: investment behavior, volatility, financial assets, financial reporting, key financial indicators

J.E.L. classification: A11, F64, Q56

1. Introduction

The use of investment resources generates situations and actions that influence the life of society. The financial-accounting information provided by the entities must meet the qualitative factor for a decision to be effective given that the users of the information are influenced by the image presented on the basis of annual financial statements.

If financial information is communicated inefficiently, the consequences can be unpleasant. For example, investors may overlook important information, leading to lost opportunities to invest. Another unfortunate example with the same result is the situations in which the relationships between different information are not well structured in the financial reporting. Therefore, good communication can motivate investors to act effectively at a low cost.

Market participants, owners, investors and creditors need concrete information about any event that may affect the business and value of an investment. Thus, it becomes essential to provide relevant and accurate information requested by both capital markets and authorities. There are also required frequent stakeholder analysis and analysis of the political situation before the process of mergers and acquisitions.

Therefore, the key action in preventing requests from participants in economic activities is "communication". This concept has been defined in various forms over the years. The origin of the word comes from the Latin language, "communis" and means "to agree", "to be in touch with" or "to be related to", although in the vocabulary of the ancients the term also fulfilled the meaning of "to transmit to others", "to share something with others."

The most comprehensive definition we consider to be the following statement published by Charles E. Osgood in the book *A vocabulary for Talking about Communication* (1987) "In the most general sense, we talk about communication every time a system or a source influences another system, in this case a recipient, through alternative signals that can be transmitted through the channel

that connects them." Given this idea, we can admit that in the science of communication "information is what is communicated in one or another of the available languages" (Tudorel, N. et al., 2006, p. 12) and at the same time "communication has the role of increasing the notoriety and credibility of the company, in order to attract investors" (Avram, A. et al., 2017, p. 43).

Regarding the communication from a financial perspective, it consists of planning some objectives and the way of using the resources, elaboration of strategies, adoption of decisions and start of actions. The transformation of decisions is due to the existence of factors among which we list the multitude of objectives, the complexity of interests, the uncertainty of situations, the unexpected reactions of the environment. It is the duty of managers to synchronize and harmonize the time and space of actions, desires and realities through the coordination function. In this case, the management process must not lack the cohesion, continuity and dynamism that, together, allow the achievement of specific objectives. Therefore, we can say that there is a basic component of the coordination function represented by communication.

2. Theoretical background

In order to substantiate investment decisions, the most valuable source of information is financial reporting. The literature (Walton & Aerts, 2006) admits that „financial reports are the only way currently available to form an opinion about a company's profitability and financial structure, in a format more or less comparable to that of other companies.”

Thus, according to research by Peterson & Fabozzi (2006), “financial statements provide the information necessary to assess a company's future profits and thus the cash flows expected to be generated from those profits”.

The analysis of financial statements was framed by Wild et al. (2007) in the broader context of business analysis, which states that the assessment of a company's prospects and risks is necessary in order to make business decisions. On the other hand, Benston et al. (2006) consider that “capital market investors can benefit from obtaining and interpreting quickly enough, by buying or selling shares at a price lower or higher than the market value ”. To support this perspective, we also find the opinion of Stickney et al. (2007) according „the analysis of financial statements has as primary objective the evaluation of the extent to which the market offers a fair price for shares issued by a company”. Based on these statements, we can conclude that the significant price changes are primarily correlated with the evolution and financial prospects of the issuers of marketable financial instruments.

In the national literature, Duțescu (2000) addresses the information needs on the capital market, stating that “the level of understanding and use of financial-quotable information by institutional investors in Romania is relatively good”, since they seem “to use considerably and with great speed” this information.

3. Research methodology

The research method is based on a predominantly deductive approach, starting from the role of financial communication in the investment decision as presented in the foreign literature and in Romania and continuing with the selection and synthesis of available information on the field under research, likely to allow for documented opinions and conclusions.

4. Findings

4.1. Communication at the level of economic entity

Communication from the economic entities is a process continually redefined. The current organizational environment is characterized by continuous economic, social, informational changes that require organizations to adapt in order to remain competitive, finding new organizational formulas and strategic alternatives designed to increase their capabilities and opportunities.

The information that an organization holds is communicated to employees through internal communication. This process allows company members to understand the company's goals and values and adapt to its culture and procedures.

The life of any business is represented by the accounting data provided. Therefore, the communication of qualitative economic information generates decisions and essential actions for their future activity.

Financial accounting information is available in various forms in the annual financial statements, thus representing a well-structured and formal means of communication. This set of economic, financial, social or environmental information can be an important aid in making well-informed decisions.

4.2. Communication and the investment process

At the micro and macroeconomic level, the use of investment resources generates states and actions that influence the life of society. The financial - accounting information provided by the entities must meet the qualitative factor for a decision to be effective, given that the users of the information are influenced by the image presented on the basis of the annual financial statements.

We can define the action of investing as “a set of practical actions, performed by legal and natural persons, as well as by the state, directed towards the extended reproduction of capital to satisfy the needs of society based on the use of patrimonial and intellectual values in various projects - economic, commercial, scientific, cultural, and charitable” (Şestacovscaia, 2012).

The implementation of internal accounting reporting in the decision making process has the following advantages (Figure no. 1):

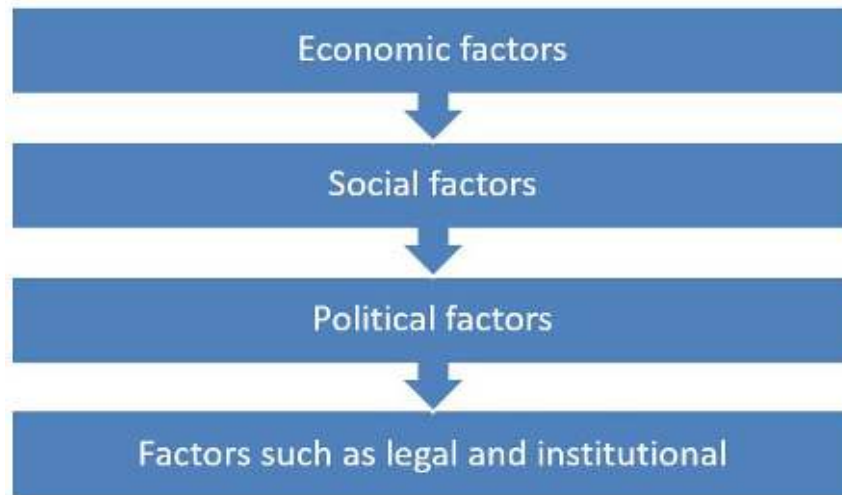
Figure no. 1. The advantages of implementing accounting reporting



Source: Own processing after Nederița; Panuș, 2010

However, like any other action taken by the company, the investment process can be risky. Depending on their nature (Figure no. 2), the risks can be grouped as follows:

Figure no. 2. Factors influencing the investment process



Source: Own processing after Marianciuc, 2007

A business company is characterized by the interdependent nature of the environment in which it operates and which is influenced by a system composed of economic, social, political and legalinstitutional factors. In this context, “the role of financial communication is to protect, but also to increase the value of the entity” (Avram, 2017).

After analyzing the information provided through the annual statements, investors decide what is the next step in their action: whether it is worth investing in the company or not, or the information presented does meet their requirements. Last but not least, “the annual financial statements are of great importance in the process of communicating with shareholders and in developing financial analyzes useful to the entity's management, which means that it must present a true and fair view of the financial position, performance, cash flows of entity and changes in equity”(Avram et al., 2017).

4. Conclusions

Communication is a process of collecting and distributing information to the public. It takes place in several stages, each of which is intended to inform, influence and share opinions.

The article addresses the process of redefining communication at the level of economic entities in response to changes in the current economic environment. The accounting data that is provided to a company is the basis for making decisions and taking the necessary actions to carry them out, the communication of these details being useful for a company.

The annual financial statements are essential documents that support the company's operations and must be presented in a format that is consistent with applicable accounting regulations. They must be approved by the GMS members and disseminated through the appropriate channels.

The importance of communication comes from the desire to create a successful quality management system. We believe that it plays a significant role in communicating with the different levels of an organization, and internal communication plays a key role in quality management by helping to understand the objectives of the quality management system and its impact on the organization.

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The Impact of Population Income Growth on Bread Consumption

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Abstract

The income of the population is the main decision-making factor of consumption, being the main source through which the goods intended for consumption are purchased. This paper analyzes the influence of income growth on the consumption of bread and loaf products, considered basic foods in the diet of Romanians. With the help of the Data Analysis program, Pearson correlation coefficient will be determined, based on income and consumption data for 2016-2020, provided by the National Institute of Statistics. The direction and intensity of the influence of income on consumption will be identified. The results will show that as the income values of a household increase, the consumption of bread and bread products decreases, one reason being the replacement of bread with other foods, the transition to a more balanced diet, in which bread is consumed in a well-defined quantity.

Key words: bread consumption, people's income, income-consumption correlation, market

J.E.L. classification: D1, D16, E01

1. Introduction

Bread and loaf products are the basis of the population's diet, regardless of social or economic status, but differences in the proportion of consumption can be observed, often compared to consumers' income. Thus, bread and loaf products are consumed in small or large sizes in all countries, representing the most essential food, but it will be assumed that as the level of household income increases, the amount of bread consumption decreases, as expected. A possible cause is the replacement of bread with other foods, the migration to a more balanced diet with a reduced, well-determined amount of bread. Bread is a cheap food, it gives satiety but does not present rich nutritional qualities such as dairy products or meat. Based on the data provided by the National Institute of Statistics for 2016-2020 it will be noted whether the consumption of bread is higher in low income households comparable to that of high incomes and what is the relationship between income and consumption between these categories.

2. Literature review

About the consumption of bread it is worth mentioning that bread is a rich source of starch and complex carbohydrates and hence an important part of a balanced diet with a stable consumption in Western Europe (FoB, 2007). However, the consumption of bread has declined, possibly due to factors such as changing eating patterns and an increasing choice of substitutes such as breakfast cereals and fast foods (Prättälä et al., 2001). Bread production is not constant – it is variable and persistently adapts to consumer wishes, which are not always understandable and – what is even more important – are difficult to predict (Bread ..., 2013; World ..., 2009). The consumption of bread and bakery products steadily increases in the world (Market ..., 2008; AIBI, 2015).

3. Research methodology

This paper will use comparative methods with the Pearson correlation. Based on the data available for 2016-2020 provided by the National Institute of Statistics regarding the values of average income per household and consumption of loaf products, the link between the two indicators will be established using the Pearson coefficient model.

The main objective of this study is to identify the relationship between the indicators mentioned above and to answer the question: Is there a relationship between the average household income and consumption of loaf and bread products? To identify the answer to this question, the specific tools used to calculate the indicators were established based on the Data Analysis software in the Microsoft Office package.

4. Findings

4.1. Analysis of data on consumption of bread and loaf products and income per household

The data necessary for the analysis of the influence of income on the consumption of bread and loaf products are centralized in Table 1. The income is taken from the databases of the National Institute of Statistics, are expressed in RON, the indicator being the average monthly income per household. The reference period is 2016-2020, in the mentioned period the revenues evolved from RON 2944.6 to RON 5220.43.

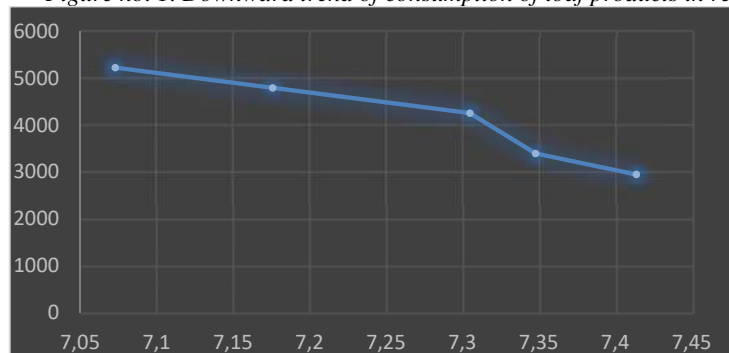
Table no. 1. Average total income per household and the average amount of bread and loaf products consumed by a person monthly in the period 2016-2020

Year	Average amount of bread and bread products consumed by a person monthly (kg)	Average total income per household (ron)
2016	7,414	2944,6
2017	7,348	3391,67
2018	7,305	4251,26
2019	7,176	4789,83
2020	7,073	5220,43

Source: National Institute of Statistics

As can be seen in Table 1, as income values increased, the amount of bread consumed decreased, resulting in a substitution of this food. This result is shown graphically in the figure 1 in which the downward trend of consumption of loaf products is observed.

Figure no. 1. Downward trend of consumption of loaf products in relation to income



Source: data taken from National Institute of Statistics and processed

4.2. Determination of Pearson's correlation coefficients between consumption of bread and loaf products and income per household

In order to establish the influence that the average household income can have on the consumption of bread and loaf products, the Pearson correlation coefficient (r_{xy}) will be determined by which an analysis will be carried out. Thus, the connection level as well as the intensity between the two variables will be established. The correlation coefficient is calculated by the ratio of the sum of the products of the deviations to the product of the standard deviations where the coefficient sign indicates the direction. In this way we will know whether the two variables are reported directly proportionally or inversely proportionally, and the value of the coefficient indicates the intensity, the closer the value is to 1 (in the absolute value), the higher the intensity. The Pearson correlation coefficient is calculated by the formula:

Figure no. 2 Correlation Coefficient Formula

$$r_{xy} = \frac{\text{cov}(x, y)}{s_x \cdot s_y} = \frac{s_{xy}}{s_x \cdot s_y} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\left[\sum_{i=1}^n (x_i - \bar{x})^2 \right] \left[\sum_{i=1}^n (y_i - \bar{y})^2 \right]}}$$

Source: Own processing

where:

r_{xy} - Pearson correlation coefficient

x_i — individual values of the variable

\bar{x} — the average of individual values of x

y_i — individual values of the variable y

\bar{y} — the average of the individual values of y

With MS Excel's optional Data Analysis program, the correlation coefficients were determined between consumption of bread and loaf products and income per household. They are shown in Table 2:

Table no. 2. Coefficient of correlation between Average amount of bread and loaf products and Average total income

	Average amount of bread and loaf products	Average total income
Average amount of bread and loaf products	1	
Average total income	-0,96318	1

Source: Own processing using Ms Excel's Data Analysis

It is noticeable that there is a direct link between the average amount of bread and bread products consumed by a person monthly (kg) and the average total income per household (ron), the correlation coefficient is negative with the value of - 0,96 which suggests a reverse correlation, the two variables correlated varies in the opposite direction. Thus, as income values increase, the amount of bread consumed decreases.

5. Conclusions

Healthy nutrition is one of the major challenges facing the food industry today and is one of the main drivers of innovation in this area. Many consumers are looking for healthy alternatives with higher nutritional value, so in some cases it is recommended to consume a well-defined amount of bread.

The most consumed product on the Romanian market is white flour bread, but if we relate to the benefits of consumption, it is a poor product in terms of content in nutrients important for health, such as vitamins, minerals and fiber. As seen in the analysis, over the last 5 years bread consumption has decreased and consumer preferences have changed starting to attach importance to a healthier diet. There is an increase in consumption of other varieties of bread such as rye flour bread, black flour, graham bread and wholemeal bread with a higher content of dietary fiber and vitamins, especially those of complex B.

Moreover, depending on the income held per household, the options regarding the consumption of bread change. As can be seen in the analysis above, as incomes grew, consumption of bread and loaf products decreased. The reverse correlation relationship is explained by replacement of bread with other foods, the transition to a more balanced diet, in which bread is consumed in a well-defined quantity.

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Romanian Tourism Destinations – A Diagnostic Analysis

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Abstract

A growing number of destinations around the world have opened up to tourists, and invested in tourism, making it a key factor in socio-economic development. With a good geostrategic position and a developing economy, supported by EU membership, with valuable natural and cultural resources, Romania can be a competitive regional and international tourism destination. This research offers a comprehensive analysis and an overview of the key challenges faced by Romanian tourism destinations. The paper presents an in-depth SWOT analysis based on direct research (interviews and surveys) and indirect research (desk research of secondary source.)

Key words: tourism, destinations, SWOT analysis

J.E.L. classification: Z32

1. Introduction

Tourism is considered an engine of economic growth and one of the most important service industries in many countries. Moreover, globalization, its tendencies associated with the integration of services and the concentration of capital, has put pressure on tourist destinations to better position their tourist offerings in an extremely competitive market.

With a population of 19 million inhabitants, a good geostrategic position, and a developing market economy, supported by the EU membership status, Romanian tourism can transform the country into a strong regional destination in the medium term and a truly international destination in the long term. Of course, all this will be possible only if Romania creates efficient coordination and management of the industry if it builds its capacity of responsible tourism management at local/regional primary levels and removes the other barriers from the general tourism business environment of the country.

Tourism is a people-based industry, with human capital at its centre, bringing authenticity, values, quality, innovation and competitiveness. In general, tourism businesses need support, the host population needs to ensure that visitors will not adversely affect their quality of life and visitors expect a quality experience. All national, regional and local government institutions need to be aware of all these challenges and create public-private partnerships to develop the most effective strategies. And responsible and sustainable destination management should involve a process that effectively and harmoniously addresses the interactions between visitors, the industry that serves them, the community that hosts them and the environment in a broad sense (natural and cultural resources).

The purpose of this paper is to provide an overview of the current state of Romanian tourist destinations and the identification of emerging opportunities, but also current and future challenges.

2. Theoretical background

As most tourist activities take place in destinations, they are the most important element of the tourism system and make up the essential unit of tourism research (Buhalis, 2000; Pike 2004; Wang & Pizam, 2011). David Bierman (2003) defines the destination as a country, region, or city that is marketed as a place to visit for tourists. And Cooper et al. (1998) consider it the center of facilities and services designed to meet the needs of tourists. In general, destinations are an amalgam of direct and indirect tourist facilities (eg accommodation, catering, public and private transport and roads, visitor information, recreational facilities, etc.) and a wide range of natural and cultural tourist attractions (e.g. eg landscape, monuments, atmosphere) offered to a tourist during a stay in a chosen place (Hall, 2008). However, for economics, a tourist destination is more than a distinctive geographical area (Bieger, Beritelli & Laesser, 2009; Bornhorst, Ritchie, & Sheehan, 2010). Often, tourists perceive a destination as a whole, so this area is often considered not only a "tourist place", but a "tourist product". Therefore, a tourism destination can be defined as a collection of experiences gained by travelers and should be perceived as a system of goods and services that suppliers are ready to deliver and tourists are willing to consume (Keller, 2000).

According to the World Tourism Organization, by tourism destination is meant „a physical space with or without administrative and/or analytical boundaries in which a visitor can spend an overnight. It is the cluster (co-location) of products and services, and of activities and experiences along the tourism value chain and a basic unit of analysis of tourism. A destination incorporates various stakeholders and can network to form larger destinations. It is also intangible with its image and identity which may influence its market competitiveness.(UNWTO, 2019)

As a product, the tourism destination is a mixture of tangible and intangible assets. Tangible assets are represented by local infrastructures, such as hotels, tangible cultural heritage, natural landscapes, etc., and intangible assets are considered services and situations such as safety, stability and security, friendship, political situation, the atmosphere of a destination. Intangible assets have been shown to be more dependent on customer behavior and are one of the key factors that make a destination profitable (Swarbrooke and Horner, 2001). In other words, the tourism destination is the central point of the tourism activity. Therefore, a destination can be seen as a combination of all the goods, services, and experiences provided to tourists. But the destinations are not infinite, neither individual nor collective. Not every place can be a destination capable of attracting tourists and destinations themselves cannot absorb an unlimited number of tourists.

Tourism destinations have a number of basic elements that attract the visitor and satisfy their needs on arrival. These basic elements can be broken down into attractions (“must-see” or “must be done”) and the other remaining elements (Cho, 2000). They can be classified into attractions, facilities, accessibility, image, price, and human resources. The supply and quality of these elements will influence the visitor's decision to choose the destination.

3. Research methodology

In order to diagnose Romanian tourist destinations, both secondary and direct research were conducted. The secondary research consisted of the review of the specialized literature, the analysis of the reports on the tourism evolution, and the statistical documents. The direct research was carried out by E. M. Iștoc. The research consisted of semi-open interviews with representatives of the Romanian tourism industry and of conducting surveys using the questioning technique. The surveys were conducted between 04.2020 - 03.2021. The survey involved several questionnaires (one type for each group of stakeholders: tourists, resident population, enterprises/institutions related to the tourism sector and travel agencies). Based on this research, we performed a SWOT analysis.

4. Findings

Romania is a Carpatho-Danubian-Pontic country with tourist resources of great complexity and certain value. Romanian tourist resources are distinguished by the variety and complexity of the relief, the richness of surface or groundwater, the continental climate of transition, rich and varied vegetation and fauna, to which are added the traces of great value left by the inhabitants of this land throughout its history and the talent of contemporaries, who participate in the enrichment of the national and universal cultural heritage. The enhancement of tourist resources creates, in fact, the tourist attractiveness of the destination and depends directly on the technical-material base and the quality of services without which no tourist resource, no matter how valuable, can be capitalized.

Regarding the technical-material base, the most important component is the network of accommodation units. According to the data of the Romanian National Institute of Statistics, in the last 10 years, the number of accommodation units has increased from year to year, less in last 2 years when it experienced a slight decrease. From the point of view of tourist destinations, excluding the category "other localities and tourist routes", 28% are concentrated in the mountains, 18% in large cities, 10% in the coastal area, 7% in spas and 3% in the Danube Delta. From the point of view of the distribution of the tourist accommodation structures by counties, their number had a sinuous evolution adapting to the tourist demand. Spectacular increases in the number of accommodation units were registered in counties such as Bacău (356%), Bistrița-Năsăud (280%) and Călărași (275%). In terms of accommodation capacity, it has followed the upward trend in the number of accommodation units, but not at the same pace. The differences are due on the one hand to the adaptation to the evolution of tourist demand, and on the other hand to the fact that the new structures built are, for the most part, tourist boarding houses or other accommodation units with smaller capacity. (according to the calculations made by the authors based on the statistical data provided by NIS at the level of 2019).

Another component of the technical-material base of tourism is represented by the public catering units. It should be mentioned that they address both tourists and residents. We do not have statistical data about the catering units at the national level, but the number of companies active in the hotel-restaurant field has experienced a continuous increase according to data provided by Romanian National Institute of Statistics.

Regarding the general infrastructure (access roads, water, natural gas and electricity distribution, sewerage, telecommunications, etc.), the situation is not good. Although Romania has all types of access (road, rail, sea and air) relatively satisfactory in terms of quantity, from a qualitative point of view the situation is inadequate. In general, the infrastructure in Romania hinders the development of tourism. Also, some areas, especially in rural areas and smaller urban centres, lack a number of facilities not specific to tourism, but necessary for tourists, others are inadequate in quantity and/or quality (eg lack of pharmacies or first aid points), lack of toilets or their unusable condition). We must specify that for the tourist is important the tourist product as a whole (with accommodation, food, leisure units, access roads, infrastructure in general - specific or non-specific, how to provide services, not least the quality of these elements correlated with their price etc.).

The labour force is the one that transforms the tourist offer from potential into actual. Tourism is a labour-intensive sector, and much of a tourist's experience in a destination depends on interactions with those working in the tourism industry. In addition, tourism is one of the areas facing a strong labour migration, so only 10% of hotel employees can be kept for more than 1-2 years. One of the reasons may be that the staff employed in the hotel and restaurant sector in the hospitality industry is among the lowest-paid nationally (according to NIS), but there are also problems in the training and education of staff for the tourism industry. Personnel currently employed in the industry often lack the skills and training needed to operate at international standards. This can be seen, in particular, in the way they interact with customers, although there are also oases of progress. The problem is, however, that Romanian institutions with staff training functions offer mainly theoretical knowledge, and graduates generally lack the practical skills required by employers and industry.

In 2019, the employed population in the field of hotels-restaurants represents 2.63% of the total employed population. As a sector of activity, HoReCa is considered a "last solution" in terms of career choice, due to the low salary level. This fact determines, as we mentioned above, the low

quality of services provided. Or, the quality of the tourist product is influenced to the highest degree by the level of education and professional training of the staff involved in tourism, which, in turn, determines the level of quality of direct services. For tourism, human resources are vital in terms of services. It should be noted that the training of the workforce and the education system for tourism also need a strategic approach, in the medium and long term. Correlating training programs with market needs, both quantitatively and qualitatively (as occupations and skills), is a necessity. At present, the education system suffers from imbalances from these points of view. As a total contribution, tourism supported about 6% of jobs, which in 2019 accounted for 537.7 thousand jobs. (WTTC, 2021)

In order to complete the diagnostic analysis of Romanian destinations and to identify the key challenges they face, office research was complemented by direct research among all stakeholders: private sector, public sector, NGOs, citizens and consumers. The direct research was conducted in the form of surveys and semi-structured interviews with representatives of the Romanian tourism industry. Interviews proved useful for collecting more nuanced data. 43 people attended to interviews: 21 representing the hospitality industry, 11 travel agencies, 4 cultural institutions, 3 marketing and PR companies, 2 education and training organizations, a representative of a DMO and a developer of projects in the field of tourism.

The surveys consisted of questionnaires to which they answered: 750 tourists, 810 Romanian residents, 26 travel agencies and 98 companies in the tourism sector (most accommodation units) in Bucharest and counties: Constanța, Brașov, Prahova, Sibiu, Galați, Timiș, Maramureș, Hunedoara and Suceava.

Based on the data and information obtained, a SWOT analysis was performed to evaluate the Romanian tourist destinations and to identify the main development requirements in terms of their management. (see table below)

Table no 1 SWOT analysis of Romanian tourism destinations

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ excellent natural resources; ▪ the diversity of relief forms; ▪ valuable tangible and intangible cultural heritage; ▪ originality; ▪ benefits for the local community; ▪ hospitality 	<ul style="list-style-type: none"> ▪ lack of destination marks; ▪ lack of marketing strategies; ▪ lack of community engagement with tourism ▪ many destinations are relatively inaccessible; ▪ unsatisfactory infrastructure, both specific and general; ▪ poor planning decisions; ▪ lack of investments related to seasonality; ▪ lack of staff; ▪ poor professional training of staff; ▪ weak market intelligence; ▪ inability to attract international tourists; ▪ poor image of destinations; ▪ the weak involvement of host communities in the development of tourism; ▪ low value for the consumer; ▪ low product diversification; ▪ very low accessibility for visitors with reduced mobility; ▪ lack of promotion; ▪ lack of interest in environmental protection or sustainability certifications; ▪ lack of health safety certifications; ▪ non-use of local products in favour of imported ones; ▪ lack of involvement in climate change mitigation plans (reduction of CO2 emissions, reduced energy consumption, etc.); ▪ the tariffs do not correspond to the quality of the services offered; ▪ visitor management

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ▪ opportunities for the development of niche tourism forms; ▪ expanding into new market segments; ▪ creation and development of new products; ▪ access to finance (EU funds); ▪ the desire of tourists to visit sustainable destinations; ▪ growing demand; ▪ residents consider tourism to be good for local development ▪ improve service quality and price competitiveness 	<ul style="list-style-type: none"> ▪ the effects of the COVID-19 pandemic; ▪ lack of continuity in public policy; ▪ lack of investment; ▪ competition; ▪ legislation: lack of a clear legislative framework, unexpected legislative change; ▪ lack of a national strategy on tourism development; ▪ loss of cultural authenticity; ▪ destruction of cultural heritage; ▪ the disinterest of travel agencies in marketing sustainable destinations; ▪ depopulation and migration

Source: authors

The SWOT analysis highlights some important issues regarding Romanian tourism destinations that should be taken into account for tourism development strategies and managing destinations:

- The Romanian tourism asset base is strong. This asset base is comprised of the natural heritage and cultural heritage. This strong asset base of Romania offers a competitive advantage and a base on which to build. The challenge is how to use and present these assets to tourists, without damage to the main asset itself may occur.
- Infrastructure deficits, in particular transport infrastructure and the national road and rail network. Accessibility is very important for destinations. Tourists should be made easier to access a variety of international transport hubs, including air, rail and seaports, which should then be supported by an efficient domestic transport system.
- Lack of employees and unqualified employees. Almost all respondents representing the tourism industry mentioned the gaps and skills shortages of the tourism workforce and the increasing levels of difficulty in finding and hiring staff and retaining them. This is a particularly serious problem in the tourism industry, where the experience of visitors is mediated directly by the tourism staff and by the professionalism and enthusiasm they bring to their work. Basically, the staff is an integral part of the tourist product.
- Uncompetitive quality of experiences and services at the destination level. The causes are multiple, among the most important being the development and poor management of tourist attractions and attractions, including the inadequate level of marketing and conservation.
- Competitiveness. Tourist destinations are more and more numerous, many of them similar in terms of resources and without proper management and proper market positioning it is impossible for any destination to face fierce competition. The lack of proper marketing makes the Romanian industry significantly dependent on the domestic market.
- The need to differentiate and diversify tourist products in order to allow Romanian destinations to remain in the long term on existing markets and to enter new ones. Product development strategies are needed, which in turn require investment and financing.
- The development of tourism in Romania will require investments both in the tourism product itself, as well as investments in the general infrastructure. This requires access to diversified sources of funding.
- Implementing the holistic concept of sustainable tourism development in destinations is a difficult task. Finding the right balance between the interest of stakeholders with the environmental vision of a destination and meeting the requirements and expectations requires long-term marketing planning and ongoing dialogue between different stakeholders.
- The effects of the COVID Pandemic - 19. The deeper the crisis, the more businesses and jobs will be lost, the greater the implications for passenger behaviour and the more difficult it will be to recover tourist destinations. This brings challenges for the sector, but also opportunities to encourage innovation, stimulate new marketing strategies, explore new markets and launch new destinations.

Although there was no statistically representative sample, it is important to note that these results were produced by an independent group of individual respondents and provide a clear picture of destination management issues and issues that need further attention in the context of further tourist development in Romania.

5. Conclusions

Destinations are some of the most difficult entities to manage and market, due to the complexity of stakeholder relations and the variety of those involved in the development of the tourism product. Factors such as attractions, accessibility, facilities, activities and the like are important for destinations that want to increase their tourism share. A tourist destination consists of physical (tangible) and psychological (intangible) elements. Both elements carry various factors that can affect the image of a destination. It is also difficult to control and manage these items as their numbers increase. At the same time, the destinations are essentially made up of regions, resources and amalgams of tourist facilities and services, which often do not belong to individuals. Instead, they represent a collection of both professional and personal interests of all the people who live and work in the area. In addition, the inhabitants of the destinations are often in the same type of resources and beneficiaries of tourism. Managing the often conflicting interests of stakeholders makes it extremely difficult to control and market destinations as a whole. Therefore, strategies and actions should take into account the wishes of all stakeholders, namely the host population, businesses and investors, tourists, tour operators and interest groups.

Romania urgently needs the professionalization of the management of tourist destinations in order to become competitive in relation to other destinations in the world. Romania faces the challenge of first and foremost establishing new experiences and products for global tourism markets and making better use of the diversity of well-differentiated tourism assets it can use to attract future customers.

New approaches need to be introduced, both by the public and private sectors, to meet global challenges.

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Scenarios for the Impact of GSM-5G Networks on the Economic Development

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Abstract

Communication through GSM-5G networks represents a new stage in its development, the communication speed being about 100 times higher than in the case of 4G networks, but the transmission distances are small. So, these 5G networks will be implemented mainly in urban areas due to high costs.

The paper aims to analyze scenarios for the impact of 5G networks on the background of accelerated technological development.

Key words: communication, 5G networks, scenarios

J.E.L. classification: O10, O18, A10

1. Introduction

Compared to 4G, GSM-5G technology can deliver up to 100 times higher bandwidth, greatly improved reliability and connection to a much higher density of devices.

Some characteristics of the 5G-technology are presented (ITU, 2018):

- Faster connections, higher throughput and greater capacity (up to 10 Gbps)- are used in cases: fixed wireless access service, enhanced in-building; broadband service, real-time augmented reality service; real-time virtual and mixed reality service, crowded or dense area service, enhanced digital signage, highdefinition cloud gaming, public protection and disaster; response services, massive content streaming services, remote surgery and examination.
- Reduced time for data from device to be uploaded and reach its target (1 ms compared to 50 ms for 4G) and Robust security properties, leading to high reliability and availability – are used in cases: autonomous vehicles, drones and robotic applications, health monitoring systems/telehealth, smart grid and metering, intelligent transportation, factory automation, remote operation, self-driving cars, mission-critical services (security and safety), high-definition real-time gaming.
- Increased spectral efficiency plus small cell deployment and Efficient power requirements for massive multipleinput, multiple-output (MIMO), small cell implementation – are used in cases: Asset tracking and predictive maintenance, smart cities/buildings/agriculture, internet of energy/utility management, industrial automation, smart logistics (advanced telematics), smart grid and metering, smart consumer wearables, environmental management, intelligent surveillance and video analytics, smart retail.

The impact of 5G-technology on the economy is given by its capacity to: create new industries and sub-industries, products and business models; improve the productivity; optimize the costs, improve the service quality. Each industry is influenced by the 5G-technology. So, 5G-technology has the potential to create or transform million jobs across all sectors of the economy.

5G-technology is based on the signals transmitted by the radio waves. This technology requires more the wave transmission points than the previous technologies. So, the construction of 5G networks requires the additional expenses. Thus, the 5G- technology is not profitable in rural areas.

Unfortunately, the 5G -technology can create the public health problems. The health effects of the radiofrequency radiation have been the subject of numerous studies. There are studies on the impact of 5G technology on people exposed to a high concentration of energy due to the large number of antennas used. In a study (Lennart Hardell, Rainer Nyberg, 2020) by Dr. Hardell, the effects on the skin, the gene and the systemic effects such as the immune function were reported.

2. Literature review

Larry Thompson and Warren Vande Stadt (Larry Thompson and Warren Vande Stadt, 2017) present both the technical and the economic reasons for which the 5G -networks will not be spread in the rural areas.

Edward J Oughton, Zoraida Frias and others (Edward J. Oughton, Zoraida Frias, Sietse van der Gaast, Rudolf van der Berg, 2019) present a detailed technical-economic analysis regarding the implementation of 5G -networks in the Netherlands. Also, an analysis is made at a geographical and demographic level (geotype) of their spread, dictated by the economic and the technical reasons.

The authors made an analysis of the potential traffic that could be covered by the 4G-GSM cells and an analysis of the 5G development costs compared to the other types of networks. The authors also try to answer the question: what are the costs generated by the implementation of 5G-networks per user ?

Augusta Riddy (Augusta Riddy, 2018) points out that despite the will of the British Government, between the localities, the fiber optic cables are chosen and only in the crowded areas will appear the 5G- networks.

Lacey Newlin (Lacey Newlin, 2020) points out the problems of the 5G implementation in the rural areas of the USA, the discrepancy between the desire to implement the 5G- technology and the technical-economic possibilities.

Roger Kauffman (Roger Kauffman, 2021) shows the attempts of telecommunications companies to connect the rural areas by trying to combine the 5G- technology with other transmission technologies.

3. Research methodology

The goal is to create scenarios based on the premises – there are necessary in the establishment of the future approaches for research on the impact of the development of GSM-5G networks.

Isolation and observation of current or past economic processes can be the basis of new research.

Thus, an economic system is decomposed into elements, each element having as few inputs and outputs as possible, so it can be approached almost independently. This decomposition is based on the observability of present or past economic systems – each element being as isolated as possible in relation to the others. With these sets of isolated elements we try to create the scenarios can be the future approaches in the research of the impact of GSM-5G networks on the economic development.

In this sense, qualitative variables were established as follows:

- Input variables described qualitatively (independent variables) - represented by investments in the communications infrastructure, communication needs resulting from the emergence of new services;
- Output variables described qualitatively (dependent variables) – represented by the volume of data and their transmission speed, the services quality, a new infrastructure in services;
- Intermediate variables (state - dependent variables) - represented by the chain of intermediate implications (for example: energy consumption difficult to quantify depending on the data transmitted, environmental variables).

All these variables are reflected in the diagrams that were made.

Methods of data collection - The data were taken by searching the internet and observing the demands and offers on the market. The evolution of the possibility of teleworking by categories of activities and types of geographical areas was followed. Information on intermediate variables was also collected by observing their citation in articles on the Internet.

Methods of analysis - Qualitative methods, based on language and observations, were used to identify the elements involved. The identified elements were put together in diagrams. Arrows were used to highlight the relationship between the elements and the cause-effect direction.

Justification of the chosen methodology - These methods were chosen due to the type of problem treated. The advantage of the approach is the possibility of adaptation and development as new data appear. As statistics appear, quantitative variables may be added. After identifying the model structure; it can be completed either by classical methods or by non-standard methods in the area of expert systems.

4. Findings

4.1. Influence of the appearance of GSM- 5G networks on the services sector

In the field of services, the most significant transformation given by the use of 5G networks is the one given by the possibility of large transfers of data which extends the services provided remotely.

Increasing the possibilities of remote control of the services leads to an increase of both their volume and their variety. Transfers of large volumes of the data lead to an increase in the share of work at home. Increasing in the volume of services leads to a decrease in their costs in the urban areas (the rural areas do not benefit from the GSM networks with 5G technology).

Working from home leads to a decrease of the time needed to carry out the activities, and implicitly to an increase in the number of people who can perform the activities in the services area.

Increasing the availability of people in the services area leads to the appearance of new jobs in this area because the service sector needs small investments and small places to carry out the activities.

Implementation of the remote services leads to new directions for the development of services such as: use of virtual reality and use of augmented reality in the promotion of tourism; improving and expanding the distribution networks - for example: increasing the frequency of information/ reporting of the product distribution; medical services provided. The appearance of new types of the remote services leads to the appearance of some new occupations. The occupations involving the use of remotely controlled equipment lead an increase in the volume of the maintenance services - for example the maintenance of robots in the service units.

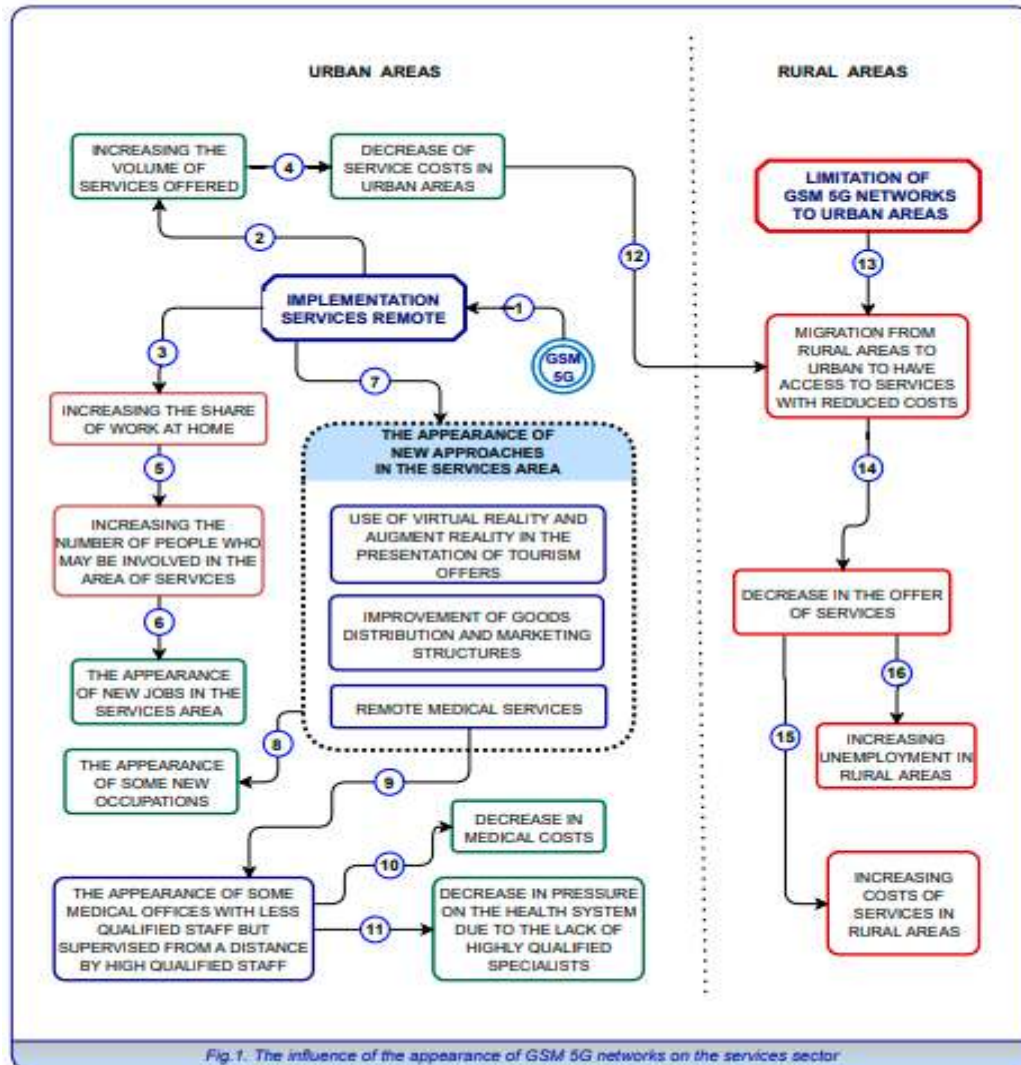
The appearance of remote medical services can create the medical units for patients served by the nurses, the specialist doctors supervising the medical activities remotely. The appearance of some medical offices with less qualified staff but supervised from a distance by the high qualified staff leads to a decrease in the medical costs. Also, the involvement of less qualified medical staff leads to reduce the crisis of specialists. A decrease in the costs of medical services in the urban areas leads to a migration of the rural population to the cities.

So, the 5G networks are implemented more in the urban areas than in the rural ones and this leads to a migration of population to the city.

Decreasing the rural population leads to a decrease in the number of services in that area. Decreasing the services in rural areas leads to an increase in the service costs. Also, declining the services in rural areas leads to an increase in the unemployment.

In Figure 1 we present a scenario on influence of the appearance of GSM- 5G networks on the services sector.

Figure no. 1. The influence of the appearance of GSM-5G networks on the services sector



Source: Own sources

4.2. Influence of the appearance of GSM- 5G networks on the industrial units

The existence of 5G-GSM networks in the urban areas can lead to the spread of work from home in the industrial units.

The high speed of communication allows the management of various industrial processes from a distance. The remote industrial process management involves the existence of automation equipment can be controlled remotely. So, the demand for such automation equipments increases.

Working from home offers the possibility to employ part-time the highly qualified specialists from other urban areas. Also, working from home decreases the administrative expenses. There will be fewer offices and less utility costs.

The transmission of large volumes of data leads to the extension of remote control.

Finally, a consequence of the automation of different processes is the decrease of production costs. The automation requires the highly qualified staff. The expansion of automation leads to increase the demand for the highly qualified staff.

The local 5G- GSM networks can be created for the rural areas. They can be made with the fiber optic cables. This also allows in the rural areas, the existence of fast communication with the cities and the remote management of industrial processes through the GSM 5G networks. This fact leads

to the lower costs for the rural areas, especially since in the rural area there is a much larger workspace.

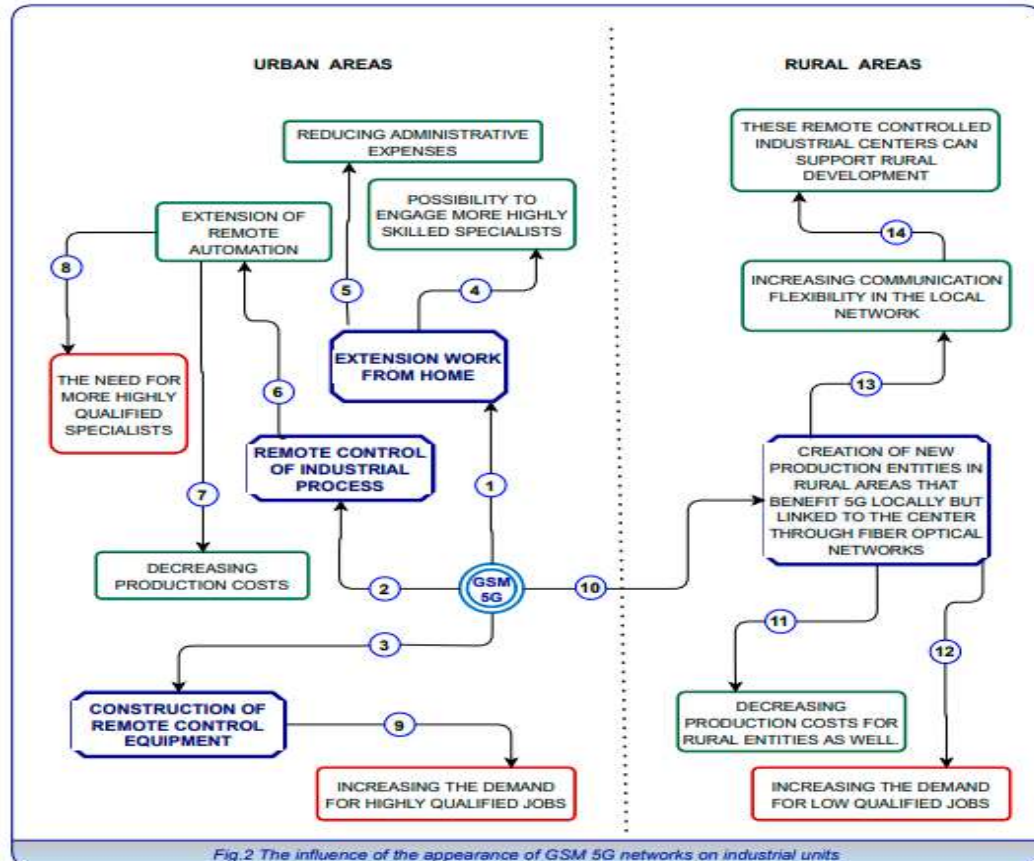
The coordination centers are in the urban areas and therefore the staff with low qualifications can be employed in the coordinated centers, in the rural area.

The GSM-5G local networks allow a high flexibility compared to the wired ones.

Finally, the existence of these coordinated regional centers leads to the development of the rural regions involved.

In Figure 2 we present a scenario on influence of the appearance of GSM- 5G networks on the industrial units.

Figure no. 2. The influence of the appearance of GSM-5G networks on the industrial units



Source: Own sources

4.3. Influence of the appearance of GSM-5G on the vocational education and the training

Unlike other technological generations, the 5G is designed as a "breakthrough" technology, different from the consumer internet and the entertainment industry. The 5G is designed to serve the innovative industrial uses.

The 5G networks impose the cities to become "smart". They need to invest in the Big Data solutions, the Machine Learning applications and the automation to facilitate the real-time interactions with citizens. Thus, the evolution on the labor market is dynamic.

The automation of the industry does not mean the elimination of the human factor, but its evolution, by improving the skills.

Two of the biggest challenges for companies are the allocation of staff and the exploitation of real capacity of the equipment.

The highly qualified people are wanted in the urban areas to design and to implement the remote control. In the urban areas, persons with the qualification of operator are also sought to ensure the service and the operation of the involved equipments.

In the rural areas, there are also sought operators for the remote control.

The highly qualified people in the field of telecommunications are sought in order to expand and to connect GSM 5G networks. The specialists in automation are sought to design and to expansion of the automation equipments controlled by GSM networks.

The higher schools are needed to train the automation specialists.

Also, for the training of telecommunications specialists, the higher schools in the field are needed.

Training in high schools requires a long time. The long periods of study lead to the specialists crises. At the time of request for the specialists, then we find their lack.

Reducing the number of specialists through the possibility of working from home tends to compensate for the lack of specialists.

Telecommunications operators are needed. Also, operators in the field of automation are also needed.

The training of operators in the field of automation can be done by the vocational schools or by the reconversion to the workplace. Also, the telecommunications operators can be obtained in the same way. The demand for operators is partially covered by the vocational schools and the economic entities that requalify them.

In the rural areas, we have a demand for the telecommunications operators to ensure the communications between the remote equipments and the control center. In the rural areas we have a demand for the automation operators to serve the remote controlled entities.

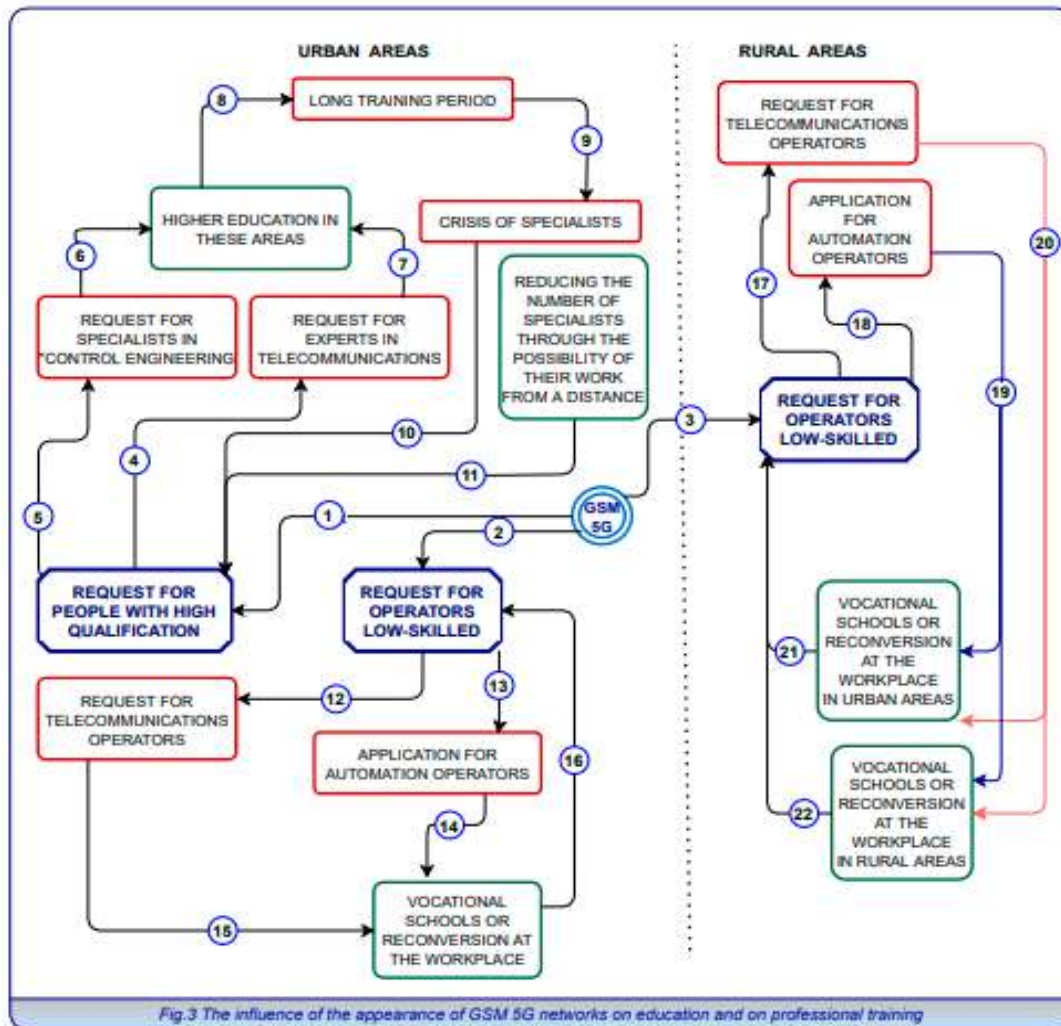
The training of operators in automation can be done both in the urban areas and the rural areas- in rural areas there may be small schools if there is demand for this or directly through professional retraining. Also, the training of telecommunications operators in the rural areas can be done in the same way.

The demand for operators in the rural areas can also be met by the specialized personnel from the urban areas. Operators can also come from rural areas if there is a sufficiently high demand in rural areas.

Digital tools and immersive experiences, bolstered by augmented reality and virtual reality as well as at-a-distance collaboration tools, are gaining rapid adoption while accelerating us along the path to Industry 5.0.

In Figure 3 we present a scenario on influence of the appearance of GSM- 5G networks on the vocational education and the training.

Figure no. 3 The influence of the appearance of GSM-5G networks on education and on professional training



Source: Own sources

5. Conclusions

The 5G networks develop more and more in crowded urban areas. The cost of implementing 5G networks is high, and the area of signal transmission is small at the transmission point level. Thus, the probability of implementation in the rural areas is low.

Increasing the communication speed in the crowded areas leads to a change of the whole macroeconomic structure. This change is achieved through the emergence of the new types of services are cheaper than the remote uncontrolled services.

At the rural level, the services remain on the initial structure with high costs. So, the rural population will use the infrastructure of services in the urban area. In the rural areas, the demand for services decreases and their cost increases. Therefore, the economic gap between urban and rural areas increases.

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Corporate Social Responsibility: An Overview

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Abstract

Nowadays, companies may benefit from the opportunity of developing and growing in a new business environment which is based on principles such as common wellbeing and welfare, sustainability and durability. Competitive advantage and economic and social growth may be perceived as benefits promised by a CSR business approach. The concept may be described as a trend from the economic sphere which may help organizations to survive and achieve objectives by doing good, being ethical, legal, philanthropic, willing to educate others, support and sustain the environment, society and next generations. The paper aims to present a conceptual framework that can be used to define CSR. The research methodology was based on the collection and analysis of secondary data, respectively scientific articles, and relevant books for the subject. The results outline the idea of what CSR is and how it can positively impact the business environment.

Key words: CSR, stakeholders, Carroll's pyramid, social contract, society

J.E.L. classification: M14, I3, D64

1. Introduction

Nowadays, companies might benefit of developing and growing in a new business environment. Individuals, as partners of interests, expect a business to be responsible and to be accountable of its actions and impact among the society. Transparency, good reputation, loyalty, commitment, competitive advantage and economic and social growth may be perceived as benefits promised by a corporate social responsibility (CSR) business approach. CSR is a concept that goes beyond the usual way of doing business (Toma *et al*, 2001; Toma, 2006; Toma, 2008). It may be described as a trend from the economic sphere which may help organizations to survive and achieve objectives by doing good, being ethical, legal, philanthropic, willing to educate others, support and sustain the environment, society and next generations (Toma & Hudea, 2012).

CSR is not only about the funds and the expertise which companies decide to invest in the communities in order to solve pressuring social problems, even though many organizations do contribute to this regard. CSR represents the integrity approach of an organization which decides to operate and self-govern, fulfil its mission, respects its values, build relationship with stakeholders, measure and minimize its impact through actions communicated transparently to the larger public (Oprea, 2011).

This article includes the basic information needed to outline the idea of what CSR is and how it may be defined, contributing to a better understanding of the concept. The definitions presented are analysed based on distinctive and common elements associated with the term. The conceptual framework of CSR is developed starting from the characteristics illustrated by the most common

theories associated with the notion. The aim of this study is to clarify the concept of CSR through some relevant theories associated with the notion.

This paper is structured as follows. The upcoming section represents the literature review (2nd section), which is divided into four parts: an overview of the four responsibilities of an organization (Caroll's Pyramid); exploring the opportunity of building lasting and prosperous relationships between the company and its partners of interest (Stakeholder Theory); assumption of bilateral obligation giving the exchange that takes place between an economic entity and the society (the social contract theory); corporate social performance and competitive advantage as likely results of an CSR business approach. Afterwards is presented the description of the research methodology (3rd section), followed by the results and discussions (4th section) and conclusions as ending part of the article.

2. Literature review

Since the 1950s social responsibility has constituted a topic of interest for researchers from various domains as it is found in numerous organizations (Marinescu *et al*, 2010; Toma *et al*, 2011; Imbrișcă & Toma, 2020; Zainea *et al*, 2020). CSR represents a phenomenon from the economic sphere that targets economic entities regardless of their typology, and its applicability depends mostly on the policies practiced at the organizational level. The concept was born from the understanding need of the general role that businesses play at the social level and what are these duties that they should address to establish the common good, giving the fact that organizations existence and functionality depends mostly on the resources that come from outside the company and external parties from the business environment.

Although the role of business in the society has been debated for hundreds of years, if not more, the concept of CSR began to take shape in 1953 when Howard R. Bowen published the “Social Responsibilities of the Businessman” (Beal, 2014, p.1). The same questions that motivated Bowen remained relevant today. What responsibilities do organizations have to contribute to the development of the society? What are the benefits received after the assumption of these duties? What are the steps that need to be taken to encourage businessman to pay even more to these obligations? Bowen defined these social duties of the businessman as “orientations of the managerial action through which the desired results are achieved, considering the values of the company” (Bowen, 1953).

Thus, the concept of CSR, once introduced, has been debated and developed by other academics and researchers. For example: Freeman (1984) launched the Stakeholders Theory, indispensable, even today, when building a favorable argument for the importance and applicability of CSR in business; Wartick and Cochran (1985) are those who brought forefront the social performance of companies, marking the transition to the concerns regarding the results of CSR actions; Caroll (1991) contributed to the conceptual framework of the notion by creating the model of CSR (Caroll's Pyramid); Porter and Kramer (2006) correlated the competitiveness of a company with the CSR strategy; Weiss (2008) used the social contract theory “to highlight the direct link between CSR, enterprise, society and stakeholders” (Katamba, *et al.*, 2012, pp.6-10).

The contributions of these authors represent the theoretical perspectives frequently approached in the existing literature concerning the conceptual framework of CSR. Caroll's Pyramid captures the four types of responsibilities that an economic entity should consider. Stakeholders theory highlights the role that CSR plays in maintaining the wellbeing of economic relations. The theory of the social contract emphasizes the existence of bilateral obligations between the organizations and the society, and CSR may be described as a beneficial way in which these duties are fulfilled by economic entities. The corporate social performance (CSP) model proposed by Wartick and Cochran starting from the principles of CSR emphasized on the importance of the obtained results and the relationship formed between the organization and its external environment. The gained result by an economic entity that integrates CSR in the business strategy translates into benefits for itself (for example, competitive advantage) and /or for the society.

The fact that there are also researchers who have vehemently challenged the relevance of CSR for the business environment cannot be omitted, Milton Friedman being one of them. Friedman stated: "the only responsibility of a business is increasing its profits" (Katamba, et al., 2012, p.7). Milton argued that government institutions are responsible for the wellbeing of society and, to the same extent, they are the ones who can provide help to those in need, through an optimal use of the funds accumulated from taxes.

Although there are pros and cons regarding the relevance of integrating the concept of CSR in the business strategy, in recent years, the term is one of major interest for researchers, companies and society in general (Simionescu, 2018, p.45).

There are many definitions that can be used to develop an understanding of the notion, but none of them has been globally accepted as the common reference. In consequence, the need for further research regarding the term of social corporate responsibility is still required.

2.1 Carroll's Pyramid

Carroll's pyramid is one of the most referenced conceptual frameworks from the existing literature used for the explanation of CSR (Dani, et al., 2019). Carroll stated that "the social responsibility of economic entities includes the economic, legal, ethical and discretionary expectations (currently known as philanthropic responsibilities) that the society associates or assigns to organizations, of any kind, at a given time" (Carroll & Beiler, 1975, p. 593). Thus, the base of the pyramid and the first responsibility of a company is to be profitable. The economic entity must comply to the existing laws and regulations. Then, it should follow the expected ethical principles. And finally, the organization should consider and respond to the needs of the communities, environment and society by creating additional benefits (Voiculescu & Neagu, 2016). As a result, the four stages of the pyramid are, as follows: economic responsibility, legal and juridical responsibility, ethical responsibility and discretionary responsibility, currently known as philanthropic (Carroll, 2016).

Starting from this framework drawn by Carroll, many of the definitions of the concept of CSR have been developed. Therefore, the notion of CSR is used "to report the economic, legal, ethical and social expectations by which the community urges companies to adopt responsible business strategies" (Shah & Khan, 2019, p.159).

CSR may be perceived as a way of increasing profits in an ethical manner, considering the legal, social and economic commitments to the parties that support, in one way or another, the survival of enterprises. Additionally, CSR may be described "an effective tool used for educating individuals and a sustainable approach that facilitates a company to progress" (Dumitrașcu, 2015, p.121).

2.2 Stakeholder Theory

The fundamental objective of an economic entity, regardless of its size, is represented by the maximization of profits (Friedman, 1970). The financial gain is obtained through the commercialization of products and/or services that result from the transformational process of available resources, namely the human, material, financial and information ones (Toma, 2013, pp.248-249).

The individual may be perceived as the engine of an organization. He is the one who has the power to act and to make decisions (how and why resources are used). The way he runs a business or fulfills his duties is closely related to the success or failure (size of the profit or loss) of a company.

Furthermore, organizational management contributes significantly to the survival and the prosperity of an economic entity (Crișan, 2013, p.93). Starting from Drucker's theory, Freeman added: "regardless of the ultimate goal of a company, the effects of the decisions made in order to achieve the goal and how others are likely to be impacted, constitute the elements that must be analyzed and considered" (Freeman, et al., 2010, p. 426). According to Freeman, if organizational management were to proceed in this way, then CSR would no longer be a useful concept, because business would follow one another considering all the groups and individuals that could suffer because of the activity carried out by an economic entity.

The stakeholder theory stated by Freeman highlights the importance of integrating the CSR into the business strategies. The concept aims to create a balance between the interests of the vital parties of an organization. The manager has the duty „to identify who are the essential stakeholders for his company and how he can meet their expectations while simultaneously applying the principles of inclusive thinking, but also the cost-benefit one” (Crişan, 2013, p.94). The role of CSR, taking into account Freeman's theory, is to build beneficial relationships with the relevant stakeholders of an economic entity.

CSR „maintains the wellbeing in the relationship established among the company and its stakeholders” (Voiculescu & Neagu, 2016, p.99). Internal stakeholders include: employees (human resource), shareholders (financial resource) and managers / owners (information resource, respectively the know-how). External stakeholders include as follow: suppliers (material resource), business partners (potential financial resource), customers (financial resource), markets (financial resource), local communities, non-governmental organizations and associations, national and international institutions and governments (Voiculescu & Neagu, 2016, pp.114-115). Almost all external stakeholders have a potential that could contribute, directly or indirectly, to the increase of the financial capital of a firm (Moon, 2014, p.22).

2.3. The social contract

Another theoretical perspective on relationships built on the principles of CSR is highlighted by Weiss and his theory of the social contract that is established between the organization and the stakeholders. According to the theory this contract occurs when there is an exchange between individuals and the economic entity (Morris, 1999). This agreement imposes „the existence of a set of rules, obligations and hypotheses regarding behavioral patterns between the different elements of society” (Simionescu, 2018, p.52).

Simultaneously, the social contract signifies the base on which the beneficial relationship between the company and the stakeholders is built. Corporate social responsibility captures all the activities carried out in accordance with the obligations that an organization must fulfil based on the perception of the society regarding the attributes of an economic entity (Chaudary, et al., 2016). Or, the concept can also be seen as "a general term that describes the various responsible activities in which companies can engage" (Feder & Weißenberger, 2018, p.106).

By associating the Stakeholder Theory and the Social Contract Theory with Carroll's Pyramid, several definitions regarding the CSR concept have been proposed. Additionally, CSR „illustrates the management of the stakeholders concerns about responsible and irresponsible acts related to environmental, ethical and social aspects, in a way that generates corporate benefits”(Mercade-Mele, et al., 2018, p.432). Alternatively, it may be described “as the organisational consideration of several stakeholders and the overall impact, beyond simply focusing on maximising shareholder wealth” (Smith, 2007, p.188). Moreover, the CSR may complement these elements without which an enterprise could not function, representing „the added value of practiced management, a technique used to ensure a good collaboration between the firm and its stakeholders, but also a sustainable way of protecting and helping both the environment and individuals” (Cohen, 2011, p.25).

2.4. Corporate social performance

Wartick and Cochran (1985) are the ones who rised awareness around the concerns regarding the results of CSR actions by creating a model which associated the concept with that of corporate social performance (PSC). In the author's view, PSC has been used as a synonym for CSR or any other interaction between society and an economic entity (Simionescu, 2018). Wood (1991) further extended the definition, explaining the PSC notion as: “the configuration in a business organization of the principles of social responsibility, the processes of responding to social and political requirements, in concrete programs and results that reflect the relationship between the firm and the society” (Simionescu, 2018, p.52).

The result obtained by an economic entity that integrates CSR in the business strategy translates into benefits for itself (for example, gaining competitive advantage) and/or society. Thus, for many of the companies, CSR has become „a basic component of their mission, values, vision and strategy” (Oprea, 2011, pp. 215-216).

Porter, possibly one of the most cited authors on business strategies, argued that social responsibility is “a way through which a company can develop competitive advantage” (Porter & Kramer, 2006). Moreover, “CSR implies the combination of responsible activities, involving individuals from both inside and outside of the company, in these activities” (Shah & Khan, 2019, p.161).

Nowadays, the most used definitions for CSR have been provided by the European Commission and the World Business Council for Sustainable Development (WBCSD). The European Commission stated that „economic entities should have in place a process to integrate social, environmental, ethical and human rights concerns into their business operations and core strategy in close collaboration with their stakeholders” (Nordman, 2011, p.3). On the other hand, WBCSD argued that „CSR represents the continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large” (Nordman, 2011, p.4). Even the name, “CSR” links the notion with a specific economic entity, respectively corporations. But this concept is no longer expected to be implemented only by the big companies and its applicability has been, at this moment, extended also to the smaller economic entities, fact outlined in these last references provided in this paper.

In the past, CSR was considered as an optional concept, but nowadays the global and competitive business environment does not allow economic entities to neglect the importance of social responsibility (Grimstad, et al., 2020, p.553).

3. Research methodology

The present study represents a quantitative research. It involves the collection and analysis of secondary data (scientific articles and existing books relevant for the topic). After setting the research aim objective, respectively developing a conceptual framework that can be used to define CSR based on exiting literature, the first step conducted in this research in order to achieve the stated objectives was finding relevant scientific journals for defining the concept. Well-known sources such as Emerald Insights and ScienceDirect were used in this scope.

The second step followed was building a data base with the definitions and characteristics of CSR. Based on the collected information the structured of this paper has been develop in accordance with the used journals. This approach regarding the consolidation of the structure is similar with the other papers such as Grimstad (2020), Pérez (2013) or Graafland and van de Ven (2006).

Starting from a briefly introduction of the importance and key theoretical perspectives regarding CSR, the conceptual framework of the notion emerges based on similarities and some distinctive found using the provided definitions.

As a practice identified in the stated journals, the analysis began with the presentation of the evolution of CSR conceptual framework based on the main theories associated with the notion (Bowen’s vision and questions, Carroll’s Pyramid, the stakeholder theory, the social contract theory and the corporate social performance). The definitions provided as reference have been analyzed based on common and new elements or characteristic associated with the CSR concept. A conceptual framework has been created in this regard based on the identified aspects. Findings reveal the fact that CSR implies the existing of three essential elements, namely collaboration between parties, commitment and change. The following step was adding a supplementary component to the structure of the conceptual framework developed in previous phase, namely the manager’s and the company’s motivation to embrace CSR policies giving the fact that these act as an important trigger in favor of CSR integration in the strategy of the business. Motivation have been viewed as an important factor that facilitates the adoption of a CSR business approach also by other researchers. For example, Grimstad (2020, pg.554) stated that “an understanding of motives for CSR, and, more importantly,

how motivation relates to CSR activities, provide useful insights for the industry itself, as well as for national and international authorities regarding policy formulation and implementation".

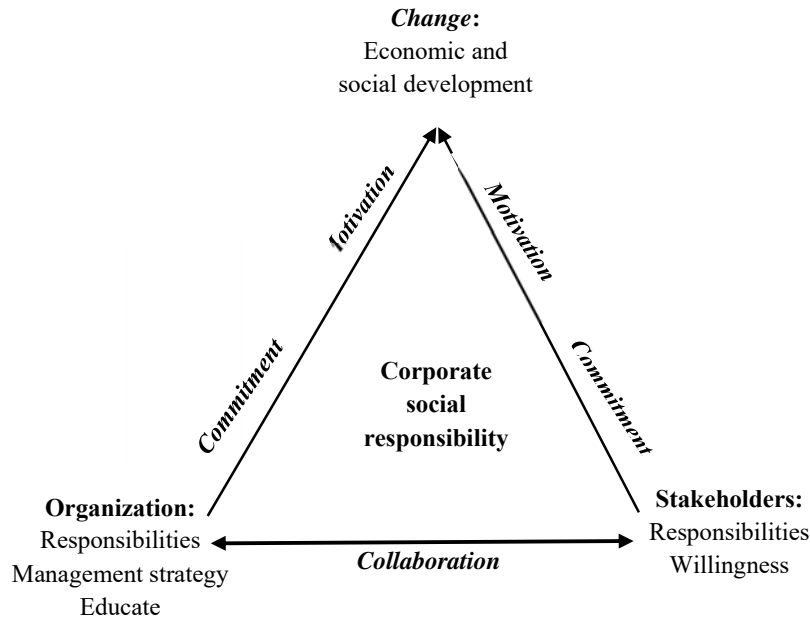
4. Findings and Discussions

Starting from the analyzed definitions, a properly understanding of the CSR notion can be build using the following theoretical approaches: Carroll's pyramid (which responsibilities?); stakeholders and the social contract theory (to whom?); Corporate social performance (what results?). The first one outlines the dimensions of the organization's responsibilities. The following, namely the stakeholder theory, indicates the importance of finding the relevant parties towards the responsible action should be oriented to. Furthermore, from a beneficial point of view, managing responsible the interests of stakeholders contributes to strengthening the relationships formed between an economic entity and its admissible partners. Corporate social performance and the competitive advantage represent essential benefits that may contribute to the prosperity and profitability of a company as result of a responsible business approach.

Thus, Carroll's pyramid may be perceived as a first answer to Bowen's question regarding the identification of those responsibilities applicable to an economic entity concerning the society. On the other hand, the stakeholder's and the social contract theory, the CSP and the competitive advantage acknowledges the benefits of the company which integrates CSR in its business strategy (Bowen's second question). The last inquiry of Bowen's outlines the need of creating motivation for persons who operate in the business environment to adopt CSR practices. Most of the definitions provided in this paper regarding the CSR notion are drawn based on the presented theoretical perspectives and, moreover, aim to stimulate individuals to consider CSR as a useful concept for their strategies by presenting the benefits which may occur being a responsible business.

The conceptual framework based on the identified common and distinctive elements can be describe a mix of several components such as: economic entities, management strategy, stakeholders, responsibilities, economic and social development, change (Figure no. 1). Organization should attempt to establish an adequate collaboration with its relevant stakeholder by adopting a responsible management strategy and fulfilling its economic, legal, ethical and philanthropic duties. Joining forces with commitment, the organization and its partners of interest, may contribute to a sustainable economic and social development. A positive change among the society and the business environment may occur if all parties would embrace CSR practices. CSR may start an initiative of an economic entity, but the effective change takes place when all the components of a society are connected and make efforts in this regard. Probably, another main duty of an organization is to educate itself and others to adopt a responsible vision and way of doing business. On the other side, stakeholders should assume their own responsibilities, be willing to learn and be motivated to follow a responsible path. The common effort is essential for the implementation of CSR. Organizations can start this initiative by being accountable of its actions, fulfilling its responsibilities and finding a suitable management strategy that enables others to learn and establish a strong, beneficial and proper relationship with its partners of interest, internal or external.

Figure no. 1. The conceptual framework needed to define CSR following the revision of the definitions



Source: Author's own contribution based on literature review analysis

The activity carried out by an organization is influenced by the environment, the society and other stakeholders. Resources, regardless of their type, are used for achieving the firm's objectives. Initially, most of these assets come from the external environment of the company and later they become internal or essential parts a business (for example, the employees). A proper collaboration between these three elements- organization, environment, society, is required for economic and social development. As any cooperation, it implies the existence of a set of responsibilities and obligations. Above all, the organization needs to apply a strategic management approach that enables it to be profitable in a legal and ethical manner. Thus, by embracing the philanthropic responsibility, companies have the possibility to act, change and resolve social problems, contributing to the wellbeing of the society. If the firm can fulfil its duties, an economical and societal behaviour is set as a benchmark and used as a reference for other economic entities.

The uniqueness of the CSR concept relays on its capacity of driving sustainable growth for both the company and the society. Even though an algorithm with the steps that need to be followed in order to define a business as responsible was not been developed yet, the existing literature illustrates important characteristics of the concept. Above all, CSR starts as an initiative of an organization or individual. The social responsibility of an economic entity revolves around the individual who has the capability of making decisions on a daily basis. Understanding why and what motivates companies and managers to adopt CSR practices may facilitate the comprehension of the concept.

As also Bowen (1953) outlined in his paper regarding the duties of the businessman towards the society, that motivation plays a significant role in encouraging individuals to accept and fulfil these moral obligations. Existing literature mostly focus on Bowen's initial first two questions and developing an understanding of the concept starting from the expectations of the society, the implied responsibilities and the benefits that may occur for a responsible business. Even though there are studies which attempt to answer Bowen's third question and reveal the motives behind the willingness of a company or individual to support a CSR orientation, a certain response has not been yet provided and additional research is required.

Furthermore, most of the existing theories reflect the philanthropic responsibilities as voluntary and depending on the motivation of the company and of the individual able to make decisions. For instance, returning to the four responsibilities stated by Carroll, the first three of them have an obligatory character and their non-compliance entails sanctions for the organization. In contrast, the fourth responsibility represents an optional variant and it totally depends on the individual's or the firm's motivation to solve social issues and offer support to those in need. Being a voluntary responsibility, the organization cannot be held accountable by authorities or existing law, but it can be by other members of the society based on moral consideration. Motivation may be perceived as the agent that determines the desire to change and act, improving the living conditions of others. Even in the stakeholder theory the philanthropic responsibilities may be considered as of secondary importance through the communities and the NGOs declared as external stakeholders of an organization, depending also on the willingness of a company to contribute to the wellbeing of others.

The interest for the CSR has increased remarkably in the past decade among researchers and businesses. Initially, the conceptual framework of CSR has been viewed as combination of four organizational duties designed for meeting the expectation of the community. An additional layer was added by the association of the concept with the stakeholder theory. From a general perspective to a more business specific one, CSR became a form of balancing interests and creating beneficial connections for an organization. Furthermore, CSR implementation depends on the managing strategy chosen for the functionality of the economic entity. Thus, by focusing on the results of organizational actions, CSR has become, nowadays, a tool that may be used to educate and create value for individuals and economic entities, drive sustainable development and influence societal and economic behaviour and development. CSR represents a complex concept and further research is requested to develop a proper understanding of the notion and its application.

5. Conclusions

Many of the existing organizations began to change their way of doing business by adopting CSR practices. CSR might contribute to the creation of a more durable and sustainable business environment, focusing on the common good. The concept has become a topic of interest for researchers, companies and individuals that aim to make positive changes, due to its contribution on the social and economic level. The emergence of CSR is clearly a proof of increased involvement among individuals and human mentality, in general.

Multinational corporations represent the main players which are promoting the CSR concept and most existing studies tend to address them by the way in which information related to social responsibility is presented (for instance, the problems raised by this concept, the benefits resulting from CSR integration in the business strategy). Despite the size of the organization, motivation represents an important agent that contributes to the adoption of CSR practices.

The outcome of this study concurred with other theoretical approaches on defining CSR, for instance Mercade-Mele (2018). The conceptual framework has been stated using the common and distinctive elements from some of the most used theories and definitions associated with the notion of CSR, creating a clear structure of the components relevant for the analyzed topic. The organization's motivation plays an important role in facilitating the integration of CSR as a practice of the business. This affirmation is also supported by other researchers, for example Grimstad (2020). Thus, this is the reason why a complete definition of CSR should take into consideration also an understanding of the principal motives that trigger individuals to make responsible choices for their companies. This study has its limitations. For instance, only four of the most relevant and often associated theories with the concept of CSR have been discussed. Future research can be conducted in order to improve and sustain the viability of this theoretical model. Furthermore, the analysis can be extended with other relevant concepts correlated with CSR.

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Tax Facilities for Romanian Companies in Combating the Crisis Generated by COVID-19

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Abstract

The year 2020 was a challenging one, both medically and economically. The pandemic that has swept the world has produced a series of changes in the economy, causing crisis and a major shock for the entire European and global economy. All states have been put in a position to take certain measures at both the political and budgetary levels to support the economy. The rapid spread of the virus, the large number of illnesses and the state of emergency we entered at the beginning of 2020, led to an economic deadlock followed by an increase in the unemployment rate, due to the fact that many companies have stopped or significantly reduced activity due to lack of demand. This paper highlights the main effects of the pandemic on the companies from Romania, leading to the support given by the state in order to support them to face the direct repercussions.

Key words: COVID-19, crisis, income tax, unemployment, compensations

J.E.L. classification: M21

1. Introduction

The COVID 19 pandemic affected the whole world, having major effects on the economic environment as well as on all industries, which within a month went through major transformations and we feel the effects of these transformations even today.

As a result of quarantine, school closures, telework and changes in consumer behaviour, many businesses have been affected by declining sales. Once revenue declined, companies were unable to pay their due debts on time. As long as the companies did not collect their receivables, many of them were put in the position of making certain decisions that led to the reduction of activity, whether or not to keep employees in the company, technical unemployment or dismissal. The statistics that are published, show that 5.2% of the active population of Romania is unemployed.

In the conditions of the pandemic, most companies felt changes, but there were also companies that increased their sales volume during the state of emergency until now. The most affected companies were those operating in the field of transport (road, sea, and air), the production of goods that were not strictly necessary during the pandemic (such as: car manufacturing, clothing, footwear, etc.). Changes also took place in the field of education, because those who owned private kindergartens or after schools had to obey the rules and suspend their activity for a while or transpose it online.

As mentioned above, there are also companies that during the pandemic recorded a large number of sales such as those whose object of activity is the production of goods necessary to prevent and treat the effects generated by COVID-19. Also in this category we can also include companies dealing with food marketing, companies operating in the IT field, with an increased demand during the pandemic, because it was necessary to provide solutions and at the same time technical support to employees who worked from home.

Legislative measures have been amended in favour of entrepreneurs, so that during the state of emergency, it has given them respite in terms of paying debts such as taxes, commissions, interest rates on banks, monthly utilities or housing rents.

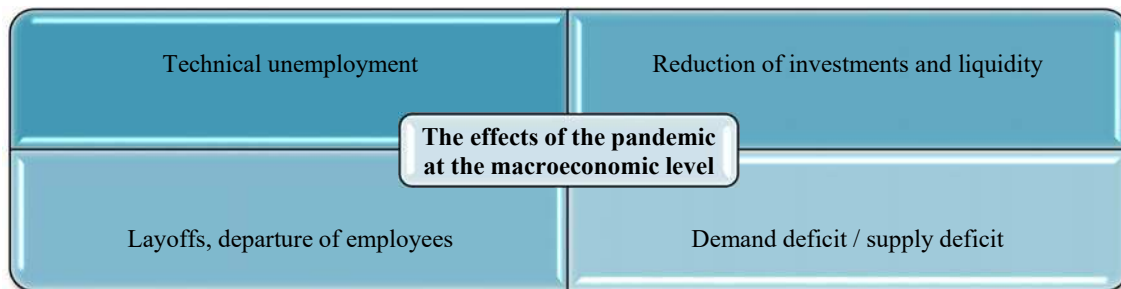
The impact is still felt because we all see a general economic slowdown as the unemployment rate has risen, the production of certain goods has declined due to falling demand for certain categories of goods, the financial market is eroding, loans have deteriorated and the world is increasingly concerned with the payment of liquidity.

2. Theoretical background

Given the situation created by the pandemic, all countries have been put in a position to reduce more or less some economic activities (McKibbin & Fernando, 2020; Grigoras-Ichim, et. al, 2020). The economic impact of COVID-19 and according to the estimates of analysts and those in the medical field, this situation could continue.

The impact of the pandemic from an economic point of view varies from one company to another, respectively from one sector of activity to another (Kaushik & Guleria, 2020; Hoke, et al., 2020; Sidhu, et. al, 2020). These situations are influenced by various factors such as market demand, supply, stock levels, supply arrangements, etc. (Maital & Barzani, 2020; Morosan-Danila & Bordeianu, 2020). The main effects of the macroeconomic pandemic in Romania and around the world are presented in the Figure no. 1.

Figure no. 1. The effects of the pandemic at the macroeconomic level



Source: Own projection of the authors

The pandemic that generated the economic crisis had an effect in a very short time both in terms of demand for products and services and in terms of supply (Stanciu, et. al., 2020; Luca, 2021; Brumă, et. al, 2021; Lucaci & Nastase, 2020). Comparing the two, the most noticeable effects are at the level of demand. At the beginning of last year, the state of panic that was created, the insecurity of tomorrow and then the state of emergency triggered a moment of sudden decrease in demand. During that period, the population focused on the purchase of products of strict necessity (food, medicine). This is the reason why some companies operating in other fields of activity have suffered. The most affected suppliers are those who owned restaurants, hotels, beauty salons (Morosan-Danila & Bordeianu, 2020, Bucaciuc, et. al., 2020).

Not only at the level of product demand there were changes, due to the situation the supply of goods was affected due to the fact that Romanian suppliers were supplied from outside with products and raw materials, and in the conditions in which the transport was interrupted and the chain distribution was disrupted.

The first state affected by the pandemic was China, which, as we all know, holds the top spot in the production of goods. Once production was reduced, China and other sourcing countries suffered and there was a shortage of supply of goods and raw materials.

The COVID 2019 pandemic generated a development blockade, due to uncertainty and lack of liquidity (Dan & Goia, 2020; Ichim, 2021). At the level of the country, but also globally, the investments are not enough to recover the economy and to bring it to the waterline. As long as the consumption of certain products has decreased, liquidity is completely lacking and investors are blocked. Globally, studies show that investments have fallen in 2020 by 30% compared to 2019.

There are exceptions including IT companies. KPMG conducted a market study for 2020 and it turned out that large companies have made considerable investments in technology (KPMG Romania, 2020a). The calculations show that they have invested in technology three times more than in 2019, in order to make possible the integration of work and home school in particular.

Due to the state of emergency in which Romania entered last year, companies have reduced activity, but at the same time sought solutions for employees, one of them being technical unemployment, in addition to reducing the program or salaries. Many of the companies suspended employment contracts during the pandemic and sent employees into technical unemployment. They received an amount of 75% of the value of the basic salary.

Table no. 1. Unemployment at European and national level

Indicators	Europa	Romania
Unemployment rate	7,3%	5,2%
Number of unemployed	15,7 (millions)	468.000

Source: Eurostat, 2021, p. 5

3. Research methodology

This article combines basic research with usable research, with the aim of discovering new problems or developing new theories and practical approaches to the problems faced by companies in times of crisis and identifying solutions to combat them, in our case with the support directly from state institutions. The usefulness of this research lies in the contribution to the future development of economic research, ensuring the necessary premises for future research, both theoretical and applied.

4. Findings on the adaptability of companies in times of crisis

The tax authorities came to the aid of the companies during this difficult period. It was necessary to take economic, budgetary and fiscal measures in a relatively short time, so that the activities carried out by companies are not so severely affected.

As a result of the various policies implemented by the Romanian state to support companies affected by COVID-19, we further exemplify the tax implications for enterprises paying profit tax, micro-enterprise income and other activity-specific tax.

According to the Emergency Ordinance no. 33/2020 for the first quarter of last year, taxpayers who paid their tax on the profit obtained within the term provided by law (25 of April, 2020) benefited from bonuses from the state. The amount of this bonus is calculated differently taking into account the category of taxpayers.

Table no. 2. Bonus granted according to the category of taxpayers

Taxpayer category	Bonus percentage
Big	5%
Medium sized	10%
NGOs, foundations, private schools	10%

Source: Emergency Ordinance no. 33/2020

There are also taxpayers who have chosen to opt for a financial year different from the calendar one. If in the period 25 of April – 25 of June, 2020, they paid their tax on the profit obtained, they also had the right to the bonus. The bonus granted to corporate tax payers had to be highlighted separately in the Declaration 100.

The purpose of this benefit was to support the economy, to encourage entrepreneurs to continue their business and to collect as many debts as possible. KPMG reported that last year in March, during the state of emergency, companies' revenues at national level decreased by 25% compared to the first two months of the year. The bonus is calculated by deducting directly from the amount of income tax due 10% or 5% depending on the category in which each taxpayer falls (KPMG Romania, 2020).

We will exemplify the specific calculations of an „X” company that operates in the field of retail trade and pays quarterly profit tax. The following table shows the expenses and revenues for each quarter of 2020. In 2019, the company was a profit tax payer.

Table no. 3. Statement of Revenue and Expenditure for each quarter of 2020

Trimester	I	II	III
Income	18.500	28.400	35.500
Dividends	5.000	-	-
Costs	7.300	9.500	10.350
Fines	0	2.000	-
Income tax expenses	0	860	(860+ 1.400) 2.260

Source: Own projection of the authors

Table no. 4. Statement of Revenue and Expenditure for each quarter of 2020

	Profit tax situation – 31 of March, 2020	Profit tax situation – 31 of June, 2020	Profit tax situation – 30 of September, 2020
Result for the year = Total revenue (N quarter) - Total expenditure (N quarter)	13,500 M.U.	18,900 M.U.	25,150 M.U.
Fiscal result = Result for the year - Non-taxable income + Non-deductible expenses	8,500 M.U.	21,760 M.U.	28,260 M.U.
Income tax (quarterly)	1,360 M.U.	2,621.6 M.U.	1,411.6 M.U.
Profit tax payable with 10% bonus	1,224 M.U.	2,359.44 M.U.	1,270.44 M.U.

Source: Own projection of the authors

In the analysed example we see that in the first quarter of 2020 the company registered a profit tax amounting to 1,360 M.U. After calculating the bonus granted by the state in the amount of 10%, the company had to pay a final profit tax of 1,224 M.U. In the second quarter of the year, the company registered a profit tax of 2,621.6 M.U., and after granting the 10% discount, the final payment amount is 2,359.44 M.U. In the second quarter you can see an increase in corporate income tax of 1,261.6 M.U. compared to the first quarter. This shows that the company recorded higher sales during the emergency period, which is due to the fact that the population stayed at home and food consumption increased. The state of emergency, the restriction of access in some localities and the insecurity stimulated the world to stock up on food and goods of strict necessity. In the third quarter of last year, the company registered a profit tax of 1,411.6 M.U., and after granting the 10% discount, the final payment amount is 1,270.44 M.U. A decrease of 1,210 M.U. can be observed from one quarter to another. A return to normal can be observed, after leaving the state of emergency, the amount of tax due being close to the first months of the year when there was no pandemic in Romania.

According to the Emergency Ordinance no. 33/2020, bonuses are granted to micro-enterprises that have paid until 25 of April, 2020, the income tax obtained from the activity carried out. The amount of the bonus granted, as in the case of medium-sized enterprises, is 10% and is deducted from the amount due.

During the state of emergency generated last year, the activity of some companies was suspended for a period or interrupted in the most unfortunate cases. According to the Emergency Ordinance no. 99/2020, the companies that were paying specific tax were exempted from payment. The period for which the taxpayers were exempted from paying the specific tax is 90 calendar days from the date when the Emergency Ordinance no. 99/2020, but subsequently the Government communicated that the term was extended until 25 of November, 2020.

When the country came out of the state of emergency, a recalculation of the tax due took place. The specific annual tax was divided into 1 year (365 days) and subsequently multiplied by the number of days in which the company operated.

$$\text{Specific tax} = (\text{Annual specific tax} / 365 \text{ days}) \times \text{no. days worked}$$

The 10% bonus is granted to specific taxpayers if they meet 3 cumulative conditions as follows:

- Possession of a document called certificate for emergency situations to be issued by the Ministry.
- Interruption of the activity undertaken in part / in full.
- The company should not be insolvent.

The certificate issued by the Ministry of Economy states on its own responsibility that the company's activity was partially / totally interrupted during the state of emergency and the company's revenues decreased by 25% compared to January and February 2020.

The companies benefit from the payment of a specific tax depending on the object of activity carried out. Thus, the following pay specific tax:

- Restaurants, hotels;
- Companies that provide catering services;
- Companies that own camping parks, caravans, etc.;
- Terraces, bars, other food services.

The pandemic period severely affected employers who in a relatively short period of time had to make major changes and adapt to the situation. Thus, in addition to the fact that the liquidity decreased due to the non-collection of receivables, solutions had to be found for the employees of the companies. The most common situations were:

- Technical unemployment;
- Reduction of working hours;
- Free days for childcare.

During the state of emergency and restrictions, some companies did not have enough funds to pay the debts and especially the salaries of the employees. Thus, with the restriction or suspension of activity for a period, there was also the sending of employees in technical unemployment, a situation that involves the termination of the employment contract for a while.

Law no. 53/2003 – Labour Code, Article 52, provides that in case of temporary interruption of the activity undertaken, the employer may take the initiative to suspend the employment of the employee, but may at any time resume work if the situation is remedied, the company starts operating under normal conditions and the employer needs staff.

More than half of the companies operating on the market have sent some of their employees into technical unemployment. The vast majority of employers sent only a part of their employees unemployed according to their activity. Employees have the right to receive a compensation during the period of temporary termination of the employment contract in the amount of at least 75% of the value of the basic salary. The 75% allowance is not granted to employees who are on medical leave.

The employer must pay tax on the allowance received and the social contributions of the employees without benefiting from the deduction. In order to recover the allowances the company paid to the employees, it was necessary for the employer to draw up and submit an application accompanied by the other legislative documents. The employer uploaded all the necessary documents plus the application on the platform ici.gov.ro. Within 15 working days from the submission of the documents, the employer received the amounts requested for the employees' allowances, and within 3 working days the employer had to transfer the money to his employees. News was published that during the state of emergency some employers received a part of their employees at work, they appearing as having a suspended employment contract. The employers who committed this contravention were fined with an amount starting from 20,000 lei.

In situations where the activity did not take place under normal conditions for a period longer than 30 days, another option that employers had in addition to sending people into technical unemployment was the reduction of the normal work schedule. Some employers chose to reduce the schedule from 5 to 4 working days per week, and others from 8 hours per day to 4 hours. Even though it was necessary to reduce the salary according to the schedule, the employees were satisfied that they kept their place and had the opportunity to continue their activity in pandemic conditions without being put in the situation of terminating the employment contract. The employer paid the salary contributions without this time having any facility from the state.

During the pandemic (especially at the end of the 2019-2020 school year), kindergartens, schools, high schools and universities no longer carried out their physical activity due to the restrictions imposed, so they moved their activity to online. In this situation, the state meets the parents with a solution. According to law no. 19/2020 parents who have children up to the age of 12 and follow a form of education had the legal right to be granted days off, as long as the state has prohibited the

opening of educational units. Only one parent is the beneficiary of this law. He benefits from paid days off, if he falls into the following situations:

- During the closing of schools, the parent cannot work from home;
- Children are up to 12 years old, or 18 in the case of children with disabilities and follow a form of education.

Parents who took days off during the pandemic last year received an allowance of 75% of the basic salary for a working day. The law clearly provides for some aspects related to the granting of the allowance. It is not allowed to grant it if the employee falls into the following situations:

- The other parent is on leave (rest or unpaid);
- The employee is technically unemployed.

We can say that for employers the most important resource to carry out their activity are the human resources. So in order not to lose their old employees, who brought results and recognition to the company, employers opted for more expensive financial solutions in a shorter term but certain for a period gives longer time, because everyone hopes for a recovery and a return to normal in the next period. A publication of the KPMG says that in Romania a percentage of 95% of companies have taken various measures to maintain the activity (KPMG Romania, 2020b). In March last year, 90% of companies took immediate measures to deal with the crisis situation, and most sent employees into technical unemployment, being the most convenient option at the moment.

We made a comparison of the costs that the employer incurred taking as an example the three situations described above (technical unemployment, reduced working hours, days off for parents) and we analysed a month that includes 20 working days, under the conditions in which the basic salary would be 2,230 M.U.

Table no. 5. Costs incurred by the employer

Compensation components	Technical unemployment (75%)	Reduced schedule (4 days a week)	Days off for parents
Compensation	1,673	1,784	1,673
Contribution to social insurance	418	446	418
Contribution to social health insurance	167	178	176
Personal deduction	0	510	516
Taxable income	1,087	650	577
Wage income tax	109	65	58
Net employee amount	978	1,095	1,029
Insurance contribution for work	0	40	38
Employer cost	1,673	1,824	1,711
Reimbursed by the state	1,673	0	1,029
Actual employer cost	0	1,824	681

Source: Own projection of the authors

In table no. 5 it can be seen that the most favourable and handy solution during the pandemic and especially the state of emergency was technical unemployment. Under the conditions of a basic salary of 2,320 U.M., the employer's cost is initially 1,673 M.U., but the state reimburses him this amount and remains at the end with an effective cost of 0 M.U. In the second analysed case, when the employee's work schedule was reduced from 5 to 4 days per week, the actual cost borne by the employer was 1,824 M.U., the state not reimbursing anything from this amount. In the situation where the employer granted 20 days off to the employee for the supervision of children attending a form of education, the initial cost of the employer was 1,711 M.U., of which the state paid 1,029 M.U., the employer finally having an effective cost of 681 M.U. As mentioned above, most companies have chosen the first option of technical unemployment, which is less expensive. Employers who wanted to keep their employees chose one of the other two options analysed, even if they had to cover costs, but most considered it a safer solution in the long run.

According to the data published by the Romanian Ministry of Finance (2020), the preliminary execution of the general consolidated budget at the end of 2020 registered a deficit of 101.92 billion lei (9.79% of GDP). Thus, amounts amounting to 46.31 billion lei (4.45% of GDP) were left in the economic environment through fiscal facilities, investments and exceptional expenditures allocated to combat the effects of the COVID-19 epidemic.

5. Conclusions

This paper aims to describe and analyse the changes that took place at the economic level in Romania at the beginning of the pandemic generated by COVID19. Among the main effects of the pandemic are technical unemployment, deficit of supply and demand, reduced investment, layoffs and departures of employees. Also, the solutions made available by the state to employers and employees were presented, including bonuses for paying profit / income taxes, postponing taxes, technical unemployment, reducing the working hours and days off for parents to supervise children, etc. In order to better clarify the situation of costs incurred by the employer, an analysis was made of the 3 types of situations presented and their interpretation.

The question that remains at the level of economists is whether fiscal incentives and facilities have really supported Romanian companies? The amounts declared by the Romanian Ministry of Finance present the following situation:

- About 0.9 billion lei bonuses granted based on Government Ordinance 33/2020.
- 7.0% decrease in value added tax revenues due to: (i) increase of VAT refunds by 14.5%, year / year (+2.72 billion lei) in order to ensure companies a level of additional liquidity during the crisis; (ii) the possibility of restructuring / rescheduling tax obligations; (iii) adverse developments in economic sectors since March (mainly industry, household services and trade in motor vehicles).
- Decrease by 2.4% compared to the level recorded in the previous year of excise revenues, mainly due to the reduction of fuel consumption in the current economic situation (limiting the consumption of certain services - tourism and increasing the incidence of work at home).
- In terms of expenses, by the end of December 2020, 4.25 billion lei were paid for benefits granted during the period of temporary suspension of the individual employment contract at the initiative of the employer, 922.13 million lei for benefits granted for other professionals, as well as for persons who have concluded individual labour agreements that interrupt the activity as a result of the effects of SARS-CoV-2, 2.69 billion lei representing amounts granted to employers for the settlement of a part of the gross salary of employees kept in work (41.5%), 96.15 million lei for allowances granted to parents for supervising children during the temporary closure of schools and 121.9 million for allowances granted during the temporary reduction of activity for professionals and for persons who have concluded individual labour agreements under Law no.1 / 2005.

Any effort would be made by the state institutions to support the national economy, their efforts are short-term, the companies being in a position to reorganize and even reorient themselves in order to face the market pressures. Even if the third wave of the pandemic ended with a series of relaxation measures, normality from the beginning of 2020 is far from being reached.

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The Role of the National Agency for Fiscal Administration in Combating Insolvencies Generated by Economic Frauds in Romania

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Abstract

The insolvency of an economic entity is determined by a number of exogenous or endogenous factors. Among the exogenous factors can be included the controls of the control bodies (in the financial, sanitary, environmental field, etc.), and among the endogenous factors are the company's employees, the decision-making management, the shareholders, etc.

The role of control bodies is to combat illicit elements in the management of the company, imposing through their controls, warnings, contraventions or subsequent disciplinary investigations compliance with the law and business ethics.

The aim of this paper is to establish whether there is a direct correlation between the number of controls performed by public control bodies in the variation of the number of insolvencies declared in the last 6 consecutive financial years (2014 - 2019)

Key words: public controls, insolvency procedure, economic fraud, prejudice

J.E.L. classification: G40

1. Introduction

Taken into account starting with Regulation (EC) no. Regulation (EC) No 1346/2000 of the Council of the European Union on insolvency proceedings, the need to harmonize and standardize legislation on economic insolvency is considered a priority in the future stages of economic and political union of the Member States. The need to draft unitary legislation applied to the whole Community bloc is the first step towards increasing the economic performance of the Member States and opening up to free movement of citizens who can practice professions throughout the community bloc, no longer conditioned by their skills and knowledge. acquired in a particular country.

The need to standardize insolvency law has been discussed among economic experts since 1996, three years after the Maastricht Treaty (establishing the European Union), the economic potential of this act being considered very significant, the fiscal control bodies are in the situation of not being able to carry out specific fiscal controls sometimes precisely due to a fiscal legislation that cannot be applied *ad-litteram*.

Through this paper I propose to analyze if there is a direct correlation between the number of controls performed by the fiscal control bodies, the amount of damages found by them and the number of officially declared insolvencies, in a time gap of 6 consecutive financial years, more precisely between the period 2014-2019.

2. Theoretical background

From a legal point of view, tax evasion is generically defined as an evasion of individuals or economic entities from the payment of taxes due to the state budget and local budgets. The form and size of tax evasion start from the size of the distortion of the financial statements reported to the competent bodies. The most used methods of evading taxes and duties are given by the declaration of profits or incomes lower than the economic reality or the oversizing of expenses. Considered as the most common economic crime at the international level, tax evasion takes various and varied forms, each method wanting to have the same purpose (Trif, 2015). The European Anti-Fraud Office

details the forms in which tax evasion is encountered as follows (cf. Report no. 1/2019 of the O.L.A.F. to the European Commission):

- Preparation of distorted financial statements, which do not reflect the economic reality;
- Preparation of accounting records that do not reflect the reality or keeping of double accounting records;
- Intentional destruction of documents regarding deliveries of goods;
- Practicing modified prices or commissions in the financial reports (both collected and paid);
- Forgery or preparation of false payment documents;
- Preparation or deliberate modification in favor of the economic entity of false customs or intra-community declarations (either for intra-community imports / acquisitions, or for intra-community exports / deliveries);
- Unjustified rectification of the purchase price, transport or storage costs;
- Preparation of distorted tax returns, mentioning only part of the income earned.

Tax evasion is often correlated with the informal economy (or underground economy). As a way of measuring the degree of tax evasion in an area, the method of undeclared income is used, which generically represents the difference between the amount reported to the competent bodies and the value of income that should have been reported (Richardson, 2006).

The most common form in which tax evasion manifests itself is that of tax evasion of value added tax, according to the Annual Report of the Office for the Fight against Fraud in the European Union (published in 2019). Value added tax is a worldwide consumption tax in the second half of the twentieth century. Tax evasion in the case of VAT occurs when traders who collect the tax report a value of goods and services usually sold less than the actual value provided to consumers. Unlike the European Union, the United States charges a sales tax.

3. Research methodology

The selection of the database was made by analyzing the annual reports published by the anti-fraud department of the National Agency for Fiscal Administration, available on the presentation site of the institution. The present study required data such as the number of tax audits performed by the anti-fraud department, the amount of damages found and imputed to legal entities that were subject to control and the number of insolvencies declared, in a time gap of 6 consecutive financial years, more precisely period 2014 - 2019. This last database was extracted from the annual reports published by the National Office of the Trade Register, data that can be found on the presentation site of the institution.

The chosen study criterion was that of **the ratio to the time factor**, of interest in the chosen research being the longitudinal method, to study the evolution of phenomena over time, together with a mathematical-statistical analysis of the two variables, the number of controls performed by the antifraud department. of the National Agency for Fiscal Administration and the number of declared insolvencies.

The processing of the database was done using the Excel spreadsheet program, of interest in this study being strictly the data provided by the competent bodies in this segment, without the need for additional processing, apart from the statistical program SPSS.

After processing the database in an intelligible format for the SPSS statistical program to recognize the data, the latter was used to determine whether the statistical data are correlated, if there is a reasoning to be able to deduce the premises from which this study starts (if the number of controls influences - H0 - or does not influence - H1 - the number of declared economic insolvencies, in the established temporary gap). For our interest in this study was the value taken by the Durbin-Watson indicator, the simple regression analysis, the sig coefficient, the ANOVA test and the Skewness analysis, respectively Kurtosis, in order to assess if there is a statistical possibility that the number of controls performed by anti-fraud department would affect the number of insolvencies declared.

The establishment of the time gap between 2014 and 2019 was made by applying a reasoning related to 2014, which amended the law on the functioning of economic insolvencies (in this case the transition from Law no. 85/2006 to Law no. 85/2014), the year 2019 representing, until the date of the study, the last year of reporting by the control bodies that provide the databases, the information related to the year 2020 being not available to the public until the date of the study.

One of the purposes of the Anti-Fraud Department of the National Agency for Fiscal Administration is to combat economic fraud, especially those that may lead to the insolvency of the companies concerned, with effects not only on them individually, but also among employees of the entity concerned (customers, suppliers, credit agencies, state institutions, etc.).

One of the variables chosen for our study is the number of controls performed by the Antifraud Department of the A.N.A.F.

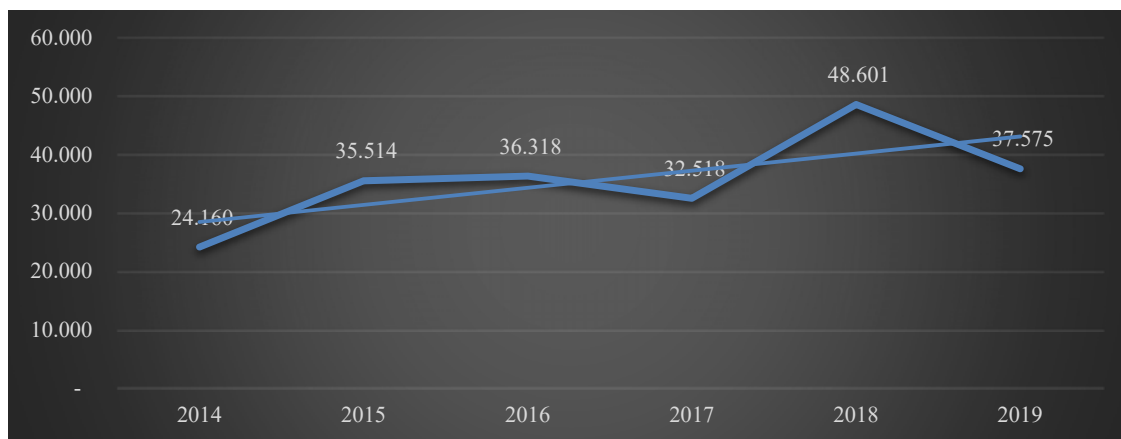
The theory from which we start in the elaboration of our study is that a more efficient control of the state institutions on the way of managing an economic activity can lead to a smaller number of declared insolvencies. The data from which we start in the elaboration of our study are presented in table number 1 and graphs number 1, 2 and 3.

Table no. 1: Number of controls performed by the Anti-Fraud department in relation to the number of insolvencies, period 2014 - 2019

Year	ANAF Antifraud reports		Number of insolvencies
	Number of fiscal controls performed	Value of prejudices found (mil Eur)	
2014	24.160	779	20.696
2015	35.514	1.059	10.269
2016	36.318	741	8.371
2017	32.518	411	9.103
2018	48.601	218	8.304
2019	37.575	122	6.777

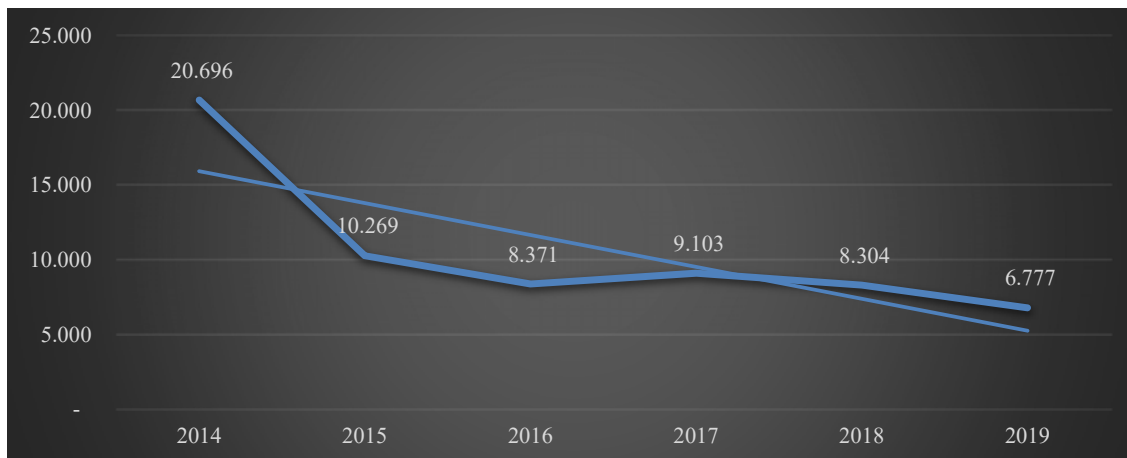
Source: Annual reports of the National Agency for Fiscal Administration

Graph no. 1: Number of controls carried out by the Anti-Fraud Department in relation to the number of insolvencies, period 2014-2019



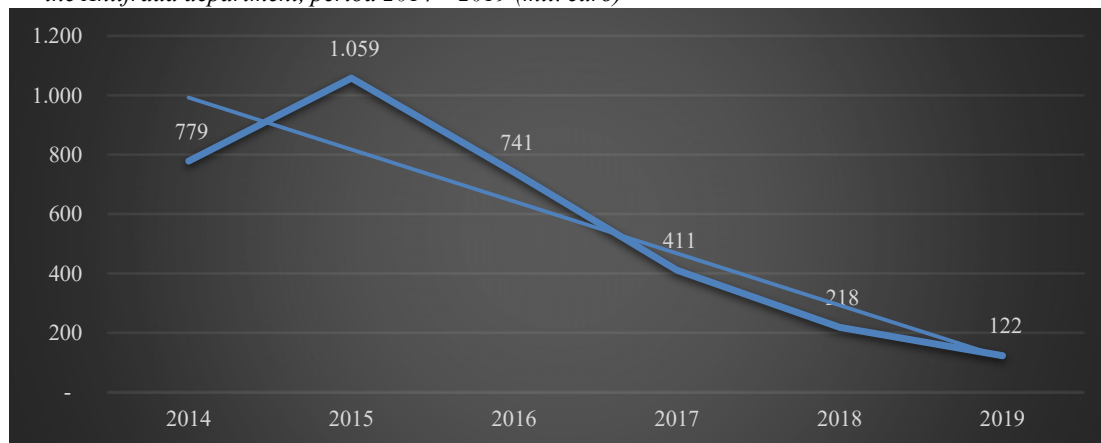
Source: Annual reports of the National Agency for Fiscal Administration

Graph no. 2: Number of declared insolvencies, period 2014 - 2019



Source: Reports of insolvent professionals published by the National Office for Trade Register

Graph no. 3: The value of the damages brought to the state budget following the controls performed by the Antifraud department, period 2014 – 2019 (mil. euro)



Source: Annual reports of the National Agency for Fiscal Administration

The two indicators taken into account in explaining the trend of the number of insolvencies from 2014 to 2020 (the number of controls performed and the amount of damages found) explain by a negative correlation the variation of the number of declared insolvencies. As can be seen in the graphs presented, as the number of controls performed increases, the response of the indicator "number of declared insolvencies" decreases in value each year of the analysis.

Regarding the amount of damages found, the correlation is this time positive, in the sense that the value of damages found from one year of reporting to another decreases, the trend is similar in terms of the number of insolvencies declared, there is a direct correlation between fraud (or attempted fraud in this case) and the number of companies experiencing financial difficulties.

Thus, as the number of inspections of state control bodies increases, the number of insolvencies decreases, thus explaining the impact of effective controls on the proper functioning of an economic enterprise and the elimination of fraud or attempted fraud.

In order to strengthen our opinion, we also considered a statistical analysis using the SPSS program, detailed in Figures 1, 2 and 3.

Figure no. 1: Correlation of the number of controls in relation to the number of insolvencies

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,745 ^a	,554	,443	5910,861	,554	4,977	1	4	,090	2,896

a. Predictors: (Constant), Insolvencies declared

b. Dependent Variable: Number of fiscal controls

Source: SPSS own processing

Durbin-Watson statistics is a statistical test used to detect the level of autocorrelation in a regression analysis. Using linear regression analysis, the Durbin-Watson indicator takes the value of 2,896. This value is equivalent to a negative correlation between the number of controls performed and the number of insolvencies, in the sense that as one of them increases, the other registers decreases.

The value of the Durbin-Watson indicator strengthens the correlation explained above, whereby the impact of increasing the number of controls of control bodies has a favorable impact (in the sense of decreasing) on the number of insolvencies from one reporting period to another.

Figure no. 2: Descriptive analysis of the number of controls in relation to the number of insolvencies

Descriptive Statistics												
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Numar controale efectuate	6	24441	24160	48601	35781	3233,29	7919,91	62725060,8	,307	,845	1,823	1,74
Numar insolvente	6	13919	6777	20696	10586,6	2074,72	5082,01	25826821,6	2,176	,845	4,991	1,74
Valid N (listwise)	6											

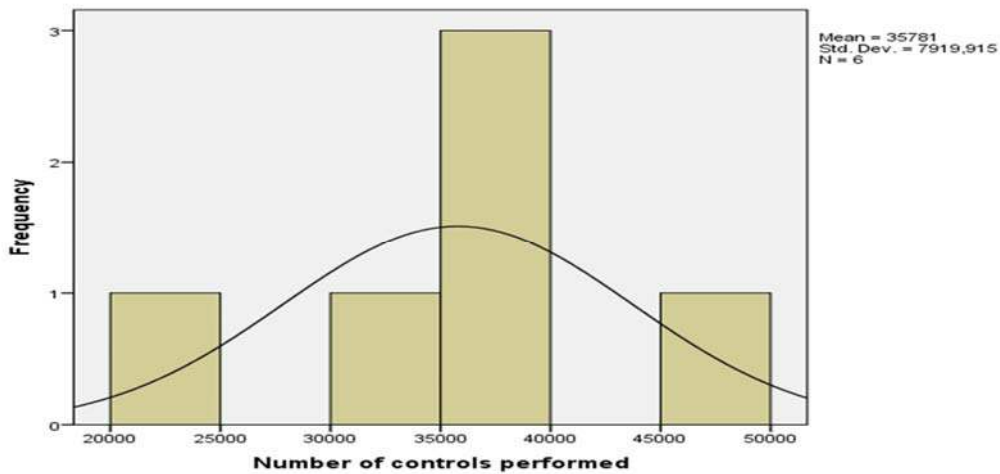
Source: SPSS own processing

The descriptive analysis of some indicators represents a summary of some characteristics that evaluate the connection between two statistical variables.

Of interest in our analysis is the value of the Skewness and Kurtosis indicators, calculated above, the Skewness indicator measuring the level of symmetry between the two variables, and the Kurtosis indicator the vaulting of the two variables analyze).

Regarding the number of checks performed, the Skewness indicator takes the statistical value of 0.307, which means an almost perfectly symmetrical distribution of the indicator, in this case it is positively asymmetric to a small extent. The Skewness indicator is an indicator of the central trend of a variable calculated as the difference between the mean and median relative to the standard deviation indicator. Knowing this indicator is of interest in determining the probability of asymmetry of a random value compared to the actual value that could influence the final result. For simplicity, the Skewness curvature is shown in Figure 3.

Figure no. 3: Asymmetry of the distribution of the "number of checks performed" indicator



Source: SPSS own processing

Regarding the Kurtosis analysis, the indicator "number of controls performed" keeps the same trend as in the case of the Skewness indicator, in the sense of a normal distribution (also called mesocurtic distribution or medium vaulted distribution).

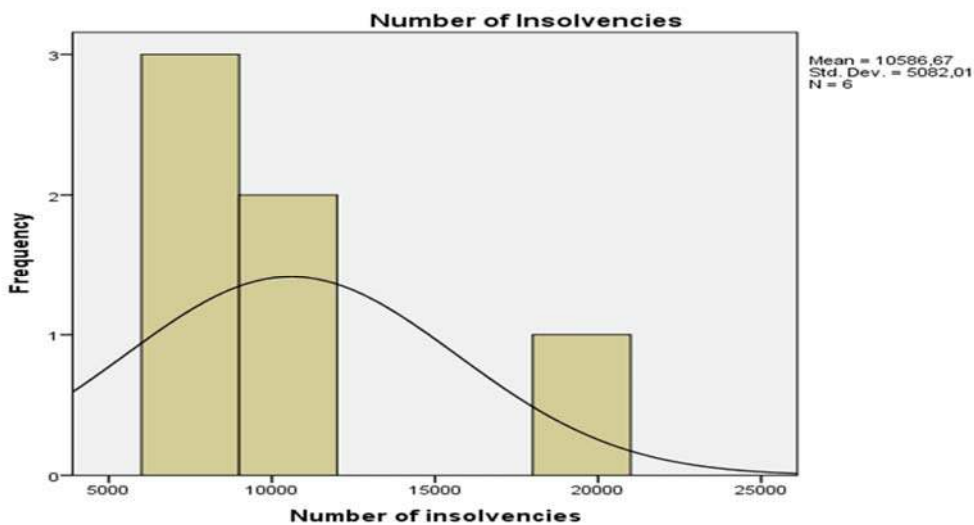
Therefore, according to figure number 2, the value of 1,823 of the Kurtosis indicator indicates a normal distribution, a value higher than 3 representing a leptocurtic or sharp distribution.

However, the "number of insolvencies" indicator does not enjoy a distribution as normal and symmetrical as in the case of the "number of controls performed" indicator.

According to figure number 2, regarding the Skewness analysis, which takes the value of 2,176, it results in a positive asymmetric distribution, which means that the values taken in 2014-2015 influence our database, which is perfectly normal in this instance, given the double number of insolvencies in 2014 compared to 2015.

The positive asymmetry of the indicator can be observed in Figure number 4.

Figure no. 4: Asymmetry of the distribution of the "number of insolvencies" indicator



Source: SPSS own processing

The positive asymmetry of this indicator does not impact our correlation in terms of the impact of the controls carried out by the Antifraud department on the number of insolvencies reported because, in this case, the positive asymmetry was observable with the naked eye and in table number 1.

The Kurtosis indicator in this case takes the value of 4,991. This suggests a sharp leptocurtic distribution, due to the number of insolvencies in the first two years of analysis (2014 and 2015), but without a real impact in supporting the opinion circulated at the beginning of the subchapter.

Starting from two general hypotheses (H0 and H1), we assume that from a statistical point of view the group averages are equal (in the first stage - H0) or not (rejection of hypothesis H0 and acceptance of hypothesis H1). Thus, we proceeded to use the ANOVA test to observe the structure of our data groups, selected for analysis, according to Figure number 5.

Figure no. 5: Anova test

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	173872189,618	1	173872189,618	4,977	,090 ^b
1 Residual	139753114,382	4	34938278,596		
Total	313625304,000	5			

a. Dependent Variable: Number of fiscal controls

b. Predictors: (Constant), Insolvencies declared

Source: SPSS own processing

With a risk threshold of 10%, we can conclude that the H0 hypothesis is accepted, which means that the averages of our data groups are equal and the statistical analysis compares two normally distributed, correlated and interpretable data structures.

4. Findings

The analysis undertaken between the number of controls performed by the financial control bodies, the amount of damages found and the number of insolvencies declared at the National Office of the Trade Register between 2014 and 2019 showed that there is a negative correlation between the two variables, in this case as the number of tax controls increases, the number of insolvencies shows a decreasing trend.

The value taken by the Durbin-Watson indicator, the simple regression analysis, the sig coefficient, the ANOVA test and the Skewness analysis, respectively Kurtosis show that the variables chosen for the study are correlated, the almost perfect symmetry of the number of controls performed and the positive asymmetry of the declared insolvency number lead as to assume that from a statistical point of view the group averages are equal (in the first stage - H0) or not (rejection of hypothesis H0 and acceptance of hypothesis H1).

The theory from which I started in the elaboration of this study is that a more efficient control of the state institutions on the way of managing an economic activity can lead to a smaller number of declared insolvencies, aspect that was confirmed through the analysis performed.

5. Conclusions

There is a disruptive element that can negatively affect both the statistical analysis using the SPSS software and our final interpretation regarding the impact of the number of controls performed on the number of declared insolvencies. Analyzing the trend of the number of controls performed in relation to both the number of damages to the state budget detected and the number of insolvencies, we observe a significant increase in the number of controls performed in 2018 (by 49.45% compared to the previous year), but a value of however, the damages found were lower than expected (by 46.95% lower than in the previous year). Analyzing especially this year, the impact of these figures is due to changes in legislation, namely the adoption of Government Emergency Ordinance no.

88/2018, measures presented and detailed in subchapter 1.1 that had a negative impact on the economic sector and in particular harming creditors.

Following the study performed using the statistical program SPSS Statistics 20 we can conclude that there is a direct correlation between the number of controls performed by public control bodies and the number of insolvencies declared in the last 6 financial years, between these two variables there is a negative correlation. in which the number of controls performed increases, simultaneously with the decrease of the number of declared insolvencies, which shows an effectiveness of the fiscal controls on the phenomenon of fraud and the deliberate desire to enter insolvency of certain debtors.

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Particularities of Fraud in Reorganization Operations

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Abstract

The pattern of fraud in reorganization operations follows a route very well known by economic criminals that is difficult to combat or prove. Frauds that occur in reorganization operations, be they reorganizations, insolvencies, liquidations or mergers, are sometimes at the limit of the law, at least in terms of documentation. However, the Romanian legislation also punishes the intention, which, however, does not appear in supporting documents and thus, represents the main problem in this sector.

The aim of this paper is to present and analyze the particularities of fraud in reorganization operations, in terms of merger, insolvency, liquidation, but also other types of fraud that may occur within a company.

Key words: fraud, merger, insolvency procedure, liquidation, economic fraud

J.E.L. classification: G40

1. Introduction

Fraud can occur in various forms, the legislation generally dealing only with specific cases of judicial reorganizations. If it were not illegal, the inventiveness of the embezzlers in their attempt to deceive the creditors and to get rich "overnight" would be commendable. Addressing key cases and moments specific to a reorganization procedure, this paper aims to bring to the fore other cases of fraud in reorganization operations that are not expressly addressed by applicable law, but for which knowledge of how to commit a fraud is essential, at least for future legislative texts.

Merger, division, insolvency and bankruptcy are treated in Romanian legislation in accordance with European legislation, often without taking into account the local specifics of Romanian business, organizational culture, collective mentality, level of education, invested capital, local and national economy and human nature, as a characteristic part of a nation. The application of European law texts must be combined with an interpretative-critical interpretation by the Romanian legislature, in order to take into account, ascertain and punish the attempts of fraud that appeared as a result of the human nature of the Romanians.

2. Literature review

The study of the works selected as representative in our research brings into question concepts and study principles that are based on the research topic we want to apply in Romania. In *The Performance of Insolvency Prediction and Credit Risk Models in the UK: A Comparative Study*, Richard Jackson examines the legislative framework for insolvency proceedings in the UK, comparing existing bankruptcy risk models and proposing a new model of insolvency risk, detection of insolvency risk that takes into account only one variable, despite the already established models (Altman, Conan-Holder, Beaver, etc.).

In the paper "Firm age dynamics and causes of corporate bankruptcy", Alexander Kucher discusses economic theories regarding the causes of insolvency among small and medium-sized companies, treating in a pragmatic and critical way their applicability in a volatile business environment and vulnerable to economic changes (data economic, health, political crises, changing end-user preferences, market trends, etc.).

Tibor Tajti addresses, in his paper "Bankruptcy stigma and the second chance policy: the impact of bankruptcy stigma on business restructuring in China, Europe and the United States", the macroeconomic effects of bankruptcy through a comparative analysis between China and the United States. The paper considers the main measures taken to prevent the bankruptcy of private companies in the three regions chosen as the most economically developed and the policies applied in them to counteract the fraudulent effects that may exist.

This study aims to formulate a relevant, justified and proven opinion on economic fraud in reorganization operations, with a focus on economic fraud committed in the declaration of economic insolvency of a private capital enterprise, thereby wishing to bring a personal note to the current stage of knowledge in the field.

3. Research methodology

The research method chosen in this paper is based on the place occupied in the empirical investigation process, especially **the field study of the facts** that may be the object of an economic fraud (either in division, merger, insolvency or bankruptcy), together with professional experience in financial audit and accounting.

By choosing this research method, I aim to answer a series of questions similar to qualitative research such as documentary research, questions that refer to Who? What the? Which? Where? How?.

Besides the field study of some events (economical in this case), in the study carried out on the particularities of fraud in the reorganization operations of economic entities, are approached concepts borrowed from both descriptive research and explanatory research, but also exploratory research, listed below they can explain both their use, thus helping to understand the present work.

Descriptive research, as a preliminary study (gathering information), in a complex scientific research project, is used to know social systems and processes, using mainly questions such as "Who?" and "what?". Explanatory research comes, instead, to explain social relations, with the aim of capitalizing on them for the formulation or reformulation of theories. This type of research is based on collecting data (information) through experiment, case study or historical research, where the study questions are "How?" and "Why?", such questions having to do with operational links that need to be traced back in time, rather than their mere frequency or incidence.

Exploratory research, aimed at developing relevant hypotheses for further investigations, is based on finding answers to the questions "What?", "Who?" and "Where?".

Starting from the key questions and definitions of the three types of research, the paper aims to describe, analyze, propose and understand some of the types of fraud in the reorganization of economic entities, thus providing more knowledge of this field and helping to on the one hand to the analysis and promulgation of some legal texts and on the other hand wishing to be a support to the practitioners in the field of economic reorganizations.

Economic fraud, like any economic, social, political or cultural phenomenon, follows a number of fairly standardized patterns. Knowing the way in which economic entities, from a legislative point of view, are subjected at a certain moment to a reorganization process, we can formulate an opinion on the economic fraud that may occur, as a first step in combating the phenomenon. For this, however, it is necessary to describe the reorganization operations that an economic entity can go through, then following the clichés that make possible the occurrence of economic fraud.

4. Findings

4.1. Fraud in company merger

The merger is a relatively recent business model applied in Romanian economic practice, which has been regulated since the early 1960s in the United States and the United Kingdom.

Theoretically, this is a way of reorganizing the entity that creates a number of advantages especially in the sector of production of goods that uses a large number of suppliers.

The merger aims to streamline production by lowering production costs, transport costs or adjacent costs such as staff salaries and eliminating the profit margin in the case of purchases from suppliers.

Just as the purpose of an economic entity is to make a profit, the merger is intended to reduce all costs in order to maximize the recorded (or unrecorded) profit, as we shall see below.

The merger procedure envisages the association of an enterprise with another enterprise that retains its legal personality or the formation of a new legal entity, by merging two older economic entities, the latter being finally deleted (Law no. 31/1990, art. 238, para. (1)).

Merger fraud may occur either in the transfer of all assets to the new company or in the valuation carried out at the time of the merger.

At the time of the merger, there is a risk of tax evasion due to a mass sale of assets held by the entity to be taken over at a much undervalued price to an external third party, assets to be acquired by the new entity. company established on the occasion of the merger at a much valued price (Hromei, 2013, p. 58).

Another form of fraud that may occur at the time of the merger occurs in holding or derivative groups that merge to cover unfavorable accounting situations. Basically, when a financial creditor refuses to grant a line of credit for development, investment or to cover current debt, it merges in writing with another entity part of the group, with the real purpose of hiding the reported loss or asset net negative accounting, cases of this kind having an increasing frequency of occurrence in the Romanian business environment. Unrecognized as totally illegal, it is at least unethical (Hromei, 2013, p. 59).

Another type of fraud derived from the previous one involves the drafting of annual financial statements applying unrealistic estimates regarding the degree of depreciation of assets of the balance sheet assets of the entity most often by internal experts, but also by authorized evaluators.

Thus, based on a high subjectivism, managers can make optimistic predictions regarding the application of the principle of business continuity, which they assume through the administrator's statement. The result of such an operation is the increase of the carried forward result, as a key to attract new funds from bank or non-bank financing companies, the manipulation appearing by the fact that in the official documents the assets were not subject to significant depreciation, situation with all wrong.

Another way of manipulating the information provided during the merger process is the provision / non-establishment leverage of provisions. This technique involves either the resumption of provisions previously established for income or their non-establishment at the time when they were to be recognized in accordance with the principle of prudence. Both procedures lead to the same result, that of reflecting in the financial statements prepared on the occasion of the merger some more optimistic situations than the economic reality, to attract the partner with which the entity is to merge and create an attraction to this process. In this procedure, the most affected provisions are those for pensions, litigation, restructuring and provisions for other obligations, situations that can be difficult to detect.

Also applied in the case of a merger, similar to the procedure stated above, an economic entity may proceed to the non-recognition of losses from debts incurred. The situation arises when one of the economic entities wishing to merge is aware that in the future it may face non-collection of a debt held, and in this regard concludes an insurance contract to guarantee the collection of the outstanding amount. In this way, in exchange for the payment of an insurance premium that guarantees it at least the nominal value of the claim held over a period of time (agreed in the insurance policy), the entity no longer considers it appropriate to recognize the impairment by recovered, and thus, on the occasion of preparing the financial statements corresponding to the merger, the accounting profit is artificially increased (Milu, 2012, p. 28).

Another case of fraud arising from the future desire to merge is the one that can be encountered in the case of stocks. Thus, when inventorying stocks, it is likely that some of them will be part of the category of unusable, due to visible technical wear, moral wear, elements that are difficult to sell or that can no longer be part of future production cycles. However, stocks that are subject to irreversible depreciation are not derecognised and / or disposed of and remain in stock for the stated purpose of artificially increasing the value of the net asset, leading to an overvaluation of the result.

In the case of the merger, the main problem arises when valuing the assets, equity and liabilities of the entities involved. The reason for an assessment that is as advantageous as possible for the acquiring company is the number of shares or shares to be received by the entity during the merger, the interest being to obtain as much control as possible in the beneficiary company and implicitly as many as possible. of payment dividends.

The starting point in the valuation procedure of the absorbing entity is the analysis of the annual financial statements that provide information on the financial position and performance, as well as the valuation method applied.

The distortions that may occur at the time of the valuation of the elements in the balance sheet and in the profit and loss account by the appraiser are likely to influence the exchange ratio, internal management and accounting policies agreed by the absorbing company, the application of free and transfer pricing.

4.2. Appearance and manifestation of fraud in case of insolvency of companies

The insolvency proceedings entail entry into the reorganization proceedings. As we presented in the previous chapter, the failure to carry out the reorganization plan at the planned level of the indicators initially entails, in some cases, the fraud of creditors and the modification of the creditor's creditors.

The reorganization plan developed for an entity in financial difficulty and requesting insolvency is a personalized and unique one, which takes into account elements such as business specifics, number of employees, history of the debtor entity, brand, market image, financial indicators achieved in previous financial years and the correctness of the payment of monetary obligations.

In a reorganization plan it is necessary to indicate clearly and in detail elements such as recovery prospects, final expectations and the premise from which the plan is developed, all in relation to the current financial or non-financial means still available to the debtor at the time. declaration of insolvency, taking into account the specifics of the business, the demand for products and / or services on the debtor's profile market and not only. A reorganization plan is designed to provide the most detailed information on the next three financial years in which the debtor's economic recovery should take place, often including measures to replace or appoint management staff, or administrative (Law no. 85/2014, art. 133, paragraph (1)).

The initially designed reorganization plan is proposed to be voted on by the creditors' meeting which is organized by debt classes. Thus, when establishing the final table of receivables, there may be guaranteed, budgetary, unsecured and salary receivables (Moțiu, 2019, p. 24).

However, practice has shown that certain categories of receivables, and implicitly their control, can be held by the debtor, thus reaching a majority vote by receivables classes including conditions of 10% or less of the total creditors, given that the order of payment of receivables is established by law. Achieving this objective (of manipulating the creditors' meeting) by the debtor or by other persons interested in the fraud process of the reorganization operation may involve artificial categories of financial or commercial creditors. Another approach encountered is the pre-establishment of a category of receivables controllable by the debtor, most often being the class of salary receivables (Moțiu, 2019, p. 25).

Because control is exercised not over the creditors meeting but over the classes of claims that make it up, there is a risk that the initially proposed reorganization plan may be unrealistic, purely formal, failing in the short term because it is not viable and / or effective in any way. form. The efficiency and viability of a reorganization plan conceived from the start as stupid and unrealistic is a problematic treatment only for the lower categories of creditors, most often unsecured ones who may face the situation that in the liquidation procedure they receive absolutely no financial compensation. for the claims they represent, and if they receive, this does not represent a significant amount so as to ensure that the claims they have to recover are settled.

The failure of the reorganization plan may project from the outset a list of payments (of creditors) that do not take into account unsecured creditors, this strategy being applied most often when the number or amount owed to unsecured creditors is consistent. In the same way, creditors who are directly or indirectly controlled by the debtor will have the right to a decision-making quorum in the future and will have control over the adoption of decisions with significant impact. The elimination

of unsecured creditors from the payment can also ensure the practical control by the debtor, including in the bankruptcy procedure, an inevitable procedure in case of failure of the reorganization plan (Szabo, 2007, p. 23).

From the moment the reorganization plan enters into its attributions and is approved by the syndic judge delegated in this mission, the object of activity of the debtor entity must comply with the rules imposed by the approved plan, and the receivables held by creditors are modified according to the clauses stipulated by the approved plan.

According to the applicable legislation in the field, one can reach the situation where a reorganization plan designed from the beginning to fail in a short period of time can affect the degree of recovery of receivables held by creditors (Szabo, 2007, p. 24).

Insolvency law no. 85/2014 imposes similar treatment for all receivables of the categories of creditors that form the credit table (through the reorganization plan), but with exceptions and derogations from the rule. Exceptions include the case where a creditor consents to unfavorable treatment for his claim.

Disadvantaged claims are treated as a distinct category for which the reorganization plan applies differential treatment in the following cases (Milu, 2014, p. 26):

- Applies a reduction of the debt held;
- Has a reduction in the guarantees agreed by both parties or proposes a staggered payment of the debt over a long period, a situation which may affect the material situation of the creditor;
- The calculation of an interest rate that applies to the amount of the claim determined by the reference interest of the B.N.R. which is often much lower than the interest rate set by the reorganization plan, with the creditor being impacted again.

With the confirmation, voting and approval of the reorganization plan, it becomes mandatory and begins to take effect including the categories of creditors who voted against it and their rights are modified in accordance with the estimates and amounts established by the reorganization plan. In this case, the debtor's debt payment schedule is treated as an enforceable title and non-compliance with the reorganization plan has the effect of the debtor's immediate entry into bankruptcy proceedings (Milu, 2014, p. 25).

In conclusion, the failure or non-implementation of a reorganization plan initially proposed and approved has the effect of changing the creditworthiness and thus an economic fraud committed against creditors, given that changing the right invoked by creditors (trade receivable) is impossible. Being a known, applied and countered procedure, it is a major problem and a legislative breach used by those who want an illegitimate debt cancellation (Deli-Diaconescu, 2017, p. 11).

4.3. Fraud in the event of liquidation of companies

As previously described, liquidation is the last stage in the existence of a legal entity that involves the capitalization of all elements of the entity's assets in order to extinguish the economic obligations to creditors (Law no. 85/2014, art. 145).

Insolvency law no. 85/2014 stipulates that the liquidation which has the role of extinguishing the payment obligations of the debtor arising as a result of carrying out an unproductive and deficient activity.

In reality, there are situations in which creditors can no longer recover their debts and the legislative levers in the field cannot help them.

Often, most cases of fraud occurring in the liquidation of companies occur when valuing the assets of the debtor's assets in which there is a risk of overvaluation situations.

Thus, although a number of assets are valued in the debtor's assets, applying a high degree of subjectivity, the inventory and valuation resulting from the dissolution and liquidation of assets may find a real value of assets much lower than the "reality" reflected in the accounting documents, this is, of course, to the detriment of creditors and in particular creditors unfavorably positioned in the table of receivables.

From my professional experience so far, I have found that the appearance in the balance sheet positions of assets (usually of high value) that do not actually exist is also a very common practice among debtors subject to the liquidation process. In this case, the balance sheet reflects a situation of net accounting assets distorted either by the appearance of assets that do not actually exist or by

exaggerating the values related to already existing positions. This practice is very common in the banking and non-banking financial fields, but also in the production of consumer goods. A relevant case in this area is the Wirecard scandal in which, when liquidating the debtor's assets to settle payment obligations to creditors, there was a significant distortion of the annual financial statements that presented a savings bank account to an Asian bank, amount of money which never existed in the accounts of the alleged banking institution. With the significant distortion and serious impairment of the business continuity principle, the audit firm that performed the audit mission to the economic entity concerned and expressed an unqualified opinion on the accuracy of the annual financial statements was held liable. role at the moment.

A similar situation is encountered if, on the occasion of the inventory for entering the liquidation procedure, a series of assets recorded and highlighted in the annual financial statements and related notes are no longer found at the debtor's premises. This case of economic fraud by theft of assets is most often carried out even by the debtor who, notified of the date of inventory, date of sealing and date of establishment of the inventory commission, consents to the theft of assets considered valuable prior to seizure and seal on goods. Some cases of fraud committed by this method allow a more truthful way to cover the debtor to avoid being held liable in which, with a very short period of time before the start of the liquidation procedure he complains to the competent bodies the theft of assets that were shared, this being, at least for the moment, covered before the syndic judge and the creditors before whom he must answer.

The legal obligation to draw up and validity of an insurance policy for movable and immovable property is also observed during the period of activity by the debtor in a state of insolvency and reorganization. The annual conference held by the National Union of Insurance and Reinsurance Companies of Romania (UNSAR) presented a series of cases of debtors in either insolvency, reorganization or liquidation proceedings that invoked the theft of high value movable property, protected by an insurance policy, and the theoretical basis used by embezzlers is simple. When the debtor finds that his economic activity cannot be recovered through the measures imposed at the legislative level, he claims to the insurance or reinsurance company the disappearance of some assets, often significant in terms of value.

Once the insurance premium is collected, it can either repeat the fraud scheme by acquiring and disposing of similar goods, or it can "invest" the value received as an insurance premium through agreements with various third parties, this case being of the win – win type.

5. Discussions

In terms of reorganization fraud, the key point where fraud is most likely to occur is when valuing assets, liabilities and equity. As the current legislation is based on only one verification key (either evaluator, judicial administrator or syndic judge), the general consideration and dissatisfaction of the creditors often focus on the transparency of the debtor's evaluation process after the official insolvency. and the development of the debtor's economic activity at least one financial year before the declaration of insolvency.

The cases in which the credit mass was deliberately manipulated by the debtor by taking over the majority (which is allowed by the Government Emergency Ordinance no. 88/2018), the cases of overvaluation of assets (in case of mergers), of their undervaluation are known and publicized in the case of insolvencies) and theft of assets committed by the debtor or persons employed by him before the actual entry into insolvency.

The present paper aimed to present some moments in the economic life of a commercial entity that undergoes transformations (by division, merger and insolvency) that are not expressly treated by the legislation in force, leaving room for interpretations and dissatisfaction.

6. Conclusions

The ways of fraud in reorganization procedures are diverse and varied, some are standard fraud procedures, which are based on breaches and legislative clichés, and some are ingenious ways of fraud, tailored to the specific activity and particularities encountered in the case of each debtor.

With the presentation of the main ways of occurrence and manifestation of economic fraud, we managed to understand the phenomenon and the patterns, sometimes classic, in which it occurs.

It is also necessary to review the keys to verification and control responsible in the fight against economic fraud, in this case accounting and financial auditing.

The importance of financial auditing is precisely from expressing an opinion on the economic situation of a company from the perspective of a third party that has no connection with the entity. The relations of belonging between the management of a company and the entity that performs the financial audit are prohibited both by the legislative norms in force and by the Regulations of Operation of the audit activity, established as internal regulation.

The fight against economic crime is and will remain a hot topic of the European Union, the continuous adaptation and reorganization of the institutions dedicated to the fight against fraud being a response to the activity of economic and financial crime that adapts extremely easily to legislative changes.

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Translation Issues in the Legal Field of the European Union. Case Study on Specialized Terminology

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Abstract

It is obvious that the English language plays nowadays a notable part worldwide as far as communication is concerned, entailing various linguistic, social, cultural and even educational consequences. Due to its complex nature, legal language hinders the correct understanding of important documents governing rights, obligations, court decisions or other legal documents. This paper aims at discussing the results of the semantic, terminological and lexicological analysis of the most frequently used words within a specialized corpus, highlighting the terminological complexity of legal texts, in order to facilitate the clarification of certain inadvertencies that translators and jurists stumble upon, and to improve their understanding. Those working in the legal field should pay close attention to the understanding and transposition of legal concepts from the source-language system to the target-language system; they should be equipped with flexibility, attention to details, multicultural knowledge and interdisciplinary abilities when tackling the intricate network of legal terminology.

Key words: legal language, English language, translation, specialized terminology, the European Union (EU)

J.E.L. classification: Z13

1. Introduction

In the recent decades, English has steadily asserted its supremacy as a worldwide communication tool and, consequently, it has triggered various issues of linguistic, pedagogical, social and cultural nature, which have been explored by many authors, such as Abbott and Wingard (1981), Crystal (1997), Graddol (1997), Jenkins (2000, 2006), Maruntelu (2006), Dumitrascu and Maruntelu (2006), McKay (2002, 20003), McArthur (1998, 2003), etc.

The complexity of the legal language hinders the correct understanding of important documents governing rights and obligations, or court decisions, regulations, laws, statutes, contract provisions. The intensity of the globalization phenomenon contributed to the intricacy of the economic, social and political background and triggered urgent requirements regarding the harmonization of the legislation (especially at the EU level), which, in its turn, entailed the necessity to tackle legal terminology and terminological differences.

Trying to facilitate the clarification of certain inadvertencies that translators and jurists stumble upon in legal texts and to improve their understanding, in this paper, we have tackled several challenging terminological aspects.

2. Theoretical background

It is noteworthy that translation in general, and legal translation in particular consist not only of a process of linguistic transference but, as Renata Vystrčilová stated in her work, “Legal English”, “it is an attempt to communicate someone else’s message through another language. It is an attempt

to communicate one world in terms of another” (Vystrčilová, 2000, p. 96). It also should be mentioned that the translator’s work is often hindered by difficulties in his/her attempts to find equivalent terms or expressions in the target language, difficulties that are usually caused by polysemy, synonymy, homonymy and by a wide range of compound words or related phrases and expressions (see Chirobocea, 2016; Chirobocea and Popescu, 2013; Leonte et al., 2017).

Taking into account the vast array of different legal systems and procedures in force in the EU member states, the underlying question is whether the achievement of balance and compatibility in the legal field is possible, to what degree and by what means. Therefore, in order to perform an effective and accurate translation, the translator must deal with an intricate network of factors such as the purpose of the translation (its intended use), the message transmitted by the original text, the rhetorical context, the communicative purpose and media, the textual organization, the generic knowledge.

Furthermore, a pertinent and appropriate legal translation requires the translator’s ability to handle adequately the terminological discrepancies between the two languages involved in the translation process and to deal with the issues entailed by the unavailability of corresponding (legal) concepts. This depends on the translator’s general knowledge of the legal systems of the languages involved in the translation process, on his/her translation competencies and skills.

It is obvious that a great deal of research devoted to terminology and linguistic corpora has evolved in the last few decades. According to Laurence Anthony, a well-known scholar in fields such as corpus linguistics, educational technology, and natural language processing, “word frequency is a linguistic phenomenon that many corpus researchers are interested in, whether it is to determine the complexity of a particular text in an English for Specific Purposes (ESP) study, the bias of a particular writer in a Critical Discourse Analysis (CDA) study, or any number of other linguistic research interests” (Anthony, 2013, p. 10). He has analyzed the results produced by several generations of software tools and he himself has conceived and implemented “AntConc, a freeware concordancer, AntWordProfiler, a freeware vocabulary profiler, and more recently web-based monolingual and parallel concordancers” (<https://www.laurenceanthony.net/resume.html>). He also underlines the need for cooperation between researchers in corpus linguistics and “members of the science and engineering community” (Anthony, 2013, p.17).

Losey-León (2015, p. 527), for example, refers to the maritime field, focusing on the “measures for controlling the emission of greenhouse gases from ships”, which have “resulted in an increasing substantial volume of written documentation mainly represented by rules and standards, technical reports, research articles, academic textbooks, newsletters, leaflets and flyers of a varied specialization level”. She highlights the purposes for studying frequency of words and collocates in a corpus:

“(a) it can account for the text’s lexical cohesion and the subdivision of registers in a language for specific purposes or for occupational purposes; (b) it contributes to draw attention to the relationships between terms based on their formal properties; this is particularly useful for learner awareness; (c) it can be the basis for the study of the terms’ semantic relationships; (d) ... it can extend its applicability to the development of teaching resources and terminographic tasks” (Losey-León, 2015, p. 527).

The legal field, especially the section connected to the EU legislation, is in full swing. Thus, Marín and Fernández (2015, p. 320) have explored “the impact that cognates, that is, words which share formal and often semantic features in the L1 and the L2, may have on the understanding and acquisition of legal English terminology”. The scholars’ study focused on two specialized corpora consisting of:

“a collection of judicial decisions issued by British courts”, and “a general English corpus of 21 million words. 56 first-year Spanish Law students were asked to translate 12 legal terms, 10 of which were English/Spanish cognates. The results showed that, as it was indeed expected, the higher the students’ proficiency level ..., the higher their rate of success in providing correct answers”.

Marín Pérez and Rea Rizzo (2013, p. 455) employed the Automatic term recognition (ATR) methods in their research, trying to identify “the most representative terms in a corpus automatically, saving time and allowing managing large amounts of data that could not be dealt with manually”. Their paper is based on a huge legal corpus, using documents of the United

Kingdom Supreme Court Corpus (UKSCC) and “a 10,000 entry legal glossary compiled by the authors which was employed as gold standard for comparison”.

3. Research methodology

Our corpus-based research was inspired by Teubert and Čermáková’s book, “Corpus Linguistics. A Short Introduction” (2007, pp. 65-77), where different categories of corpora are discussed (“reference corpus”, which contains “the standard vocabulary of a language”; “monitor corpus”, which monitors the occurrence and frequency of new words; “parallel corpora” used especially by translators; internet or virtual corpus).

Having in view that corpus analysis enables the investigation of language use, furnishing valuable pieces of information about frequently used language phrases, structures and rhetoric strategies, we extracted from a specialized corpus the legal terminology by using “*Text Analyser - Text Content Analysis Tool*” (see <https://www.usingenglish.com/resources/text-statistics.php>), and we analyzed its intricacy and the difficulties it entails in terms of understanding.

For the purpose of our study, we have also accessed other specialized analysis tools, such as *Analyze My Writing* (see <https://www.analyzemywriting.com/index.html>), *Seoscout* (see <https://seoscout.com/tools/keyword-analyzer?lang=en#analysis>) and *Text Analyzer* (see <http://www.roadtogrammar.com/textanalysis/>), which analyzed the content of the chosen corpus and automatically produced statistics in terms of number of characters, word count, average syllables per word, number of sentences, lexical density, readability indices. These valuable data on content analysis were associated with the lexical profile of the legal language register. However, in this paper, we have focused on terminological issues encountered in the corpus, while the aspects related to lexical density – text statistics, frequency and top words, word length, syllable count, frequency of word structures – will be tackled in another paper. Thus, by studying real-life language samples through a corpus that, in our case, is representative of the legal (maritime) language, we were able to identify certain specialized language behavior patterns. In this context, the corpus-driven study on the lexis (legal English) was conducted in an endeavor to extract and analyze the specialized terminology, for a better understanding of the legal text. Furthermore, this analysis focused on the semantic, terminometrical, terminological and lexicological analysis of the most frequently used (specialized) words within the corpus.

The analyzed corpus includes excerpts from a representative text of the legal language, i.e. *articles 1-11* of the “*United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules)*”. It should be mentioned that we have already analyzed this text in our previous research (see Nădrag and Buzarna-Tihenea (Galbeaza), “Aspects of Legal Translation in Contracts of Carriage”, published in “*Ovidius University Annals, Economic Sciences Series*”, Ovidius University Press, XVI(1), 2016, pp. 35-40) and that this analysis completes and expands the previous one. We chose the *Hamburg Rules* for our analysis because this set of rules governs the international transport of commodities and represents an attempt to harmonize the legal base for the shipment of commodities on ships. This endeavor is also based on our experience in teaching legal and maritime terms over a long period of time.

4. Findings

This section presents the results of the semantic, terminological and lexicological analysis of the most frequently used words within the corpus, in order to highlight the terminological complexity of the legal texts and to find solutions to better understand the specialized vocabulary employed in maritime law, in English. In this regard, our analysis demonstrates that the reader encounters difficulties in his/her quest for equivalence in the target language due to polysemy, synonymy, homonymy and to the great variety of compound and related words and expressions.

By looking into the syntagmatic relations, we have identified word combinations/ collocations employed in specialized communication situations in the English language; it is noteworthy that these combinations represent a special feature of the specialized language (i.e. legal maritime field) as well as a key element that plays an essential part in encoding and decoding messages and

specialized knowledge.

The analysis of the word frequency list led to the identification of function words, and field-specific lexical items. The corpus analysis reveals that legal maritime language abounds in technical words, such as: "obligation", "party", "charter", "clause", "contract", "agreement", "rule", "regulation", "to govern", "liability", "responsibility", "damages", "act", "document", etc.

As expected, the titles of the parts and articles are a mixture of legal and maritime terms: "provisions", "convention", "liability" ("of the carrier"; "basis of liability", "limits of liability"), "responsibility", "loss of right", "non-contractual claims", "deck cargo", "dangerous goods", "bill of lading", "evidentiary effect", "guarantees", "shipper", "notice", "damage", "jurisdiction", "arbitration", "stipulations", "depository", "acceptance", "approval", "revision", "amendment", "denunciation", "law", "through carriage".

Another difficulty was posed by the identification of synonymous terms such as "agreement" or "contract", "carriage" or "transport" or "transportation", "liability" or "responsibility", "acceptance" or "approval", "revision" or "amendment". The exact meaning and usage of these terms could be further clarified in specialized glossaries and thesauruses.

However, some terms are defined in Part I, Article 1 of *Hamburg Rules* (p. 1). For example: "carrier" refers to "any person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper"; "actual carrier" is "to whom the performance of the carriage of goods, or of part of the carriage, has been entrusted by the carrier, and includes any other person to whom such performance has been entrusted"; "shipper" is "any person by whom or in whose name or on whose behalf a contract of carriage of goods by sea has been concluded with a carrier, or any person by whom or in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage by sea"; "consignee" refers to "the person entitled to take delivery of goods". On the other hand, other synonyms remain unexplained in the document: goods and cargo, liability and responsibility, acceptance and approval, revision and amendment.

Furthermore, the terminology issues encountered in the corpus presented above were also triggered by the fact that the legal maritime language has unique field specific lexical units, such as "self-propelled", "floating facilities", "inland waterway", "freight", "bill of lading" "docking", "towage", "floating equipment", "dredgers", "floating elevators", "floating cranes", "floating grabs", "floating docks", "floating landing stages", "pontoons", "floating sheds for ships", "drilling platforms", "floating lightship", "pleasure crafts", etc. As it is noticed in the above examples, the maritime lexis consists of compounds made of words with a common meaning and technical terms. Most of the technical compounds can be understood by taking and examining the meaning of each word separately.

The field specific lexical items most frequently encountered were: "ship", "vessel", "deck", "cargo", "goods", "transport", "carriage", "carrier", "sea", "rule" and "obligation". Thus, the general level of difficulty in understanding the message conveyed by the text is average for a proficient English speaker if he/she focuses on the semantic field and if he/she considers the words in context.

The main lexical devices employed in legal maritime contexts, with key roles in the corpora, also encumbering the identification of field-specific lexis when dealing with a de-contextualized word list, are polysemes (terms with multiple meanings), compounds and homonyms (terms that are spelled identically but that have distinct meanings). To give a few examples, "send", may refer not only to an action, but an obligation on the carrier or the employed mode of sending; for instance, "I shipped (verb) the cargo (theme)".

Send

Definition:

A Sender plans the Path (along with Source and Goal) of a Theme and places it in circumstances such that it travels along this Path under the power of some entity other than the Sender. This frame also has a Recipient distinct from the Goal, as both can be present:

They sent (verb) the documents (theme) to Spain (goal) to Mr. Travis (recipient).

They forwarded (verb) the goods (theme) to a buyer (recipient) in Berlin (goal).

This frame contains verbs that participate in the ditransitive construction, with a recipient as the direct object, as in the following:

She sent (verb) Mr. Travis (recipient) the papers (theme).

Table no. 1 Fes: Core and Non-Core

Core	
Goal Semantic Type: Goal	[] The end of the path and intended goal of the sending: We <u>sent</u> (verb) <u>the cargo</u> (theme) <u>to the warehouse</u> (goal).
Recipient [Rec]	This is the recipient of the sent Theme: <u>Billy</u> (sender) <u>mailed</u> (verb) <u>the request</u> (theme) <u>to his partner</u> (recipient).
Sender []	This is the person who initiates the movement of the Theme and, unlike Carrying, does not accompany it. <u>Mr. Travis</u> (sender) <u>sent</u> (verb) <u>the bill</u> (theme) <u>this morning</u> .
Theme Semantic Type: Physical_object	[Theme] The objects being sent: You <u>mailed</u> (verb) <u>the encyclopedias</u> (theme) <u>to the library</u> (goal). Theme may be multiply instantiated: Mr. Travis <u>mailed</u> (verb) <u>an application</u> (theme) <u>with a return envelope</u> (theme).
Transport_means [Transport_means]	The mode of sending employed: We <u>shipped</u> (verb) <u>the oil</u> (theme) <u>by an oil tanker</u> (transport means).
Non-Core	
Container [Cont]	A container in which the Theme is sent: They asked us to send the goods <u>in sealed plastic bags</u> (container).
Co-theme [CT]	An additional theme sent along with the main Theme: I sent the documents <u>with an additional note</u> (co-theme).
Degree Semantic Type: Degree	[Degr] Degree to which event occurs: The shipment went <u>very</u> (degree) smoothly.
Depictive [dep]	Depictive phrase describing the Sender or Theme: You <u>faxed</u> (verb) his request <u>while drinking your coffee</u> (depictive).
Distance [Dist]	This is any expression characterizing the extent of motion of the Theme: They <u>threw</u> (verb) the ball <u>3 meters</u> (distance) in the air.
Manner Semantic Type: Manner	[Manr] Manner of performing an action. He <u>sent</u> (verb) the request <u>quickly</u> (manner.)
Path []	Path along which movement occurs: They <u>shipped</u> (verb) the goods <u>across the Black Sea</u> (path).
Place Semantic Type:	[Place] A spatial setting including the Source location, where

Locative_relation		the Sending event takes place: Mr. Yellow <u>posted</u> (verb) the package <u>on Thursday</u> (time) <u>in Budapest</u> (place).
Purpose Semantic Type: State_of_affairs	[Purp]	The Purpose of the sending: Mr. Green <u>sent</u> (verb) the invitation to his clients (recipient) <u>to announce them about the product launch event</u> (purpose).
Reason Semantic Type: State_of_affairs	[Reas]	The Reason for the sending: Nowadays, job applications are generally <u>sent</u> (verb) by e-mail, <u>because this is a faster means of communication</u> (reason).
Source Semantic Type: Source	[Source]	The beginning of the path, similar to source except that it serves to define the path: They <u>sent</u> (verb) the bricks <u>from Boston</u> (source) <u>to London</u> (goal).
Time Semantic Type: Time	[Time]	When the sending takes place: He <u>sent</u> (verb) the cargo <u>to our partner</u> (recipient) <u>two months ago</u> (time).
FE Core set(s): {Goal, Recipient}, {Sender, Transport_means}		

Source: authors' own processing

The examples presented above highlight the lexical units and help indicate the meaning of words in context but also their grammatical function (from verbs, such as “send”, “forward”, “post”, “fax”, to nouns – i.e., “Black Sea”, “documents”, “cargo”). In addition, the words/ expressions have also been emphasized according to their semantic role, i.e. those referring to source (“from Boston”), purpose (“to announce him about the merger party”), time (“two month ago”, “on Friday”), reason (“because this is a faster means of communication”), recipient (“to our partner”, “to Mr. Travis”), theme (“the cargo”, “the encyclopedias”, “the bill”, “the goods”, “the oil”), the container (“in sealed plastic bags”), goal (“to the warehouse”, “in Berlin”, “to the library”), transport means (“by an oil tanker”), path (“across the Black Sea”), etc.

Based on this study, we inferred that, in the legal *maritime language*, common words take on meanings and roles different from the ones they have in General English. The most common word forms are present, but the most common meanings are not equally present. Sorting out lexical items just according to their forms does not lead to satisfactory results.

This investigation entailed the following classification of the lexis in our corpus: unique field specific lexical items (a very limited number), lexical items typical of other ESP fields, phrases or compounds with field-specific meanings, homonyms and polysemantic words with special meanings in the frame of reference), function words.

Compared to common/standard language, specialized languages, traditionally seen as functional registers (see Biber, 1988; Halliday, 1988), are characterized by variations in the recurrence of special linguistic elements. Therefore, the analysis of quantitative data plays an essential part in the characterization of specialized languages, especially since specialized corpora can be used in order to lay the foundation for the thorough description of a certain specialized language, the corpus-based techniques being very important in quantifying language characteristics and making available statistical reports of language features. In addition, by quantifying linguistic phenomena, we were also able to identify the language items that are most likely to occur in the analyzed register, which gave us the possibility to make statistical assumptions about specialized language use.

5. Conclusions

Law and its specialized language constantly influence societies and nations in an age dominated by globalization. Its archaic, complex and laborious nature also contributes to the urgent requirement to clarify at least the most important laws and regulations, especially in terms of legal terminology and terminological discrepancies, taking into account the steps undertaken in order to adjust, harmonize or even unify the legislation at the EU level and the complex international network of social, economic and political elements influencing the legal field.

Moreover, a very important aspect which should be tackled is that, in order to perform an effective and accurate translation, the translator should be able to focus on a complex and multidisciplinary network of factors such as the interpretation or purpose of the translation (i.e. its intended use), the facilitation of the original text, the context of situation, the rhetorical context, the communicative purpose, the textual organization, the generic knowledge. Furthermore, for a pertinent and adequate translation, translators should acquire general knowledge of the legal cultures and systems of the two languages involved in the translation process, in order to be aware of the differences of these cultures and systems and to effectively manage the issue of terminological differences between the two languages and even the absence of equivalent concepts.

It is obvious that a better understanding of both the specialized field and the corpus linguistics research, and the cooperation between linguists, terminologists, teachers and members of the engineering community can lead to spectacular and useful outcomes in various fields.

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The Management of the Romanian Pre-university Education. A Current Scientific Assessment

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Abstract

In recent years, the management of pre-university education has gained notoriety in our country, thus the role of school management has become the subject of public debate at all levels. The theme is a priority in the NCSRHE (National Council of Scientific Research in Higher Education) fields approaching a clear vision of educational management, analyzing the fulfillment of the functions, the management relations, analyzing the methods and techniques, designing the strategies in the wider context of current requirements.

The purpose to research this theme is based on the idea that a school manager must know methods and techniques thoroughly which are specific to the management in order to properly solve the problems that he is facing.

Key words: educational management, pre-university education, school manager, performance, education.

J.E.L. classification: I20

1. Introduction

Obtaining not very good results, by students, at various national competitions, presents a weak image of the current educational management exercised in the Romanian pre-university system. The reorganization and application of the management implies an intelligent and efficient solution for the development of the Romanian pre-university education system.

The inequities in education have deepened a lot lately, there are many problems that need solutions as urgent as possible, and the application of leadership strategies is more and more obvious. generation for the current and future society, the importance of the development and application of an educational management of quality, adapted to the changes produced in the whole world and in the entire Romanian pre-university education system, grows even more.

2. Theoretical background

Quality, positive answers, achieving objectives, modernizing Romanian pre-university education, adapting to the new, have generated the importance of developing educational management. A greater need for correct application of educational management is felt lately in almost all schools. Application of managerial activities: planning, organization, and not only, are increasingly necessary for Romanian pre-university education to prepare future generations that can easily adapt to changes and modernizations of society.

2.1. Management practices in future organizations

The problems in educational management are the consequence of major changes and the impossibility of educational factors to adapt and accept these changes. The concrete nature of these

problems is interpreted in terms of Romania's entry into the labor market and through EU requirements for Romanian education to be integrated into European standards imposed. People who do not have information cannot act responsibly.

According to Ken's, formula Blanchard can be the interface of what we call the Organization of the Future, an innovative organization. In the old culture, there were teams in the informal organization, and in the innovative culture there are informal team organizations. Specialty literature states that in innovative cultures, the team is a pool of knowledge, support and catalyst effort, according to the principle no one is perfect, but a team can be. Management is the new technology that transforms the organization of the present into that of the future.

We must be able to perceive these transformations and make them possible at the level of the school organization. These are the opportunities of the present to build a future on the measure of our expectations. Otherwise, we may be outside those of serious concern and constant for the enrichment of management theory and practice and beyond those who obtain related success. (Druker, 1993)

Educational, visionary and sustainable management in the 21st century presents itself as an alternative to commonly practiced management. In the organizations of the future, an innovation is based on scientific research aimed at preserving and improving the quality of life through making a profit for the benefit of humanity.

The leaders of visionary and sustainable organizations are 360 degrees leaders. They are aware of their passion and potential so that they know how to conduct themselves and do not worry about their position, realizing the impact they have on the people around them. (Maxwell, 2003)

The 360 degrees leaders are by far, the school Euro-managers of tomorrow. Competence manifests itself through passive expertise - I know what to do and how to do it, and when I don't know I figure out myself what should be done, and through active expertise - the ability that transforms passive expertise in action and manifests itself in the form of processes and systems.

The topic can be a source of inspiration and reflection for unit managers of pre-university education in our country, and the expected effect is the optimization of the educational-instructive process by applying and practicing efficient management. Effective communication both inside and outside the school and staff participation in the vision of PDI is part of the modernity of the practices of the Organizations of the future.

PDI strategies must start from the tradition of each school and the ways to be chosen on the basis of the resources available to the school unit. (Tusa, 2012)

Education systems around the world will undergo major changes by 2030, being favored by the technological revolution. Over the next 15 years, the Internet will turn schools into interactive environments that will put aside traditional forms of education and change the way teachers, parents and students belong.

The evolution of educational units as visionary and sustainable organizations, detonates myths in the world of management and shows that evolution is potentiated by people - disciplined, flexible and creative.

2.2. Adaptive change of education

Due to its status as a strategic resource, the dominant nature of action in Education at this time is one focused on real leadership, later doubled by management-centered action. (Williams, 2005)

The 21st century has inherited the technology revolution from the recent past information and communication. These technologies have changed and will continue to change all areas, including education and school. There are two global challenges. On the one hand, schools transmit efficiently and on a large scale a growing volume of knowledge and information adapted to a civilization set in motion by knowledge.

On the other hand, find ways so that today's students - tomorrow's adults, are not overwhelmed by the flow of unimportant and ephemeral information, which invades the public and private domain and selects important information necessary for individual development.

Life, the experience of modern man, shows that learning to maintain simple reproduction of the values of the past, tradition, are not enough to "equip" the man of the society of the future.

The old type of learning, based on a "maintenance" learning can no longer satisfy today, when changes are so rapid and complex, causing real "shocks" to the contemporary human being.

Therefore, a different kind of education is needed, namely one that brings change, true and innovative learning. Innovative learning as an essential element of education for change is nothing more than a necessary means to prepare both individuals and societies to act together in new situations, especially in situations that have been and continue to be created by humanity itself.

Transformation through a process of adaptive change in pre-university education in Romanian language starts from the vision of articulating an authentic educational system, which cultivates values. The model of "Management-leadership, as a manifestation of the complexity-change duality" has become very popular.

If there is a long-term willingness to learn responsibly and irrevocably, we obtain the generation of adaptive change in education.

3. Research methodology

To carry out this study, we used the method of descriptive research, observation, and reading using specialized bibliographic sources, methods that led to the follow-up of facts and reference to essential aspects of the proposed topic.

4. Findings

The research in the Romanian space regarding the pre-university management, showed that Principals exercise the intuitive managerial act, not having a scientific basis, although in most cases they are interested in a specialized system which will ensure them an appropriate qualification. As a solution for relaunching pre-university education and, implicitly, decentralization of education is necessary, although in this case there would be risks, blockages or barriers.

The scientific approach of this paper, later developed in an extensive research, can be considered a set of necessary recommendations for implementation within the units of pre-university education of an efficient and qualitative management, comparable to those of European countries. The suggestions are addressed to school managers in educating Romanian pre-university students, as well as fellow teachers, actors in the educational process.

Above all, at the level of drawing up the Institutional Development Plan, effective communication is necessary both inside and outside the school, as well as team participation of staff. Strategic approaches to PDI should start from the tradition of each educational unit, taking into account the resources available to that school.

Suggestions on the development of human resources is imperative to go through specific training courses to solve problems that arise at the level of each school and not on purely theoretical aspects. The need for professional development must take into account the needs of the school, as well as the specialized needs of each person.

The development of the school - public institutions partnership, school - economic agents, school - institutions abroad, it is still an insufficiently explored segment. Students need to develop professional skills through internships performed at economic agents, whose field of activity corresponds to the interests of the school, and access to as many as possible European programs - Comenius or Leonardo type, which would bring useful experience in implementing sustainable partnerships.

By trying to compare with other European education systems, it can be concluded that the school manager model and managerial skills cannot be implemented adlitteram in our education system due to different social, political and economic conditions. The problems in educational management are largely due to the changes and the inability of educational factors to adapt and accept these changes.

5. Conclusions

Change in education is already a profound learning algorithm collective on the scale of the whole society, based on trust, honesty, competence and courage. The synthesis of the research is based on

the idea that school managers must possess extensive knowledge of specific methods and management techniques.

As a result of an interdisciplinary approach, this paper can go beyond the scope of the argument to convince educational decision makers that a management based on the correct use of specific methods and techniques leads to progress and performance in education. Education is the number 1 priority public project in Romania in the coming years because, through education, society can change the mental infrastructure, and this change has not yet taken place in its entirety!

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Discovering the Need to Apply Leadership Strategies in Digital Education

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Abstract

The pandemic generated by the appearance of the new coronavirus SARSCOV-2, had an extremely strong impact on education, seriously affecting the entire education system remains global, thus generating the emergence of a new model of education: Digital Education.

The purpose of this paper is to highlight the difficulties encountered by teachers in the educational process, in a new alternative to education, namely digital education exclusively. Our proposal is also to emphasize the importance of knowing the correct leadership strategies and their application, so necessary in such a period with major changes in education.

Key words: leadership, education, education quality, teacher quality, school access

J.E.L. classification codes: I20

1. Introduction

The adoption of this educational alternative has generated unique situations among teachers who have had to deal with a situation not practiced before in the history of pedagogy, exclusively online education. The necessary resources, attracting students, finding didactic solutions to be able to continue the education of students, highlighted the special need to apply teacher-leader strategies.

2. Theoretical background

What we propose to highlight in this article does not offer a solution to solve the impasse in which online education is lost, but I can try to emphasize that with the emergence of this educational alternative, there is a need to change the training of teachers who would should, in my opinion, be seriously oriented towards leadership.

2.1. The importance of transforming a teacher into a leader

The unique, serious situation in which the teachers found themselves, revealed features, skills, visions and reactions extremely close to those of a true leader, forced to defend, to continue, to encourage, to maintain the education in - a difficult situation with few teaching aids.

In the literature the leader is referred to as the person who has authority and influence in a group, (Limbos, 1996) is also appreciated as being the one who trains other people to achieve goals, are appreciated as people who motivate, establish clear, precise responsibilities that creates events that are likely to stimulate energies. (Peretti, 2011)

The leader is an agent of change that involves a critical analysis of his own motivations, the leader must make a rigorous analysis of the forces favorable to change and the results. Talents are cultivated through practice, but talent itself is not reduced to practice. Study must accelerate learning. "Leaders are made, not born," says W. Bennis, president of the California Leadership Institute, and his "Becoming a Leader" work believes that leadership skills and abilities can be learned. (Vagu, 2006)

What teachers have done during this period, in which they have learned how to use technology almost exclusively to continue education, keeping students' interest in the school alive, progressing, can be interpreted as the first steps taken towards leadership, which easily brings them closer to a kind of leader.

The major decisions they had to make in the shortest time, so as not to accumulate huge losses in students' education, due to the lack of physical presence in schools, and by finding the fastest and most accessible solutions for students to communicate, work and progress, outlined the profile of a leader.

The improved qualities and leadership traits can be appreciated among teachers, they have developed and with the maintenance of relations of cooperation, collaboration and mutual support with students' families, some hard tried by this pandemic, but also with public and private institutions. by trying to obtain the materials and teaching aids so necessary to continue learning online.

Another fundamental feature of a leader, developed quite quickly by teachers, was to discover together with subordinates, solutions, methods and ways to progress and achieve their goals.

Also, through the influence exerted on the organization, behavior specific to leaders, which produce changes in behavior, attitude, feelings, etc (Miner,1973). Another individual, teachers maintained reactions among members of the organization, created clear goals that followers set and tried to overcome the stalemate in which the entire education system found itself. The power to focus on the proposed goals, to adapt and react to change, to instil in others a positive attitude about the opportunities that change brings, leads teachers as close as possible to the term leaders. (Vagu,2006)

2.2. Leaders in the digital age

Although, a challenge, especially in the beginning, digital pedagogy, it can be said that it also had some benefits for teachers, who found support for a variety of teaching strategies, facilitating access to resources, supporting continuous professional development, as well as for students who found support for a variety of learning strategies, they were also allowed to choose the pace of learning by supporting the development of 21st century skills.

A school community in which employees leave their competitive attitude to share their learning experiences, the steps that led them to success, respectively the situations - problem that remained problems is an active learning environment, focused on the needs of individuals learning community.

Members of a learning organization actively participate in learning not because it is required of them by the authority or imposed on them from outside, but because they want to explore the situations listed by mutual agreement on the group's agenda.

Learning organizations cannot be forced to exist; the pressure exerted by the authority (inspector, director), as the holder of the correct, unique information, as well as the pressure exerted by the continuous provision of ready-to-digest information, explained blocks, paralyzes the active learning of the group.

The school encourages, through rules and procedures established by consensus, through freely assumed responsibilities and roles, through procedures and tools for monitoring and evaluating the process - a different type of intelligence than traditional educational approaches; Instead of resorting to recognizing knowledge or manipulating details, the school focuses on the participants' ability to learn, to understand the situation - the problem they face.

Most teachers and students are interested in learning useful and relevant information and practicing skills as needed.

Teaching that integrates skills training and development with a relevant context is known as contextualized training. Although it provides learners with opportunities to broaden their knowledge and build structured schemas or knowledge (structuring procedures) of knowledge that broadens understanding, as it improves basic skills, there are few resources (supporting materials) that integrate both components.

Teachers need to understand their own way of thinking in order to become more efficient and to facilitate and amplify the development of their students' thinking. If they have gained an understanding of the social and situational nature of learning, an appreciation of the importance of authentic contexts, a habit of reflecting on their own experiences and desires, a willingness to

question their own beliefs and assumptions, then they will be better prepared to create middle school students to make it easier for students to learn quality lessons that really matter.

There is more and more discussion in the Romanian educational space often about educational strategies and policies to be put into practice to increase quality and effectiveness the instructive-educational system. The need for models is an acute one and is felt both by the actors mainstays of the education system (teachers and students), but also the other beneficiaries of the educational services (parents, family, local community representatives or enlarged).

Modern management practices educational indicates that educational policies are implemented in schools by managers who approach different leadership styles of the staff teachers who work in the school. Educational leadership is highlighted in literature as the most democratic and effective form of leadership of an organization.

A historical evolution of the concept, made by theorists in the field of management have shown the close, stimulating connection between employees and leader's organizations, causing some to turns into leaders, while leaders accountable by assigning moral principles to complete their leadership status. Leadership transformational and transactional are two of the most recent currents in the landscape scientific management.

3. Research methodology

The article we propose is based on the observation, analysis and investigation of the new phenomenon that appeared in education. The recently published literature and internet sources have contributed to the strengthening of the idea that a change is needed in terms of continuous teacher training.

4. Findings

The training of teachers from the perspective of applying leadership strategies is, it can be said, even urgent, the continuous training of teachers in the Romanian pre-university system at this time is really poor in the field of educational leadership. What I noticed during this period of educational crisis was that the management of the educational act was based to a very large extent on the leadership skills of the teachers.

The authorities' investment in in-service training programs should also be based on the design of more such courses and programs in order to develop the concept of leadership among teachers. The new, unforeseen and unprecedented situations, which appeared with the coronavirus pandemic, highlighted the need to develop educational leadership, which may not solve all the problems that the Romanian education system has faced but will certainly make many positive changes in it.

Teachers need to be taught to remain flexible and open to new experiences and to embrace and manage change. Teachers should be as prepared as future leaders who must continually learn to acquire the skills and tools needed to lead the organization. (Vagu, 2006)

5. Conclusions

The approach to quality assurance in education is an important aspect of the evolution of the educational environment in the context of the multiple challenges of today's society, which is also technological and more sophisticated. A successful approach to the quality assurance process in education could prepare the educational environment for the transition to other challenges that are already being implemented in other parts of the world. We are referring, for example, to a considerable advance of some education systems in terms of another important approach: standardization education.

Finally, the continuous training of teachers will have to pay more attention to the field of leadership and implicitly to the development of the leadership profile among teachers, who need to improve their qualities and leadership traits already held.

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Teaching Functional Language for Business Purposes

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Abstract

The present paper discusses English language teaching with a focus on functional language. ESP teachers have a useful tool when using this approach that enables them to improve the students' communication skills in the field of business without the pressure of rigid grammar rules. Drilling dialogues may eventually give way to innovation once learners master the given sets of phrases. The importance of context and formality is also taken into account for a better understanding of how language functions.

Key words: functional language, language teaching, communication skills

J.E.L. classification: Z13

1. Introduction

Apologizing, agreeing, disagreeing, giving advice are only several examples of the functions that language performs in everyday situations. As far as students learning business English are concerned, they need to be able to communicate effectively and be aware of the functions performed by language. Specific functional language becomes a necessity when coping in a job market dominated by English speakers. As we are going to see in the next sections, functional language is an important part of language teaching and learning. Practical examples of such an approach will also be provided in order to support functional language lessons.

2. Theoretical background

Language teaching can be approached from a more functional point of view and it is closely related to the communicative approach. In this sense, Margie Berns (1983, pp. 7-8) identifies three basic concepts, namely:

1. *context of situation*, which involves the idea that we should use authentic language not idealized one, meaning the one that cannot be used for interaction,
2. *function* which accounts for “the complexities of language in actual use” , and
3. *meaning potential*, the concept which offers insight into language.

The speaker's behavior options are influenced by the social context and these options may be either verbal or nonverbal. Moreover, the behavior options are analyzed according to degree of “appropriacy (Berns, 1983, p. 9). Discussing the field of education, this is seen as an area of “social concern where language is involved” (Berns, 1983, p. 10). He also discusses about a notional syllabus which is considered to be an improved version of both the grammatical syllabus form and a situational syllabus. This is because the learner is taught not only forms of the language but the forms that are appropriate to one's immediate needs so he or she is to be taught only those forms which are seen as relevant “the necessary functions, or uses, of language”. To conclude, “what the learners were to do with the language what meanings they would need to communicate through language” (Berns, 1983, p.11).

With Berns, it is vital that language interaction should be considered in order to develop the students' communicative skills. He states that “...only context gives meaning to form and function an makes it possible for us to make any sense out of any instance of language” (Berns, 1983, p.20).

3. Research methodology

Communicative tasks can be easily achieved when learners use functional language. what combinations the so-called ‘chunks of language’ can be associated with real life situations instead of simply presenting students with individual words or dull grammar rules. Associating language items with this purpose these may be used, certainly helps learners develop their communication skills in both speaking and writing because they are easier to memorize. In this way, however complex grammar they may involve, phrases are perceived as practical tools to express the speaker's intentions: to offer advice to request info to make suggestions to ask for help and so on. Currently, we are witnessing a trend as far as the coursebooks are concerned. For example, *The Market Leader* series has replaced much of its rigid grammar rules with more contextually based uses of tenses. The coursebook that is targeted for intermediate-level (B1) students of business English makes use of different tenses that can be used in order to describe this approach. Another example is explaining the role of conditional sentences making a promise or threat when the first conditional is used or negotiating the second conditional (see Cotton *et al*, 2015, p. 86). Besides, the final section of every unit focuses on specific situations in the useful language box and here are provided some sets of phrases for learners too study. The background is always colored and the situations are written in bold to make a greater visual impact. Unit 9 (“International Markets”) explains the uses of conditional sentences and some of the structures used to exemplify the theoretical aspects presented in the language review section are recycled in this section in order to make offers and concessions: e.g. “If you order now, will give you a discount.” or “We’d be prepared to offer you a better price if you increased your order.” Another function is checking understanding and conditional sentences that served his purpose are offered as examples “if I understand you correctly....”, “You mean, if we ordered..., would...? A third function included in this language box is following up ordeal and the conditional structure used to exemplify it is “If there are any other points, I'll email you.” (Cotton *et al*, 2015, p. 88).

Role playing and dialogues create a context where the degree of formality vary along with situations. There are two axes that need to be taken into account when selecting functional language to be taught: the first coordinate is students’ level of English and the second one concerns the academic syllabus.

Exercise A in Unit 9 (Cotton *et al*, 2015, p. 88, requests that negotiation should be roleplayed and the situation given to student A sounds like this: You are a handbag supplier. Because there is strong demand for your new range of handbags you want to

- increase your list prices by 20%
- increase your delivery time to three weeks
- only offer the buyer a one-year contract

Student B receives the following set of instructions: You are a buyer for department store because the market for handbags is very competitive, you want to:

- paid the same price this year as last year
- have a shorter delivery time of two weeks
- get a three year contract with the supplier. (Cotton *et al*, 2015, p. 138)

As, it can be seen, negotiating is considered the type of functional language most appropriate for the intermediate level of learners and it consolidates the use of conditional sentences.

4. Findings

The functional language to be analyzed in the following section is making a complaint and functions are making an apology and accepting excuses.

The level of formality as far as Business English is concerned has to take into account A. the written versus the spoken context and B. the relationship between interlocutors meaning the speaker versus the listener or the sender versus a receiver.

The phrase or the element needs to be appropriate when using certain situations. This exponent is formal or informal and it would be suitable when not used between two friends or coworkers or business partners etc.

The formality is a trait linked to the length a phrase or exponent--the shorter the phrase the less formal its use. The danger of using formal phrases in excess is that they create a cold atmosphere and communication becomes distanced. The recommendation is using neutral exponents in order to avoid this unpleasant outcome.

Students can create their own dialogues as a warming up activity they may practice a drill or and brainstorm functional language check the pronunciation and recycle the functional language they have already learned. To achieve this easier, a good idea would be having prepared sets of functional language in their notebooks. For example, a complaining and apologizing language sheet will include what combinations that may be used when making a complaint apologizing explaining making a promise asking for feedback and even calming someone down.

Making a complaint

I'm afraid I have to make a complaint.

I'd like to make a complaint.

I'm sorry to trouble you but...

I've got a bit of a problem, you see...

Excuse me, there appears/seems to be something wrong with...

Apologizing

I'm sorry...

I apologize.../My apologies...

I would like to apologize for the inconvenience.

Please accept my sincerest apologies for

Asking for feedback

Please tell me exactly what the problem is.

Can you tell me what happened?

Did everything workout to your satisfaction?

Has your problem been solved

Calming someone down

I'm sure that we can sort it out.

Thank you for bringing this to our attention.

We appreciate your opinion.

I suggest that we should see what can be done.

(Adapted from <<https://www.teach-this.com/functional-activities-worksheets/complaining-apologizing>>)

Following this activity, a logical step is to provide them with a function such as making an offer or a complaint. The aim is to practice the functional language of offering or complaining. The procedure goes like this--once the function being chosen, each student needs to write several pieces of info on a piece of paper including a first name a family name a job title or location. All this extra information can be included in a file that can include background details. It must reach a deal on the best possible terms while seeking to build a long-term relationship with the customer. This time students are going to deal with a complaint, but, first of all, they have to identify the priorities and they also have to work out their own strategies and tactics. Finally, when dealing with a complaint they should focus on getting the best deal for their company. Improvising is a valid option, and it is important not to be criticized for one's mistakes. The drill offered for practice may include some words written in bold and it is precisely those words who may be replaced at will in the second stage of the practice.

Representative Good morning. You've reached customer service. Please tell me exactly what the problem is.

Manager: Hello I have a complaint about **an order**, and I wanted to make sure your company will fix the problem.

Representative: Our customers' satisfaction is important to us. Can you tell me what's wrong with your **order**?

Manager: I paid for **express shipping**, but I still haven't received my **order** for seven days.

Representative: Let me apologize on my company's behalf; we deeply regret this situation. How may I help you?

Manager: Is it possible for you to **refund my shipping costs**?

Representative: I'm sure that we can sort it out. What about **including a discount on your next order**. Can you tell me your account info?

Manager: My name is **George Smith** and my account number is **381 411 95**.

Representative: Thank you **Mr. Smith**. Your **request** is on the way.

Manager: That sounds perfect.

Representative: Are there any other questions I can answer for you?

Manager: Now that covers it. Thanks for your help!

(Adapted from Evans *et al*, 2013, p. 16)

It is important for the learners to further identify appropriate contexts in order to practice the chunks of language in the real world. In this way, the pattern is adapted and the proper nouns, the activities or any other reference is to be placed accordingly.

In the dialogue above, the focus is not on grammar but on the functional elements, more exactly suggesting, requesting information and apologizing.

If we focus on grammar this dialogue could be used to highlight the use of modal verbs to make polite requests and word-order in interrogative sentences. On the other hand, if we focus on function, this could be dealing with a complaint and offering compensation. Other phrases that can be included are listed in the previous section.

5. Conclusions

So far, we have seen how dialogues may help students practice language function such as complaining and apologizing without the pressure of grammar rules and enjoying an interactive activity. After working in pairs and practicing complaints or requests they may create their own mini dialogues using the drill. Other options would be using pictures or cards for the background information. In this way they may role play these dialogues to the class. The students are encouraged to use the useful phrases written in their notebooks but also to use their imagination and adapt various structures. Particular attention is to be given to pronunciation but also to the degree of formality that should be used in such a context.

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Mapping out the Impact of Covid-19 on the Tourism Industry: from Crisis to Recovery

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Abstract

The tourism sector has gone through a severe paralysis of activity due to the Covid-19 pandemic. Worse than any other in recent history, this crisis seems to be particularly difficult to overcome. Its impact is spread over every line of business, at any possible level, into related industries, across the world. The complexities of recovering from such a setback are deeper than they might seem, with both practical and ethical ramifications. Everything is up for debate, even the very rules of the game.

However, before we can start thinking of sustainable recovery strategies, we must truly grasp the scale of the touristic disaster. Using a compilation of data on country, regional and global level on the impact of Covid-19 on tourism, we do our best to paint a clear image of where the industry stands a little over a year since the virus started massively spreading. Then, based on these insights, we look into some visible general trends born as adaptive strategies, touching upon what the “new normal” might mean for tourism entities and visitors. The aim of this article is thus to contribute to a better understanding of how Covid-19 affects tourism and how it needs to adjust in order to survive.

Key words: Covid-19 impact, crisis, tourism recovery, proximity tourism, quarantine tourism

J.E.L. classification: Z30, Z38, Q26

1. Introduction

In the global context of an exceptional health, social and economic turmoil caused by the Covid-19 pandemic, tourism is among the hardest-hit sectors. During the better part of the last year and a half we have been witnessing a quasi-total paralysis of tourism-related activity due to the restriction on people moving around for leisure and other activities, the compulsory closure of touristic facilities and, due to the dangers of travelling, the partial or complete shutdown of borders.

The level of social and economic disruption is unprecedented. 2020 financial results available at the time this paper was written already showed millions in lost revenues from tourism compared to the previous year. As a result, the GDP of countries heavily reliant on tourism could drop by several percentage points and millions of jobs could be lost. Although timid signs of recovery begin to be visible, the consensus is that it will take a long time for all involved actors – from airlines to hotels and restaurants, tour operators and so on – to recover.

Under these circumstances, what mechanisms do national and international administrations have at their disposal to efficiently revive the tourism sector? What are the estimations on the costs inflicted on the tourism sector by this crisis, both in terms of lost jobs as well as in terms of wasted economic resources at different levels? Which new ways of supporting, reinventing and promoting tourism can be looked into, particularly in the countries that are most affected?

By interpreting available data by country, by region and at a global level, the aim of this paper is firstly to offer an overview of what is currently estimated to be the range of impact of Covid-19 on tourism. Furthermore, by critically analyzing what is actually known about this situation, we are discussing the practical directions pointed out so far as parts of viable recovery strategies, as well as their underlying assumptions. We are thus hoping to formulate a deeper, more profound

understanding of the consequences this pandemic has for the tourism sector and where we are on envisioning realistic solutions to this global scale problem.

2. Literature review

There tourism industry has always been very vulnerable to external factors such as natural disasters, pandemics, migration, terrorism, economic crisis etc. The existing body of research focuses on impact assessment of such factors as a crucial step in building recovery strategies.

The concept of resilience (Jiang et al, 2019; Alonso et. al, 2020) in front of these various factors has been particularly studied, along with everything it entails for the tourism industry. This means mainly coping as well as possible with the current situation in the hospitality management, dealing with uncertainty, coming up with alternative ways to create revenue streams during this difficult context and prepare for new modus operandi to be implemented in the post-Covid-19 era.

Spinning-off adaptive recovery strategies, the existing literature is very rich when it comes to discussions around more sustainable tourism practices. Hall et. al (2015), Khazai et al (2018), Cohen (2020), to name just a few, view severe external factors such as natural disasters or global pandemics as an opportunity to search for an implement more ethical and responsible ways of doing tourism. This might seem counter-intuitive in a context of urgency for recovery, as painted by industry advocates focused primarily on rapidly neutralizing the industry-wide evident degrowth.

Nevertheless, as Fletcher et Al. (2020) point out, the Covid-19 crisis and its consequences for the tourism sector are not equivalent to degrowth, which entails a voluntary, planned contraction. Still, even if the crisis ends relatively soon, we cannot afford to start again where we left off. Just as we are currently controlling people's mobility due to health crisis reasons, it should also be possible to regulate tourist flows according to sustainability standards once the Covid-19 crisis wears off.

3. Research methodology

The current investigation considers the effects of a global pandemic that continues to unfold while this study is underway. The level of economic and social upheaval is unprecedented.

Given the novelty aspect of the situation under study, our research endeavor is framed as a descriptive review. The objective is to portray in a most comprehensive manner the different ways in which the tourism sector is affected by the ongoing Covid-19 crisis, the counteracting efforts undergone at various levels, as well as the predictable premises, paths and timeframes for economic recovery.

Our method consists of gathering, analyzing, presenting and discussing qualitative and quantitative data from secondary sources. This allows us to provide insights into the different layers of the researched phenomenon and bring a contribution to its better understanding at large.

All these factors being considered, we choose a qualitative method of study as it can offer critical insights into the various aspects of the subject to be explored.

4. Findings

4.1. Assessing the impact of Covid-19 on tourism: socio-economic and environmental aspects

The United Nations World Tourism Organization (UNWTO), a specialized agency responsible for the promotion of tourism, has been compiling data on the impact of Covid-19 on the tourism sector across the world, by world regions and by touristic destinations. By looking at the overview provided in terms of tourism results via the available data on international tourist arrivals, we can form a clear understanding of the extent to which this ongoing medical crisis has affected tourism. Entire economies, the livelihood of citizens, public services and all sort of business opportunities dependent on tourism from all seven continents are severely impacted.

All this creates an unmatched situation, with a wider impact than initially perceivable. As one of the most impacted sectors by the Covid-19 pandemics, all parts of the tourism value-chain are affected. The substantial slowing down of activities further impacts import revenues, services and

business development in all sorts of other sectors associated with tourism, such as labor-intensive accommodation, food services or transport industries. Moreover, small businesses – a main pillar of the sector – are particularly vulnerable and account for around 80% of the sector, reports UNWTO (2021).

Figure no. 1. Evolution of international tourist arrivals on global, regional and sub-regional level

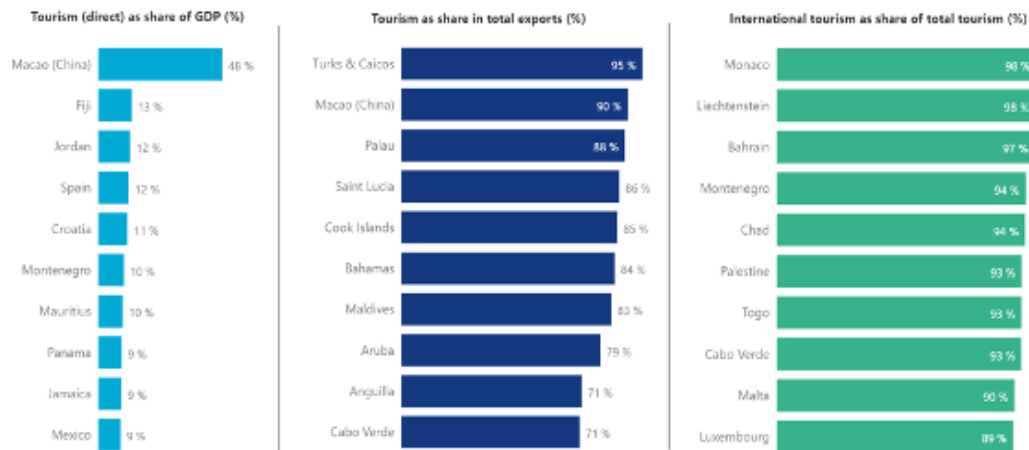


Source: United Nations World Tourism Organization, 2021

However linked to the economic factor, some other types of impacts are not just as easily perceived and taken into account from a larger perspective. For instance, preserving biodiversity and ecosystems becomes an even tougher challenge as usual funding from tourism is cut off. The same goes for preserving cultural and natural heritage practices, which were once part of the main appeal in so many touristic destinations. Festivals, events and gatherings are being halted or postponed across the globe, while traditional markets, world heritage sites and museums are being closed, some of which without a clear prospect of ever reopening. All of this comes obviously with huge socio-economic consequences for individuals, families and communities reliant on tourism.

There is no region of the world left unaffected by this situation. Nevertheless, a particularly strong impact is being witnessed in vulnerable destinations such as Small Islands Developing States (SIDS), Least Developed Countries (LDCs) and African countries. As accounted by the UNWTO (2021), here below are lists of the top 10 most affected destinations worldwide according to the three main vulnerability indicators: tourism as share of GDP, tourism as share of total exports and international tourism as share of total tourism.

Figure no. 2. Vulnerability of tourism destinations due to the Covid-19 crisis



Source: United Nations World Tourism Organization, 2021

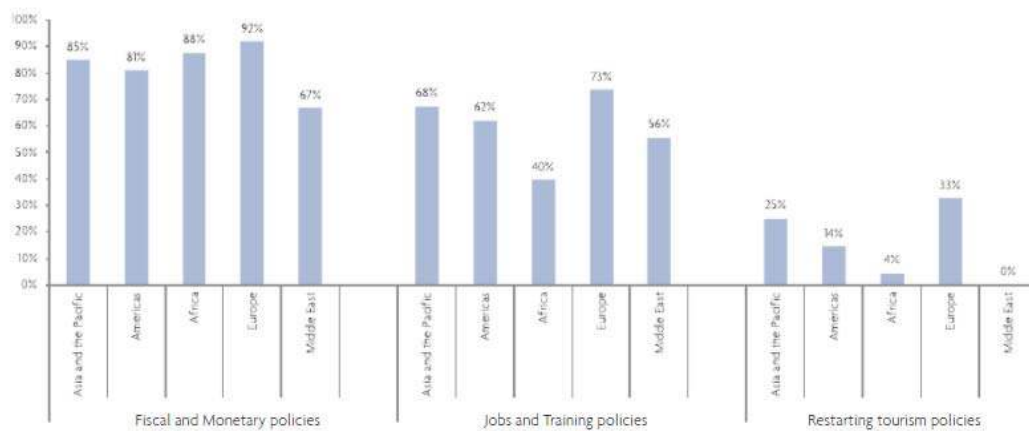
4.2. Igniting recovery: navigating the complexities of a tourism bounce-back imperative

An e-book published by the UNWTO in May 2020 offers extensive information on the different measures conceived to ease the effects of the pandemic for the tourism sector and accelerate its recovery as soon as possible.

In terms of countries front-running tourism recovery, as shown by the figure below, we have several examples of administrations who quickly assessed the damage and responded strongly by adopting economy-wide stimulus packages, including fiscal and monetary measures. Since tourism is a very labor-intensive sector, they also came along with serious employment support measures. The aggregated data from UNWTO (2021) points to policy responses to Covid-19 covering 220 countries and territories and more than 30 international and regional institutions.

Beside these measures, since mid-May 2020 a growing number of countries have announced various initiatives to restart tourism, built on robust health and safety protocols, as well as programs to promote domestic and virtual tourism. These measures are already paying off in part, contribution to the general keeping afloat state of the various tourism branches.

Figure no. 3. % of countries adopting policies per region (n=167)



Source: United Nations World Tourism Organization, 2020a

Relying on a partnership between representatives of the private sector and several international organizations, the UNWTO has also developed the first tourism recovery tracker worldwide. This comprehensive, interactive online tool covers relevant indicators allowing for the tracking of tourism recovery at various levels: international tourist arrivals, air travel reservations, hotel searches and bookings, occupancy rates, travel restrictions, Covid-19 14-day notification rate per 100.000 population etc. All these key performance indicators for tourism and others can be freely consulted, by month, region or sub-region. This allows for a real time comparison of where the sector is standing at a certain time and can help trace recovery signals across the world. The global evolution of some of these indicators in 2020 compared to the previous year is showcase in Figure no. 4.

According to this tracker, tourism was slowly starting to show timid signs of restarting ever since the last two quarters of 2020. With vaccination becoming widely available, restrictions being gradually lifted and masses adapting to the new normal in terms of safety measures during travel and vacation times, touristic activities started picking up. Rebuilding tourism is not an easy task, by far, especially after such an unexpected and unprecedented set back as the Covid-19 inflicted one. But these measures and the activities they enable are crucial to cushion the pandemic’s massive impact on lives and economies.

After these months of deep turmoil and shy recovery, the secret of a viable new post-crisis normal for any actor in the tourism industry, independent of their size or line of business, seems to consist in successfully implementing confidence-building measures for tourists (Alonso et al, 2020). Beyond promo packages and discounts to assure a certain cash flow, such measures may include designating a hygiene supervisor or assuring on-site presence of healthcare experts in case of any eventuality.

Figure no. 4. YOY change by indicator (%)



Source: United Nations World Tourism Organization, 2020b

Another visible direction in terms of adaptive strategies has consisted in enlarging the touristic activities spectrum. There is a certain emphasis put on proximity tourism, allowing people to enjoy the perks of escaping from their day-to-day routine without venturing very far away, discovering new destinations closer to home and helping restart tourism in their regions while also keeping safe.

Advocating for a touristic experience even closer to home, the so-called “staycation” is another proposal for those not willing or able to travel at all (Garg, 2015). Accommodation facilities have thus adapted with special services especially for locals who, given the new conditions, can become tourists for a short period and, in doing so, also help the environment by reducing their travel carbon foot print (Cohen, 2020). Moreover, apart from proximity tourism practices, there are also very specific quarantine tourism trends that can be observed.

Namely, with the generalization of remote work, “workations” became more widespread, implying a temporary relocation to a vacation destination.

All of these essentially touristic anomalies in the pre-Covid era helped economic agents in the tourism industry and not only survive this very difficult period. They also showed the world a more sustainable way to enjoy travel and leisure, away from the frenzy of hunting exotic destination at all costs and checking new travel conquests without any concern for what it means for the environment.

5. Conclusions

This paper aimed to explore some of the transformations the Covid-19 crisis forced on the tourism industry and all of its stakeholders. Thanks to existing data made available by the UNWTO, we managed to portray some of the aspects in which this sector has been affected by the global health situation. Depending on how the sanitary situation will evolve, it remains to be seen how the different involved actors will adapt and help build a better, viable way of doing tourism. This means it is a critical time to emphasize investments in talent development, digital skills, health protocols and any other means helping to pull us beyond the grim status quo (Ivanonv & Webster, 2018).

The negative impact of the Covid-19 pandemic on this huge sector is undeniable. Nevertheless, this unfortunate context might also be viewed as a blessing in disguise and an opportunity to reconsider the way we build up and consume tourism across the world. As maybe the one chance we get to imagine new ways of how tourism as a system interacts with our societies, other economic sectors and our natural resources. Covid-19 could be warning alarm we need to start better managing this vital sector, to ensure a fair distribution of its profits and to advance the transition towards a carbon neutral and resilient tourism economy. And, of course, to make health and safety of travelers, tourism employees and destination communities a true, non-negotiable priority.

The limitations of this study are evident as it relies exclusively on secondary sources available online. Other types of research avenues were unfortunately out of reach or very impractical to the sanitary situation, a direct reflection of the new Covid-19 imposed reality. Nonetheless, the paper provides an accurate snap shot of the impact of Covid-19 on the tourism industry at large as it could be observed in the beginning of 2021 and can be a valuable starting point for future research.

Looking forward, the Covid-19 crisis certainly emphasizes the need to develop and refine conceptual frameworks and to offer a more comprehensive theoretical approach (Wen et al, 2020). To outline just a couple of future research opportunities in this sense, we believe there is a profound need of research in how tourists’ consumer behavior has changed because of the Covid-19 crisis. Related to exploring consumers’ attitudes, another research focus might attack the way in which information and communication technologies can be used to address rising customer safety concerns.

Especially in this crisis context, all stakeholders, including academia, have a great responsibility when it comes to helping redirect tourism and find its new tomorrow. Both supply and demand need to adapt and reinvent a better way of providing and enjoying tourism services in the future. The imperatives of sustainability and resilience are stronger than ever, but, in a constantly changing and challenging environment, this is the only way moving forward in our opinion.

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Challenges Relating Sustainable Structural Transformation

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Abstract

For the past fifteen years, export diversification and sophistication emerged as the indicators for measuring and qualifying structural transformation. While the economics development pioneers describe the transformations of the productive structure, contemporary work focuses on exports. Such an approach, in the current context of global fragmentation of production, is problematic. Concerning the current global production fragmentation, such an approach is questionable. There has been a shift from "trade-in goods" towards the exchanges of tasks known as "trade-in tasks." In task swaps, the link between the technology content of exports and production activities is broken. The article is proposins to detail the new challenges implied by the global context and revise the operational definition of productive transformation so that the latter is considered. Then it defines a "sustainable" structural transformation resulting from profound changes in the economy and leading to a virtuous transformation circle.

Key words: exports, transformation, sustainable, macroeconomics

J.E.L. classification: F12

1. Introduction

As was the case for the old industrialization countries, the economic development of the third countries implies that the GDP growth is accompanied by a powerful transformation dynamic of their economies and raises the question of processes to guide these structural changes. This notion of structural transformation occupied a central place in the pioneering theory of economic development. Subsequently, it was relegated to the background of the academic and strategic debates, which carried their attention to financial issues and the economic growth objective from the eighties.

Productive transformation is then downgraded to a mere economic growth consequence and capital accumulation, whereas until then, it was considered its primary driver. For the past fifteen years, the structural transformation analysis and the industrial policies adopted have become central themes of international institutions and a study object for development economists. With C. Monga, they describe and prioritize policies to promote the productive accessible transformation to developing economies open to the globalized economy. They no longer discuss the usefulness of an industrial policy but rather the best policies to bring out the sectors most able to bring the productive transformation of the economy as a whole. In this context, they show the value of using comparative advantages as support for productive transformation. The first has shown a quadratic relationship between productive diversification, value-added or sectoral employment, and economic development (Persaud & Meade, 2012).

The latter was interested in exports and have developed an indicator of export sophistication, allowing them to empirically show that the export sophistication is unique with economic development. Since then, export diversification and sophistication have become the indicators for measuring and qualifying structural transformation. Therefore, the recent literature is mainly empirical; it does not propose a theoretical model of productive transformation but attempts to describe the relationship between these two variables and income and endeavors to study their determinants. Thus, while the pioneer development economists set out to describe the evolution of the production structure and employment at a high level of aggregation - they only retained three

sectors - recent empirical literature focuses on the export structure. It can therefore address the issue of structural change at a very high disaggregation level (Botchwey, 2019).

2. Literature review

2.1. Export Diversification

The fundamental work on diversification focuses on the evolution of the sectoral distribution of employment, production and exports. The real work on diversification focuses on the evolution of the sectoral distribution of employment, production, and exports. Using labor and sectoral value-added as a production measure, Botchwey (2019) show that the production diversification increases in a non-monotonous manner with income. Their relationship is illustrated with a quadratic U-curve: economies tend to diversify up to an estimated income level of \$ 9,000 per capita in PPP from which they re-specialize. Lee & Zhang (2019) confirm this relationship on international trade data. In these studies, the turning point is estimated at \$ 20-25,000 per capita in PPP; the degree of export concentration is therefore much higher for equivalent income levels. De Mcintyre et al. (2018) finds a monotonic negative relationship between the concentration of exports and income. Thus, while the various authors agree on the concentration decline in the first phases of economic development, there is no real consensus concerning the exports concentration from the most developed countries.

However, when it does occur, the reconcentration of exports appears at very high-income levels, so we can conclude that the developed economies have more diversified productive structures than those of the developing economies. This diversification that accompanies economic development may result from an equal distribution of exports or the introduction of new products. However, these mechanisms differ according to their position concerning the technological boundary. On the one hand, high-income economies will relocate production, requiring production factors that they no longer have in abundance and specialize in intensive technology and R&D activities. On the other hand, countries far from the technological frontier having accumulated tiny endowments have meager diversification opportunities. However, they have access to technologies already developed in high-income economies (Pineres et al, 2018). Thus, the innovations nature changes with economic development. Innovation consists of the introduction of new goods never produced and new goods not previously locally produced. As economies grow closer to the technological frontier, innovation will shift from imitation to the introduction of new goods.

Thus, changes like innovation (imitation or creation) that arise from positioning about the technological frontier impact the appearance of new productions; they are expected to be more frequent in developing economies far from the technological frontier and imitators than in developed economies located at the frontier and creators. In other words, developed countries that already have a diversified productive structure have fewer opportunities for diversification than developing economies. Discovery episodes' are therefore more common in developing economies (Ibid.).

In the early stages of economic development, diversification consists of introducing new products and, as development shifts towards an equal distribution of exports. Export growth occurs at an extensive margin; it consists of new exports to old or new markets or old exports to new markets. In the second case, export growth occurs on the intensive margin; the result increases and a better distribution of existing exports. The extensive margin sums up the capacity of countries to introduce new varieties on the international market. Overall, the growth of exports is explained mainly by the intensive margin, and the extensive margin tends to decrease with economic development. Overall, the growth of exports is explained mainly by the intensive margin, and the extensive margin tends to decrease with economic development. These trends are therefore consistent with the evolution of the innovation nature. Indeed, the extensive margin is particularly dynamic in the least developed economies, especially in Sub-Saharan Africa. Therefore, entrepreneurship would be dynamic in low-income countries, but these new exports have a very short lifespan of almost two years.

Diversification seems to be a process inherent in economic development (Cadot et al, 2011a), we indeed notice a divide between high income countries and others. Diversification seems to be an inherent process in economic development; we notice a divide between high-income countries and the rest of them. Their concentration does not exceed, on average, 2.5, while it approaches 3-3.5 in other economies. We also note that the exports concentration from the most impoverished countries

decreased over the period; it increased for the other three categories of higher-income countries. Over the past two decades, and mainly in middle-income economies, the intensification of trade has been accompanied by increased concentration. The economic development of these countries, therefore, seems to be accompanied by a concentration of exports. Moreover, OECD (2019) or IMF (2016) note significant disparities between countries. They note, among other things, that some countries have been able to diversify their productive structure without having any real impact on their economic development.

López (2020) also introduce the notion of "bad structural transformation", he speak of a structural change of the "growth reducing" type or "productivity-reducing structural change". They note, for example, that in Latin America and Sub-Saharan Africa, labor has migrated in the "wrong" direction, that is, from more productive activities to less productive activities, especially informal ones. Pineres et al. (2018) underline the existence of an additional parameter ("something more"), which can explain these disappointing results. They propose the level of sophistication of exports as a determining factor of the impact on economic development.

2.2. Exports Sophistication

Structural change economists describe the labor migration from the primary sector to the production one; therefore, they assert the superiority of the second as an economic development engine. This raises the underlying question of so-called "desirable" productions, because they generate economic development. While the superiority idea of specific productions is old, Wei et al. (2019), have empirically shown that products have different impacts on economic development and some productions is therefore more promising than others. Over the years, have been proposed many "sophistication" or "complexity" indicators. These different classifications seek to measure the production process's complexity. The first classification proposed by the OECD in 1989 and directly measures product complexity via its R&D intensity. It groups industries into four categories according to their technological intensity. However, the data scarcity limits the technological production intensity, hence the same aggregate level of this first classification. We are talking about an indirect approach by the exporting countries characteristics.

3. Research methodology

Our research is a qualitative one and aims to critique export diversification and sophistication as indicators for measuring and qualifying structural transformation and, therefore, development ideology. Information gathering was carried out exclusively from a documentary analysis; the documentary resources serve both as theoretical support and investigative ground for research. Moreover, given the objectives of our research program, the literature review pays particular attention to primary sources. Primary sources include materials published by the World Bank and various researchers that are focusing on macroeconomics. All primary sources have been studied in conjunction with the specialized literature.

This technical documentation, which includes scientific literature (monographs and scholarly journal articles), emanates from several recognized specialists in development and the activity of the World Bank in particular. This work was based on a qualitative and structural analysis approach of deconstruction of discourse by corpus and themes that underlie the different aspects of the exports issue. Our project was to question export diversification and sophistication as indicators for measuring and qualifying structural transformation. Such an approach to the object of study seemed particularly well indicated. In all formal research, particularly in human and social sciences, the research obstacles and limits remain crucial.

For this reason, in recent years, this question has itself been the subject of complete research. Furthermore, advances in this field, especially in qualitative research, make it possible with more precision and certainty to identify, classify and categorize many of the central epistemological obstacles to knowledge and the limits inherent in this research type. As a result, certain vital biases that may affect or mar the researcher's work are relatively well known and preventively neutralized. For others who are less so, it is up to the researcher to identify them and take them into account,

particularly by seeking to know them better and imposing on himself critical vigilance throughout the process—the research.

4. Findings. The exporting countries sophistication measure

These literature classifications are based on two postulates: the productive structure modernization depends on the endowments factor accumulation, and the exporting countries' characteristics can indirectly estimate this accumulation. Indeed, it is "illusory" to establish an exhaustive list of all the direct and indirect factors involved in the production of goods. In addition to the "traditional" endowments factor, the place of production can also be explained by logistics, activities proximity, natural resource requirements, infrastructure, or the fragmentation level of production, etc. Political factors are also determining the case, such as trade restrictions, tariff barriers, or trade agreements. The level product sophistication level is a "mix of all these factors." This is why the product sophistication level is estimated through the average income of their exporters. Income is used as a proxy for all the elements likely to impact the productive structure; this consists of an outcome measure. Therefore, these classifications are well constructed from the exporting countries' characteristics, which points to their income. The Sophistication Index is based on equivalent reasoning. They classify products according to their absolute productivity/income level estimated by the exporting countries' income level.

Mathematically, the Sophistication Index is the weighted average by the country's exports in the total exports concerning the countries exporting that type of good. The weight used to construct the PRODY index which reveals the comparative advantage of each country for a specific product (OECD, 2019). Each product is associated with a productivity/income level of the PRODY index. By definition, PRODY implies that each country export products according to its income level, which means that poor countries export cheap goods and rich countries expensive ones. PRODY index implies that emerging countries must diversify into products exported by rich countries. Subsequently, Hausmann proposed a new indicator as the Product Complexity Index presented in the Atlas of Economic Complexity. All the factor endowments or "non-tradable inputs." are called capabilities.

Table 1 shows the five most and less complex products. Highly technology-intensive products are products in the electronics, machinery, and communication sectors. Surprisingly, in 2014, the most complex product relies on processed metals. These metals are often processed and valued in industrialized economies. In the case of "tubes, pipes and pipe fittings," 97% of world exports is produced in Japan. Therefore, ubiquity is extremely low, and Japan has a diversified export basket; consequently, it was the most complex country during 2014. At the same time, the most miniature complex products are natural resources (agricultural and mining). Tin minerals are 44% exported by African countries and by Burma, which exports 14%, these economies have entire exports (Lee & Zhang, 2019).

Table no. 1 The complex products in 2018 (HS4 classification)

HS4 Code	Product	PCI	Industry
Top 5 of the most complex			
8457	Machining centers, stationary machines, and multi-station machines for metalwork	5,1	Electrical machinery and equipment
7805	PCI piping tubes, pipes and accessories	6,6	Base metals and thereof articles
9204	Accordions and similar instruments	5,6	Optical instruments and devices
8113	Cermet and articles thereof	5	Base metals and thereof articles
8444	Machines for spinning -extrusion-, drawing, texturing, or slicing of artificial textile materials	5,7	Electrical machinery and equipment
Top 5 least complex			
0714	Cassava, arrowroot or salep roots, artichokes, sweet potatoes, and similar roots and tubers	-3,8	Vegetable products

2615	Niobium, zirconium, tantalum, vanadium or and their concentrates	-3,8	Mineral products
5303	Jute and other bast textile fibers	-4,7	Textiles and thereof articles
2609	Tin ores and concentrates	-3,8	Mineral products
1801	Cocoa beans and broken beans, roasted or raw	-4,6	Food industry products

Source: The Economic Atlas Complexity (online, 2021)

At the same time, researchers propose a country-wide indicator called the Economic Complexity Index (ECI), which consists of the diversity of the export basket corrected by the ubiquity of the products composing it. Countries with diversified exports and low ubiquity are those with accumulated diversified skills. These countries have a high complexity level. On the other hand, if the export basket is made up of goods, certainly varied, but with high ubiquity, then the country has a low complexity level. In the country approach, the diversification level of the export basket is corrected by the ubiquity of the products composing it.

Table no. 2 The ten most and least complex countries

10 most complex		10 least complex	
Country	ECI	Country	ECI
UK	1,5	Malawi	-1,4
Hungary	1,5	Papua New Guinea	-1,5
Finland	1,6	Congo	-1,5
Finland	1,6	Congo	-1,5
Czech Republic	1,6	Libya	-1,6
Austria	1,7	Mauritania	-1,6
South Korea	1,8	Guinea	-1,7
Swiss	1,9	Sudan	-1,7
Sweden	1,7	Yemen	-1,7
Germany	1,9	Nigeria	-2,1
Japan	2,2	Angola	-2,3

Source: The Atlas of Economic Complexity (online, 2021)

Table 2 lists the ten most and least complex countries. Surprisingly, Hungary and the Czech Republic are more complex than the United States or France. Followed by Slovakia and Slovenia. In order to clarify this result, we looked at the exports structure of these 4 Eastern European countries. In 2014, they diversified their exports were, and their main exports: "cars" and "vehicle parts and accessories" (which represent around 10% of total exports), have low ubiquity. It turns out that five countries are responsible for more than half of their total exports. In terms of complexity, cars are only at the 414th position and "vehicle parts and accessories" at the 155th position in a classification comprising 1240 products. At the same time, the less complex countries are major natural resources exporters. These economies are also distinguished in illustrating the relationship between economic complexity and income per capita. We note the existence of a nonlinear relationship with a reversal beyond \$ 40,000 per capita in PPP. The sophistication levels of countries with incomes below \$ 20,000 per capita are widely dispersed.

Some low-income countries manage to achieve a high level of complexity, for example, the Philippines (whose sophistication level comes from exports of "integrated electronic circuits" and "automatic data processing machines"). Similarly, we notice a wide dispersion in countries' income levels with a sophistication group around 1. On the one hand, in China, Mexico, and Romania, the income per capita (in PPP) is less than \$ 20,000, while in Singapore, Holland, and Denmark, per capita income exceeds \$ 40,000 (PPA). The few high-income countries with low sophistication are essential natural resource exporters. This is, for example, the case of Norway, Oman, or Australia.

Combining the notions of diversification and sophistication, the PCI effectively seems to have an explanatory power more significant than the PRODY. The indicator exceeds the PRODY circularity limit made and consists of a characteristics mix between countries and products. However, by endeavoring to associate a sophistication level with the products - the export approach - rather than

with the carried out production process, all of these classifications face certain limitations that must emphasize.

To conclude, the same sophistication level can come from very diverse export structures. The export basket average sophistication may result from a sophisticated structure such as the high-income economies. It can also come from a few very sophisticated significant exports. Thus, if sophistication complements the analysis of export diversification, the reverse is also true. The literature often dissociates these two dimensions of structural transformation; only they can lead to biased conclusions of the structural transformation underway process.

5. Conclusions

The research paper underlines that the export limits approach, generally ignored by the literature, becomes particularly problematic in value chains. If the diversification and sophistication of the export are supposed to characterize productive transformation because they signal the accumulation of new domestic capabilities, integration into GVCs can blur it. Indeed, to date, exports are no longer necessarily the continuity of production; concluding productive transformation from the sole analysis of exports can therefore be risky. However, the use of trade data internationally seems inevitable. International, however, seems inevitable. This is why, in order to correct the bias induced by the export approach, we propose adding the dimension of sustainability to the usual definition of productive transformation. Sustainability includes the continuity notions and depth of the transformation process.

Entering the industrialization era does not necessarily mean entering a virtuous circle of transformation. With insertion into value chains, manufacturing exports can expand while being concentrated and without gaining complexity. They, therefore, stimulate structural change but do not always allow its continuity. Indeed, industrialization can materialize through specialization in specific activities. By being confined to the most straightforward stages, developing countries amplify their comparative advantages in low-skilled labor-intensive activities, which in the long run can block the transformation process continuity. We, therefore, mean by continuity the entry into a virtuous circle of transformation (it, therefore, avoids the specialization trap). Thus, we define sustainable, productive transformation as a process of diversification and export sophistication resulting from the capabilities accumulation that allows the country to enter over time in a virtuous circle of sustainable transformation.

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Is There a Necessary Prerequisite to Follow Ethical Issues in Entrepreneurship and Business ?

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Abstract

Liberalization of the economy has cemented the open road for many to become entrepreneurs. The possibilities created by today’s comprehensive awareness together with the unfettering of indigenous ventures, has laid a fertile ground for entrepreneurship to thrive on in India. There are several challenges faced by entrepreneurs today and study reveals that most of challenges are because of ethical issues in growing entrepreneurship. The main objective of this research paper is to investigate the entrepreneurship and business developments and their intrinsic relationship with the concept of ethics. Currently, the linkage between entrepreneurship and business ethics is a growing challenge with multidimensional implications.

Key words: entrepreneurship, business ethics, customer satisfaction, sustainable development, global economy

J.E.L. classification: G10, G11, G15

1. Introduction

This research paper aims to investigate important aspects about ethical issues in entrepreneurship and business. The etymology of the word “ethics” has as source of origin the Greek word “ethos” which means morality, set of moral norms, character and habits, but also fundamental values. Market opportunity is the biggest motivational factor for an individual to choose the entrepreneurship perspective. For instance, Spulbar and Birau (2019) suggested that the dynamics of global economy highlights a strong interconnection with a profitable, but also competitive banking system. However, Zulfiqar et al. (2020) have conducted an empirical study and concluded that there is a significant linkage between high quality of governance and higher returns on stock, while it is very important to consider sustainable development.

2. Literature review

Ma et al. (2020) investigated if entrepreneurial ethics has the ability to improve entrepreneurial performance in the case of new and innovative ventures. The empirical findings suggested that entrepreneurial ethics is hostile to the survival and development of new ventures but favorable with respect to their sustainable growth. Pallavi (2015) provided a complex definition for the concept of business ethics which is perceived as a certain category of applied ethics and is considered as “application of moral or ethical norms to business”. Donaldson and Fafaliou (2003) investigated

relevant aspects about business ethics, corporate social responsibility and corporate governance dynamics and argued that represent a "growing sense of corporate wrongdoing".

Donaldson (2001) suggested have the ability to highlight a reliable coexistence in the same community, while some of these are dominant in contrast to others. Ethical responsibility represents a significant concept in achieving a sustainable level of growth and development of modern companies. Sroka and Lőrinczy (2015) investigated a wide range of important aspects regarding ethics in business and concluded that business ethics represents a key pillar in achieving both profit and success for companies in the current period. Jamnik (2011) argued that managers have a very frequent interaction with ethical issues in their current activities. Paliwal (2006) examined the concept of ethical behavior in its dynamics and concluded that is based on the following: "honesty, integrity, morality and good management practices". As a very recent research study, Batool et al. (2020) have discussed the magnitude of economic disruptions generated by COVID-19 pandemic. This global health crisis has also determined some potential opportunities so that business thrives in the context of the sharing economy. Implicitly business ethics is essential in this case.

3. Research methodology

The research methodology is based on a qualitative analysis. The ethical issues in entrepreneurship and business represent certain extremely important aspects in the context of the global economy. In this regard, the existing literature was briefly examined and the implications were investigated. During the primary research of the area reveals that any small, medium and developed entrepreneurship faces high stress environment even in successful entrepreneurs. On the other hand, Nethravathi et al. (2020) have empirically analyzed the implications of the concept of business intelligence and have highlighted the fact that its fundamental principle is based on the necessity of understanding consumer behavior. In this regards, a very important aspect is the prediction of consumer purchase pattern. As an interesting feature regarding the consumer behavior that can affect business dynamics, Ullal et al. (2021) argued that emotional reviews and responses have a significant contribution in increasing sales, while the negative reviews, have a much more significant impact on utility framework compared to the luxury aspect.

4. Findings

Social entrepreneurship and ethics represent two essential concepts. In the context of the changing global scenario, it also requires to change in policy to certain business to grow with balancing direction. Business ethics includes the main set of rules or principles that any organization should follow in order to achieve performance. Ethics sets a standard for the organization to impose a certain type of behavior.

The ethics which is developed in a company, corporation or organization is based on creating a sustainable organizational culture. The code of conduct is a concept with significant implications for business. Every businessman should always be prepared to take responsibility for his actions and decisions because business ethics is an essential aspect of leadership. Business ethics is one of the specialized directions of applied ethics which is focused on moral principles. Moral values and ethical behavior represent the cornerstone of a sustainable development of entrepreneurship and business ethics.

5. Conclusions

It is concluded that a joint ventures and partnerships may present different variety of test when they filter under the ethics of businesses. Most of ethical questions always two alternatives "do" or "don't" and at the end after the implementation of the decision, it finally impacts on the "worker" and the "consumer" when it ends to the delivery of the product. Even in non-monetary decisions it produced the same impact since there would be compromise in quality of product and it does impact on health issues.

The ethical leadership is a very interesting concept that ensures balance in a business organization. Any emerging business in terms of entrepreneurship is directly related with the concern society and work as being part of the same society. The corporate reputation is very important in the context of business ethics.

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Sustainable Trade - Current Aspects

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Abstract

Protecting the environment and the profitability of a business are not two approaches that go always in the same direction. Therefore, all the factors involved, from suppliers, manufacturers, companies that offer various packaging solutions, to sellers or buyers or agents operating in the field of waste management, should contribute to the creation and application of sustainable and efficient solutions. This paper presents a series of aspects regarding the existing preoccupations in the modern trade regarding the achievement of the sustainability objectives. The attention paid to sustainability in the trade activity is relatively recent, that's why we tried to highlight the involvement of some important retailers acting in Romania, where the idea of sustainability becomes more and more attractive.

Key words: sustainability, retailers, management, waste, environment

J.E.L. classification: L2, K32, M14, Q01, Q2

1. Introduction

The global climate crisis and the fact that 57% of consumers say they are willing to change their buying behavior to reduce the negative impact on nature (according to a study by the National Retail Federation, from 2020, on 18.90 people in 29 countries), causes large retailers to adapt through appropriate measures, informs cncb.com. Companies that invest in business solutions that protect the environment will only gain in the coming years, say experts in the field. (<https://ecompedia.ro/5-tendinte-legate-de-marii-retaileri-care-au-initiative-eco/>)

With the COVID-19 pandemic, sustainability took on a new meaning for companies: disposable masks and gloves filled the landfills, and tons of food were dumped after the restaurants closed. According to a CB Insights report (published in December 2020), retail companies have begun to use technology and innovation to operate more sustainably. (<https://ecompedia.ro/5-tendinte-legate-de-marii-retaileri-care-au-initiative-eco/>)

In this context, the responsibility for ensuring sustainability in commercial activities of all types increases, represented by the pillars of success which are healthy choices, product transparency, elimination of food losses and plastic packaging and environmental impact.

As health and sustainability grow in importance for consumers, they expect retailers to be increasingly transparent about the products they sell to help them make the best choices. Customers want to know the impact of their purchasing decisions on their own well-being, on the lives of other people and on the health of the planet.

The consultation of specialized works and studies related to commercial activity but also the analysis of information published in various publications in the field of trade highlights a series of trends that are emerging both on the evolution of all commercial activities and in connection with the series of changes that will take place in the typology of sales.

Businesses' attempts to cope with a constantly changing environment represent the overall evolution of retail activity. The attempts of the enterprises will be materialized in the development and improvement of the managerial concepts as well as in the promotion of some commercial practices and technologies. (Danciu, 2013)

2. Theoretical background

From the regional and local perspective, the topic of sustainability is very important, also in the context of the transitions to a more sustainable economic model that takes on the challenges and opportunities of the digital and environmental transitions.

Trade policy represents a powerful way to encourage and promote sustainability and digitalisation not only in the EU countries, but also throughout the world. During the period of COVID-19 when protectionism rose, it is clear that if the EU is striving for sustainability outside the Union, it must do the same inside and each stakeholder playing their role. It is obvious that the global trade affects the world order; we already have seen the impact on the creation of jobs, reducing poverty and powering economic growth. The leadership from the EU meaning promoting trade free but fair, must continue and be extended outside of the European space. EU has always been very vocal in the sustainability matter in trade which ensure that sustainability and green rules are followed inside the Union and all over the world. (Murphy, 2020)

For the first time, sustainability is becoming a central and explicit pillar of trade policy. The EU is committed to mobilizing global power and strong trade relations to support more sustainable and equitable trade, as well as to enhance the ambition of its trading partners to address global challenges such as climate change.

(https://ec.europa.eu/commission/presscorner/detail/RO/qanda_21_645)

The EU needs a new trade strategy to meet the challenges we face and especially the economic recovery, climate change and environmental degradation.

Therefore, the new strategy will further integrate trade policy into the Union's economic priorities, reflected in the Green Pact and the European Digital Strategy, will specify the role of trade policy in the post-COVID economic recovery. The new strategy aims to establish a new consensus for a trade policy based on openness, sustainability and firmness. It strengthens the EU's position as a global, rules-based, fair and sustainable promoter of open trade.

(https://ec.europa.eu/commission/presscorner/detail/RO/qanda_21_645)

Less waste, more products rented and sold second-hand - recycling is in vogue, and digital platforms that offer second-hand or rental products have multiplied, especially as Generation Y prefers to rent clothes on the Internet (see the Vestaire Collective clothing marketplace, the Back Market mobile phone start-up or the local ro marketplace, the Furlenco Indian furniture start-up, even after Ikea has recycling programs and buy back - one also present in Romania)

Monitoring the source of products through new technologies - consumers want to know where the purchased products come from and how they were made, and governments ask producers to be transparent about the supply chain; In this sense, the start-up Material Exchange offers software that provides brands with information on how sustainable the materials in their products are, and companies such as Ugg, Calvin Klein and North Face use this platform to procure their raw materials.

Some of the most visible preoccupations in this direction at world level are:

- 0-emission logistics - to slow global warming, the widespread use of electric cars is vital, both by consumers and retailers;
- investments in all-electric logistics equipment companies reached a record \$ 7.9 billion in 2020, reports notes; these include Rivian (which has a partnership with Amazon), Nuro, Arrival or Einride;
- more sustainable ingredients - investments in start-ups that produce alternative proteins (designed to reduce the impact of animal farms on the environment) reached a record \$ 2.3 billion in 2020;
- companies such as Impossible Foods, Memphis Meats, Perfect Day and Califia Farms; major retailers continue to adopt these sustainable products (Pizza Hut sells pizza with Beyond Meat sausage topping, and Califia Farms cashew, avocado and olive oil are sold at Whole Foods Market, Kroger, Stop & Shop and Target) (<https://ecompedia.ro/5-tendinte-legate-de-marii-retaileri-care-au-initiative-eco/>)

3. Research methodology

This paper looks at the various research methodologies and research methods that are commonly used in the field of information systems, mainly at qualitative ones. The field research was used at the mentioned commercial operators, being analyzed both their databases and the practices regarding their preoccupations regarding the assurance of sustainability in their activity, for the benefit of the consumers. Descriptive methods have been used to investigate the opportunities and issues related to the subject of sustainability in the trade activities.

4. Results

Considering the existing preoccupations at international level and the tendency regarding the implementation of the principles of social responsibility in all types of activities and the traders from Romania have aligned in this direction of action in order to ensure sustainability.

The aspects presented have in view some aspects of the trade activities, related to development strategies on sustainability, with reference to the activity of some Romanian retailers companies already well known by most people who shop in these store chains.

As health and sustainability grow in importance for consumers, they expect retailers to be increasingly transparent about the products they sell to help them make the best choices. Customers want to know the impact of their purchasing decisions on their own well-being, on the lives of other people and on the health of the planet. (Isaac, 2021)

The most visible results in this sense are found in the Romanian retail trade in the activity of large international companies such as Mega Image or Lidl.

Founded in 1995, Mega Image is the largest supermarket chain in Romania with over 9000 employees and a network that currently includes over 800 stores, having among associates legal entities the Belgian company Delhaize the Lion Nederland B.V. Ahold Delhaize was formed in July 2016, the Ahold Delhaize group was born from the merger of Ahold and Delhaize, retail innovators for almost 150 years. Ahold Delhaize is one of the largest food groups in the world. They are leaders in supermarkets and e-commerce being at the forefront of sustainable retail. Thus, the group's approach to sustainability is found in the Mega image activity and is based on 4 pillars of success: healthy choices; product transparency; elimination of food waste and plastic packaging; environmental impact.

Mega Image aims to make healthier eating commonplace. By making fresh, nutritious and delicious food available and affordable, it contributes to healthier communities. As health and sustainability grow in importance for consumers, retailers expect retailers to be increasingly transparent about the products they sell to help them make the best choices. Delhaize believes their brands they can help customers understand the impact of purchasing decisions and allow them to make choices that fit their needs, tastes and values. To achieve this, Delhaize brands will use the latest technologies, such as blockchain and artificial intelligence, to bring customers more transparency by 2025 - starting with fresh fruits and vegetables and then moving to supply chains with seafood and meat. By giving customers access to personalized information - for example, through loyalty apps or online tips - Delhaize brands will empower and enable busy customers to make better choices.

Ahold Delhaize are signatories to the global commitment to the New Plastics Economy, led by the Ellen MacArthur Foundation in collaboration with the UN Environment Program, to address plastic waste and source pollution. The commitment calls on companies and governments to eliminate the plastic we don't need; innovate so that all the plastic we use is 100% reusable, recyclable or compostable; to circulate all the plastic we use to keep it in the economy and out of the environment. Concrete actions include: optimizing the packaging of own-brand products, reducing disposable plastics used for transport bags and recycling plastic waste generated in its own facilities. Their brands continue to improve their own product packaging, moving to materials more environmentally friendly or reusable packaging, eliminating unnecessary plastic packaging and increasing the use of post-consumer recycled content. To meet the challenge of environmental impact, customer engagement is accelerated and they are encouraged to adopt healthier and more sustainable diets, reduce climate emissions throughout the value chain, promote biodiversity and

reduce waste. Moving to low-carbon distribution and logistics, their brands will further modernize their fleets and opt for green fuels. In 2021, they will also start to include an internal model of the carbon price in investment proposals. (www.aholddelhaize.com)

Lidl is a company that acts responsibly in all areas of activity. Thus, the company is permanently oriented towards sustainability and efficiency, a fact that can be observed in all the projects developed and implemented during its presence on the Romanian market. Their CSR strategy has 5 main dimensions: environment, society, assortment, employees and partners

Acting sustainably is their way of fulfilling their promise to customers about quality and, at the same time, ensuring a better future for all. LIDL's goal is to put on the shelf the best products that their customers can enjoy every day. And this is based on the two central pillars: safety and quality. Quality assurance is not limited to the product itself. LIDL also focuses on packaging and tries to meet customer needs, trying to make them as practical as possible and include a transparent description of the product. This information facilitates the purchase of Lidl products for customers and is an important component for a responsible diet. In Lidl, both quality management and consumer safety are each based on 3 pillars, these being: monitoring of residues, suppliers and traceability and feedback and respectively checking products in specialized laboratories, testing products and monitoring them. This approach is aimed at achieving the sustainability objectives they set for themselves. (<https://www.lidl.ro/>)

Other concerns that can be mentioned refer to Zalando, a marketplace that has almost 39 million customers, according to the company's information, will start selling in Romania as part of an expansion strategy on eight other new European markets. online tries to attract customers but also partners by showing concern for sustainable fashion, with a positive impact on people and the planet. (Cicovschi, 2021)

Another example is about IKEA, the world's largest retailer and largest manufacturer of wooden furniture, is - we believe - the best example of success for the way a company can change its production processes. to minimize or even zero the impact on the environment and for success in implementing the concept of circular economy. 2020 marks the year of sustainability at IKEA. (Ilie, 2021)

In IKEA stores in Romania, only electricity from renewable sources is purchased since 2011. Since 2019, Ikea offers customers in Romania the opportunity to buy back old IKEA furniture, which the company then resells without profit, giving it a second chance.

Ikea Romania organizes active consumer education and information campaigns and has conducted in stores educational sessions and practical workshops related to our sustainable products or which provide inspiration for a sustainable way of life. The coronavirus pandemic forced them to temporarily stop these activities, but they will be resumed when possible.

5. Conclusions

Sustainability encourages the responsible use of resources and is undoubtedly the main strategic option for the future.

Awareness of the need for the sustainability of companies and in particular of trade activities is relatively new and has grown in the last decade.

The contribution of companies to a promising future must be the result their increased favorable impact on society, and this goal can only be achieved if companies become sustainable. In order to become sustainable, companies collaborate with suppliers and retailers to develop and use environmentally friendly raw materials and components and reduce waste.

Thus, the role of the commercial branch is decisive and where the idea of sustainability becomes more and more attractive.

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Organizational Rewards in the Online Work Environment. Is There Any Chance of Full Accomplishment ?

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Abstract

When work is done at the employee's home or elsewhere outside the official work environment, some organizational rewards disappear (such as interaction between colleagues, direct support from superiors, etc.), while there is a need for new rewards (technical support, payment for utilities, flexible work schedule, adequate work equipment, etc.). This paper main purpose is to analyze the literature review regarding the organizational rewards in the online work environment and to sketch the proper rewards that attract and maintain employees in the remotely online work. Many studies argue that employees are more productive when they work from home, but despite these, other authors declare vice versa. Even if the remote way of working brings somehow flexibility in employees' s programs, there are cases that confirm that work from home involves longer hours programs than employees are paid, which can generate family problems (Crosbie and Moore, 2004). The main conclusions to which this paper reaches are: working remotely expects higher productivity, working remotely has many disadvantages, and to maintain employees when they work remotely, extra leisure time is needed.

Key words: homework, online, employees, consequences, organizational rewards.

J.E.L. classification: J59, M29, O15.

1. Introduction

The process of human resources' attracting into companies has as first activity the announcement of vacancies, and its purpose is to end with suitable employees (Turnea, 2017). The details that candidates find out during the selection process usually influence the final choice for employment (Boswell *et al*, 2011).

In particular, in the recruitment and selection stages, applicants/ candidates analyze information regarding the package of rewards and benefits they would receive if they reach the final offer of employment. In other words, the recruitment process has as main concepts the job announcement and the applicant, which represents the potential employee and sends the application form to the employer (Cole, 2003). The selection process is associated with individual or group interviews, tests and the so-called candidate, which is actually a past applicant who was already choosed for future interviews and/ or tests (Cole, 2003).

The level of uncertainty in decisions when applying for a job is quite high, given that, the person who is looking for work has a limited access to information (Asseburg *et al*, 2020). However, practitioners in the field point out that attracting and maintaining talent into organizations largely depends on the reward strategy applied (Boswell *et al*, 2011; Pregolato *et al*, 2017; Bwowe and Marongwe, 2018). Also, it seems that improvements in the employer's attributes in terms of image, values, presence at charities, etc., produce more interests for the potential employees, and thus impact the recruitment and selection practices (Rynes and Barber, 1990 in Asseburg *et al*, 2020).

Regardless of whether the production or service activity is considered, if the work is done in the classic manner (in production or at the office), the reward strategy should be clear, because it appears and develops at work. But what happens when work is done at the employee's home or elsewhere outside the official work environment? Obviously, some organizational rewards

disappear (such as interaction between colleagues, direct support from superiors, etc.), while there is a need for new rewards (technical support, payment for utilities, flexible work schedule, adequate work equipment, etc.).

These arguments bring in the center of attention the research questions of this paper: Is there any chance to fully satisfy employees that work remotely using organizational rewards? Which are the key reward elements in this situation? This paper aims are to analyze the literature review regarding the organizational rewards in the online work environment and to sketch answers to these questions.

2. Theoretical background

Work from home has growing in the last decades (Reshma *et al*, 2015). Homework is defined as a job that is made from home at least 20 hours weekly (Crosbie and Moore, 2004). The “work from home” is equivalent with other concepts found in the literature: teleworking, telecommuting and remote working, and defines flexible work arrangements (Rahman and Zahir Uddin Arif, 2021).

There are three major type of work which can be made remotely (Reshma *et al*, 2015):

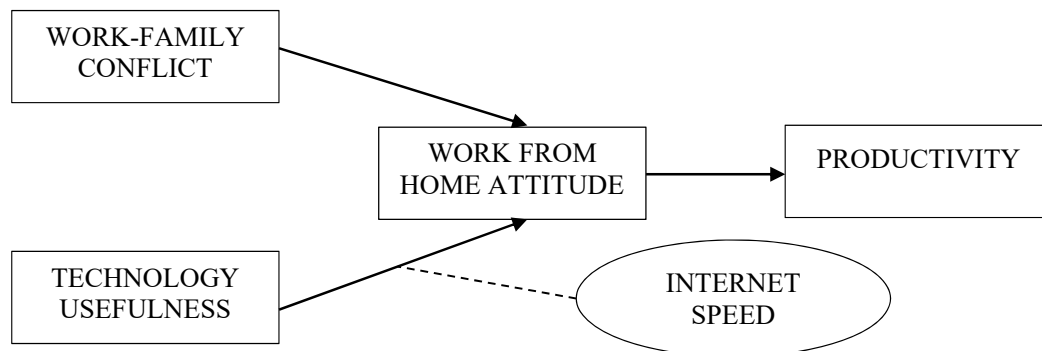
- The work in call centers;
- The work in sales (especially with home made products);
- Consultancy.

The main advantage of the traditional homework occupations is that there is no need for special skills when it comes to perform the working tasks (Crosbie and Moore, 2004).

We can also add to these the following activities that are compatible with the remotely manner of working: outsourcing of support services, accounting services and professional training. All these activities can be successfully made online.

Because of the COVID-19 pandemic, working from home increased substantially. For example, according to a study made in Egypt, it was registered an increase of 124% in the number of work posts that involves work from home (Bassant, 2021). But by invading personal space with work, there might appear some work-life problems. Before establishing such diagnoses, employees create themselves a “work from home attitude” (AbuJarour *et al*, 2021). Details are presented in Figure no. 1.

Figure no. 1. Factors that influence the work from home attitude and productivity



Source: AbuJarour *et al*, 2021.

According to AbuJarour *et al* (2021), when employees work remotely, they create themselves a specific attitude (AbuJarour *et al*, 2021). Two extremely importing factors that help to create this attitude are: work-family conflict and the perceived usefulness of thechology (AbuJarour *et al*, 2021). The Internet speed moderates the relation between technology usefulness and the work from home attitude (AbuJarour *et al*, 2021). Finally, this model explains that all these factors ultimately influence the productivity (AbuJarour *et al*, 2021).

3. Research methodology

The present research was conducted using content analysis, to clarify the basic concepts in terms of motivation in the remotely work and to establish future directions for a quantitative research. In this regard, useful information was sought about online work, remote work, advantages and disadvantages of online work and ways to motivate employees that work from home.

4. Findings

Working remotely expects higher productivity

Technology favors working from home (Prasad *et al*, 2020, in Bassant, 2021) and makes time more flexible (Bassant, 2021). There are people that declare that when they work from home, they have more free time (Crosbie and Moore, 2004).

There are studies that argue that employees are more productive when they work from home and that, they can improve their work-life balance working this way (Reshma *et al*, 2015; Bassant, 2021). Despite these, other authors declare vice versa (Grant *et al*, 2019, in Bassant, 2021).

Self-efficacy improves productivity and performance when employees are working remotely (Bandura, 2006, in Rahman and Zahir Uddin Arif, 2021). Self-efficacy is high related to professional success (Rahman and Zahir Uddin Arif, 2021). In a study conducted in Bangladesh on 100 professionals, 45% of respondents declared that are productive when they work from home, and 22% of them said they are very productive when they work remotely (Rahman and Zahir Uddin Arif, 2021).

Working remotely has many disadvantages

Unfortunately, this option of work blends family and work and the personal space with the working one (Reshma *et al*, 2015). However, parents can be retained through working remotely, because they can simultaneously take care of childcare responsibilities (Thatcher and Zhu, 2006 in Reshma *et al*, 2015).

Even if work from home is related to job satisfaction, can lead to more stress, work-life conflicts, and negative well-being (Jehanzeb *et al*, 2012). The work from home attitude can affect productivity (Jehanzeb *et al*, 2012).

A tough disadvantage of working from home is working longer hours than employees are paid, which can generate family problems (Crosbie and Moore, 2004). Homework brings time flexibility. However, it is a concern because of managing personal and professional time at the same time (Bassant, 2021). Psychological wellbeing might be affected by the remotely way of working, employees might be unconnected, isolated and loneliness feelings may appear (Bassant, 2021; Rahman and Zahir Uddin Arif, 2021).

Workplace pressure, an affected wellbeing, overload work and missing of human interaction are other consequences that can appear when employees work from home (Charalampous *et al*, 2019 in Bassant, 2021; Molino *et al*, 2020 in Bassant, 2021).

How employees want to be motivated at work

Maintaining motivated employees into organizations can bring high performance and competitiveness, and for such behaviors, rewards and recognition represent success factors in keeping them passionate and self-esteemed in the organizational environment (Danish and Usman, 2010).

The reward strategy consists in intrinsic and extrinsic rewards. While the extrinsic rewards are pay, bonuses, fringe benefits and other career development possibilities, the intrinsic rewards come from the job itself (Hackman and Oldham 1976 in Jehanzeb *et al*, 2012).

Rewards and recognition of merits impacts employees' motivations and bring high performance levels (Ali and Ahmed, 2009; Danish and Usman, 2010). In a study conducted on 568 employees from public and private banks of Saudi Arabia, it was proved that organizational rewards positively influence motivation and satisfaction (Jehanzeb *et al*, 2012). But to maintain workers when they

work remotely, extra leisure time is needed (Reshma *et al*, 2015).

Employees' commitment is based on recognition programs and balanced rewards (Andrew, 2004, in Danish and Usman, 2010). Moreover, recognition leads to motivated people (Deeproose, 1994, in Danish and Usman, 2010). Further, there is a connection between the work itself, motivation, and satisfaction (Danish and Usman, 2010).

There are cases in which, employees who are not performers at work, negatively react to performance-contingent rewards, while employees who perform at work react positively, with less stress, to performance-contingent rewards (Ganster *et al*, 2011).

Work-life balance while performing homework can be achieved through distinguishing the following: personal space and time, care time and space and work time and space (Williams, 2000, in Crosbie and Moore, 2004).

5. Conclusions and future directions of research

After reviewing the literature, it is more than obvious that the remotely work blends family and work and the personal space with the working one. According to Jehanzeb *et al* (2012), work from home can be related to job satisfaction, but also can lead to more stress, work-life conflicts, negative well-being, and affected productivity (Jehanzeb *et al*, 2012).

Homeworking effects on personal life are little known (Crosbie and Moore, 2004). But personal characteristics, such as, personality, aims and skills, are very important in considering this manner of working (Crosbie and Moore, 2004).

Work-life balance while performing homework can be achieved through distinguishing the following: personal space and time, care time and space and work time and space (Williams, 2000, in Crosbie and Moore, 2004). To maintain workers when they work remotely, undoubtedly extra leisure time is needed (Reshma *et al*, 2015).

Given the above, the topic of organizational rewards established in the online work, from home, is interesting and denotes many aspects that still need to be researched. Thus, we list below, possible questions that can be answered in future research in the field:

- What rewards are essential in working from home?
- Are young people differently motivated to work from home compared to other age groups?
- How much free time do people need to accept an online job?
- What other facilities can companies offer to support the remotely work?

6. Acknowledgment

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Workplace Orientation: Norms, Rules, Roles and Values as Principles of Ethical Behaviour and Effective Communication

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Abstract

The nature of human communication provides an in-depth look at some key situational factors in workplace orientation, the core of company culture, ethical behaviour and effective communication.

The aim of this paper is to discuss the importance of different ways of thinking and acting in interpersonal communication from four points of view: firstly, an analysis of norms as culturally ingrained principles of correct and incorrect behaviours; secondly, a description of the new rules which are formed to clarify cloudy areas of norms; thirdly, an approach to role behaviour within a culture and how it is affected by norms and rules; fourthly, a helpful way of examining core values in corporate culture.

The results of the research show that sharing such workplace issues as values, goals and priorities can help to defuse tension and conflict in professional relationships. They are an integral part of any company culture where a purposeful effort to accommodate the needs of our employers and colleagues can strengthen our communications.

Key words: corporate culture, norms, rules, roles, values

J.E.L. classification: Z00

1. Introduction

In the next few years, communication techniques will become increasingly sophisticated in the world of business. There is not the slightest doubt that adaption to the worldwide phenomenon of globalization, or the rapid pace of free market and trade will have to come naturally to leaders and managers, both in the present and future, on condition that they have the ability to remain sensitive and responsive to different ways of thinking and acting in interpersonal communication.

Clearly, mastering these skills will work to their advantage, help them operate more successfully, and fight the other players in the business arena for influence and economic power. Gaining job satisfaction often involves taking on new roles or assuming new role identities based on their corresponding beliefs, capabilities and strategies.

From a broader perspective, a highly competitive business environment requires highly skilled business people (negotiators, sellers, investors), able and willing to stay attuned to the values and behaviours of their customers, suppliers or business partners.

As business contacts occur between companies, diffusion takes place. People engage in expected as well as unexpected patterns of behaviour, which are not always easy to manage, assimilate or adapt to, but are essential for the process of communication. Conducting businesses at a local level, or, over international borders, implies communicating with the other side's culture, understanding their specialized interests, ideas, attitudes and values through various levels of communication, i.e. interpersonal, organizational, mass or public. Jandt (2000) noticed that every cultural pattern or act of social behaviour revolves around the communication process. Thus, the focus is on how culture and communication intermingle by analyzing to what extent communication is culture-specific and the misunderstandings that can be caused in multicultural teams.

2. Theoretical background

Considering that all business activity is inevitably tied to communication, knowledge of key situational factors is important. Such terms as norms, rules, roles, or values are often used in relation to workplace orientation. All companies pass along norms and values to their employees, thus creating their own *culture* which shows the universal characteristic of this concept. The idea is shared that cultures allocate values, and even display reprehensible behaviour. No two individuals see the outside world in the same way. To put it differently, no two maps are exactly the same. Two individuals may encounter different psychological stimuli and share different sensory receptors when sending and receiving information/messages. The cognitive approach to studying communication styles and listening skills in Andrews’ DK Essential Managers suggests that “Everything, from the culture in which we live to the norms or standards of the groups to which we belong, can influence how we perceive the messages, events, and experiences of everyday life” (Andrews, 2015, p.13).

Milton Rokeach’s (1973, 1979) studies, which are value-oriented, point to the idea that values should be understood as beliefs about what is good and desirable. In the context of workplace, he draws attention to the two types of values, namely *terminal* and *instrumental*. In his view, the former category is related to *ends* (our goals/aims/targets – a comfortable job, a sense of accomplishment, social recognition, job enriching), whereas the latter type refers to *means* (the way we conduct our professional lives – ambition, determination, responsibility, self-discipline, broad-mindedness).

During negotiations, both terminal and instrumental values come into play. By way of illustration, arranging an agreement successfully or resolving a dispute peacefully need terminal values, and skilled negotiators’ imagination, astuteness, self-control, honesty, cheerfulness are the mark of instrumental values.

Drawing on Rokeach’s extensive study, Carrell and Heavrin’s (2008) research is much more behaviourally-oriented. The authors further conclude that, in a negotiation, “ethics, values, and behaviour rules are important because they influence how the parties view each other, how they evaluate the negotiation, and how they act during the negotiation” (Carrell and Heavrin, 2008, p.194) and classify them from an ethical perspective. The authors introduce the notions of *descriptive* and *injunctive behaviour rules* in order to explain how they stem from our values and influence our actions.

Thus, *descriptive* behavioural rules show the way people commonly behave in typical situations (what people *do*), on the one hand, and *injunctive* behaviour rules are defined as judgements on what behaviour is appropriate or reprehensible within the culture (what people *should* do). In this line of thinking, Carrell and Heavrin (2008) believe in behavioural rules as rules of proper conduct (codes of ethics) and diagnose behavioural drivers that guide people’s actions and reactions in alignment with the values of an organization. They state the importance of the method of devising behavioural rules as a successful attempt to help both children (*educational role*) and newly hired employees (*organizational role*) to learn the proper rules of conduct in a community.

Their notion of ‘behavioural rules’ closely resembles Andrews’ (2015) opinion which takes a similar stand when teaching how to properly pass along values and norms from generation to generation, therefore defining the core of a culture.

Enlarging upon the pillars of an appropriate behaviour, Carrell and Heavrin introduce two types of values, i.e. ‘self-centered’ and ‘social-centered’ to better explain the orientational patterns used in any kind of environment. The *self-centered* aspects are defined as intrapersonal, within ourselves, internalized standards, the way we work on a problem and think things over (our *own behaviour*), and the *social-centered* aspects are viewed as interpersonal, between or among people, external, the way meaning is transferred from one person to another (the values we expect from *someone else’s behaviour*): “Values are both *self-centered* and *social-centered* because they involve both the individual and society. The self-centered aspects of values are standards that you have accepted for your own behaviour. External, social-centered aspects are guiding principles established by the social environment in which you live” (Andrews, 2015, p.197).

Irrespective of the communication level, company people encode and decode messages – verbally and nonverbally – with the hope of developing invaluable networks or *personal ties* in workplace situations. The capacity to build and maintain internal business contacts (with customers, professionals in similar positions to us, consultants, suppliers, experts) is as important as nurturing external networks (through business networking groups, conferences, and so on). By expanding the notion of networking, Gudykunst & Ting-Toomey (1988) state that we need to bridge between intercultural and multicultural environments: “The ability to develop networks in intercultural situations can enable you to do business more effectively in multicultural environments. In some cultures such as the Arab, Spanish, and Japanese, networking is essential because they prefer to conduct business with people they know or with associates of people they know” (Gudykunst & Ting-Toomey, 1988 quoted in Chaney and Martin, 2007, p.10).

3. Norms, rules, roles and values – Principles of ethical behaviour in company communication

The ‘unwritten guidelines’ that people follow within a company, i.e. norms, rules, roles and values are of the utmost importance in understanding ways to streamline communication.

• Norms

According to Chaney and Martin (2007), norms are firmly established principles of appropriate and inappropriate behaviours whose violation can lead to overt or covert punishment. Similarly, in relation with group members’ behaviour and their conformity with the group’s standards, Robbins (2005) remarks that group norms do not merely determine the proper dress code, or the friendships during or outside office hours, being used to deal with performance-related goals. He advocates a degree of alignment between the individual and the company’s goals, giving primacy to the acceptance of preferred norms: “Work groups typically provide their members with explicit cues on how hard they should work, how to get the job done, their level of output, appropriate communication channels [...] Knowing the norms of a given group can help us explain the attitudes and behaviours of its members. Can managers control group norms? Not completely, but they can influence them” (Robbins, 2005, pp.104, 117). Robbins argues against the exertion of groups’ pressure on members with high potential and strong abilities to perform at a high level: “Norms are extremely powerful in affecting an individual employee’s performance. In fact, it’s not unusual to find cases in which an employee with strong abilities and high personal motivation performs at a very modest level because of the overriding influence of a group norms that discourage members from producing at high levels” (Robbins, 2005, p.104). He rejects the negative influence of group norms on the individual’s personal motivation in favour of a higher group cohesiveness embedding plenty of positive reinforcement, praise and rewards for good contribution to the group’s overall performance. Robbins is among the business scholars to theorize the link between status and norms, status and group interaction, or status and culture. Within this framework, he defines status in terms of position or rank granted to group members who accept and develop rights and roles to conduct the group’s activities. Rules, rights and rituals are the criteria for measuring status equities /vs/ inequities within groups.

Low-status members cannot compete on a level playing field with their more privileged counterparts. Unlike their lower-status peers, who find status inequities frustrating by strongly affecting their productivity and willingness to stay with the company, high-status people have more power over the decisions and outcomes that affect the group. The influence and authority wielded by power-hungry individuals have significant behavioural consequences, largely due to their ability to make status differences visible and inhibit group creativity and diversity of ideas. Robbins adds these stereotypes of formal leaders and managers: criticize more, state more orders, interrupt more often, are more assertive.

In my opinion, these differences explain why top performing businessmen, through their valued attributes, seem unaware of the fact that they recklessly disregard the social norms which their low-status peers have to obey without hesitance, thus limiting their potential and hindering their participation in group discussions.

● **Rules**

Individuals in a group are expected to follow the company’s rules precisely and the managers are there to enforce them to make sure employees do the things they should. As Chaney and Martin (2007, p.10) put it, “Rules are formed to clarify cloudy areas of norms” and everything depends on the intent of *today’s* new rules of work premised on gaining a keener and more subtle understanding of our interests, values, and motivations.

In an ever-changing world of work, career paths are no longer linear, but tend to proceed in great jumps. They can and must be ‘plotted’ from our “strengths, personal interests, and core values” (Cavoulacos and Minshew, 2017, p.15). Cavoulacos and Minshew state that the goal of a dream career is to figure out the kind of job that gives us true satisfaction, what gets us out of bed every morning, what we expect and want from work, or how we can click our employers and meet the requirements of our positions. Therefore, by embracing the *new rules*, they agree to the necessity of a major mindset shift and devise a 3-sized working tool (the Three R’s): 1) Reflect; 2) Research; 3) Refine, allowing us to take the first check-in steps in our career, “This series of steps will enable you to navigate this preparatory stage of your process, narrow your options, understand your real choices, and get ready to make your move [...] Finally, remember that the New Rules don’t only apply to presenting yourself in such a way as to get that job, but also to what comes afterward: to acclimating at that job, thriving in that job, and then understanding where you want to go next” (Cavoulacos and Minshew, 2017, pp.10,11).

If Chaney and Martin’s (2007) presentation of the differences between norms, rules, roles, and networks follows a synthesized path, somehow classical, Cavoulacos and Minshew’s (2017) mapping seems to be more flexible, dynamic and to the point. From this perspective, their approach sets the stage for identifying the qualities and skills in thriving at our dream jobs. I have adopted Cavoulacos and Minshew’s approach to leaving behind the *old* company *rules* and navigating or playing by the *new rules*, because, in my opinion, we are no longer bystanders, watching the world go by, but responsible makers and participators, capable of taking our careers in our hands.

Much more psychologically-oriented, Dilts and DeLozier (2000) widely acknowledge that rules typically link certain values to specific behaviours. In their opinion, rules should be interpreted as *generalizations*. In neuro-linguistic terms, behavioural rules are governed by *modal operators of necessity* (should, must, ought to), and, apart from increasing the connection between values and behaviours, they also act upon a person’s beliefs. At the linguistic level, when rules become less flexible, and hence limiting, the next step is to run an ecology check and assess how behavioural change will impact upon the rest of an individual’s systems. Thus, the appropriate use of Meta-Model questions will help challenge counterproductive rules or beliefs, their outcome being to create harmony between the elements of an individual’s internal and external system: ‘What would happen if you did, or didn’t follow the rule?’, ‘What would happen if you bent the rules one time?’, ‘What kind of impact do you expect if you refuse to play by the rules?’ Cavoulacos and Minshew (2017), in line with Dilts and DeLozier’s (2000) standpoint against job decision hesitations or doubtful feelings, avow that the process of self-awareness can be difficult, but that it can and must be handled with *wisdom* and *grace*.

According to Alison and David Price (2013), charging role models with breach of the company’s rules is a mark of frail leadership and can create problems in a team, company or social system. Leaders failing to follow the rules cannot be considered models of the right way to behave. The authors aptly conclude that companies where role models constantly show a reckless disregard for rules are far from promoting a supportive, effective leadership style which, in turn, may trigger unacceptable behaviour and the loss of employees’ respect and control.

● **Roles**

Personal ecology is of utmost importance when we set goals, comply with the rules, or clarify values. In this context, in-depth knowledge of how we can manage up in an organization will take our careers to the next level. From the basic definition of a role (Dilts and DeLozier, 2000; Chaney and Martin, 2004) to more conceptualized representation of role behaviour (Robbins, 2005; Cavoulacos and Minshew, 2017), the importance of a strategy for subordinate – superior interaction coupled with the right attitude for good collaboration become a priority. The role(s) we play at certain stages of our careers align with who we will become and work toward the position we want in the future of the organization. They don’t remain static, but change along the ride,

preparing us to move to our next role: “Building, maintaining, and growing your relationships with colleagues and managers are key to thriving in your current role and setting yourself up to take your career to the next level [...] as you manage the sometimes rocky waters of interoffice dynamics, always think about how your interactions serve yourself and others. So it’s important to understand that interpersonal skills are vital to the trajectory of your career” (Cavoulacos and Minshew, 2017, p.271). To put it differently, when our role matches with our manager’s goals and objectives, we eagerly step outside our assigned work, are able to multi-task and proactively engage in sharing the same priorities as our boss’s without being told explicitly what to do.

Within this model of interpersonal communication, the self-starter’s guiding principle will be: Don’t just listen, be one step ahead! Roles can be offered a twofold interpretation, namely a function of an individual’s relationship to other group members and the task that person is carrying out within that group.

I consider this approach closely related to Dilts and DeLozier’s (2000, p.1135) opinion that “Roles such as *project leader, production manager, coach, administrator* are defined by the actions and activities assigned to, required from, or expected of a person or group”. Moreover, roles are culture-bound and are based on the beliefs, values and expectations which that culture rests upon (Dilts and DeLozier, 2000; Robbins, 2005; Cavoulacos and Minshew, 2017). This approach is continued by Dilts and DeLozier who remark on the different levels that roles can touch upon and the set of questions which validates them: “Some roles may place more emphasis on the level of capabilities, while others are more related to identity and socially defined status [...] Defining roles involves providing answers to such questions as: What is the overall structure of this organization or system? Where do I fit in? How am I valued and judged? Why should I commit myself?” (Dilts and DeLozier, 2000, p.1135). Their research on role development in groups closely resembles Hofstede’s (1980) and Robbins’s (2005) framework for assessing status and culture in organizations and demonstrates that role differentiation in small group interactions often leads to an imbalanced communication process, where high-status members’ attitudes can easily bias the contributions of low-status employees.

However, there are similarities between Dilts and DeLozier’s view and Chaney and Martin’s (2007) view, who are also of the opinion that a (sub)group’s business communicators develop jargon and exhibit behaviour that are particular to that (sub)group: “A role includes the behavioural expectations of a position within a culture and is affected by norms and rules” (Chaney and Martin, 2007, p.10). Similarly, “the vocabularies of subgroup members make it difficult for members of the macroculture to understand the intended meanings of the words used by subgroup members” (Samovar&Porter, 2004 quoted in Chaney and Martin, 2007, p.11).

In addition, a company culture characterized by role models (outstanding personalities in the field) will positively influence decision outcomes, set a playground for performance, and offer opportunities for career advancement. Both Dilts and DeLozier (2000) and Alison and David Price (2013) report similar results regarding role models as rich and powerful sources of learning which inspire their followers to achieve unexpected results. The findings of their studies reveal the role models’ ability to keep a high profile, totally aligned with the values of the organization they identify with. Alison and David Price highlight that the more aligned we are to our values, the stronger the payoffs will come on-stream: “Reward people who role-model living the values. Some companies give bonus payments to people who have demonstrated the values. Other companies give on-the-spot bonus prizes for people who have done something outstanding to make a value live” (Alison and David Price, 2013, p.64). Thus, taking on new roles and assuming role identities – partner, supervisor, leader, etc. – could not be achieved without the full support of their corresponding beliefs, capabilities, or strategies.

As far as the experiential learning of new skills is concerned, role behaviour and role playing overlap. When engaged in practicing interactive skills, assuming new roles, role playing becomes *a scaffold in developing new perceptions of behaviour*. So the essence of role playing is based on regular stimulated exercises whose aim is to relate the actions to a ‘fictitious I’ (Lev Vygotsky, 1978). This perspective blends in perfectly with Dilts and DeLozier’s acting *as if* as a tool for learning, “Imaginary situations allow people to assume fictitious ‘I’ identities and to behave in forms that may be contrary to their daily identity, and the accompanying expectations [...] Through

reflection on our own experiences and observations of role plays a person can begin to discover patterns and insights into their own socio-cultural learning” (Dilts and DeLozier, 2000, p.1134).

● **Values**

Given the rather profit-dominated business world, *values* are of paramount importance in devising an ambitious career plan. Employees are naturally industrious and more creative when they feel their opinions are valued and their work is intrinsically interesting. In increasingly diverse cultures, employees display different attitudes toward ethical standards and work. They discover along their professional paths that meaningful and purposeful work blends in perfectly with the personal values which bring them success and satisfaction in their professional careers.

Thus, each type of work can be associated with a specific value. Furthermore, on a scale of 1 to 4, each value can be graded in order of importance:

1. Particularly vital
2. Worthy/necessary, but not vital
3. Neither significant nor insignificant
4. I'd rather avoid

At the end, all the values ranked as 1 will be understood as the most significant taking into account our own work priorities and preferences at any particular time:

For the **mission and impact** criterion, the values can be:

-Organizational change:

e.g. *I want to radically redesign all the aspects of the company's activities.*

-Service:

e.g. *I want to make available to consumers cutting-edge, market-driven technology.*

-Influence:

e.g. *I want to stimulate motivation and stir my team to tremendous effort.*

-Decision making:

e.g. *I want to be one of the company's key decision-makers.*

-Ethics:

e.g. *I want my job to match with my principles and morals.*

For the **social interaction and teamwork** criterion, the following values can be displayed:

-Sociability:

e.g. *I want to visit employees at their workstations and discuss their work.*

-Teamwork:

e.g. *I want to work as part of a co-operative team to look for new solutions and explore alternatives.*

-Management:

e.g. *I want to supervise staff and monitor quality standards.*

-Autonomy:

e.g. *I want to feel free to schedule my own work and determine without supervision the procedures to be used in conducting it.*

As far as **job routine** is concerned, the most appropriate values are:

-Deadline:

e.g. *I want to meet work deadlines and get my boss appreciation.*

-Detail:

e.g. *I want to get involved in finicky work since I've always been a stickler for detail and accuracy.*

-Flexibility:

e.g. *I want to be able to plan my agenda in a way that suits me perfectly.*

-Travel:

e.g. *I want to go on business trips more often and share the results of my travel experiences with my colleagues.*

In relation to the **reward** factor, values are usually equated with:

-Recognition:

e.g. *I want to enjoy strong support and receive warm congrats on my work results.*

-Compensation:

e.g. *I want to relish the idea of earning a higher wage in exchange for good work.*

-Prestige:

e.g. *I want to serve a company that has gained considerable prestige.*

-Security:

e.g. *I want a salaried job and long-term career stability.*

The older we get, our preferences and priorities with respect to the above-mentioned categories or criteria and their accompanying values may fluctuate. What matters most in the 20-30 age group (glamour, creativity, praise, self-development, risk-taking) might lessen gradually in the 40-50 age group for which other values are given precedence (security, flexibility, reward, company culture).

This perspective meshes very well with Dilts and DeLozier's (2000) opinion that we set ourselves goals which match our values and motivate us: "...goals can be considered values which have been placed into some future location on one's time line [...]. A person's values will also shape how that individual gives meaning to his or her perception of a particular situation. This determines which kinds of mental strategies a person selects to approach that situation" (Dilts and DeLozier 2000: 1519).

I also consider guiding values/behaviour closely related to Alison and David Price's (2013) opinion that "Values are significant because they subconsciously shape our behaviour on a day-to-day basis" (Alison and David Price, 2013, p.59).

In my opinion, the more prominent and stronger our values, and the more headed they are towards our vision and mission, the more powerful and determined the action towards achieving a common goal.

4. Research methodology

This research has used four major principles of ethical behaviour with the aim of making business communicators aware of the importance of various patterns of behaviour, which are not always easy to manage, assimilate or adapt to, but are essential for the process of communication in an international business context. The emphasis was placed on both the key situational factors in workplace orientation which are an integral part of any company culture, whatever the business, and the understanding of the individuals' specialized interests, ideas, attitudes and values through different levels of communication, i.e. interpersonal or organizational. In this case, the paper has concentrated on our ethical belief system which becomes a platform for the values we develop. It has shown how values are based on the cultural setting in which we work and are influenced by those with whom we interact, i.e. co-workers or employers. Values mirror our beliefs about the outcome we aim to achieve and the 'means' for generating the desired outcome.

The article further pointed out that particular values provide a basis for behavioural rules. They speak of the power of behavioural rules and suggest that communicators should be aware that they are the accepted customs, standards, or models we expect of ourselves in the conduct of our life and our professional relationships.

The research method was based on highlighting the notions of descriptive and injunctive behaviour rules as codes of ethics. Thus, I have stated the importance of devising behavioural rules as a successful attempt to help employees to learn the proper rules of conduct in a community. In addition, the paper also proved that, when assuming new roles, role playing becomes a cradle of developing new perceptions of behaviour.

5. Findings

Understanding that valuing good networks will give us a competitive edge is mainly due to the very understanding of the norms, rules and roles governing them. Before we expect our opinions to be understood and considered, we first need to understand the 'unwritten guidelines' that people follow within a company. They involve three separate, yet related, situational factors. Following these factors will set the stage for the connections we are trying to establish within an organization and the attitudes or behaviour we will exhibit in a group and in relation to our prospects.

The findings of my research have also shown that role differentiation in small group interactions usually leads to a biased attitude of high-status members against the contributions of low-status members as far as rank/position and cultural assessment is concerned.

Thus, emphasis has been placed on the value of building relationships, through cooperation, or, to put it differently, on being skilled at creating and then claiming value.

Moreover, the paper highlighted that the hierarchies of values and criteria are crucial in deciding on the degree of importance/meaning we attach to various personal and professional experiences. It proved that communicators should be aware that the selection of values is a subjective experience and that people usually operate from different values. Even if two individuals may share similar values like *success, reputation, integrity, trust*, they may have different standards for judging on their achievement or violation. Such hierarchies are best put into practice in meditation, negotiation or communication, their role being to understand cultural diversity, on the one hand, and to resolve conflicts or disputes, on the other hand.

Consequently, only by harmonizing the personal and organizational rules, roles and values, can we create a positive, long-term effect on the process of changing corporate culture.

6. Conclusions

In conclusion, gaining job satisfaction often involves taking on new roles or assuming new role identities based on their corresponding beliefs, capabilities and strategies.

As a manager, the focus is on consistently leading a team by agreeing in advance on each member's role and responsibilities. In this respect, the manager might want to avoid putting group members under the undue pressure/influence of groupthink, create cohesive groups instead, influence rather than control group norms, and encourage member input.

As an employee, special attention is given to the need for alignment between individual and company goals. Agreed and clear rules will provide a framework for enhancing potential and increasing participation in group discussions.

To recap, only colourful leaders are able to understand that values are more important than rules. They make values come alive through their power to inspire, guide and motivate people.

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Section IV

Marketing – Management

The Chain Reactions of Business Models and Strategies

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Abstract

When researching business models in the available literature, the concept of strategy comes up frequently. It is typically portrayed that these two concepts are intertwined and must be used in tandem to achieve a company's goals and objectives. This article proposes a conceptual analysis that can provide an overview of how business models and strategies interact and what the outcome of this union is. As a result, a synthesis of the most common characteristics associated with them was derived from the existing literature review and was analyzed in order to establish their relationship, leaving room for future research. The research methodology is quantitative in nature and helps establish the ground work for the research in this paper.

Key words: business models, business, strategy, value creation

J.E.L. classification: M1, M19

1. Introduction

Every company has a set of goals and objectives that it hopes to achieve. To do so, they must devise at least one strategy to pave the way to their end purpose in today's turbulent times (Toma & Marinescu, 2015). As a consequence, businesses will use various methods and tools to correctly understand what options are available and which steps must be taken to reach their aims.

Business models can be used to create a framework for the structure and organization of a company's operations. As a result, this tool may provide its users with a comprehensive picture of the company at a given point in time and how it operates. While this is extremely useful for understanding where the company is now, it does not provide managers with solutions for preserving or correcting the company's current path. Today's business models are increasingly based on innovation and digitalization (Tohănean & Toma, 2018; Toma & Tohănean, 2018). In this respect, the automotive sector provides numerous valuable examples, especially in connection with lean management or business excellence (Naruo & Toma, 2007; Marinescu & Toma, 2008; Toma & Naruo, 2017).

The focus of this article is to demonstrate the benefits of combining the business model tool with strategic thinking. The concepts of strategy and business models are inextricably linked and should be treated as such when determining the best course of action for the company. A pattern can be established by using the results of building a business model at various points in time, which can then help the company elaborate and adjust the strategy implemented appropriately.

To achieve the above, a literary review of significant writings from recent decades was carried out in order to analyse and recognise the most prevalent and noteworthy features of business models, as well as appreciate the importance of strategy and its applicability. Because the concepts in question do not have a single meaning, interpretations and conclusions will be drawn by collecting the most prominent perspectives from the researchers who have done extensive studies in this area. The authors have used a quantitative research method in order to achieve the paper's goal, and the results have been conveyed in the findings section.

2. Literature review

2.1. Business models

The business model is a concept that has only recently gained academic attention in the fields of strategic management, innovation, and entrepreneurship (Toma & Marinescu, 2012; Toma & Marinescu, 2018; Toma & Tohänean, 2019). The paradigm is gaining traction as a novel idea for explaining not only a company's fundamental logic for creating and extracting value, but also the mechanisms that support that logic. With this ideation, the business model provides an original framework that offers a new perspective into the managerial conversation and thus extends the prior knowledge frameworks within this domain. The number of publications mentioning the term "business model" has risen exponentially since the late 1990s and early 2000s, indicating a spike in interest in the topic. The significance of the business model, on the other hand, is not limited to academic discussion. Practitioners have recently expressed interest in the concept, recognizing the business model as a significant source of innovation that goes beyond traditional product and process improvements. Furthermore, when determining the value creation and value capture rationale, the business model is thought to have a significant impact on firm performance.

The buzzword "business model" has become more widespread and it has been used more frequently. Regardless of the fact that academics and business executives are becoming more interested in the term "business model", the business community has yet to reach an agreement on a universally accepted interpretation (Shafer *et al.*, 2005).

Through a structural layout, the Business model portrays the arrangement of a core company's dealings with all of its various stakeholders in factor and product marketplaces. It has climbed to the forefront of strategic management thinking and has become an especially important new opportunity representation as a result of recent rapid developments in information and communication technologies, particularly Internet and broadband enhancements, which have motivated new types of innovation among both financial specialists and managers (Geoffrion & Krishnan, 2003).

Because it influences firms' potential outcomes for creating a competitive advantage, the study of business models is an important subject matter for strategic management research (Amit & Zott, 2001). A freshly centered business model, along with an early entry into a company sector, has a positive impact on performance (Zott & Amit, 2007).

Each coordinated movement in planning and implementing a specific business model includes both hierarchical and administrative levels, with a focus on specific functional departments that are most discriminating in determining and blending business components whose relationship and complementarity structures the breadth and scale of any company's focused abilities. In this context, business modeling is a process rather than a state, due to the necessary adjustments, whether transformative or value-based, that create the technique for managing it (Drakulevski & Nakov, 2014).

It is evident that the topic of business models has resulted in a large number of papers and works of literature. Osterwalder & Pigneur (2011) explore it from a variety of perspectives, including e-business, information technology, strategy, and organization. The business model, according to Mansfield and Fourie (2004), is the connection between a company's resources, activities, and setting.

2.2. Strategy

For many years, industry leaders and theorists have studied strategy. However, there is no definitive answer to the question of what strategy entails. One explanation appears to be that people have different viewpoints on strategy. The layout and construction of an organization's existing resources in order to meet the needs, demands, and interests of marketplaces and stakeholders is meant to be referred as strategy. This is also the long-term path and span of an organization that shapes its visions and goals (Johnson *et al.*, 2008).

A company's strategy is, in some cases, the set of decisions that identifies and reflects the company's objectives, aims, and goals. Furthermore, strategy develops the major policies and plans for achieving the goals. It defines the scope of the company's operations as well as the social and economic structure it aspires to be (Andrews, 1980).

In actual fact, not all business practices fall into the strategic band. Strategic choices are those that do things "diversely" to competitors, and that variation results in a long-term competitive advantage. Even the actions taken to increase productivity are not strategic because they are simply replicated by others (Porter, 1996). In essence, strategy is a framework that directs activities while also being influenced by them, and it has nine potential driving forces: products offered, market needs, technology, production capability, method of sale, method of distribution, natural resources, size/growth, return/profit.

In their work, strategy specialists employ administrative, discursive, and episodic approaches (Jarzabkowski, 2005). Because practices are repeated, they frequently generate internal inertial forces that stymie strategic change (Jarzabkowski, 2004). On a personal level, such factors are linked to cognition, putting strategy experts at risk of ignoring environmental changes due to the passive thought processes on which their perceptual filters are based (Hodgkinson and Wright, 2002).

As per Khalifa (2020), strategies are classified into three types: (good or bad) strategies, non-strategies, and no strategies. These are to be taken into account as follows:

- No strategy - A no strategy situation occurs when a company has not established, evaluated, or recognized the need for something resembling a strategy;
- Non-strategy – occurs when an entity has a strategy and believes it has been adopted and is now being implemented, but the strategy is not really driven by the winning theory; and
- Strategy (good or bad) - According to Khalifa (2020), a strategy is one that has been comprehensively thought out, guided by the philosophy of winning, and purposefully implemented, regardless of whether the strategy is genuinely right or wrong for the organization or business.

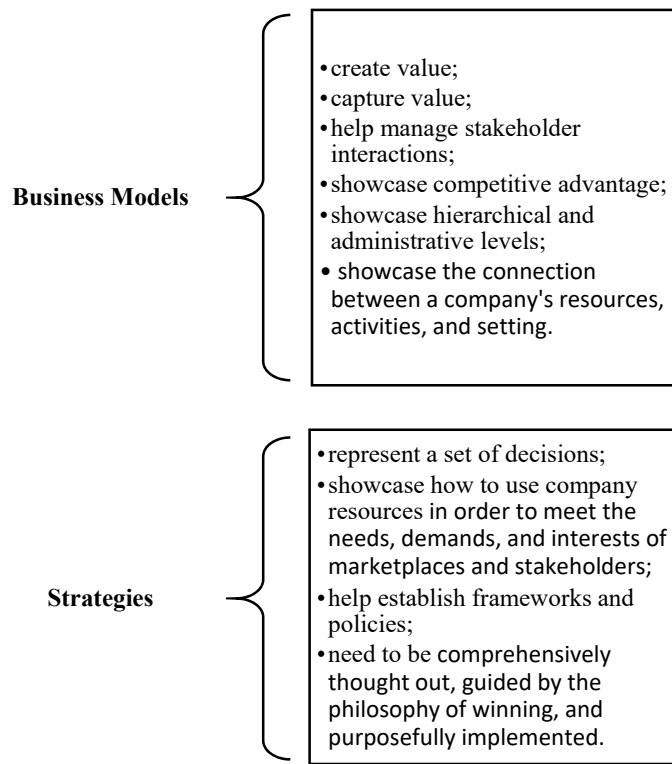
3. Research methodology

The methodology used in the paper was quantitative in nature. Online databases including academic articles and scientific papers from the fields of business, management, and leadership have been used to access information from multiple resources for the literature analysis with the goal of assessing the varied definitions of and applications of business models by firms. The empirical findings from the reviewed literature are presented and elaborated in the findings section. Finally, the conclusions section summarizes the findings of this analysis, while also providing room for additional research within future papers.

4. Findings

In order to synthesize the findings of the literature review, the author chose to highlight the most prominent features of the two concepts in question (see Figure no. 1) and identify the link that can be established when both are put into practice. (see Figure no. 2)

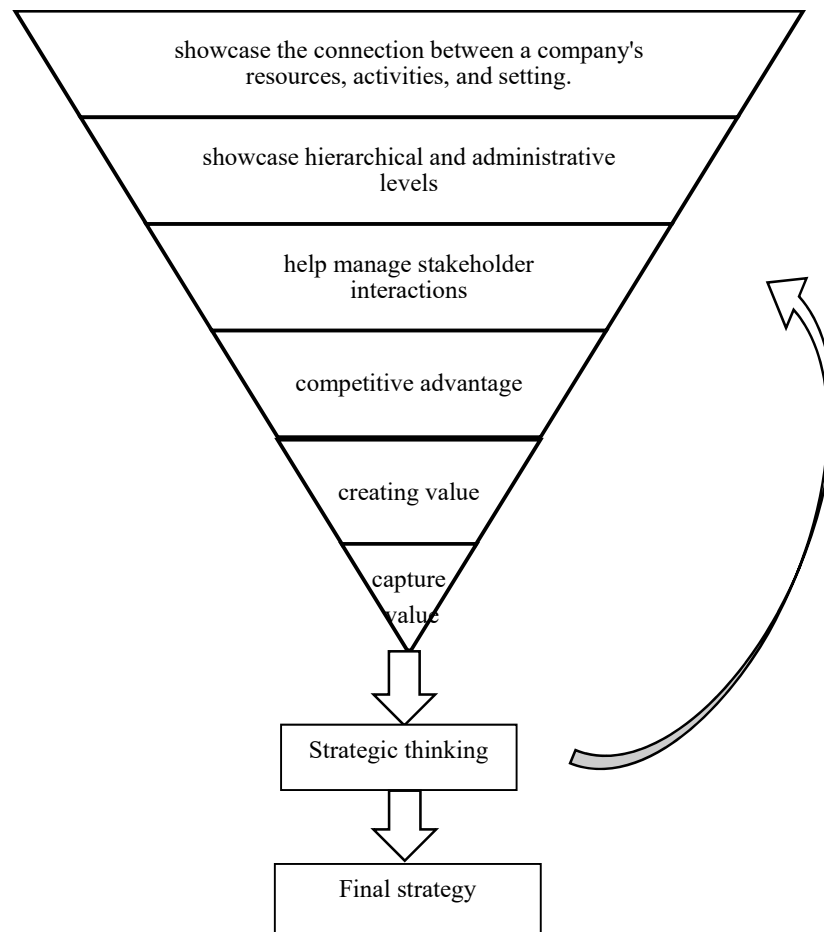
Figure no. 1. Business models and Strategy characteristics



Source: Author's own contribution based on literature review analysis

The link depicted in Figure no. 2 indicates that in order to obtain a final form of strategy, it is necessary to create a process in which information is funneled through the strategic thinking of managers and companies. This process is a cycle that must be repeated at various points in time in order to understand the patterns created by the business's activities. Only then can a proper course of action be determined by employing various tactics that comprise the overall strategy. This strategy is then implemented in order to achieve the company's primary goals and objectives. The reason for the process being repeated several times is to create either a long-term strategy or multiple short-term strategies that will benefit the company in the long run.

Figure no. 2. Link between Business models and strategies



Source: Author's own contribution based on literature review analysis

5. Conclusions

Overall, the paper has demonstrated the value of employing both business models and strategic thinking. This was accomplished by analyzing the various sources of information provided by the authors who had previously conducted research on the subjects mentioned above. The author then extracted the most important characteristics of both concepts and demonstrated the linkage that can be established between them using visual aids. To summarize the findings, strategic thinking is a funnel through which business models must pass in order to see the bigger picture and contribute to the company's goals and objectives.

The main limitation of the paper was that the research was only conducted through quantitative means; however, this leaves room for future research on the topic in future writings.

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The Role of the Food Service Industry for the Tourism Destination Development

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Abstract

Tourism destinations' development is a difficult process which requires positive evolutions among all the companies involved in meeting visitors' needs. Out of these companies, the food service units have a special role, as they satisfy basic physiological needs and also offer a wide range of opportunities to spend a pleasant leisure time and to entertain.

In this article, the food service units from Braşov city are analyzed. The results confirm the important steps and in the right direction made by the local entrepreneurs who contribute, on a large scale, to the development of the tourism destination Braşov city.

Key words: food service industry, restaurants, online reviews, tourism destination, Braşov city
J.E.L. classification: Z32, Z33

1. Introduction

Trips for tourism purposes generate the consumption of a variety of tourist services and products. Restaurants offer specific services which meet basic needs, thus being indispensable for satisfying visitors' demands at a tourism destination. On the other hand, restaurants' services also address to residents, as a result of several changes in lifestyle. The contemporary life in Romania has undergone many changes within the last period. Spending more and more time at work, prolonged mental and physical effort to fulfill professional duties, the unprecedented development of the electronic universe and many other factors generated numerous changes with significant influences for the food sector development. Eating out is becoming a usual habit in order to meet physiological needs, to socialize and to spend the free time as pleasant as possible, with an important impact on the development of restaurants' sector.

Braşov city is one of the most famous tourist destinations in our country. The number of Romanian and foreign tourists is constantly increasing and food services are amongst the most requested tourist services. All these elements generated the expansion of this activity, the steps taken in this direction being significant, and the concerns of local entrepreneurs involved in the restaurant businesses deserve closer analysis and assessments.

This article has two objectives. The first objective is to present the statistical analysis of the restaurant industry in Braşov city. The aim is to identify the types of restaurants in Braşov city and to assess their comfort levels. The second objective consists in identifying the level of customers' satisfaction following the consumption in restaurant locations from Braşov city. To this end, the evaluations carried out by the Gault & Millau guide, a certification system with wide international recognition, were presented. Restaurants' assessments based on visitors' online reviews on Google Maps and Tripadvisor were also analyzed.

2. Theoretical background

Food service plays an important role in all environments, including tourism destinations (Barrows *et al*, 2012, p.69). From the tourism perspective, food service offers at a tourism destination represent an essential element with a defining contribution to shape tourists' experiences (Băltescu, 2016).

The food service activity is considered an advanced stage of food preparation for citizens, being a sector highly influenced by the level of the economic development, living and working conditions, demographic structure, occupational profile and the mentality of the inhabitants (Minciuc, 2004, p.272). The consumption in food service locations is analyzed in the light of the main motivations which correspond to the functions performed by these activities. Food service performs four functions: the feeding function, the leisure function, the social function, and the business function (Lupu, 2010, pp.27-28).

Food away from home may be purchased in a variety of locations and this wide availability speaks to the size and scope of the food service industry (Barrows *et al*, 2012, p.68). Restaurants are the best-known locations and are often considered gastronomic units that fulfill all the specific functions. Recently, the term "green restaurant" is being used more and more often. The green restaurant is individualized by deep anchoring in the application of "green" principles and practices which are based on the three pillars of sustainable development, namely the environment, the social environment and the economic environment (Moon, 2021, p.2). The major concerns of green restaurants are to achieve three coordinates, namely the health coordinate (ensuring healthy, organic, nutritionally balanced meals), the environmental coordinate (applying practices that do not affect the environment, including recycling, energy conservation and pollution reduction), and the social coordinate (involvement in the life of the community and the application of correct staffing practices) (Choi *et al*, 2007, p.43).

Nowadays, in the digital era, more than ever communication is a major decision which can make the difference between success and failure. The same thing is valid for the food service industry. A restaurant which does not function in a favorable location but highlights a constant concern for adapting menus, practicing affordable prices, creating a pleasant atmosphere and so on, has little chances to succeed in the absence of a sustained communication. In the tourism sector, the most widespread form of communication and also with the greatest impact is developed in the online environment (Grossecck, 2006, p.195). Today, searching online tourist information is a habit, a "must" for the modern tourist (Băltescu, 2018, p.58).

Obtaining a large volume of tourist information is the basis for taking the best decisions, and therefore tourists use several information channels (Ho *et al*, 2012, p.1469). Online presence is the key point of the communication process and the website is considered the cornerstone of any Internet marketing activity (Băltescu, 2010, p.166). A valuable website can contribute to the development of the brand identity, direct marketing, e-commerce, customers' assistance, content publishing (regularly publishes content of specialized interest in order to bring visitors to the site) (Kotler *et al*, 2006, p.699). Fast and easy development of e-commerce has also led to the necessity of consumer protection in cyberspace, where trade takes place, so as to ensure consumer safety and security matters (Neacșu, 2016, p.301). On the other hand, the need to obtain as much relevant information as possible in the shortest possible time, has generated the development of new information technologies, known as smart technologies, among which a special place is occupied by the mobile applications.

Selecting a restaurant has become an increasingly complex and difficult process, mainly due to the unprecedented development of the food service industry (Băltescu, 2020, p.42). Studies have shown that the use of information technology to search for restaurant information is widespread (Rodríguez-López *et al*, 2020, p.2), and the use of online platforms to access customer reviews which describe consumers' experiences is a common practice (Zhang *et al*, 2018, p.116). Online evaluations fulfill two functions: they provide information about products/companies and contain recommendations (Park *et al*, 2007, p.140). Electronic verbal communication includes a variety of forms, websites, social media, mobile applications, and so on, but it has been found that online reviews have the greatest influence on the consumer choices (Zhang *et al*, 2010, p.696). On the other hand, it is recognized the constant increase in the number of customers at restaurants with

many positive reviews, but over time, the effects will be negative, in the sense of excessive congestion of restaurants and increased waiting time (Fernandes *et al*, 2021, p.9).

The most accessed online platforms which contain a significant number of customer reviews on their dining experience in restaurants are: Google Maps, Tripadvisor.com and Booking.com. Google Maps, for example, has a predominant position in the search options of the potential consumers, providing a huge amount of information, including: opening hours, addresses, location, images, reviews, along with additional services such as the possibility of making reservations for meals, orders for the distribution of food outside the restaurant, etc. (Hawley, 2019). Analyses performed in Romania to highlight the degree of trust of potential consumers in the information posted online showed that on the first place in the hierarchy is Booking.com followed by Google Maps and Tripadvisor (Băltescu, 2020, pp.45-46).

3. Research methodology

The article presents numerous analyses carried out with the final goals to assess the development of the food service industry in Braşov city and to highlight the major ratings for the food service industry performed by visitors and specialized entities. To this end, the author used official governmental data and public information provided by the Gault & Millau guide and by the tourism online platforms.

The Romanian Ministry of Economy, Energy and Business Environment – Tourism Direction, communicates frequently which are the food service units in function in our country, by counties, towns and villages. Based on this information, the author performed several analyses on the types of food service locations in Braşov city, emphasizing which is the number of the food service units, which are the types of the food service units in function and also their comfort levels.

The food service units' evaluations were presented from two points of view. First, restaurants and bars were analyzed based on the evaluations carried out by the Gault & Millau guide. Internationally, several classification systems are applied to food service units, many of them enjoying high levels of recognition amongst consumers. Among these, there are two with utmost trust, namely the Michelin star classification and the Gault & Millau classification. Secondly, evaluations performed by Google Maps and Tripadvisor were analyzed.

4. Findings

In Braşov city there are 181 food service locations. One of the main remarks following the analysis presented in table no.1 is the diversity of food service units which are in function in Braşov city. The best represented units are the fine-dining and upscale dining restaurants (64 units) with a percentage of 35.4% of the total of classified units, followed by day bars (32 units, 17.7% of the total) and coffee-bars (13 units, 7.2% of the total). At the same time, fast-food restaurants, cafeterias and pizza restaurants, units with a common characteristic, i.e. the quick-service concept, represent 12.2% out of the total (22 units).

Table no. 1 Food service units by type and comfort level in Braşov city

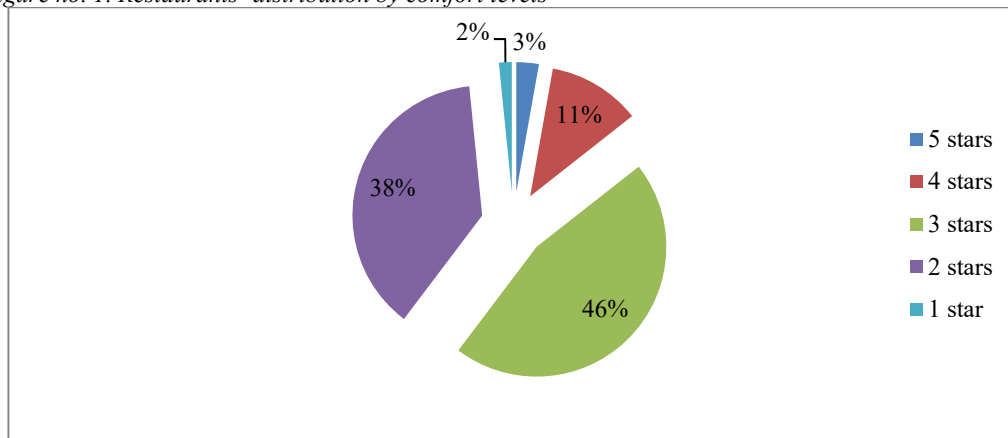
Types of restaurants/Comfort level	5 stars	4 stars	3 stars	2 stars	1 star	TOTAL
Fine-dining and upscale dining restaurants	1	9	32	22	-	64
Local type restaurants	-	1	2	1	-	4
Wine cellars	-	-	2	-	-	2
National type restaurants	-	-	2	-	-	2
Italian restaurants	-	-	2	-	-	2
Lebanese restaurants	-	-	-	1	-	1
Chinese restaurants	-	1	-	-	-	1
Family restaurants	-	-	8	1	-	9
Brasseries	1	-	4	1	-	6

Bistros	-	1	1	2	-	4
Breweries	-	-	2	1	-	3
Terraces	-	-	-	3	-	3
Day bars	2	7	11	12	-	32
Night bars	1	-	-	-	-	1
Coffee-bars	-	1	7	4	1	13
Disco-bars	-	1	1	2	-	4
Buffets	-	-	2	4	1	7
Cafeterias	-	-	1	5	-	6
Fast-food restaurants	-	-	5	5	1	11
Pizza restaurants	-	-	1	4	-	5
Snack-bars	-	-	-	1	-	1
TOTAL	5	21	83	69	3	181

Source: Ministry of Economy, Energy and Business Environment, 2021, Authorized units. Available at: <http://turism.gov.ro/web/autorizare-turism/> (Accessed 20 February 2021)

Another relevant analysis is the distribution of these restaurants by comfort categories (figure no. 1).

Figure no. 1. Restaurants' distribution by comfort levels



Source: Ministry of Economy, Energy and Business Environment, 2021, Authorized units. Available at: <http://turism.gov.ro/web/autorizare-turism/> (Accessed 20 February 2021)

The analysis by comfort levels highlight that the best represented fine-dining and upscale dining restaurants are included into the 3-stars comfort level (32 units, respectively 50% of the total of this restaurants). They are followed by the 2-stars locations (22 units, 34.4%), 9 of these locations are 4-stars restaurants (14%) and in Braşov city there is only one 5-stars restaurant (Club Belvedere restaurant). As for bars' classification, the most numerous are included in the 2-stars category (12 units, 37.5%), followed by the 3-stars locations (11 units, 34.4%), the 4-stars bars (7 units, 21.9%), and the 5-stars category which includes 2 day bars (6.2%), respectively Club Belvedere Bar and Aro-Palace day bar. The quick-service restaurants are classified in low comfort categories, respectively 3, 2 and 1 stars.

In Braşov city, according to the latest edition of the Gault & Millau guide (the 2019 edition), there are 16 locations, out of which 13 are restaurants and 3 are included into the POP bars category. These locations are evaluated with scores between 12.5 points and 10 points (which is the minimum score required for a restaurant to be included into this guide). These units are presented in figure no. 2.

Another analysis refers to the restaurants' assessments based on the online reviews posted by visitors. It is important to note that only restaurants with a significant number of ratings were considered in order to avoid those well-known situations when customers are motivated by various means to conduct favorable reviews. The article comprises two distinct assessments which are available on Google Maps and on Tripadvisor.

Figure no. 2. Restaurants and POP bars from Braşov city included in the Gault & Millau guide



Source: The Yellow Guide Gault & Millau, 2019, *Restaurants guide - Romania*

Following the assessments available through the Google Maps application, it is further presented the hierarchy according to the average score based on customers' appreciations obtained by the restaurants in Braşov city. The analysis includes only the restaurants with an average score of 4.5 or more. It is important to note that in this application the maximum average score is 5.0. The results are shown in table no. 2.

Table no. 2 Restaurants from Braşov city evaluated by Google Maps application listed based on the average assessment of registered reviews

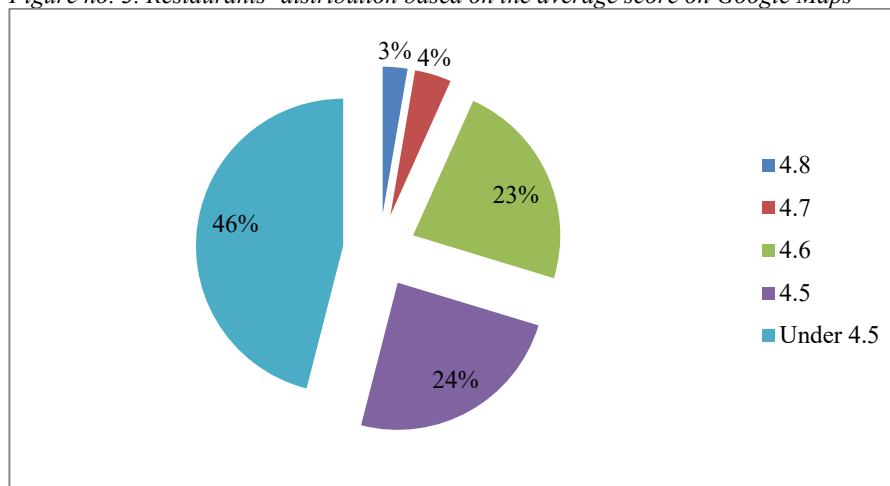
No.	Restaurant	Average score
1	Croitorea de Cafea	4.8
2	Pizzeria Da Mario	4.8
3	Restaurantul Dei Frati	4.7
4	Café-bar Tipografia	4.7
5	Restaurant Belvedere (Events)	4.7
6	Restaurant Sergiana (Str. Mureşenilor)	4.6
7	Restaurant Casa Tudor	4.6
8	Restaurant La Ceaun (Piaţa Sfatului)	4.6
9	Restaurant Sub Tâmpa	4.6
10	Pizzeria della Nonna	4.6
11	Restaurant Hopaa	4.6
12	Restaurant Grătar Urban	4.6
13	Bistro Aha	4.6
14	Restaurant Athanasios	4.6
15	Restaurant Poarta Schei 4	4.6
16	Millenium Pub & Cafe	4.6
17	La Strada Bistronomie	4.6
18	Berăria Aftăr Stube	4.6
19	Restaurant Addicton The Ranch	4.6
20	Restaurant Cucinino Pasta Bar	4.6
21	Keller Steak House	4.6
22	Restaurant Massimo	4.6
23	Restaurant La Ceaun Str M. Weiss	4.5
24	Restaurant Bistro de l'Arte	4.5
25	Restaurant Festival 39	4.5
26	Trattoria Del Chianti	4.5

27	Restaurant Prato	4.5
28	Pizza Hot	4.5
29	Restaurant Casa Hirscher	4.5
30	Pizzeria L'Altra Idea	4.5
31	Restaurant Trattorian Artisan Food	4.5
32	Restaurant Four Roses	4.5
33	Restaurant Am Rosenangen	4.5
34	Restaurant Pilvax	4.5
35	Grand Restaurant	4.5
36	Restaurant Platinum	4.5
37	Zorba the Greek	4.5
38	Restaurant Chef's Boutique	4.5
39	Restaurant Vîno e Sapori	4.5
40	Restaurant Tassi	4.5

Source: Google Maps (accessed 2.02.2021)

These results underline the fact that the restaurants from Braşov city meet customers' expectations and are highly appreciated. Continuing this idea, it could be observed that the share of restaurants with average scores greater than or equal to 4.5 (out of a possible maximum of 5 points) is 54%. The distribution of all restaurants assessed from Braşov city through Google Maps application is presented in figure no. 3.

Figure no. 3. Restaurants' distribution based on the average score on Google Maps



Source: Author's own research

Tripadvisor website includes 314 restaurants which have been evaluated in Braşov city and these locations are presented both according to the average scores based on customers' reviews and also, according to the number of reviews. The hierarchy of the first 30 restaurants is presented in table no. 3.

Table no. 3 Restaurants' assessments on Tripadvisor based on the average scores and number of reviews

No.	Restaurant	Average score	Number of reviews
1	La Birou Bistro	5,0	475
2	Dei Frati	4,5	1156
3	Addiction The Ranch	5,0	297
4	La Ceaun – Piaţa Sfatului	4,5	1346
5	Mediterra	5,0	184
6	Grătar Urban	4,5	575
7	Restaurant Athanasios	4,5	177

8	Casa Hirscher	4,5	880
9	Sub Tâmpa	4,5	576
10	Cucinino Pasta & Pizza	4,5	275
11	Restaurantul Vino e Sapori	4,5	226
12	La Ceau – Str M. Weiss	4,5	2124
13	Pizzeria della Nonna	4,5	323
14	Keller Steak House	4,5	481
15	Restaurant Belvedere	4,5	512
16	Home Cocktail Bar	5,0	72
17	Albert Bistro	4,5	433
18	Viva la Vida Bistro-Hostel	4,5	234
19	Prato	4,5	882
20	Simone Bistro	4,5	259
21	Bella Musica	4,0	978
22	Casa Tudor	4,5	246
23	Restaurant Sergiana	4,0	2553
24	Trattorian Artisan Food	4,5	521
25	Bistro de l'Arte	4,0	789
26	Poarta Schei 4	4,5	186
27	Pilvax	4,5	380
28	Terroirs Boutique du Vin	4,5	263
29	Restaurant Transilvania	4,0	392
30	Deane's Irish Pub and Grill	4,0	470

Source: Tripadvisor (accessed 4.02.2021)

The hierarchy of the most appreciated restaurants according to Tripadvisor ratings also includes sponsored units which do not meet the average marks or the number of reviews, being presented as preferential locations on the platform. Thus, on the list of the 30 best rated restaurants in Braşov, there are two locations, namely La Gustări (average rating of 3.5 with a total of 210 reviews) and Meatica (a newly opened unit, without any reviews) which are included in this list.

5. Conclusions

The paper aimed to analyze the current state of development of the food service industry in Braşov city. This approach was justified on one hand by the reputation of Braşov as an important Romanian tourism destination, but also by the changes of residents' consumption behavior, which consider eating out in a restaurant as a usual way to satisfy their basic needs and also a pleasant way to spend their leisure time.

The food service activities in Braşov city have experienced a positive evolution, both in terms of increasing the number of units, increasing the interest of local entrepreneurs for the development of specialized businesses, but also in terms of diversity and quality of the services. An essential aspect is the managers' increased concerns to adapt the entire activity to the wishes and expectations of contemporary customers, as well as to ensure a pleasant consumer experience, the pillar for the customer loyalty.

The presence of the well-known Gault & Millau guide in Romania and in Braşov city in particular, the evaluations performed by their own specialists, confirm the positive evolution of this tourism sector and confirm the interest of the foreign visitors for Romanian tourism destinations. At the same time, the large number of reviews recorded for the Braşov restaurants reinforces the idea that this assessment procedure is widely recognized by the customers and their ratings represent a real barometer for the food service activities.

The analyses focused on the idea that the progress in the food service industry is noticeable and it is a real and important step for the development of the tourism destination Braşov city. The prospects are promising, and enable the implementation of new ideas meant to contribute to further expansions of these activities.

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Flexible Forms of Work in Romania during Pandemic COVID-19

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Abstract

Today, due to the flexibility of work, the workplace is no longer just a place with four walls and a desk, and barriers such as time and space have been overcome by implementing flexible ways of working offered to employees. In Romania, changes in the labor market are obvious. If 10-15 years ago the standard/traditional employment model was the basic element of labor relations, and flexibility seemed an exotic and distant concept, nowadays labor flexibility has become a reality that no one can deny. Moreover, flexibility in labor relations has become a necessity. The employer is required to find and retain those employees who professionally meet the requirements of the job. The currency of exchange is that employees have their own requirements and needs to which the employer must adapt. The main objective of the research study is to determine how managers implement the main forms of flexible work.

Key words: telework, jobshare, flexitime, project work

J.E.L. classification: M54

1. Introduction

In the context of today's economy, when professionals can choose from a wide range of offers available on the labor market, employers must reinvent themselves and learn to offer employees other benefits than financial ones. Most of the time, the flexibility of the organization in which he works can determine the employee to remain faithful to it for a long time and, most importantly, to be motivated to give his best at work and to be productive. Extremely tight deadlines, a very high workload, a management that shows skepticism or working with rigorous clients are things that can demotivate employees to the point where they will want to reorient to other professional opportunities. If certain things cannot be changed or negotiated, as they would jeopardize the smooth running of the organization, there are others for which the employer could be more flexible, the aim being to increase the retention of existing talents and attract new ones by promoting these benefits.

Most organizations seek to strike a balance between their productivity needs, short delivery times, customer satisfaction, increasing market share, innovation and needs, employee interests (lifelong learning, professional development, work-life balance). Thus, the concept of flexibility of work performed is well rated by managers and employees alike. There are so-called internal flexibility policies, which consist of work processes at organizational and functional level, involving a degree of secondment of staff. Adoption by companies and the implementation of flexibility programs, minimizing job losses and competitiveness are key factors in maintaining them in the market. The term flexibility has values such as the ability to react and adapt to change. In the current political discourse of the European Union, this concept is viewed in a timely and essential manner, since workers and organizations of all kinds must adapt to the variables of today's society, characterized as the digital age, speed century, information society, in which the IT

industry has gradually penetrated all areas of activity.

Organizational or functional flexibility refers to work processes, work and job organization and secondment of staff. For example, production based on teamwork includes the acquisition of multiple skills and the rotation of tasks. There is also extensive teamwork, which includes own teams and partnerships, which will generate cognitive consolidation, evolutionary learning, innovation and product development.

The flexibility of the work schedule may consist of a continuous shift schedule or schedule on certain days of the week, certain times in a day or in a year; this could mean working from home, while traveling, part-time and full-time work. This type of flexibility can be developed along the professional path, through various leave programs and continuous training, related to the job in question.

Flexibility policies can take many forms, depending on the options available to each organization. Internal flexibility contributes to improving the performance of companies, in terms of adaptation, productivity and innovation. At the same time, it offers benefits to employees in terms of time management, health status and availability to perform duties. Economically, such forms of alternative labor involve a cost-benefit interaction that benefits the management, staff, company dynamics and, implicitly, the labor market.

Internal flexibility must be implemented in a participatory and balanced way. It has the role of balancing short-term demand and supply, based on productivity and minimizing costs, with long-term demand for innovation and strategy. Another function of internal flexibility is to meet the goals of all parties and to find viable solutions for them.

2. Literature review

Freedom to choose the work schedule, to choose where to work or non-traditional forms of employment (such as part-time employment, with an unequal or individualized / flexible schedule) are preferred to substantial salary benefits. In such a context, the employer has the mission, not always easy, to find those tools / ways / facilities that will make him attractive for future employees. On the other hand, the facilities offered to employees, in order to increase their attractiveness, must be compatible with the business needs of the employer, but also in accordance with the legal provisions (Mariappanadar, 2019). Thus, the flexible approach to the employment relationship should not only follow current trends or just try to increase employee satisfaction.

In practice, employers should consider several aspects that justify the implementation of flexible approaches, such as (Greene, 2020):

- flexibility must be introduced for a reason, namely the employer to identify those business problems that he is trying to solve;
- establishing through internal policies the forms and limits of flexibility, as well as defining the minimum requirements that are not negotiable and that the employer must implement so that, in the end, the benefits of flexibility are reciprocal;
- establishing the functions that will be the decision-makers for the implementation of the forms of flexibility - these functions should be those that closely manage the activity of the employees and that can decide, in reality, if a certain form of flexibility is compatible or not with that activity;
- it is important for employees to be informed about all aspects and implications of a flexible formula they want to access;
- last but not least, it is necessary to document the implementation of the form of flexibility applicable for each employee; in the absence of documentation or poor documentation of how the employee and the employer must cooperate and the rules applicable during the implementation of that form of flexibility may generate real problems in their relationship.

A variety of work flexibility is also called on call. This type of arrangement is often used both in the field of IT, but also in the field of service provision (electricity, gas, communications) in order to solve problems / breakdowns that may occur at any time (both during the day and at night) and which requires urgent employee intervention (Dundon and Wilkinson, 2020).

Another approach to work flexibility is employee mobility, which can be an attractive factor for them in making the decision to join a company. Flexibility through mobility offers employees the opportunity to transition to work internally, within the same employer, applying for positions they consider more attractive and more compatible with the training acquired, but also externally, by seconding to other countries and even the transition permanent job abroad (Gilbert, 2020).

Therefore, employers have at hand various tools to make them more attractive to future employees or even to existing employees who want a job stability, the choice of one or another of the work flexibility formulas being the exclusive attribute of the employer, which you have to accommodate these formulas to your own business needs.

Flexicurity is an approach that seeks to combine labor market flexibility for the benefit of employers and job security for the benefit of employees, flexibility combined with employment security and reduced labor market segmentation (Sims and Bias, 2019).

Employment flexibility refers to the speed with which the labor market can adapt to changes in the economy. Enterprises are trying to adapt to the increasingly harsh conditions on the market, and labor market flexibility strategies also help workers, giving them the opportunity to adapt. The flexibility of the labor market brings advantages to both employers and employees. Among the tools related to flexibility are: *on-the-job training, fixed-term contracts, part-time flexibility contracts, working hours* (Slater, 2019). Over time, major changes have taken place in the way work is perceived, as well as in the relationship between organizations and employees; There were times when employees expected to stay at their jobs for a long time and enjoyed an acceptable level of job security, but competition, technological change, led to a rethinking of the relationship between employees and organizations, as well as us strategies focused on the ability to react effectively to market conditions, conditions that are constantly changing. It is currently necessary for the workforce to be able to produce immediate results, and employees can be evaluated according to performance criteria, these aspects having an impact on maintaining the job for a long time. There are currently training and development programs to improve employees' skills, thus enabling them to become more able to move from permanent employment to a flexible job (Mathis and Jackson, 2015).

The alternative work modalities most often used in knowledge and innovation-based organizations are *telework, part-time, jobshare, flexitime, project work and intermittent work* (Gilbert, 2020). All this meets the collective and particular needs of human resources and human capital, talent management in any open-minded corporation.

3. Research methodology

The purpose of the article is to determine the way in which managers, from several organizations in Romania, perceive and apply the main forms of flexible work. Using in this sense the method of SWOT analysis, through which we highlighted qualitative aspects such as strengths, weaknesses, opportunities and threats of each concept of flexible work.

The alternative ways of working most often used in organizations based on knowledge and innovation are *telework, jobshare, flexible and project work*.

1)Teleworking is a spatial tool for organizing work and is the most well-known possibility of working remotely, even if not very widespread. This represents the work activity carried out remotely at the employer's premises, due to the use of information and telematics technologies, in a different and distant place from the one where the person directly benefiting from the work is located.

2)Job-share work consists in the distribution of work tasks and is a form of flexiwork through which two or more part-time employees share their work and the benefits of a normal job, full time. The salary and the holiday allowance are shared.

3)The flexible work schedule includes a variable work schedule. It is the most widespread, easy to manage and accessible flexible form of work. The flexible work schedule offers alternatives to arrival times, departure, lunch breaks, generally there is a time in the middle of the day, when all employees are present. Also, a variant of this working method is the flexiplace, which allows the employee to carry out part of the activities outside the office, according to pre-established rules.

4)Project work is an employment contract through which the worker participates in the realization of one or more specific projects, as established by the employer, without a relationship of subordination independently, regardless of the time required and depending on the result. The collaborator carries out his activities in his own way, but coordinated by the company organizing the project.

Based on the purpose of the scientific research, the following objectives have been drafted:

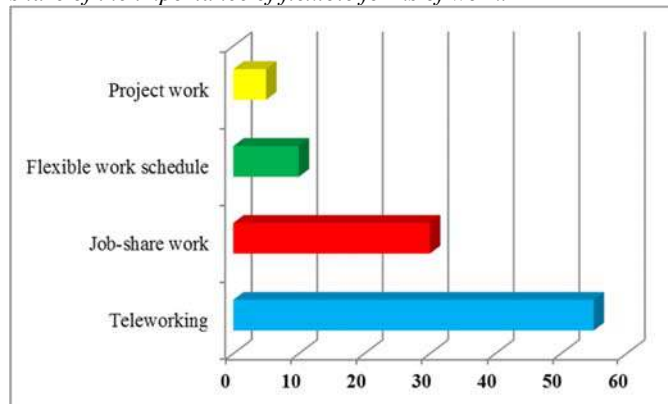
1. Identifying the main forms of flexible work;
2. Analysis of flexible forms of work;
3. Identify the strengths, weaknesses, opportunities and threats of each concept of flexible work.

Data collection was carried out between November 2020 and February 2021, using the questionnaire.

4. Findings

Below are presented the results obtained after the development of the exploratory qualitative stage, respectively the analysis of the data collected with the help of the questionnaire. Figure 1 shows the informational basis of the study, respectively the share of importance that managers give to each form of flexible work.

Figure no. 1. The share of the importance of flexible forms of work.



Source: the author's own concept

The results obtained indicate that the manager takes into account the first *Teleworking*, and, in the last instance, *Project work*.

Using the SWOT analysis method, we highlighted qualitative aspects such as strengths, weaknesses, opportunities and threats of the teleworking concept (Table 1).

Table no. 1. SWOT analysis of the teleworking concept

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ flexibility in the organization, innovation; ✓ increased confidence in job satisfaction; ✓ increase productivity, reduce costs. 	<ul style="list-style-type: none"> ✓ lack of application methodology; ✓ limited control of employees; ✓ communication barriers between members.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ✓ creating a new organizational culture; ✓ competitive advantages by reducing costs; ✓ market expansion, application of environmental protection policy. 	<ul style="list-style-type: none"> ✓ occupational risks; ✓ absence of normative regulation; ✓ difficulties in adapting workers; ✓ risks in information security.

Source: the author's own concept

Teleworking can be defined according to two variables: temporal and spatial. By analyzing the time variable, teleworking can be full-time or part-time, with a fixed schedule or with a flexible schedule. It is a form of home-working, and may not involve the obligation to weigh in favor of the possibility of free management of one's own work schedule.

From the SWOT analysis we can observe the main characteristics of the job-share concept (Table 2).

Table no.2. SWOT analysis of the job-share concept

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ greater flexibility of the work schedule than part-time; ✓ the possibility of allocating personal life time; ✓ efficient coverage of the company's work needs; ✓ attracting capable individuals who would not decide to work full-time. 	<ul style="list-style-type: none"> ✓ the salary scale refers to the number of hours worked per week and less to efforts; ✓ difficulties of integration in the culture of the organization; ✓ the organization and functioning regulation of the company does not correspond to the new organizational structure;
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ✓ investing in human capital and increasing the degree of labor flexibility; ✓ engaging employees in individual and group projects, at organizational and external level; ✓ facilitating communication through multimedia means (computers, laptops, landline / mobile phones, faxes). 	<ul style="list-style-type: none"> ✓ the company profile does not meet the variable requirements of the market; ✓ the quality of the work is overlooked in favor of quantity; ✓ unqualified staff that causes the decrease of the economic-financial indicators of the company (cash flow, turnover, profit, market positioning).

Source: the author's own concept

Not every job done by job sharing is considered job-share. If one of the parties works less than 17.5 hours per week, it can no longer be considered part-time, but becomes a temporary job.

Following the SWOT analysis, the main qualitative aspects of flexible work are highlighted in Table 3.

Table no. 3. SWOT analysis of flexible work

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ harmonization of family life with work; ✓ uninterrupted time for creativity and analysis; ✓ reduction of travel costs and parking spaces; ✓ reduction of stress, delays and absenteeism for personal reasons; 	<ul style="list-style-type: none"> ✓ fatigue felt on days with more hours of work ✓ inadequate strategy in case of interdependent positions
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ✓ increasing competitiveness by reducing fixed costs; ✓ attracting motivated and qualified employees; ✓ facilitating the recruitment of the best staff; 	<ul style="list-style-type: none"> ✓ transferable human capital ✓ economic crisis that brings unemployment, layoffs, austerity measures.

Source: the author's own concept

This work practice should not be confused with working from home in various reports and presentations, with the completion of professional training or with teleworking, which takes place mainly outside the premises.

The strengths, weaknesses, opportunities and threats of the project work concept are identified in Table 4.

Table no. 4. SWOT analysis of project work

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ✓ it is not necessary to hire staff for the execution of some works, this requiring additional costs; ✓ the client can terminate the contract if the work performed by the collaborator does not fall within the terms provided in the contract; ✓ the collaborator has the right to sickness allowance or maternity leave; 	<ul style="list-style-type: none"> ✓ management is not flexible and participatory towards employees with little seniority; ✓ the proposals of the employees are not taken into account, and the vacancies are covered in a large proportion from external sources; ✓ age limits and restrictions on experience are introduced in press releases;
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ✓ establishing a favorable work climate and attracting talents; ✓ desire to promote, increase skills and a high degree of adaptation to crisis situations; ✓ increasing the quality of work performed and producing specialists; 	<ul style="list-style-type: none"> ✓ people with inappropriate behavior can be hired; ✓ involves a large volume of work, being necessary to constantly update the grids;

Source: the author's own concept

The role of the employee in the work on the project is of collaborator, and that of the employer is of client. The project is easily identifiable and completed by a result, while the program is an activity completed by obtaining a result. In the case of this flexible form of work, the work performed must be completed within a specified period of time.

5. Conclusions

A national economy is all the more advanced the better its labor resources are used. Somewhat paradoxically, in Romania, this very resource was neglected. The immediate consequences were the migration of a relatively important part of the competent workforce or young graduates with remarkable potential and a widening of the gap in labor productivity, compared to the level achieved in Western European countries, but also to other countries in transition.

The existing alternatives to the traditional work of 8 hours a day meet the needs of employees, offering them the possibility of a more efficient time management dedicated to personal life, a greater satisfaction of the work performed and, implicitly, better productivity. These alternatives are divided into telework, part-time, jobshare, flexitime, project work and intermittent work. Each of them includes advantages and disadvantages alike. The individual and the collective labor contract in the case of these forms of activity are differentiated and address issues regarding the salary scale, the included bonuses, bonuses, the right to rest, medical, maternity / paternity leave. A major shortcoming of these forms of labor flexibility in Romania is that of deficient legislation, in the sense that there are no well-defined rules on occupational safety and medicine and, therefore, these concepts of work are rarely available to most SMEs, as well as large state and private companies. Exceptions are usually multinational organizations, which already have well-established employee satisfaction policies.

It is preferable for Romanian organizations to enter into strategic partnerships with major players in the world market, so that they can implement their own human resources policies, inspired by their organizational culture and adapting the strategies taken over to the trends of the Romanian labor market. Learning organizations are open to such opportunities for work and mobility of human resources. They add value economically and socially, and also achieve success in the services provided, as well as in interpersonal relationships.

If in the short and medium term the productive direct investments represent the engine of the economic recovery and of the increase of the labor productivity, the approach from the long term perspective supposes the consideration of other fields as well. In Romania, in order to start the relaunch of economic growth and to ensure its long-term viability, it is essential to break the vicious circle, which, in a schematic representation, could consist of the following phases: low level of labor productivity - low income in the productive sector (of employees and capitalists) -

low volume of savings, accumulation and amounts collected through the budget - small investments and insufficient expenditures for health, education and training and improvement of the workforce - failure to provide funds to replace used fixed funds (physical or moral), capacity building and the introduction of technical progress, on the one hand, and the depreciation of indicators on health status, level of education and professional competence, on the other hand - maintaining the average level of labor productivity at low values.

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Entrepreneurship in the Educational Field. Modernization of Romanian Education by Professionalizing the Function of Director

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Abstract

The paper investigates entrepreneurship in the educational management system, its ability to correlate educational objectives and the goals of the education system with community objectives, in order to overcome the potential of the organization as a process, by capitalizing on community opportunities and meeting society's educational needs.

The paper also analyzes the management system and its implications in the organization and management of a pre-university education institution, the ability to cope with changes in the economic, social and technological environment. For the elaboration of the article, we investigated, through exploration, the educational management, in correlation with the modern management systems and methods in order to increase the effectiveness of the management activity of a pre-university educational institution.

Key words: management, director, managerial strategies, entrepreneurship

J.E.L. classification: M12, M21

1. Introduction

The usefulness of a community-based educational institution is an important criterion for assessing its performance in the society in which it operates. Community development is directly influenced by the professional training of young people, which form the labor market supply on the labor market and the size of entrepreneurship in the area. By capitalizing on the most important resource of an organization, HUMAN RESOURCE, educational institutions bring added value to a region. The Regional Action Plan for Education (PRAI) and the Local Action Plan for Education (PLAI) present the strategic lines that ensure the correlation of the offer of vocational and technical education with the needs of socio-economic development at regional and local level, respectively. Deriving from the two strategies, the School Action Plan (SAP) must ensure the effectiveness of the institution, as a provider of training and its integration into the community. Document prepared by the director, as manager, the PAS reflects the management style, the type of management and the organizational culture of the institution. The director, who through creativity and innovation promotes the success of an educational institution, carries out a managerial activity closer to the entrepreneurial activity, and the entrepreneurial character is reflected in the organization's mission, vision and managerial strategy (PAS of the organization). In the activities of planning, organizing, coordinating and training the staff, the director uses concepts, notions specific to the field of management necessary in the elaboration and interpretation of documents, in the activities carried out to achieve the established objectives and implement strategies managerial. Professionalization of the position of director, being a necessity for the future and effectiveness of Romanian education.

The manager has the function of managing the business, a key function when companies do not operate efficiently (Leibenstein, H., 1979). The manager oversees the combination of resources in the production process, coordinates and trains people to increase business efficiency by reducing costs and develops the company's prestige. Studies show that the entrepreneur can be defined as the person who, alone or in association, assumes the risk of starting and running a business or the

person who, through innovation and creativity, promotes the success of the company he belongs to. There are scientists who study, define and explain entrepreneurship as a process or as a result "create new economic activities or new organizations" (Reynolds, 2005), and scientists who direct their study to the individual, who has the ability to identify and exploit opportunities (Casson,1982); by taking risks (Schumpeter,1934). Most authors in the field of entrepreneurship, through research, seek to explain the "heart" of entrepreneurship (Stevenson, 1985) the "strength"(Bays, 1988) of entrepreneurship or the "spirit" of entrepreneurship (Abdnor, 1988), each trying to discover the most sensitive features and foundation of the concept qualitatively.

Practice has shown that there are principals, who identify with the mission of the organization, who are "the heart and strength of that school", who develop organizational cultures, recognized over time by society, principals who add value to the educational process and success of the educational institution. As are schools that influence the growth of business in the field at the community level through the professional training of young people. All cities with strong companies in a field have high schools and vocational schools, universities recognized in that field forming those communities, called clusters. Sometimes the school's relations with economic agents in the community are close, based on identifying the needs of companies for the development of young people's professional skills through professional training. Through these relationships, the economic agents ensure the development of professional training courses, involve the training of students, recruit and hire graduates from among them. Is it necessary for the director of the educational institution to have knowledge in the field of management, for the elaboration of SMART objectives and efficient activities, for the superior capitalization of human, material, informational resources, depending on the potential of the organization? The answer is yes because the educational institution is an organization that plans, organizes, conducts activities and leads people. It has achievable goals, limited resources and operates in a more or less friendly external environment. Knowledge of human resources and field of activity will allow the director to ensure the training of all staff, and the values and principles promoted will influence the work climate, organizational culture and results of the institution.

2. Literature review

The managerial system includes four subsystems: organizational, informational, decisional and methodological, which through complexity and importance develop into systems (Nicolescu, 1996). For any institution / company, the organizational system ensures the combination and operation of work processes in order to achieve the established objectives. It operates with two concepts: the formal organization, which is reflected by the Regulation of organization and functioning of the organization, organization chart and job description, respectively the informal organization represented by formal groups, relationships and leaders. The role of the organization is to rethink the combination of work processes, depending on several criteria (technological, personnel, efficiency), in tasks, duties, activities, functions in order to be assigned to jobs, functions and work compartments. It is essential to rigorously establish organizational relationships, hierarchical levels and hierarchical weights, for the construction of an optimal organizational structure. In the entrepreneurial vision, the organizational structures are flexible, so as to change in accordance with the dynamic objectives of the company and the type of management implemented, to capitalize on a higher level of internal human, material, financial and information resources and opportunities from the external environment.

The information system, in the current context, encompasses a growing component, namely the computer system, which ensures the collection, processing and storage of information electronically. The management of the information system ensures the efficient use of the elements of the information system: data, information, information circuit, information flow, procedures and means of information processing, contributing to the substantiation, establishment and realization of managerial decisions, respectively organizational objectives. The information system supports the managerial system in identifying opportunities and avoiding risks generated by the external or internal environment, influencing the efficiency of the organization.

The decision-makingsystem consists of the set of decisions adopted by a company, namely the mechanisms for substantiating, adopting and applying them. The decision-making process is

complex comprising a succession of stages. The decision-making system differs from manager to entrepreneur through creativity and innovation. In exercising the processes and managerial relations within the company, the manager uses methods, techniques and procedures, all of which form the **Managerial methodological system**. Its role is to provide logistical support for the exercise of management relationships and processes, the division of management activity, and the development of the potential of management and execution staff.

Among the management systems and methods presented by the specialized studies are:

- Management by objectives;
- Project management;
- Product management;
- Management through budgets;
- Management by exceptions;
- Participatory management.

Each management system has advantages and disadvantages, the choice of a system to implement it within an organization depends on several factors, including: the professional training of the manager, his skills and character, the company's vision and strategy adopted. Depending on the type of management used in decision-making and their implementation, different methods and techniques specific to management are used: diagnostic method, meeting method, delegation, dashboard and methods for stimulating human resources creativity. The specialized literature presents in detail the methods listed above, and in practice there are successful companies that implement them. There are questions related to the implementation of management methods and the effectiveness of an educational institution. What is the best management method in running a school? Can the managerial activity of the director have an entrepreneurial component?

3. Research methodology

The descriptive and applied empirical research aimed at the management of pre-university education institutions in carrying out educational activities, respectively the management implications on the evolution of school relations with the community, students' results and the development of an organizational culture. At the same time, the study aims to identify the need to professionalize the position of director for the modernization of Romanian education. Methods used in the research were: comparative method, analysis, synthesis, qualitative, descriptive and applied analysis and case study.

4. Findings

Management by objectives a management model that can be implemented in school organizations. Drucker recognizes the individual roles of the entrepreneur, manager and executor in his work, and contemporary science requires these types to assume responsibilities, tasks as specialists. In his book "The Practice of Management" (Drucker, 1954) he presents management by objectives, as a type of management that ensures the increase of the organization's performance. At the base of this type of management there is a set of objectives and a process of achieving them in five stages: reviewing the organization's objectives, establishing the set of objectives, monitoring progress, evaluating performance, rewarding employees (Drucker, 1954).

Figure no.1. The cycle of the Management process through objectives



Source: after Drucker (1954), *The practice of management*, New York, NY:Harper Collins

The goals set by the organization must be SMART, or specific, measurable, achievable, achievable, and timed. Objectives are qualitative and / or quantitative indicators established by the organization depending on its capacity, potential. They must be linked to the activities that ensure their realization and the necessary resources. Their review is performed periodically after a rigorous analysis of the results obtained by the organization. The implementation of this type of management is done in a work climate in which the manager encourages collaboration, teamwork urging employees to work together, to share ideas, tips and recommendations for increasing efficiency through creativity and innovation. Practice has shown that a person with a strong authoritarian style will achieve modest results by applying this type of management. From here we can deduce the idea that managers, before professional training, skills, abilities, should be leaders, for a company to be successful (Drucker, 1954). Organizations exist and develop through the quality of human resources, and people must be driven, organized, supported, advised, motivated so that their involvement in the work is as high as possible.

5. Aspects of the managerial activity at a pre-university education institution “Virgil Madgearu Economic College, Ploiești Municipality

The research was conducted over a period of four years, 2017-2020, through a diagnostic analysis of strategic management and operational management and focused on issues related to the School Action Plan, organizational culture, community relations, teaching, student outcomes, respectively the Internal Management Control System (SCIM).

The dynamics of the economy in the coming years, the particularities of the labor market reflected in priorities at local, regional and national level, in the context of the COVID-19 Pandemic, correlated with the EU objectives of the Europe 2020 Strategy, require education and training providers to adapt to these requirements. Based on the strategic documents, developed at different levels: European, national, regional and local, the educational institution has identified several priorities in the development strategy (Action Plan of “Virgil Madgearu” Ploiești Economic College, 2017-2021):

1. Increasing employment capacity and combating social exclusion. The requirements, assumed through the strategic documents, aimed at adapting the educational planning to the needs of sustainable, integrated, economic and social development, on each level of interest, respecting at the same time the needs of personal and professional development of the students;

2. Design and development of methodologies for examination, assessment and certification of professional skills acquired by students by strengthening mechanisms to ensure the quality of vocational training through vocational and technical education, in order to increase the chances of socio-professional integration and development of learning skills permanent. The unit aimed at

organizing and conducting national exams for certification of professional skills, according to the legislation, increasing the performance of students in these exams and training teachers in the field.

3. Strengthening and developing the organizational culture of educational units from the perspective of social partnership and entrepreneurship and ensuring the transparency of initial vocational training. Promoting a set of values, principles and a moral work climate, consistent to ensure a quality education.

Studies show that the supply of professionally trained labor at national level corresponds to a small extent to the requirements of economic agents for its integration into the labor market. All the more so in the current context, companies are demanding new skills for graduates to get a job. Given that new professions are appearing on the labor market, the demand for labor is undergoing new quantitative and structural changes. The unemployment rate among young people in Romania is higher than the European Union average, and the increase of over 40% of the share of adults with higher education among the population established by the EU, requires educational institutions to rethink the education and training system of young people, so as to increase the number of high school graduates admitted to educational institutions, respectively employees on the labor market. The indicator established at European level, to which Romania has also joined, can be achieved over time through an efficient management at the level of each school, which will capitalize on the human, material and financial potential of the education system for direct beneficiaries of education and training for the community.

An educational unit that contributes through the young people trained to the economic and social development of the community generally capitalizes on the resources of that community and especially the human resources of the school unit through its efficiency and effectiveness. The activity carried out at the “Virgil Madgearu” Economic College, Ploiești Municipality, at managerial and school level, reflected the concern and involvement of the management team and school staff in the development and development of quality education at European standards.

The managerial policy promoted, at the college level, a redistribution of responsibilities and decision-making authority to the heads of departments / commissions. Implementation is achieved by customizing job descriptions, with precise, clear tasks. At the same time, a balance between authority and responsibility has been maintained within the organization. Intra-institutional and inter-institutional communication has been streamlined, through well-defined procedures, to ensure quality in education and by achieving a real educational partnership with business, academia and society (Romanian Agency for Quality Assurance in Pre-University Education Report, 2019). Gradually the school became a center of information, continuous training and development for the community. The implemented management policy ensured the efficiency of the middle level management, the motivation of the staff and the capitalization of the potential of the employees with an impact in increasing the school results and the image of the institution. The objectives included in the School Action Plan were achieved annually (passability at BAC current promotion over 95% annually), and partially on different components they were exceeded, e.g. the number, diversity and complexity of the projects carried out, the results of the school competitions and olympiads, the portfolio of educational partners in the activities carried out (Prahova Chamber of Commerce and Industry, Body of Expert Accountants and Certified Accountants from Romania, Prahova Branch , universities and economic agents). Although the institution is a high school with a technological profile, it ranked 25th nationally at the European School 2019 national competition and first place at Prahova County, a deserved place (second place) is also obtained at the European Leader 2019 competition organized by the Representation European Commission in Romania (Report on the State and Quality of Education Virgil Madgearu Economic College, Ploiești Municipality, School Year 2017-2018, 2018-2019, 2019-2020).

Peter Druker (1909-2005) called the father of management has an innovative theory that is used by managers today. In his work, Druker encourages innovation, flexibility and collaboration at the organizational level, he attaches great importance to decentralization, arguing that authority is good to be assigned to employees. For a company to be competitive, the basic principles must be observed: decentralization, promotion and training of employees (Drucker, 1946), remarkable principles, rarely concentrated in an integrated system (Marciariello, 2009). The effectiveness of the performers, according to the analytical model promoted by Druker, results from skills conferred by the essence of motivation, practices, tasks necessary to perform the functions and performance

spirit. Executors in the entrepreneurial system have creativity in performing tasks, compared to executors in the management system who have repetitive tasks. The activity carried out by the members of the commissions / departments in the institution subject to research was characterized by creativity and performance. In the educational process, the innovative, student-centered method, the "exercise firm" (Vlăduț et al, 2011) is used to teach specialized modules for all high school classes. Along with practical training through vocational training, the method develops creativity, innovation, entrepreneurship and forms professional skills in each field of activity: economics, trade, tourism and food and key skills needed to integrate young people into the labor market. The Erasmus +, EEA and POCU projects carried out add value and capitalize on the potential of the institution for the benefit of students and the community¹. The World Economic Forum's Future of Jobs Report, 2020 supports the emergence of new skills for employees required by the labor market, the design and use of new technologies such as: critical thinking, creativity, analytical thinking and digital skills². For the development of STEM (natural sciences, mathematics, technology, engineering) skills within the school was established in 2017, the robotics circle - Robomanager entrepreneur, coordinated by physics teachers and economists. Mathematical thinking, economic analysis, critical thinking, solving complex problems are constantly improved by attractive teaching-learning methods in mathematics, natural sciences, technology, physics and chemistry, etc. The performance of students and teachers is supported by their involvement and that of the school in national or international competitions and contests, organized both by the school and by educational institutions or national and international organizations Ex. International Fair of Exercise Companies Ploiești, Romanian Business Challenge, International Symposium Performance through Partnerships Ploiești, Entrepreneurial School (2018), International Fair of Inventions and Practical Ideas Ploiești (2019), College of Entrepreneurs (2017), Gala Edumanager (2018).

The managerial capacity of strategic planning and the effectiveness of the implementation have known an evolution in the four years, by creating an organizational culture based on values and principles, by promoting the participatory, proactive and anticipatory attitude within the school organization. The pandemic period created new challenges for the institution's management in achieving the objectives set by the strategic plans and functionality of the institution, objectives achieved through creativity and innovation. An example is the online organization of the 11th edition of entrepreneurship competitions: Skype Romanian Business Challenge offered the possibility for 42 pupils and 9 students to practically experience the activity at home, in the telework system, in a mixed multinational team for elaboration of managerial strategies for a real company during the pandemic, and 106 operating companies, from the country and from abroad, competed for the best strategies and means of promotion for the development of the business through online sales, within the International Fair of Exercise Firms.

6. Conclusions

I strongly believe that innovation, creativity, capitalizing on opportunities and taking risks, basic characteristics of entrepreneurship, are also found in the modern management system, in its subsystems: organizational, informational, decision-making and methodological. By capitalizing on opportunities from the external environment in carrying out educational activities and taking risks, they can also talk about entrepreneurship in the educational system. The objectives, set by principals with entrepreneurial skills through the institutional development plan or the school action plan (PAS), are more daring, the mission and vision place the educational institution in the community, the organization effectively capitalizes on internal and external resources of the community. The activities and projects carried out by directors with entrepreneurial skills are based on creativity and managerial innovation and have a strong educational impact on the beneficiaries. The directors of the institutions are leaders for the organization. Employees are involved in the activity to obtain performance not through the constraint imposed by the job description or director, but through the climate of educational work conducive to their professional development. The

organization benefits from the synergy effect, and the results are greater. The director's management style makes communication more efficient, supports educational partnerships, decision-making and the implementation of managerial strategies. The organization becomes more flexible, efficient and innovative. The objectives of the organization through achievement and aggregation, lead to the achievement of educational objectives and purposes of the education system.

In order to improve the managerial activity, the organizations can consider several aspects:

Streamlining the strategic planning activity of the organization by:

- carrying out an objective needs analysis, depending on the regional, national and European context, in order to identify the strategic objectives;
- mission formulation;
- elaboration of at least one variant of strategy, formalized in a plan;
- performing diagnostic analyzes to establish the potential of the organization and the characteristics of the external environment;
- elaboration of operational plans rigorously;
- elaboration of a methodological system of monitoring and control;
- identification of the competitive advantage.

To optimize the decision-making process and improve stakeholder participation, solutions can be identified such as:

- active involvement in the decision-making act of parents and representatives of the local community;
- encouraging and promoting initiatives from teachers, students, parents, other educational partners;
- encouraging teamwork and supporting work teams during tasks;
- choosing the members of the work teams according to their skills and experience;
- counseling parents and students.

The managerial activity of the director should be focused on the efficient management of educational resources (human and material) and the development of the capacity to attract and maintain well trained and motivated human resources, on the development of exchanges of “good practices” between teachers through national projects and international, the selection of teachers who can be a model for beginners, apprenticeships at work, respectively the implementation and development of mentoring; promoting innovation in the teaching-learning-assessment process by capitalizing on new teaching techniques focused on the requirements and individual learning styles of students.

The evolution of the society requires the use by the directors from the pre-university education of the studies in the field of management to their full potential in order to increase the organizational efficiency of the institution. The notions of the organizational subsystem and the formalization of specific documents are used to a greater extent in relation to the other subsystems of management. Management methods and systems know an initial phase of implementation in pre-university education institutions, eg Project Management, Participatory Management. Management training is optional for teachers, who hold management positions, through courses or individual study depending on availability and interest. By professionalizing the position of director, the premises for the efficiency of the organization and the professional success are ensured. At the same time, a good knowledge of the educational activity by sector, profile and specialization of the management framework is necessary to identify it with the type of organization, to develop realistic educational objectives and to carry out effective activities to achieve them. The entrepreneurial leadership brings added value to the educational institution by capitalizing on the potential of the community and internal resources, through the leadership style and the implemented management.

The paper allows new research directions in the field of entrepreneurship in the education system as a form of streamlining the educational process and the usefulness of organizations in the community through the activity carried out.

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Covid-19 Pandemic – A New Aspect of Social Sustainability

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Abstract

Since the financial crisis recovery scholarly approaches on sustainability have intensified. Organizations feel pressure from various sources to adopt practices of social sustainability. Stakeholders are interested in not only the performance of companies but also in processes and structures that are implemented to back up the performance. Covid-19 became a great global concern impacting environmental and social sustainability together with life quality. In this context, the aim of present research is to understand the impact of the pandemic on social responsibility. The methods used are the review of published literature and policy work and qualitative analysis of annual reports and sustainability reports of the biggest company in energy from Eastern Europe - OMV Petrom, two listed Romanian banks – Banca Transilvania and BRD GSG and one international listed Bank Erste Group Bank. The conclusions of the study can serve professionals and stakeholders who lead social sustainability research in this field and open the path for more extensive research in the future.

Key words: Corporate Governance, COVID-19, Social Sustainability, CSR (Corporate Social Responsibility), ESG (Environmental, Social and Corporate Governance)

J.E.L. classification: G34, M14, Q01, Q56

1. Introduction

Sustainability is a part of the future development of the financial system. It is to be expected that organizations participate in combating climate change, mitigating the negative impact on the environment, and assuming their own sustainability. Companies that fail to adapt will be eliminated from the market either because of climate risk or by competition. Most institutional investors are constantly preoccupied with making sustainability decisions involving companies, which leads to sustainable results for those companies that choose to implement environmental, social, and governance strategies (E&Y, 2020).

With the pandemic, the trust in institutions has declined while political division, nationalism, imminent awareness of ecological disasters, losing trust in corporations, and capitalism has intensified. The Covid-19 pandemic determined people to rethink all aspects of their lives as well as the way companies work and manage employees during the crisis.

Companies feel pressure from a variety of sources to adopt several social sustainability practices. Investors, media, activists, the general public, and regulators constantly put pressure on companies.

Companies Act (441/2006) stipulates that directors are the ones entrusted with the promotion of the welfare of the company and are expected to serve the interests of the company in good faith in the company's interests in the best way. However, it's not enough for a company only to fulfil the legal duties and to pursue only profit-making. It is important that private companies align to the global sustainability objective. To be sustainable, organizations must be financially ensured, minimize and even eliminate their negative impact on the environment and action according to

society's expectations (United Nations, 2021). The European Commission, the United Nations and the Organization for Economic Cooperation and Development defined general principles for companies' activities. The European Commission even announced a complex package of measures promoting sustainability towards creating climatic neutrality in Europe by 2050, as a Directive that will impose reporting requirements that will be more comprehensive compared to the Non-Financial Reporting Directive (NFRD), so that in the long run, both financial and non-financial reporting to be done analogously. The reporting standards will impose providing quantitative and qualitative information regarding both previous and future activity.

2. Theoretical background

Corporate social responsibility (CSR) is a management concept through which companies integrate social and environmental preoccupations in their commercial activities and interaction with the stakeholders. CSR refers to the way a company achieves the balance between the economic, social and environmental requirements following the expectations of shareholders and stakeholders. Social sustainability is about identifying and managing the impact that an organization can have on people, both from a positive and negative perspective. The involvement of the company in the relationship with stakeholders is fundamental. Companies are responsible for whatever happens with the employees, value chain workers, customers, local communities, directly or indirectly. Impact management in a proactive way is crucial.

Social sustainability is a new approach to sustainable development. Actions towards developing social sustainability can open ways to new markets, can improve the relationship with business partners, and contribute to attracting new partners and increasing their employees' loyalty degree. They can also be a source of innovation for new services and products and can improve the relationship between companies and local communities and lead to better management of risks and conflicts. Leaders are responsible for managing their companies sustainably.

Social sustainability is firstly about human rights, especially of those belonging to certain vulnerable categories but it is also about the responsibility towards employees, investments in communities, women and their empowerment, promoting gender equality and the rights of children, of indigenous people, of disadvantaged people, the people with disabilities. Social sustainability is also about the impact of companies towards poverty, the shareholders rights, particularly the minority shareholders, the anticorruption policy, education, health, marketing, creating and promoting responsible products and services. According to Woodcraft (2015) social sustainability refers to places that support wellbeing, relating to social capital and quality of life.

Sudusinghe and Seuring (2020) proved in their research that there is a positive relationship between social sustainability adopted practices and economic dimensions in supply chain management.

Hutchins and Sutherland (2008) argue that companies that are aware of social issues start their sustainability efforts with their employees and develop their practices in the communities they activate, targeting their CSR activities. Employee performance is directly related to economic performance of a business. Employees' satisfaction is directly related with social wellbeing, that is why companies need to put in efforts to assure a safe and pleasant working environment.

The social score is composed of 4 elements, workforce, human rights, community and product responsibility. First one, *workforce* refers to how effective a company is in terms of job satisfaction, a work environment that is safe and healthy, promoting diversity and equal rights and opportunities for the employees. (Eikon Reuters ESG, 2021)

Human rights represent the effectiveness of a company in meeting the human rights requirements and conventions.

Community score is about the company's engagement in being a good corporate citizen, protecting the public health and obeying the business ethics.

Product responsibility measures a company's ability to deliver good quality products and services, respecting customers health and safety, integrity and privacy.

For the analysis, there were first compared the ESG combined score and the three pillars' scores, environmental, social and governance. Further on, there were chosen for the social score elements only a few indicators, for which the authors could find reported results. For the Workforce dimension,

18 dimensions were selected, for human rights 9, Community 15 and 3 elements for Product Responsibility.

3. Research methodology

This research aimed an examination of the impact of the Covid-19 pandemic on companies' social sustainability processes and synthesize the scientific literature on strategies regarding social sustainability, using scientific electronic databases like ScienceDirect, Web of Science, Emerald, Scopus,

We proceed to analyze companies' annual reports for 2020 to identify the social sustainability measures and policies they adopted last year and compare their social score. From Romanian companies, we found only four that have reported scores on social pillar, according to ESG criteria. Data was gathered from Eikon Reuters platform. The analyzed companies are the energy company, OMV Petrom, and three banks: Banca Transilvania, BRD Societe Generale and ERSTE Bank.

4. Findings

At first glance, it can be noticed Erste Group Bank has higher scores overall.

Table no. 1 Environmental, Social, Governance Scores for the four analyzed companies

REFINITIV ESG Statement View 2020	OMV Petrom SA	ERSTE Group Bank AG	Banca Transilvania SA	BRD Groupe Societe Generale SA
ESG Combined Score	B+	A-	A-	
	68	80	79	56
Environmental Pillar Score	B+	A-	A	
Social Pillar Score	A-	A-	A-	
	82.59	80.94	80.02	61.92
Governance Pillar Score	C-	A-	A-	
ESG Controversies Score	A+	A+	A+	100

Source: Authors' selection from ESG Eikon Reuters Database, 2021

For the workforce element of the Social Pillar score, the selection of indicators is following below.

Table no. 2 Workforce scores for the four analyzed companies, in 2020.

REFINITIV ESG Statement View, 2020	OMV Petrom SA	ERSTE Group Bank AG	Banca Transilvania SA	BRD Groupe Societe Generale SA
	Weight 12.2%	Weight 19.2%	Weight 19.2%	
Health & Safety Policy	TRUE	TRUE	TRUE	TRUE
Policy Employee Health & Safety	TRUE	TRUE	TRUE	TRUE
Policy Supply Chain Health & Safety	TRUE	TRUE	FALSE	TRUE
Training and Development Policy	TRUE	TRUE	TRUE	TRUE
Policy Skills Training	TRUE	TRUE	TRUE	TRUE
Policy Career Development	TRUE	TRUE	TRUE	TRUE
Policy Diversity and Opportunity	TRUE	TRUE	TRUE	TRUE

Targets Diversity and Opportunity	TRUE	TRUE	FALSE	TRUE
Employees Health & Safety Team	TRUE	FALSE	TRUE	TRUE
Health & Safety Training	TRUE	TRUE	TRUE	TRUE
Employees Health & Safety OHSAS 18001	TRUE	TRUE	TRUE	FALSE
Net Employment Creation	-12.85%	-3.37%	3.29%	-6.74
Number of Employees from CSR reporting	10,761	48,516	9,623	6938.00
Women Employees	24.03%	62.00%	74.76%	76.00
Women Managers	25.56%	43.50%	61.64%	69.00
Flexible Working Hours	TRUE	TRUE	TRUE	FALSE
Day Care Services	TRUE	TRUE	FALSE	FALSE
Management Training	TRUE	TRUE	TRUE	FALSE

Source: Authors' selection from ESG Eikon Reuters Database, 2021

From all the analyzed companies, it can be noticed that Banca Transilvania (BT) doesn't have a Policy for Supply Chain Health & Safety and a policy targeting Diversity and Opportunity, while Erste Bank omits to install an Employees Health & Safety Team. BRD GSG does not implement the occupational health and safety management system according to OHSAS 18001.

Only BT has a positive net employment creation for the last fiscal year and for the percent of women employees, the banking companies have a majority women staff and managers, due to its specific. OMV Petrom, being a technical company has a majority of men employees and for 2020 had over 25% women managers and targets for 2030 a 30% for managerial positions for women.

Concerning the flexible working hours, excepting BRD GSG, the other companies adapted their schedule to pandemic, developing part of their activities remotely, adopting online meetings and installing cyber security policies in accordance (OMV, ERSTE, BT, BRD 2020 sustainability reports).

Table no. 3 Human Rights scores for the four analyzed companies, in 2020.

REFINITIV ESG Statement View	OMV Petrom SA	ERSTE Group Bank AG	Banca Transilvania SA	BRD Groupe Societe Generale SA
2020				
Human Rights	(Weight 15.7%)	(Weight 9.6%)	(Weight 9.6%)	
	B+	B	B	
Human Rights Policy	TRUE	TRUE	TRUE	TRUE
Policy Freedom of Association	TRUE	TRUE	TRUE	TRUE
Policy Child Labor	TRUE	TRUE	TRUE	TRUE
Policy Forced Labor	TRUE	TRUE	TRUE	TRUE
Policy Human Rights	TRUE	TRUE	TRUE	TRUE
Fundamental Human Rights ILO UN	TRUE	FALSE	FALSE	TRUE
Human Rights Contractor	TRUE	TRUE	TRUE	TRUE
Ethical Trading Initiative ETI	FALSE	FALSE	FALSE	FALSE
Human Rights Breaches Contractor	FALSE	FALSE	FALSE	FALSE

Source: Authors' selection from ESG Eikon Reuters Database, 2021

Regarding the human rights component, all analyzed companies have installed social objectives and policies with respect to human rights, health, education, safety, diversity, product safety and marketing ethics.

Table no. 4 Community scores for the four analyzed companies, in 2020.

REFINITIV ESG Statement View	OMV Petrom SA	ERSTE Group Bank AG	Banca Transilvania SA			BRD Groupe Societe Generale SA
	2020	2020	2020	2019	2018	2020
Community	Weight 7.8% A	Weight 12.0%A	B+	B-	C-	
Policy Fair Competition	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE
Policy Bribery and Corruption	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Policy Business Ethics	TRUE	TRUE	TRUE	FALSE	FALSE	TRUE
Policy Community Involvement	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Improvement Tools Business Ethics	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE
Whistleblower Protection	TRUE	TRUE	FALSE	--	--	TRUE
OECD Guidelines for Multinational Enterprises	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE
Donations / Million in Revenue	1,594.34		7,953.90	7,513.00	7,380.78	3293.27
Donations Total RON	31,435,668		39,795,000	38,139,000	32,932,000	102000.00
Employee Engagement Voluntary Work	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Corporate Responsibility Awards	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
Diseases of the Developing World	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Crisis Management Systems	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE

Source: Authors' selection from ESG Eikon Reuters Database, 2021

As per Covid-19 situation, all companies made investments in local communities and health awareness area taking strong pandemic responses and donated money as it can be seen in the above table.

The highlight of the analysis remains the yearly evolution of Banca Transilvania on most of the elements measuring Community score. They donated more than 2 million euros for 38 hospitals in Romania.

Banca Transilvania spent 15 million lei for protective equipment and anti-Covid-19 fight and took special measures to support its customers by according special conditions for credit cards and loans customers. They also organized campaigns to support local entrepreneurs and granted over 100.000 loans.

OMV Petrom made donations to hospitals, schools, continued its renowned programs for helping children, environment, etc.

Erste Group made donations to Austrian Red Cross, Croatian and Romanian Hospitals, Czech Republic call centers and educational Slovakian centers and instituted special loans and donations programs to health care workers in Hungary.

BRD invested in 2020 in social projects about 10 million Ron. Their report is not describing all the actions completed.

Table no. 5 Product Responsibility scores for the four analyzed companies, in 2020.

REFINITIV ESG Statement View	OMV Petrom SA	ERSTE Group Bank AG			Banca Transilvania SA			BRD GSG SA
Product Responsibility	Weight 6.3%	Weight 8.8%			Weight 8.8%			
	A 2020	B+ 2020	A- 2019	B+ 2018	B+ 2020	A- 2019	B 2018	2020
Policy Customer Health & Safety	True	False	False	False	False	False	False	False
Policy Data Privacy	True	True	True	True	True	True	False	True
Policy Cyber Security	False	True	True	False	True	True	False	True

Source: Authors' selection from ESG Eikon Reuters Database, 2021

OMV Petrom respects the United Nations Sustainable Development Goals and have product responsibility measures in force specially because their object of activity. The banks, as financial services providers obey to specific requirements. For all companies analyzed cyber security policy needs to be top priority and product responsibility policies have to be developed more in the future.

5. Conclusions

Covid-19 pandemic raised awareness of the risk occurred from systemic problems and serious threats like climate change, natural catastrophes, the financial system potential failures. It emphasized particularly the bond between people, planet and profits, highlighting the Social in the ESG and pointed towards reassessing the E of the Environment, Social and Governance (Adams & Abhayawansa, 2020). Measures taken between and after the pandemic crisis need to focus towards inclusive, sustainable and more equal economies that would be better prepared in case of climate change, pandemics and other challenges. Businesses need to assimilate sustainable development in their strategies, management and governance and assume the responsibility for them (Guterres, 2020).

In Romania companies need to develop their sustainability practices and take more seriously their corporate citizenship behavior as it is not enough to obey the laws but for being competitive and economic performant in the contemporary market it is important to take responsibility for own footprint, create work environments that promote wellbeing and involve in community life by making investments that lead to raising the standard of living.

Further studies might analyze companies from different industries on their actions taken towards social sustainability and the relationship between economic and social performance.

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Marketing Mix in Healthcare Services

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Abstract

In a highly competitive environment, considering the characteristics of nowadays society and the large number of businesses in the field of medical services, competitive advantages and marketing tools are essential for differentiation. For a company to act and react in accordance with the needs of its customers, it is important to consider the components of the extended marketing mix. The aim of the paper is to present the particularities of the components of the marketing mix and their applicability in the field of healthcare services. The methodology was based on a quantitative desk-research method. The paper contributes to an enrichment of the literature on marketing characteristics of health services.

Key words: marketing mix, healthcare, services

J.E.L. classification: M31

1. Introduction

In a highly competitive environment, competitive advantages and marketing tools have become essential for differentiation. Also, today's turbulent times requires companies worldwide innovation and strategic planning (Toma & Marinescu, 2013; Toma & Marinescu, 2015; Tohănean & Toma, 2018). There are important differences between the products and services, in terms of their characteristics and marketing mix. Intangibility of the services causes patients to refer to healthcare services according to the quality of service based on the Servicescape model (exterior and interior design of the organization, ambience, waiting time), its employees (their dress code and behavior), the equipment and promotional materials used, and its prices (Booms & Bitner, 1981). The simultaneous production and consumption determine the fact that the quality of the healthcare services cannot be assessed before purchase, but only during the provision (Pentescu *et al*, 2015). The heterogeneity of the healthcare services, because of the physician (its personality, mood) and the patient will determine the patients to seek as much information as possible about the service provider before making a decision (Dumitrescu & Apostu, 2009; Zeithaml *et al*, 2012).

Achieving performance in the service sector involves the design and implementation of a competitive marketing mix (Grădinaru & Toma, 2017b). In its traditional form, the marketing mix comprised the so-called "4Ps"- product, price, promotion and place (Grădinaru *et al*, 2016). Starting from the fact that in practice it has been demonstrated that services have certain peculiarities, the researchers have added 3 more elements to the traditional marketing mix: people, physical evidence and process that leads to the "7Ps" of the extended marketing mix (Booms & Bitner, 1981; Grădinaru & Toma, 2017a; Catană & Toma, 2021).

The aim of the paper is to present the particularities of the components of the marketing mix and their applicability in the field of healthcare services. The remainder of the paper is structured as follows. The next section reviews the literature on marketing mix in healthcare services. The third section displays the research methodology. The fourth section contains the results and discussion and the last section presents the conclusions, along with research perspectives.

2. Literature review

The literature shows that services characteristics contain the elements of differentiation between companies (Catană, 2019). According to Rădulescu and Cetină (2011), there are three socio-cultural factors that influence the consumer behaviour in healthcare services: culture and subculture, social class, and level of education. These factors have a correspondent in the elements of the extended marketing mix.

Hospitals and healthcare clinics are medical services providers that should employ the marketing mix components in order to achieve a successful performance (Sreenivas & Srinivasa, 2013). Other studies reveal that marketing mix is essence to optimize services characteristics and prices, increase the number of satisfied patients and to be receptive to the needs of stakeholders (Sreenivas *et al*, 2013).

The patient's selection of the hospital is the most important aspect considered by the medical providers and the studies revealed that there are differences between patient's perspective upon public and private hospitals, regarding the 7 Ps of the marketing mix. In public hospitals the determining factors are the following: the price, products, physical assets, place, process, people, and promotion. In private hospitals the relevant factors are: products, physical assets, promotion, place, process, people, and price (Abedi & Abedini, 2017).

Considering the variations of factors among different studies, the discussion among the elements of the extended marketing mix in services is of essence. Furthermore, this study aimed to present the 7 Ps in services, in general, and in healthcare services, particularly. The results may provide key information that guide the development of optimal marketing strategies for hospitals.

3. Research methodology

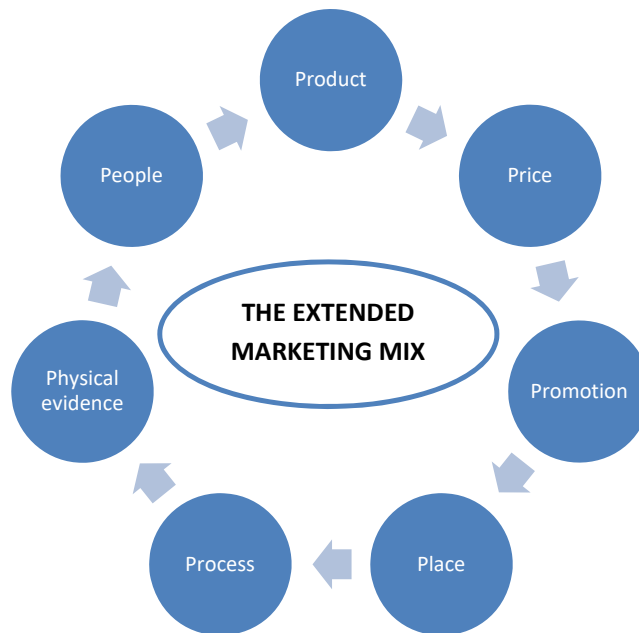
The authors used a descriptive and quantitative research method as it describes the elements of the marketing mix in services. In this respect, many secondary data were collected to review the literature. The needed information was gathered through desk research from various sources, such as books and articles found in electronic databases (e.g., Google Scholar, Springer, Emerald Insight, Science Direct) and international journals (e.g., International Journal of Healthcare Management, International Journal of Commerce and Business Management, Procedia Economics and Finance). The data were carefully selected and grouped into categories. Then, the data were analyzed, correlated, and synthesized. Finally, the authors composed the article.

4. Findings

Modern marketing implies the shift towards customer-centricity and empowerment and, consequently, healthcare services providers should incorporate the marketing tools into their business strategy (Pure, 2019). A modern and useful marketing tool in healthcare services is the marketing mix. The hospitals, clinics and other healthcare services providers should take into consideration the influence of its 7 elements through the relation between the service provider and the patient.

The following figure (*Figure 1*) presents the extended marketing mix in healthcare services, highlighting that the 7 elements are interconnected and producing a synergic effect for services providers and for patients.

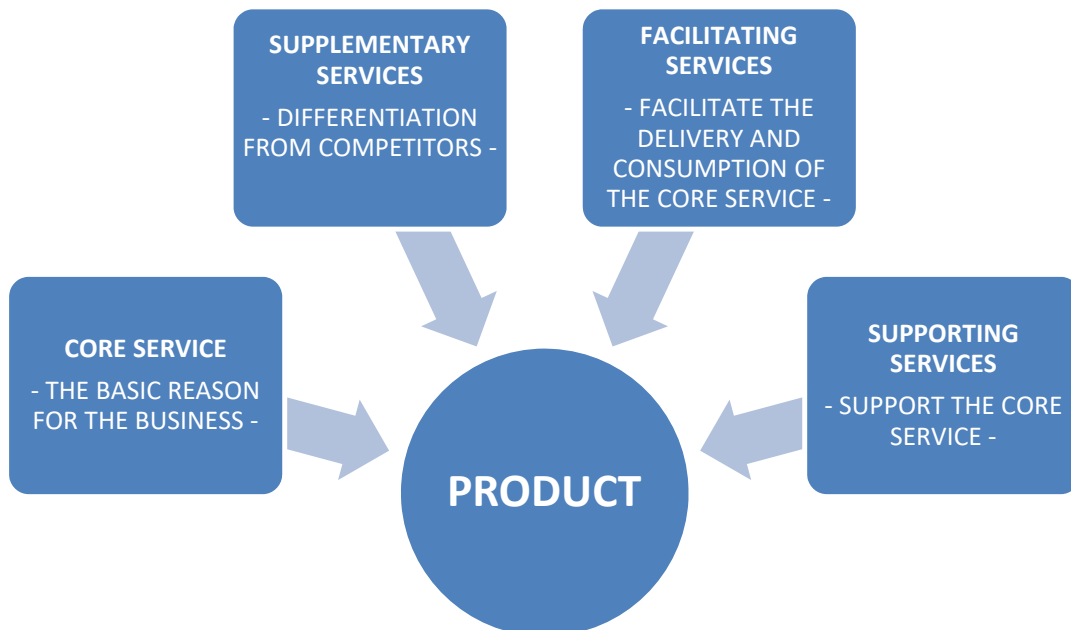
Figure no 1. The extended marketing mix in healthcare services



Source: Authors' own adaptation

Product consists of a bundle of tangible and intangible elements: core service, supplementary goods and services, facilitating services and supporting services (Figure 2) (Hoffman *et al*, 2010).

Figure no. 2. The tangible and intangible elements of the product in healthcare services



Source: Authors' own adaptation

In the following, there are presented some of the elements of the healthcare services:

- Core service – medical procedure that solves patients' problems;
- Supplementary services – e.g., consultation, hospitality;
- Facilitating services – e.g., information provision, payment methods, billing;
- Supporting services – e.g., education on important health topics.

In order to achieve the patient's expectations, the healthcare services providers should take into consideration their needs and to make an analysis of the products and services in order to identify gaps or missed opportunities (Pure, 2019).

Price is one of the most challenging components of the marketing mix (Marinescu *et al*, 2010). When they set prices and rates, the healthcare services providers should take into consideration at least the following two aspects:

1. There are prices of healthcare services that are subject to public regulation;
2. The balance between the profitability of the hospital/clinic and to ensure that services are affordable.

Promotion involves the process of establishing communication between the hospitals/clinics, patients, and other companies. The healthcare services providers should use online tools such as website, social media profiles and engaging storytelling.

Place refers to providing easy and convenient access to product and services. In order to facilitate access to the healthcare services, providers should consider fast appointments, enhance communication with patients and optimize the streamline patient onboarding (Pure, 2019).

Process should be designed for the customer's convenience and judging from his point of view, thus focusing it on his specific needs (Gradinaru *et al*, 2016). Thereby, it is considered that customers are part of the production of the service. In healthcare services, the caregiving and support processes used to provide care have the peculiarity that, beyond the performance of the medical staff, the patient's contribution is essential (Barach & Johnson, 2006).

Physical evidence provides tangible cues of the quality of experience that a company is offering (Allen, 2020). For a healthcare services provider, the website holds valuable physical evidence, such as: testimonials and information about doctors and diseases. Moreover, the physical evidence could be in form of staff uniform, mobile application, and interior design of the hospital.

People involves that the services should be done in an organized and efficient manner, and the delivering of the services should be done with a nice and friendly manner (Murphy Marketing, 2016). Healthcare industry is a knowledge-based industry, so people play key role in hospitals which include doctors, nursing staff, paramedical staff, supporting staff & front office executives (Motwani & Shrimali, 2014).

5. Conclusions

Healthcare services are intangible and, consequently, the extensive marketing mix is a relevant strategic option for medical providers. The marketing mix in healthcare services implies an interconnectivity with synergic effect. The providers of healthcare services should determine the way and the proportion in which it uses the components of the extended marketing mix.

The paper provides a theoretical framework for a better understanding of the concept of marketing mix and its implications in healthcare services.

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The Influence of Digitalisation on SMEs

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Abstract

SMEs are an essential part of the economy, providing jobs and stimulating economic growth. Helped by digitalisation, SMEs will be a central part of the dual transition to a sustainable and digital economy. In order to make the economy green as inclusive and as broad as possible, SMEs will have to digitise their processes, provide more goods and services digitally and reduce their waste associated with the raw material economy.

This paper deals with a sensitive topic – the digitisation of small and medium-sized enterprises (SMEs) with a view to the socio-economic development of the regions and most importantly combating unemployment.

Key words: Management, SMEs, digitalization

J.E.L. classification: M15

1. Introduction

Although SMEs are a true engine of the economy as a whole, their survival depends to a large extent on the accuracy of the data and information used. And their performance, through the higher or lower levels recorded during the last period, both globally and at the level of resources used, have led to the identification of the true needs for improving management. (Demyen, Ciurea, 2013)

As far as management of business organizations is concerned, digitization is already seen as a necessary condition for their competitiveness, regardless of size and area of work. (Gerasimenko, Razumova, 2020). That is why digitalization in business management and marketing has recently become an object of scientific study (Gerasimenko, 2019).

In an era of globalisation, of modernizing processes in all branches of activity, in a period of time dominated in particular by the rapid transmission of information, companies seek to align themselves with the general standards imposed worldwide. No organisation can survive in isolation, using rudimentary working methods, without adapting to new trends (Demyen, Ciurea, 2013).

Digitalisation is one of the most visible phenomena of this decade, and it is evolving at an alarming rate. We can say that digital transformation is one of the primary transformational paths in the modern economy. The economic crisis caused by the pandemic has once again highlighted the role of technology in general and digital in particular, both in the economy and in society.

The world around us is becoming more technical, and in this context it is natural to be concerned about the current digital revolution. Digital transformation is essentially a major goal, with our country talking more and more about it. The challenges of digitalisation are different for businesses, with SMEs in need of different support measures, depending on their level of digitisation and their size. Digitalisation continually produces new plans of action while additionally essentially affecting society and employees. Digitalisation is also about technology and how it transforms people's lives in the workplace (Deaconu, Igreț, 2019).

2. Literature review

The challenges of digitalisation are different for businesses starting from risk reduction, cost optimisation or rapid exploitation of opportunities, with SMEs needing different support measures, depending on their level of digitisation and size, a legal framework that is sufficiently flexible, neutral and secure for the future, ensuring fairness transparency and a level playing field. Digitalisation should be seen as a tool for supporting work and increasing productivity and not as an imposition or an end in itself. A profound digital change is needed, aimed at making the increasingly complex production processes more efficient, through new technological solutions, in order to meet the needs of customers. The creation of added value from digital innovation occurs in products, processes and business models.

As indicated by Reis J. et al. digitalisation is the marvel of changing simple information into computerised language (for example digitisation), which, thusly, can improve business connections among client and organisations, bringing added value to the entire economy and society.

In order to support the development of the information society and, respectively, the increase of digital competitiveness, the European Commission has fostered a tool to evaluate the presentation of digital society, called the Digital Economy and Society Index (DESI). It tends to five primary regions: network, human resources, web use, digital innovation integration and advanced public administrations. In view of past pandemic information, the 2020 DESI report positions Romania 26th out of the 28 EU Part States. Romania's performance was identical in four of the five measured DESI areas, a situation caused by slow progress in general, but also by political developments.

In terms of human capital, Romania ranks 27th out of 28 EU countries, stagnating in this respect compared to the previous year. Less than a third of Romanians have at least basic digital skills. Romania is well positioned in terms of ICT graduates, placing fifth among Member States, with 5.6% of all graduates (EU average: 3.6%).

When talking about the use of Internet services, Romania still has the lowest level among EU Member States. However, there are two online activities where our country ranks 6th in the EU. It is about the use of social networks (82%, compared to an EU average of 65%) and video calls (67%; EU average: 60%).

Romania positions 27th among EU nations when referring to business integration of digital technology, beneath the EU normal. There has been a slight improvement in the portion of SMEs selling on the web, from 8% in 2017 to 11% in 2019, however it stays underneath the EU normal of 18%. More and more SMEs are selling their products online outside the country, but this only applies to 6% of the total number of SMEs, compared to an EU average of 8%.

In terms of digital public services, Romania has ranked last among EU Member States in the past three years. In contrast, Romania ranks 8th in terms of users of e-government services, with 82% of internet users, compared to the EU average of 67%.

The DESI study highlighted that Romania does not have a national digital transformation strategy for businesses and that specific measures are needed to support the digitisation of SMEs and raise awareness of the importance and benefits of adopting digital technologies. The evaluation was based on data from 2019, before the outbreak of the COVID-19 pandemic, which once again highlighted the crucial importance of citizens' digital skills and the digitisation of the economy.

3. Research methodology

Based on the results of the DESI index, as well as analysing the information in the literature, we carried out a research on a randomly selected sample of 73 SMEs from Caraş-Severin. Respondents were represented by decision-maker factors in the SMEs analysed. The objectives of the study focused on identifying the need for digitisation and its impact on SMEs. We have made the hypotheses: H0: digitalisation does not have a significant impact on SMEs in Caraş – Severin H1: digitalisation has a significant impact on SMEs in Caraş – Severin, and to determine the impact of digitalisation we used the test χ^2 . After formulating the null and alternative hypothesis, the level of significance of the test is determined, the value of which is usually chosen as $\alpha = 0.05$ (5%). (Şipoş C, Preda, 2004) After calculating the test χ^2 , it is compared the calculated value with the tabular value and decided to accept or reject the null hypothesis, as follows:

- if χ^2 calculated is greater than the tabular value of χ^2 , the null hypothesis (H0) must be rejected and the alternative hypothesis (H1) accepted;
- if χ^2 calculated is less than the tabular value of χ^2 , the null hypothesis (H0) must be accepted and the alternative hypothesis (H1) rejected.

4. Results

Following the collection of data from respondents, the results highlighted the following aspects:

Question 1. Do you think that digitalisation will lead to an increase in the performance of SMEs?

Response Variants	Absolute frequencies	Relative frequencies (%)
Agreement	68	93,15
Disagreement	2	2,74
Undecided	3	4,11
Total	73	100

Source: Made by authors

We can see that 68 (93.15%) respondents believe that digitalisation will increase the performance of SMEs in Caraş-Severin, while 2 (2.74%) opposed this view and 3 (4.11%) were undecided.

Question 2. The implementation of digitalisation in SMEs will be a determining factor for the economic development of the county?

Response Variants	Absolute frequencies	Relative frequencies (%)
Agreement	65	89,04
Disagreement	6	8,22
Undecided	2	2,74
Total	73	100

Source: Made by authors

The results indicate that 65 (89.04%) respondents agree that the implementation of digitalisation is a determining factor for the economic development in Caraş-Severin, while 6 (8.22%) had a contrary opinion and 2 (2.74%) were undecided.

Question 3. Will the implementation of digitalisation in SMEs lead to new business opportunities in the county?

Response Variants	Absolute frequencies	Relative frequencies (%)
Agreement	57	78,08
Disagreement	3	4,11
Undecided	13	17,81
Total	73	100

Source: Made by authors

It can be found that 57 (78.08%) respondents believe that the adoption of digitisation in SMEs will lead to new business opportunities in the county, while 3 (4.11%) did not agree on this, and a number of 13 respondents (17.81%) are undecided

Question 4. Do you think that digitisation in SMEs will help reduce unemployment in Caraş-Severin?

Response Variants	Absolute frequencies	Relative frequencies (%)
Agreement	61	83,56
Disagreement	2	2,74
Undecided	10	13,7
Total	73	100

Source: Made by authors

83.56% of the respondents, felt that the introduction of digitisation in SMEs could help reduce unemployment in the county, while 2 (2.74%) had a different opinion, and 10 (13.7%) had no opinion.

Question 5. Will the digitisation of SMEs lead to the creation of new jobs?

Response Variants	Absolute frequencies	Relative frequencies (%)
Agreement	59	80,82
Disagreement	2	2,74
Undecided	12	16,44
Total	73	100

Source: Made by authors

The results show that 80.82% of respondents see the opportunities that digitalisation offers by creating new jobs, 2.74% of respondents are sceptical in this regard, while 16.44% could not decide on this issue.

Based on the respondents responses to the questionnaire, we made the totalizer table with the observed frequencies:

Question	Response Variant			TOTAL
	Agreement	Disagreement	Undecided	
1	68	2	3	73
2	65	6	2	73
3	57	3	13	73
4	61	2	10	73
5	59	2	12	73
TOTAL	310	15	40	365

Source: Made by authors

To calculate the χ^2 test, we will use the following formula:

$$\chi^2 = \sum \frac{(O_{ij} - A_{ij})^2}{A_{ij}}$$

O_{ij} – the frequencies of row i and column j resulting from observation;

A_{ij} - the frequencies of row i and column j that are expected to result according to the null hypothesis.

The expected frequency (A_{ij}) shall be determined according to the formula:

$$A_{ij} = \frac{TR \cdot TC}{TG}$$

TR – row total

TC – column total

TG – overall total

Row&Column	O _{ij}	A _{ij}	(O _{ij} – A _{ij}) ²	(O _{ij} – A _{ij}) ² /A _{ij}
R1C1	68	62	36	0,5806
R1C2	2	3	1	0,3333
R1C3	3	8	25	3,125
R2C1	65	62	9	0,1452
R2C2	6	3	9	3
R2C3	2	8	36	4,5
R3C1	57	62	25	0,4032
R3C2	3	3	0	0
R3C3	13	8	25	3,125
R4C1	61	62	1	0,0161
R4C2	2	3	1	0,3333
R4C3	10	8	4	0,5
R5C1	59	62	9	0,1452
R5C2	2	3	1	0,3333
R5C3	12	8	16	2
TOTAL				18,5402

Source: Made by authors

$$\chi^2 = 18,5402$$

The ovariene value of χ^2 is compared to the theoretical value of χ^2 . For this purpose we determine the number of degrees of freedom in the contingency table by formula: $(r-1)(k-1) = (5-1)(3-1) = 4*2 = 8$ degrees of freedom. For a significance level of 0.05 (a 95% probability) and 8 degrees of freedom, the tabular value of χ^2 is 15,507.

Since the calculated value of χ^2 is larger than the tabular value of χ^2 , we reject the null hypothesis and accept the alternative hypothesis that digitalisation has a significant impact on SMEs in Caraş-Severin.

5. Conclusions

Digitalisation is essential for SMEs to compete in the provision of goods and services, attracting and retaining young people with superior digital skills.

Sooner rather than later, we can say that digitalisation will be the instrument by which numerous SMEs will actually want to develop internally and also externally. Digitalisation is the future on which SMEs can rely, and not just in times of crisis. From the digital environment, all types of customers will want to collaborate and work with companies that are efficient and have innovative solutions for providing services through technology.

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Covid-19 Crisis and the New Challenges for Supreme Audit Institutions Management

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Abstract

No supreme audit institutions have remained unaffected by the global crisis covid-19. Based on previous major crises, such as those caused by Ebola, SARS or even Hurricane Katrina, and the experiences they provide, Supreme Audit Institutions (SAI) can learn important lessons for managing the coronavirus crisis in order to develop contingency plans for how to respond to similar situations in the future. SAI's are not immune to the effects of the virus and face a number of challenges regarding the limitations imposed by the unavailability of staff or homeworking, but more importantly, the need to adapt to play a proactive role and provide valuable real-time support to governments in the context of the sharp rise in emergency spending while temporarily easing internal controls and the legislative framework.

This paper aims to highlight the challenges SAI's carried out on its mandate in the fight against the new coronavirus.

Key words: external audit, management, fraud risk, public procurement, funds

J.E.L. classification: H12, H83

1. Introduction

Supreme Audit Institutions (SAI) can play a key role in the various stages of a crisis such as Covid-19. They can provide critical advice on rules and regulations and can conduct audits on the use of funds according to approved destinations. This can have a discouraging effect but helps to protect public or those received by donation to combat the effects of crises. SAI can also audit the implementation of new regulations and programs (such as for infection control or economic incentives), thus contributing to effective government action. After a crisis, the SAI can provide assurance on the use of funds and can assess the economy, efficiency and effectiveness of governments' responses. The reports can be used both for accountability and to identify lessons for the future.

2. Literature review

2.1. The international situation regarding the Covid-19 crisis

According to the European Commission's 2020 General Report on the Activities of the European Union, in the first half of 2020 more than € 23 billion has been invested across the Union under the four cohesion policy funds - an increase of over 5% at the end of 2019, despite the economic uncertainty caused by the pandemic. A significant reprogramming effort is currently under way in the two Coronavirus Response Investment Initiatives, implemented in March and April thanks to an immediate Commission proposal and the swift approval of the European Parliament and the Council, allowing for the provision and allocation of funds for crisis-specific actions in all Member States.

In addition to purchases from their own budgets, from the European Development Fund, member states have been financed with considerable sums as follows, for example:

- Ireland financed the purchase of 65 million personal protective equipment for medical staff;
- Spain has set up almost 3,800 additional spaces for intensive care beds, purchased 1.8 billion personal protective equipment and bought 2,170 fans;
- Bulgaria bought 317 fans and over 2 million protective masks;
- Greece supported with working capital of SMEs amounted to EUR 1.3 billion;
- Slovakia purchased 110 new emergency vehicles;
- Romania: support for SME working capital amounted to EUR 800 million;
- France provided grants and financial instruments worth EUR 223 million to more than 3,200 SMEs;
- Hungary supported with working capital of SMEs amounting to EUR 320 million.

The pandemic caused by the new coronavirus is an unprecedented shock for both the EU economy and the world economy, with very serious socio-economic consequences. According to the Commission's autumn forecast, the EU economy is expected to contract by 7.4% in 2020, before recovering and growing by 4.1% in 2021 and 3% in 2022. Although the pandemic has affected economies in all member states, the magnitude of the impact and the strength of the recovery will vary significantly from region to region.

In order to respond immediately to the need to combat and mitigate the effects of the Covid-19 health crisis, the European Commission has recommended applying the flexibility mechanisms available in the EU on public procurement in cases of extreme urgency, in order to quickly procure goods, services and works needed to deal with the crisis by reducing deadlines, applying less transparent procurement procedures, applying alternative solutions and establishing contacts with the market (European Commission, 2020, p.4).

Therefore, for an effective response, governments have had to lower the bar and relax the level of internal control as well as the level of regulation in public procurement, measures that tend to stimulate the occurrence of fraud in public procurement of goods, services or works needed to combat the effects of the Covid-19 crisis.

Fraud is an ever-present threat when using public resources and will always be a major concern for management to combat this phenomenon.

It appears from the literature that the term fraud has been broadly defined, in principle retaining the definition described by ISA 240 (International Standard on Auditing 240, 2009), an intentional action taken by one or more many people in the management, employees or third parties, which involves the use of deception in order to obtain an unfair or illegal advantage. Thus, fraud involving one or more members of management is called managerial fraud, and that committed by the employees of a company, fraud with the association of employees.

Some common types of fraud include, but are not limited to, the manipulation, falsification or alteration of accounting records or documents, misappropriating goods, concealing or omitting the effects of transactions in accounting records or documents, recording transactions without content and improper application of accounting methods. The fraud is considered to be a "deliberate statement, which causes damages, usually monetary losses".

Frauds can be classified as "employee embezzlement, management fraud, investment fraud, seller fraud, customer fraud and various frauds". Fraud also involves complicated financial transactions performed by white-collar criminals, businessmen with specialized criminal knowledge and intentions (Cressey, 1953).

2.2 Brief considerations on public internal audit during the Covid-19 crisis

The sudden evolution of the global crisis generated by Covid-19 determined the internal public audit activity to adapt and rethink the way of carrying out the initially planned audit missions. The need to rethink the priorities of this internal control tool to support managers and meet new challenges has been more pressing than ever.

Current internal audit challenges include making audits more flexible due to changes in the environment and the economic and social context, having to recognize limitations and restrictions and focus their audits in high-risk areas. All circumstances must also be taken into account, including travel limitations, constraints on technical capabilities in accessing databases and audit procedures, and the willingness of management to address non-essential issues in the short term.

The opinion of international experts on internal audit is that it should focus on designing a continuous monitoring program around Covid-19 instead of conducting a typical, long-term audit. An agile style of audit is required, in which topics should be chosen for very short periods of time and short and timely reviews should be carried out only on the key activities of the organization. With this approach, the internal audit can follow the existing situation and provide updated answers to the management.

Internal audit is considered to bring more added value in supporting these processes from a consultative approach, rather than superimposing an audit on a period of crisis.

In times of crisis, when the opinion of the auditors is important, the conclusions and recommendations they can offer must answer questions such as:

- what measures and policies work;
- how can we be sure that the procurement of medical equipment meet the needs of society;- how we add value and reduce the risk of fraud, waste and abuse at the same time;
- what we can learn from the current circumstances in order to be better prepared to face a crisis in the future.

To answer these questions, auditors need to change their approach from an ex-post audit and adapt to a real-time audit, quickly improvising new approaches.

To do this, auditors need to adapt to real-time monitoring and take a risk-based approach. This strategy has helped prevent many risks in public administration. For example, working groups can be set up to help public entities monitor emergency aid transactions made with flexible procurement, where auditors make operational and risk assessments of corruption in procurement contracts and inform decision-makers about their risks.

2.3 The role of external public audit exercised by Supreme Audit Institutions (SAI)

Over time, the work of auditors has evolved, with a key role to play in strengthening better policies for a better life for society. The current period, marked by the Covid-19 crisis through a widespread impact on all activities in society, has also left its mark on the work carried out by SAI. From lockdown measures with a direct impact on the work of SAI employees and audited entities, to new decisions by governments to address both the immediate effects and long-term consequences of the crisis, to various dysfunctions caused by staff unavailability, in fact, the activity of SAI underwent an important transformation during this period, including through the reorganization of the activity in order to ensure the continuity of the activity in safe conditions, thus emphasizing the guarantee of the safety and health of the staff.

Despite the challenges, these circumstances also create an environment that stimulates creativity and innovation.

The INTOSAI Guidelines for the Corruption Prevention Audit (2016) stipulate that SAI's fight against corruption should aim to prevent corruption by analyzing the occurrence, causes, areas and mechanisms of corruption during each audit and strengthening public institutions by identifying ways to reduce arbitrary, simplifying administrative procedures and eliminating inequalities.

Without prejudice to significant developments in the approach and methodology for combating fraud and corruption by SAI, the exact mandate and nature of the audit carried out by SAI varies greatly depending on the constitutional, legal or institutional framework.

The Department for International Development (DFID) has generally identified three models of SAI organization: the Westminster model, the judicial or Napoleonic model, and the collegial model.

Under the Westminster (Anglo-Saxon or parliamentary) model, there is an auditor general who has rights and responsibilities along with guarantees to ensure independence. The ability of SAI to challenge corruption depends on the powers and authority of the office and its independence from other national institutions.

Under the judicial or Napoleonic model, SAI, known as the Court of Auditors, is an integral part of the judiciary system and normally there is also a complementary high-level system of parliamentary accountability for public spending. The vulnerability of such a system to political influence is quite low due to the indefinite mandate, but there are challenges in terms of transparency, lack of parliamentary involvement and implementation of the recommendations.

Under the collegiate system, SAI has a number of members appointed by parliament who form their college or board of directors and make joint decisions. Its limitations are the slow decision-making process and the appointment system by parliament affecting independence and impartiality.

Objectively, the crisis generated by Covid-19 is a challenge and an opportunity for all Supreme Audit Institutions to demonstrate their role as a key governance institution. As the independent body responsible for overseeing the expenditure of public resources, SAI makes a particularly important contribution to the response of governments in the fight against Covid-19 in terms of protecting the lives of the population, by maximizing value for money, concentrating efforts on vulnerable groups, government, as well as to minimize the risks of mismanagement or waste of public funds and corruption.

To answer these questions, auditors need to adapt to a real-time audit and quickly improvise new approaches. Such pressure can stimulate creativity and innovation. Supervising large expenditures on economic recovery is a major challenge in today's environment.

Corruption is a negative social phenomenon that exists in all countries in both the public and private sectors. Corruption not only causes considerable losses to public resources and the proper functioning of the state, but, more importantly, diminishes public confidence in state institutions. Supreme Audit Institutions are considered effective tools for they play an extremely important role in preventing and combating corruption through audit activities.

Almost all countries set up SAI to monitor the financial performance and work efficiency of public institutions. According to the OECD (2011), SAI is an organization responsible for auditing government revenue and expenditure by acting as a body for overseeing national financial integrity, assessing whether public funds are spent efficiently and legally.

As one of the pillars of the national integrity system and a public finance oversight body, SAI's contribution in preventing and combating corruption mainly concerns two ways: prevention and detection.

Despite differences in the legal framework, institutions, organizational models (whether Westminster, judicial or collegial model), the functions and responsibilities of SAI in each country generally provide the function of deterrence and prevention in the fight against corruption. SAI are not considered anti-corruption agents and the functions and duties of many SAI do not require a clear responsibility for detecting and investigating corruption. However, in addition to prevention and deterrence, there is a public expectation that SAI will play an important role in detecting fraud and evidence of corruption together with other relevant bodies.

3. Research methodology

The research conducted in the article was performed from a theoretical and practical perspective. From a theoretical point of view, we used concepts promoted in the literature that we presented in the synthesis. Among the existing research methods, we used as a methodological option a qualitative approach to the data through the objective presentation of reality, through the use of general logical reasoning, through subjective interpretation, in accordance with the data provided by direct observation.

4. Findings

As shown in previous chapters, the examples offered by former major crises exist and the recommendations and feedback came in abundance from the profile bodies. Academically, rivers of ink have flowed over time, and researchers have launched a wealth of ideas and theories, some of which have been successfully taken over by governments and implemented through the national regulatory framework. So, there are plenty of lessons, with governments being forced to show responsibility and involvement in designing tools to minimize the economic and social impact of the crisis.

An example is that of SAI audits in Liberia and Sierra Leone during the 2014 - 2015 Ebola outbreak, both in real time and after the epidemic.

The audit reports of the two countries identified several findings that could be relevant to the Covid-19 crisis. These include non-compliance with public procurement procedures, double payments for the same goods and services and mismanagement of medical assets. These weaknesses have contributed to substantial property losses, waste and the inability to use funds effectively for the purpose of strengthening national health and life-saving systems (INTOSAI Developing Initiative, 2020, *Accountability in a time of crisis. How Supreme Audit Institutions and development partners can learn from previous crises and ensure effective responses to Covid-19 in developing countries*).

The main findings of the audit reports were:

- supporting documents regarding purchases or expenses made, absent or incomplete;
- procurement procedures ignored and major losses identified, especially in single resource contracts;
- overpayments, double payments or failure to withhold taxes and duties due;
- poorly drawn up contracts, unforeseen subsequent costs, assets below standard;
- poor quality goods and services, slow distribution of medicines and equipment.

Audits of previous disasters and crises also found:

- non-compliance with legal provisions and disaster management regulations;
- lack of preparedness and adequate institutional mechanisms to deal with the disaster;
- absence of national disaster management plans;
- ineligible expenditures from disaster management funds, as well as unnecessary expenditures;
- poor coordination between agencies responsible for disaster management, leading to overlapping and duplication of effort;
- lack of efficient dissemination of information;
- lack of a central database for disaster management;
- non-existence of emergency operation centers;
- inadequate prioritization of intervention areas.

According to the same report, the Red Cross has identified more than \$ 5 million in aid money lost to fraud and corruption during the West African Ebola epidemic. "The auditors found supplies too expensive, wages for non-existent workers and false customs invoices." As Ebola spread to Liberia, Sierra Leone and Guinea, the Red Cross and the Geneva Federation distributed cash donations to national Red Cross societies in each of these countries - a total of about \$ 100 million. An investigation by Red Cross auditors has found that \$ 2.7 million has disappeared fraudulently in Liberia in overvalued goods, services or supplies, or in wages for non-existent workers.

Also, "a former health minister in the Democratic Republic of Congo and his financial adviser have been sentenced to five years of forced labor for embezzling more than \$ 400,000 from Ebola response funds in the country, a court ruling said. The court convicted Ilunga and his financial adviser of counterfeiting \$ 391,332 in proceeds from a counterfeit company called New Sarah Pharmaceutical Warehouse to justify purchases of products already paid for by international donors".

It is important to follow other SAI who, in addition to the classic actions initiated in the control of allocated public funds, have used other methods to make the government and public managers in general aware of their responsibility in the general economy of the fight against Covid-19. An example worth mentioning is the message of the New Zealand Comptroller and Auditor-General who in April 2020 published a letter in which he urged the maintenance of strong governance and effective control systems for the proper monitoring of public expenditure, set out expectations when spending is made in an emergency and emphasized the need to be aware of the increased risks of fraud (John Ryan, Controller and Auditor-General New Zealand, 2020).

The documentation on the research topic involved the comparative study of the challenges encountered by other supreme audit institutions, being extracted some common criteria and elements that affected to one degree or another, the audit control activity during the COVID-19 crisis.

Table no. 1. Comparative analysis on some aspects identified in the COVID crisis audits.

Criteria	Findings
<p>Limitations in SAI activity due to the pandemic. Does SAI have sufficient IT resources and human skills to meet these limitations in the work of auditors?</p>	<p>Australia Due to the fact that the activity of ANAO was essential to support accountability and transparency, the staff of the SAI was not subject to the restrictions and limitations imposed by the government. However, due to previous investments in technology, staff were able to work remotely. The audited entities supported SAI in performing the remote audit tasks. Steps have also been taken to interrupt the other audits in order to carry out the new tasks (Australian National Audit Office, 2021).</p>
	<p>UK All necessary measures have been taken to minimize the risks to employees, their families and the general public. The work systems are designed to be operated remotely, and most staff work from home. Access to offices was allowed only for a limited number of staff, in compliance with government instructions for safe office work. The audit teams were able to complete most of the audit procedures while working remotely. Where on-site audit visits were required, they were conducted in accordance with government guidelines for safe work (National Audit Office United Kingdom, 2020).</p>
	<p>Canada As in all other organizations, the Covid-19 pandemic had a major impact on the OAG. Until mid-March, OAG employees worked remotely, as did some or all of the employees of the organizations audited by the office. All travel for OAG auditors has been suspended in response to public health guidelines. Moreover, OAG encountered difficulties in obtaining audit evidence, given the challenging working environment and the limited access or total lack of access to the organizations that the office audits. As part of the Office's response to the pandemic, OAG has worked with the federal organizations it audits, as well as with federal government agencies, to adapt to circumstances and develop viable solutions (Office of the Auditor General of Canada, 2020).</p>
	<p>Romania The Court of Accounts had to adapt quickly to change. The activity program of the institution for 2020 has been updated according to the new rigors, the restrictions on travel to the headquarters of the audited entities, telework, the quarantine conditions imposed by the pandemic. To these were added the difficulties given by the level of computerization of public institutions, which must facilitate the interaction with external public auditors and other public entities. During the audit missions, the external public audit teams collaborated and communicated in good conditions with the managements of the audited public entities at the level of administrative-territorial units, without hindering or compromising the efforts of local public administration authorities and without exposing the participants to epidemiological risk in the audit process. Although there were apparently some limitations on the direct presence of external public auditors at the headquarters of the audited entities, due to the restrictions imposed by regulations issued during the state of emergency, however, with the help of information technology, the audit missions were completed, achieving a balance between the obligation to perform specific tasks and the need to comply with the regulatory framework in force for protection against SARS-CoV-2 infection (Romanian Court of Accounts, 2020).</p>
<p>What type of audits were performed? The implementation of new regulations and programs has been audited (such as for infection control or</p>	<p>Australia Audits were conducted on the impact of Covid-19 on public service workforce management, planning and governance of medical stock purchases, risk management, rapid implementation of economic measures, procurement and consumption of medical stocks. SAI strategy was designed in 3 work phases: phase 1 covering urgent areas (implementation of economic measures, medical strategy, labor strategy), phase 2, which will focus on policy design, implementation (including risk management) and performance appraisal, including the appraisal and dissemination of lessons learned and phase 3, which will examine the results of the government's response and analyze</p>

<p>economic incentives)?</p>	<p>whether government objectives have been met through response measures (Australian National Audit Office, 2020).</p> <p>UK Between 2020 - March 2021 were carried out 17 audits on government activity related to the pandemic. The areas of interest analyzed were: employment support, government funding for non-profit organizations, education of children in the early stages of the Covid-19 pandemic, local government funding in the event of a pandemic, protection and support of extremely vulnerable people during lockdown measures, preparations for potential Covid-19 vaccines, public procurement during the pandemic, provision of personal protective equipment, investigations into how the government has increased the number of available fans (National Audit Office United Kingdom, 2020).</p> <p>Canada The originally planned audit work was reviewed. The audits initially targeted for launch in the autumn of 2020 have been postponed until the spring of 2021, and the audits originally planned for launch in the spring of 2021 have been postponed indefinitely. These decisions were taken to plan several priority audits on COVID-19 measures. The audits focused on government measures related to the protection of health and safety, support for individuals and businesses, as well as other types of liquidity and capital reduction support (Office of the Auditor General of Canada, 2020).</p> <p>Romania Romanian Court of Accounts carried out between June and July 2020 an audit action at institutions in the central and local public administration, on the following areas: public procurement, health, labor and social protection, economic support or general actions of limitation and control of the spread of the pandemic (Romanian Court of Accounts, 2020).</p>
<p>Has the way of conducting audits changed from an ex-post approach to a real-time approach and, if so, to what extent?</p>	<p>Australia According to the multiannual strategy, audits are being carried out on the influence of the pandemic in areas of general interest, such as: labor force maintenance measures, international travel restrictions, biosecurity practices for international air travel, management effectiveness Department of Foreign Affairs and Trade in the return of australians from abroad in response to the Covid-19 pandemic(Australian National Audit Office, 2021).</p> <p>UK In May 2020, the National Audit Office (NAO) released its first report on the government's response to the pandemic, giving an overview of the British government's response to the COVID-19 pandemic. This report would help identify a number of special challenges facing the government. Since then, another 16 reports have been published on the government's response to the COVID-19 pandemic National Audit Office United Kingdom, 2020).</p> <p>Canada Several ways in which the Fund Manager has modified existing audit processes have been implemented to minimize the efforts of civil servants, providing timely audit reports, addressing existing controls and providing value to the government (Office of the Auditor General of Canada, 2020).</p> <p>Romania The SAI Romania report was made during the pandemic, after the end of the state of emergency but during the state of alert. However, we cannot say that the way the audit was carried out has been fundamentally changed (Romanian Court of Accounts, 2020).</p>
<p>To what extent has the activity of the Fund Manager focused on a proactive (prevention) approach and to what extent has it</p>	<p>Australia At the beginning of the pandemic published an article that provides some key lessons from previous audits ANAO treating these risks, such as preparing for crisis identification and risk management to implement government measures, resource mobilization, emergency procurement management (Australian National Audit Office, 2021).</p> <p>UK Of the 17 audits conducted on government activity in the Covid-19 pandemic, 2 had a preventive approach, with the following topics: investigations into preparations for</p>

been reactive (detection)?	potential Covid-19 vaccines and guidance for audit and risk committees on financial and management reporting in time Covid-19 National Audit Office United Kingdom, 2020).
	Canada Ongoing audits include emergency preparedness and rapid response actions, climate change, cyber security, environment and sustainable development (Office of the Auditor General of Canada, 2020).
	Romania Through its recommendations, the audit offers proposals regarding the digitization of public institutions, rethinking fiscal and budgetary policy, reviewing the legal framework incident to the emergency situation, optimizing centralized public procurement and distribution procedures, establishing and maintaining the national medical reserve. Overall, we can conclude that SAI Romania had a reactive approach, establishing the problems identified after their occurrence and offering the necessary corrective measures, without actually getting involved in advising public entities. (Romanian Court of Accounts, 2020).

Source: author's processing after SAI's audit reports

The findings of audit reports differ from case to case depending on the type of audit performed, the objectives set or even the mandate of SAI in that country.

In the case of the United Kingdom, National Audit Office in the report entitled *Public Procurement Investigations during the COVID-19 Pandemic* found that there were risks to public procurement with regard to contracts related to Covid-19, which include:

- potential unequal treatment of suppliers in procurement processes;
- poor procurement practices due to rapid procurement, such as retroactive award of contracts, lack of background checks or lack of documentation before making decisions to make important purchases, such as why certain suppliers were chosen and lack of documentation on how conflicts of interest have been identified or managed;
- lack of transparency on how and to whom contracts were awarded.

Inevitably, Romania was also affected by the Covid crisis¹⁹ and had to take urgent measures to combat and reduce the disastrous effects generated by the pandemic, mobilizing considerable budgetary resources in this regard.

However, the management of these public resources was not, in all cases, one that complied with the principles of legality, regularity and efficiency, the problems not being delayed. According to the conclusions of the report, illegal expenditures were identified that damaged the public budgets in the amount of about 38 million lei, the findings referring mainly to the development of illegal public procurement procedures, the purchase of goods at overvalued prices, non-compliance with deadlines, salary increases or overtime paid to persons who did not have this right, the purchase of non-compliant protective materials and equipment.

For example, at Ariceștii Rahtivani Commune (Prahova County) payments were made for disinfectants overvalued by up to 5,400% and at the Brăila County Emergency Hospital and at the Clinical Hospital of Obstetrics and Gynecology "Dr. I. A. Sbârcea" Brașov, protective masks or other non-compliant equipment were purchased (Romanian Court of Accounts, 2020).

An important aspect was identified at SC Unifarm SA, a national company subordinated to the Ministry of Health, which purchased 265 lung ventilators from a Chinese company that was not on the list of the 200 producers approved by the European Commission, at an overestimated price. of 48 thousand dollars while their price did not exceed 18 thousand dollars. Fans are currently unused in Unifarm warehouses.

5. Conclusions

Regarding the activity of the SAI, we can say that it was influenced by the evolution of the global pandemic situation, to a greater extent (UK, Canada) or to a lesser extent (Australia). This concerned both the way staff work and the way they interact with the audited entities and the availability of the requested data. The way they worked before the pandemic and the investments in

digitization allowed SAI to carry out its activity without a significant impact on the quality of the results.

The types of audits performed during this period were different. Some of the audits scheduled to take place have been postponed or rescheduled for other periods. From performance or financial audits, the SAI activity during this period focused on key areas for society: how to spend public resources, the medical sector, the formation and management of emergency medical stocks, various aids for economic sectors and disadvantaged population groups, and so on.

Regarding the conduct of real-time audits, they were partially implemented, SAI focusing on various government responses, on the recommendations of previous extreme situations, on the influence that the pandemic has in areas of general interest, such as: measures job retention, travel restrictions, travel biosecurity practices, etc.

The proactive approach of SAI has resulted in the publication of various reports on key lessons from previous audits in dealing with these types of risks (crisis preparedness, identification and risk management of government measures, resource mobilization, emergency procurement management, preparations for potential vaccines).

The research carried out reveals an important aspect, namely that there is no universally valid prescription for the states of the world and implicitly for the supreme audit institutions when they face a health crisis of such magnitude. None of the previous crises could offer only limited lessons, the peculiarity of the COVID-19 crisis being that it affected everyone at the same time and not just one area in the world.

These challenges force SAI to adapt, to learn from the lessons of the current crisis and constantly innovate. Summarizing these lessons, we can draw some important conclusions for future audit missions on future crises.

The transition from the various meetings that auditors had before the crisis period to online meetings is a proof of the adaptation to this new reality. The added value of this change is the possibility of meetings, exchanges of ideas, sharing good practices that they would like to use in their own context with a much higher number of participants.

The broad and varied spectrum of knowledge and skills within SAI's personnel must add value to government and citizens by promoting accountability, transparency and good governance. Speed, flexibility, resilience and the right tools are the most important assets in times of crisis.

Audit innovation must focus on three things: the right ideas, people and processes, which form an integrated product. The integrated product is an audit composed of a multidisciplinary team that combines compliance auditors, traditional tax auditors, performance auditors, IT auditors and other specialists to provide the best audit opinion.

Increasing emphasis should be placed on the importance of working with internal and external stakeholders, through various mechanisms and flows for any interested party to report fraud in government programs, and every citizen should be able to report potential fraud. Thus, consideration should be given to setting up a system for the automatic identification and transmission of risk alerts on irregularities in public procurement, through a specific methodology for processing the information received and sending an opinion before taking a final decision on the procurement.

This empirical research has, of course, its limits, because states face different challenges when faced with a crisis, caused by different social and economic contexts, the most effective measures need to be tailored on a case-by-case basis.

On the other hand, although the agility and promptness of real-time reactions can be a solution, the involvement of SAI in certifying expenses during the game from the perspective of legality and regularity can compromise the independence of SAI for subsequent verifications, which still raises issues for management on the best way forward.

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The Impact of the COVID-19 Pandemic on Electronic Commerce in Resita

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Abstract

This paper aims to highlight the changes in the intention of the population to buy, moving the center of interest from traditional trade to e-commerce. E-commerce can also be defined as a process of buying or selling through via remote data transmission. This approach is specific to the expansive policy of marketing of commercial companies. Consumption is not at this point a framework recognised to be a need and subjected to the social bond, however it is optional for helping to conduct the changes following the COVID-19 pandemic.

It is very important to understand that online business is not limited to the sale of products via the Internet. Electronic business involves maintaining contacts with suppliers, potential business partners, but also customers, the promotion of products and/or services provided using electronic means.

Key words: marketing, Internet, e-commerce

J.E.L. classification: M31

1. Introduction

Promoting during the COVID time frame is the declaration of the insurgency of robotics, of correspondences, as a crude material of the whole engineering of present-day development. It will be cybermarketing, similarly as there is a cyberlanguage, a cyberart. Extraordinary exhibitions toward the epistemology of new showcasing, in which worldwide thoughts are not yet completely acknowledged as axioms in mathematics, agreement is not prevailing, and translations and assessments are just in part acceptable, requiring illumination and establishment. A stage and a legitimate contraption fit for doing and executing substantial, informative, and prescient developments.

Advertising, as a vision and reasoning, stays unaltered, with the goal that the fundamental ideas, conventional trade or online business stay legitimate. The COVID emergency has changed the real factors to which advertising is applied, with the development of another social system and new frameworks made by the pandemic time frame. The progressions of the climate decide new directions of the market offers, alluding to the progressions that will rebuild the interest, to the innovative changes, to the appearance in the forefront of the electronic trade, all these focusing on the fulfilment of the customer.

Dinu and Dinu (2010) say that in general in the real world firms set prices according to the costs of production, marketing and supply. On the Internet, however, the supply chain is reversed as the customer begins to exercise all power.

2. Theoretical background

Four large groups of services can be called through the Internet network:

- world wide web
- electronic mail
- electronic commerce
- chat/FTP

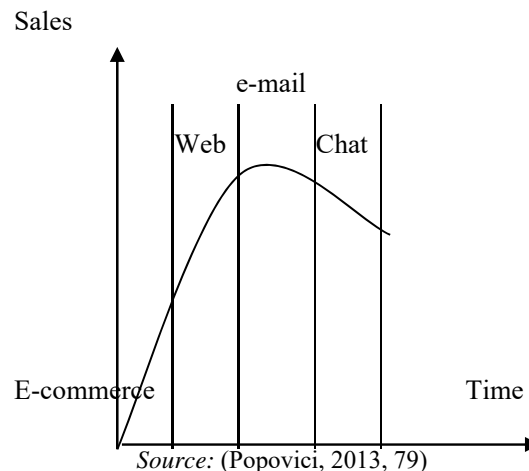
For most, the term "e-commerce" is performance online shopping on the World Wide Web. However, electronic commerce or e-commerce) is more than the process of buying / selling products and services. It can include many other activities, such as: exchanges and negotiations between companies, internal processes of the companies they run performs in support of the activities of purchase, supply, sale, employment, planning. E - commerce also involves the transfer of documents, from contracts or orders, up to images or voice recordings.

The analysis of the e-commerce internet service can be illustrated both on the "S" curve of the life cycle of a product, and in the BCG (Boston Consulting Group) matrix.

The life cycle of Internet services means the period of time from the launch of a service to its exit from the market.

According to the S curve of the life cycles of a product, Internet services are divided into the 4 stages of evolution as follows:

Figure no. 1. The S curve of the life cycle of Internet services



In the launch phase is e-commerce, due to the difficulties encountered in ensuring the security of transactions.

In the BCG matrix, the value of 10% is conventionally accepted as the limit for the growth rate, and for the market share of 50% the growth direction is different.

If the growth rate is higher than 10% it is said that the service has a high growth. Money is invested in this service, considered a star, but it is also obtained.

The absolute market share for Internet services is calculated by the relation:

$$Ms = (\text{sales service CY} / \text{total Internet sales CY}) \times 100$$

Where:

CY – current year

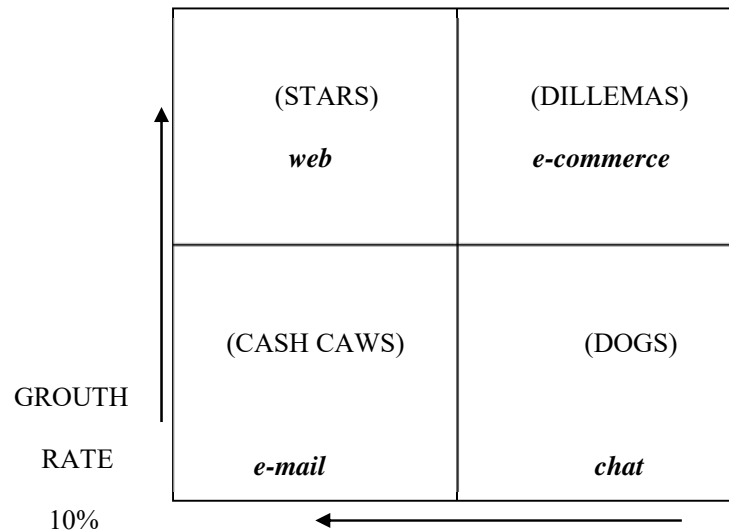
The growth rate for Internet services is calculated by the relation:

$$Gr = (\text{sales service CY} - \text{sales service PY} / \text{sales service PY}) \times 100$$

Where:

CY – current year
PY – previous year

Figure no. 2. BCG (Boston Consulting Group) Matrix



Source: (Dinu&Dinu, 2010, 132)

E-commerce - is a dilemma service because it still requires a lot of money to invest and does not bring the expected money. It is characterized by a relatively small market share, but a high growth rate. This means that it is still necessary to invest in the introduction of this service.

3. Research methodology

This investigation plans to accentuate the impact of the pandemic time frame on consumer behavior from Resita city.

In accordance with the information resulted from the research, it is a quantitative research, and as per the spot of advancement, a field research, accord to Plaias (2008).

To complete a proficient investigation, it is firstly important to plan the exploration, with the foundation of the vital stages and assets to ideally do the examination and get the main data for the decision process.

The study was led on two parts, a qualitative report and the stage that guarantees representativeness in the outcomes and detailing of conclusions, the quantitative investigation. However, as the data acquired from an unrepresentative sample cannot be extrapolated to the whole population, the outcomes being just speculations that will be approved, we considered it ideal to introduce in this section just the quantitative investigation.

The quantitative examination goes through the accompanying stages:

- setting up the sample;
- determining the sample size;
- writing the poll;
- administration of the poll;
- processing and examination of acquired information;
- writing the blend report;

The issue that the examination means to state is identified with the elements of shopping with regards to the COVID-19 pandemic, at the degree of the people from Resita's consumer behaviour.

The approval of the speculations detailed on the event of the subjective investigations is done through quantitative examinations.

Two classes of studies can be utilized for this:

- census - is the cross examination of all people of a given population;
- survey - is an investigation led to know the qualities, the assessments of a given population questioning a set number of its individuals, which means an example.

It comprised of overseeing a poll to a delegate sample taken from the researched population.

To treat the issues examined and predictable help to guarantee an appropriate scientific work, we utilized some logical examination strategies that can be referenced among the techniques for information assortment and association of the meeting, survey, perception, data visits and direct perception, factual investigation the poll, the dissemination of upsides of a variable, mathematical systems (Sipos, Ciurea, 2007) for testing ordinariness, univariate measurable examination of information, the connection strategy, relapse, testing the contrast between two extents.

Since the customer's behavior is showed available (Dinu and Dinu, 2012), it turns into a significant investigation of advertising. I have examined how promoting impacts consumer's behavior. The state of how

the investigation was made was working by the overview led on a delegate test for the number of inhabitants in Resita.

The study that was needed for improving this paper was led during the period September 2020 – October 2020. The review is non-exhaustive, the base sample size was determined using the formula:

$$R = \frac{n}{N} * 100 = \frac{t^2 * p * q}{e^2}$$

Where:

R - sampling rate

N - researched population size

n - sample size

t - the coefficient of confidence

p - frequency of the phenomena

e – tolerated margin error

The survey was made as a type of research: organised individual, based on a survey made out of a specific number of inquiries, all closed. The survey incorporates content inquiries and inquiries to distinguish the respondent.

4. Results

Most marketing studies consider the indication of consumer behavior because of specific components. We concentrated what the Coronavirus emergency meant for purchasing propensities as far as purchasing and consuming behavior. The state of how the examination was done was work by the survey directed on an representative sample for the number of inhabitants in Resita (Dinu and Dinu, 2014).

Coronavirus lastingly affects buyers needs, inclinations and behaviors. The pandemic created in a brief time frame a change of the manner in which individuals purchase and consume, regardless of whether are items, administrations, media channels or social encounters.

This part might be isolated by subheadings. It ought to give a succinct and exact portrayal of the exploratory outcomes, their understanding and the experimental conclusions that can be drawn.

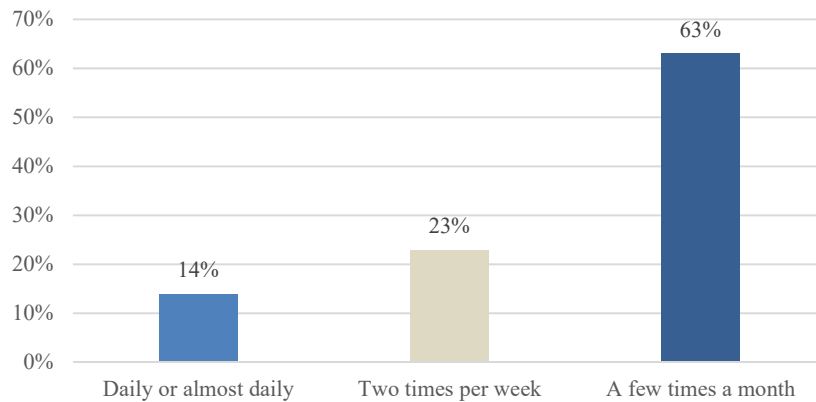
Moving on, the appropriate responses given by 366 survey subjects questions 1-7 of the survey will be introduced, analysed and deciphered. Questions 8-10 allude to the standards for investigating the outcomes (age, gender, not needing singular examination of the study).

A sociological examination was directed at Resita's population level, an examination dependent on a survey.

Further, I realized interpretation of research results:

I. Regarding frequency of visiting online stores in Pandemic.

Figure no. 3. Frequency of visiting online stores in COVID-19 pandemic

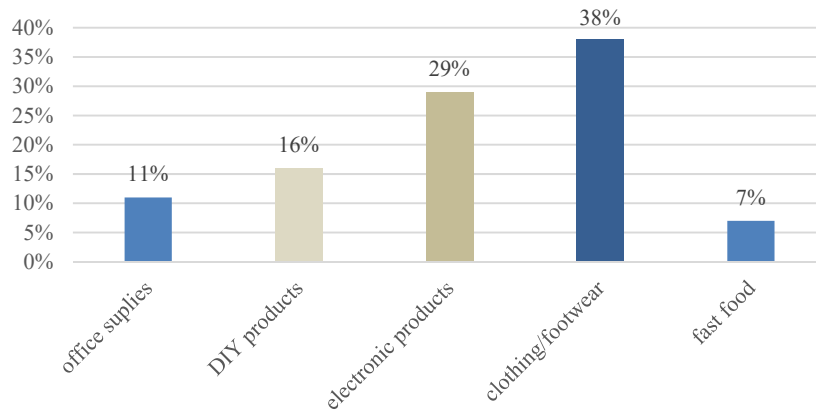


Source: Authors' contribution

A percentage of 63% of residents visit online stores even if they do not buy. Followed by those who enter the Internet weekly to visit virtual stores, with a percentage of 23%. Respondents who visit online stores daily are in a lower percentage, 14%. Among those who enter the Internet daily to visit online stores are young people aged between 18 and 25, with a percentage of 58%.

II. Regarding categories of products purchased in pandemic.

Figure no. 4. Categories of products purchased in pandemic



Source: Authors' contribution

The pandemic favored e-commerce for goods that were normally bought only by physical presence in the store. Thus, on the whole sample, 11% of those surveyed ordered office supplies, another 16% of respondents bought DIY products. Also, significant acquisitions took place in the electronics segment, where 29% of the residents bought electronic products from the virtual stores. The category of non-food products with the most sales in the pandemic was clothing / footwear, 38% of the residents buying from the profile sites. There is also a preference for fast food orders during the COVID-19 pandemic, 7% of respondents choosing this type of food.

III. In terms of shopping in virtual stores.

Figure no. 5. Buying from Romanian online stores

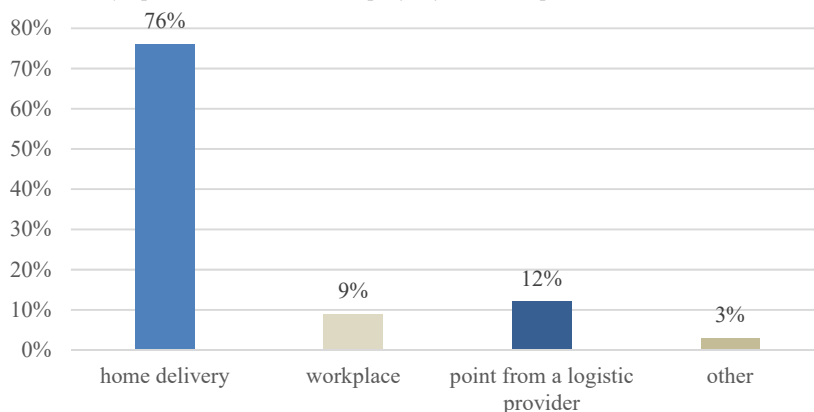


Source: Authors' contribution

A large number of Romanians overcame in 2020 their fear of ordering online and discovered how simple, convenient and safe it is, while others, already familiar with online shopping, have expanded their product categories that he orders them. On the total sample, 57% of respondents did not shop through e-commerce, while 43% of those surveyed bought products from online stores at least once.

IV. Regarding the delivery options that consumers prefer for online purchases.

Figure no.6. Delivery options that consumers prefer for online purchases

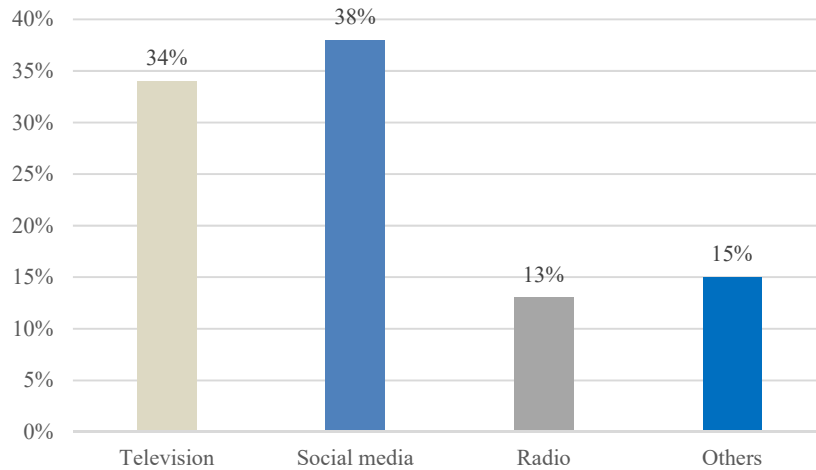


Source: Authors' contribution

Most respondents, in a percentage of 76%, prefer home delivery for online purchases on their online acquisitions. Another respondents, in a percentage of 12%, prefers delivery to the delivery point, while others want the product delivered to their workplace, in a percentage of 9%. Only 3% of respondents chose other delivery options.

V. Regarding advertising channels that inspired online purchases.

Figure no. 7. Advertising channels that inspired online purchases

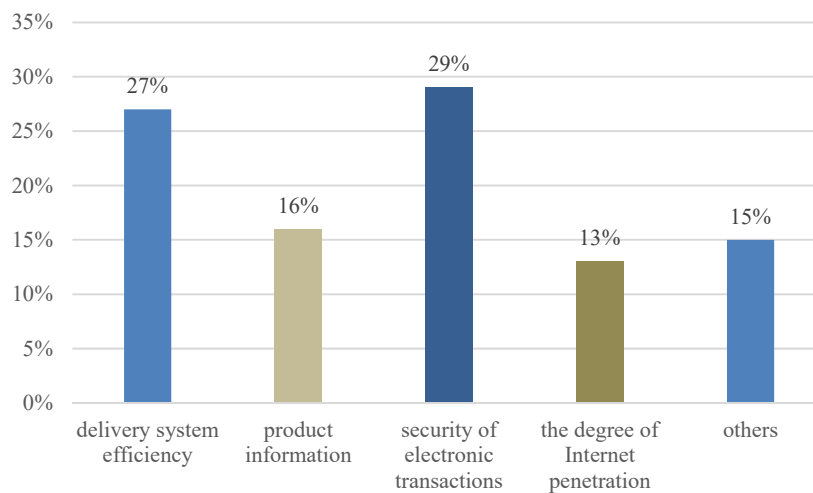


Source: Authors' contribution

Regarding the types of advertising support that influenced the residents of Resita to buy online, the largest proportion have the social networks Facebook and Youtube with a percentage of 38%, followed by television with a percentage of 34%. Next is the radio that influenced 13% of respondents, while 15% of those who answered questions bought online influenced by other forms of advertising support.

VI. Regarding the barriers to online shopping.

Figure no. 8. Barriers to online shopping

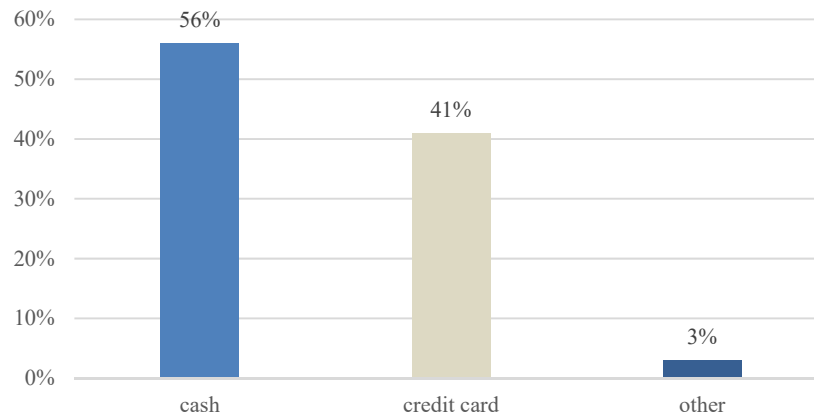


Source: Authors' contribution

On the total sample, 29% of those surveyed believe that the security of electronic transactions can be a problem, 27% of the respondents say they don't trust courier companies, 16% consider that the information about the products sold online is too little. For 13% of respondents, a problem with online shopping is that not all the people have access to the Internet.

VII. Regarding the method used.

Figure no. 9. The payment method used



Source: Authors' contribution

Regarding the payment method, 41% of the respondents pay by card payment, while 56% chose to pay offline purchases with cash.

5. Discussion

Romania introduces itself in a rich ground for exchange, yet, lamentably, the internet business consumer remains to a great extent undeveloped all through the country.

More than a quarter of Resita occupants are hesitant to have a look on internet business due to the security of their exchanges. Likewise, a considerable lot of the occupants of Resita do not trust courier companies since they have recently received harmed items and do not have enough information about the items they want to buy.

Also, many people do not order online as they do not have a steady Internet connection.

As a country of the European Union, Romania has less than one bank card per person perhaps the most reduced value in the Union because of the inclination for cash payments.

Consequently, card payment involves trust, which relies upon creating and developing the online market, and the fact that there are stores that do not offer the possibility of online card payment (Dinu and Dinu, 2013).

Regardless of this diminishes, a large number of Resiteni defeated in 2020 the fear of online shopping and found out how easy, advantageous and safe it is, while others, already acquainted with online shopping, have extended the variety of products.

6. Conclusions

Although the shopping habits for Resita occupants have changed, the investigation showed that the greater part of the respondents never purchased online. The study additionally showed that around 66% visited online stores at any least once a month.

Resita inhabitants purchased in the pandemic office supplies, DIY, being champions in the acquisition of hardware, clothes and shoes.

It is additionally worth mentioning that the occupants of Resita were headed to purchase from virtual stores because of the advertising made through TV and online media.

The Covid pandemic has constrained numerous nearby purchasers to cross the psychological barrier of buying online. Once persuaded of the advantages of online business, buyers will keep on picking this option and, in a roundabout way, courier services, with every one of the constraints of delivering items ordered online.

The change to cashless and contactless is a pattern that has increased in the last years in the digitalisation of banking administrations, however it has been sped up during the pandemic. As an extra measure to guarantee wellbeing, banks have suggested that individuals make non-cash payments through current methods of payment given by them, like cards or online payments.

According to the huge effect of this pandemic, customers will avoid potential risk and will bound to act accordingly (Hasanat et al., 2020).

As a result of demographic change and mechanical development, basic changes are occurring in buyer's behavior and in customer's lifestyle, changes whose effect crearea new purchasing behavior (Dinu and Dinu, 2020).

Online business improved by COVID-19. The way that impacted online business will be helping different researchers to explore more profoundly this area, for example, how online business changed because of the virus and future patterns (Bhatti et al., 2020).

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Artificial Intelligence Tools for Maritime Business Development in the Algorithmic Age

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Abstract

Algorithmic age is the actual time context where automated technologies and decision-making systems are starting to influence world scale transport economies and in particular the sector of maritime transport. Algorithms emerging from Artificial Intelligence (AI) and machine learning applications are suited to solve demanding problems or improving our ability to accomplish time-consuming tasks of maritime companies.

This paper presents a comparative analysis of technology advancements met in three case studies of artificial intelligence assisted platforms and tools useful for enhancing maritime business in the algorithmic age.

The case studies can be further used in qualitative studies on the societal impact of artificial intelligence technologies and for the understanding of the framework of digital evolution in the maritime sector.

Key words: marketing, dynamic codes, data, development, education

J.E.L. classification: H89, I25, M31

1. Introduction

Artificial intelligence is used intensively in automated business, political, decisional and technical systems. In the context of algorithmic age, accelerated development of artificial intelligence and advanced social web technologies lead toward machine-aided participatory communication, boosting processes and updating conventional business of maritime companies.

Over the last decade, marketing strategy and practice in the maritime have undergone major changes due to major technological advances, especially due to the development of the Internet and the artificial intelligence technologies. Like any field, marketing in the maritime continues to keep pace with technological developments. As a result, after invading with advertisements on all traditional channels (audio-visual, written press, events, etc.), it also approaches the virtual environment, in an attempt to attract, but especially to retain new customers.

Evolving so quickly, the consumer of maritime services is accustomed to selecting the media he/she wants to access. Thus, there is a continuous change in the status of consumers from “physical viewers” to “Internet browsers beneficiaries”, which has given return to both advertising companies and their customers. Under these conditions, the importance of traditional marketing is not diminished at all, but it is necessary to develop a new component, which is online marketing based on artificial intelligence technologies. In this context, maritime companies that do not neglect their marketing side, aim to be present as much as possible on the virtual market for various actions aimed at launching a new shipping line, strengthening an existing brand or transport service, or their advertising.

In the context of the continuous evolution of web technology, social networks represent an excellent opportunity to establish meaningful relationships and to create ways of social interaction defined by dynamic exchanges between their members.

Social media is booming in terms of the number and variety of platforms and users. In the last two decades, social networks have grown and evolved into something that allows consumers and businesses to engage with each other in a meaningful way.

Thus, you can find audiovisual platforms such as YouTube, Vimeo and SoundCloud; image platforms such as Flickr, Picassa, Pinterest or Instagram; general social networks such as Facebook, Twitter, Google+ or specialized ones such as LinkedIn; news aggregators or bookmarks such as Digg or Delicious; blogs; Wikis and more - a vast digital arena where the new winners of the web in terms of digital marketing stand out.

2. Theoretical background

The context for artificial intelligence based changesets was anticipated around 1970, when Alvin Toffler, a futurist and visionary businessman, published the book "Future Shock", printed in millions of copies. After four decades, in 2016 (the year when he died), a BBC News article made an analysis of what Toffler had correctly anticipated and what he had not "guessed" until then, e.g. "demarcation of post-industrial societies, eclipsed by a knowledge-based economy" or shifted focus from manufacturing and labour to information and data" (Subramanian, 2016).

Today, at the level of 2021, is interesting to reanalyze the context of Toffler's predictions and to see what he anticipated correctly or not.

By evaluating the technological developments, social changes and political and economic context, we observe that what Toffler had anticipated in 1970 was, in fact, totally correct, and has become, in the meantime, a reality. For example, the "shift of work from both office and factory back into the home", leading to the raise of the deurbanization, is confirmed. This happens especially in the context of pandemics when maritime companies working environment is partly or totally switched from the office area to remote working from home, in order to avoid risks of contacting Corona virus which is spreading rapidly and aggressively in closed environments with lack of air circulation.

Another aspect that we notice Toffler got right is that "social isolation ignites by the wave of information". The raise of social media platforms like Facebook, Instagram, You Tube, Twitter, Pinterest, Tik Tok, We Chat, WhatsApp, Viber, Signal and other contribute to social isolation.

Toffler prediction of establishing colonies in space is in the process of becoming a reality, in 2021 first tourists being able to travel to space.

Although organizations initially understood the Internet as a new channel to increase their presence, they soon began to look for ways to maximize their various platforms and services. Currently, online marketing communications are an essential part of operational marketing in terms of becoming, in itself, a specific marketing line: digital marketing (Piñeiro-Otero and Martínez-Rolán, 2016, p.38).

Use of artificial intelligence is becoming more popular for communicating between the maritime company and customers through chatbots useful for natural and quick answers to customers (Stevanovic et al, 2018, p.107). Alibaba, a major China based technology company specializing in e-commerce, retail, Internet, and technology, with 500+ million users, combine big data analytics and artificial intelligence to customize customer experience both in physical store and in online store (Dudic, 2018, p.13).

An AI based digital marketing plan, in addition to study the maritime organization and its environment, must analyze its online presence and position. A concrete digital strategy compare the following elements:

- Monitoring the keywords of the organization, the competition and the sector of the organization (some useful tools are Mentions, Google Alerts, Hootsuite)
- Evaluate the web positioning of the organization and its platforms (for example, Google search or Alexa top ranking)

- Evaluation of social networks. Presence, activity, influence, etc. (a number of tools such as Klout, PeerIndex and Kred become relevant here)
- Comparative analysis of the competition and the main influencers in the sector present on digitalmedia
- Specific SWOT analysis (Piñeiro-Otero and Martínez-Rolán, 2016, p. 41-42).

Social media is not only a market place, but is also a place where companies interact with customers to try and solve their problems. Maritime companies should be aware social media is “a major player in most people’s business lives” (Edosomwan et al, 2011, pp. pp.79-91).

Although the notion of social network is not new, in the period 2020-2021 it has reached new heights, due to the penetration and connectivity of Web technology and Artificial Intelligence technologies. Social networks have been developed through platforms that have different types of functions, but common features. These features aim to create a community by connecting users, who can interact, discuss, provide information or knowledge. And in the case of these platforms, the technology must be flexible and favorable to the exchange of information. This means that free web standards and modular architectures that lead to complex but efficient applications are usually preferred (Campos-Freire, 2008, pp. 287–293).

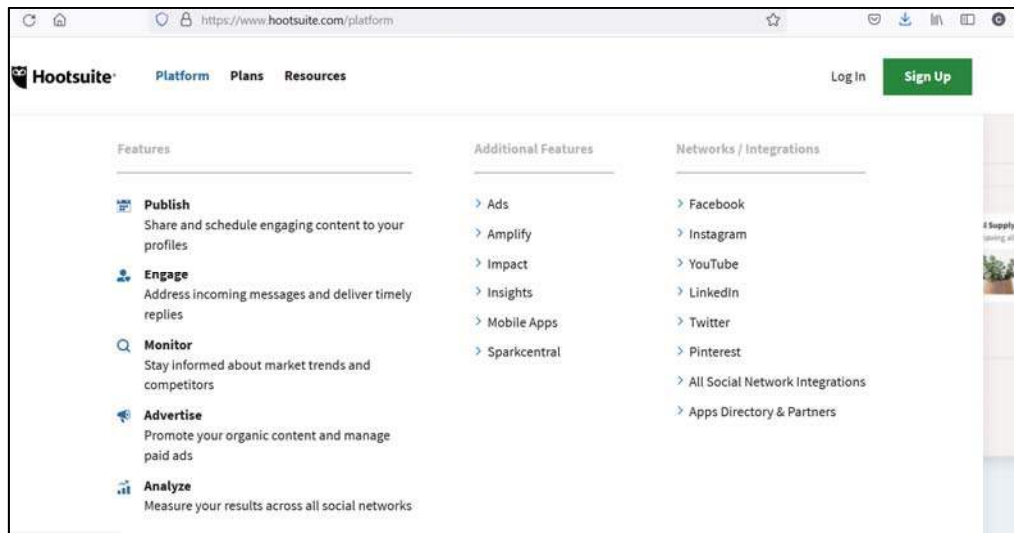
3. Research methodology

This paper presents a comparative analysis on three case studies of artificial intelligence assisted platforms and tools useful for enhancing maritime business.

A first case study presented in this paper is the Hootsuite platform, which has the role to simplify the process of planning, composing, and publishing engaging, on-brand content and plan postings and content on social media channels. The platform has the role to engage, monitor and manage incoming messages, advertise, measure and analyses company’s performance on social media. Hootsuite integrates Proofpoint, a software tool that provide automated screening and analysis before and after each post is published.

Below is Hootsuite dashboard print screen showing the features from the platform.

Figure no. 1. Dashboard in the social media management platform and social networking services Hootsuite

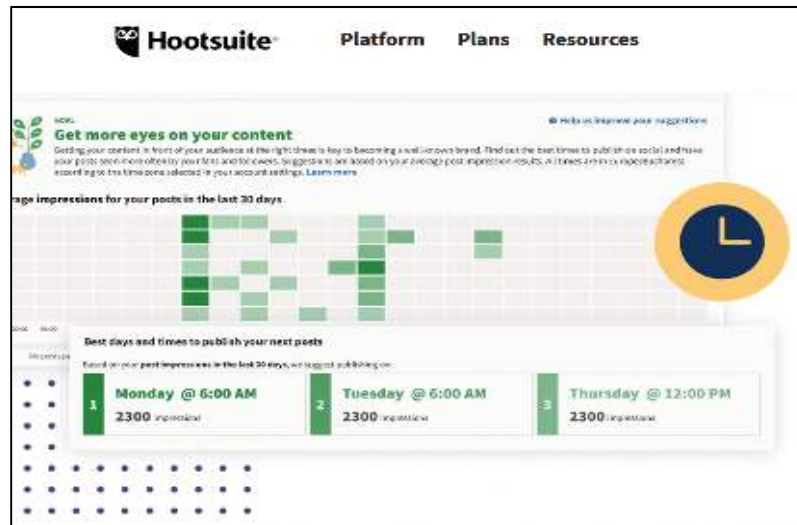


Source: (hootsuite.com)

Hootsuite analysis function is pre-determined to enhance brand awareness, engagement or driving traffic, suggesting the best time to publish on social media and have the posts seen more often by followers, based on post impressions in the last 30 days of use. The platform also measure post performance, team performance, amplified leaderboard, the impact content, audience discovery and provide reports on Hootsuite activity, LinkedIn, Facebook, Instagram or mixed

overview. The AI technology used in Hootsuite Impact function has the role to inform and influence business decisions with insight from social media campaigns (it measures campaign performance, optimize social media strategy and share insights across the business).Google Analytics or Adobe Analytics track how each post leads to actions that matter (contribute to sign-ups or to purchases).

Figure no. 2. Analysis function in the social media management platform and social networking services Hootsuite

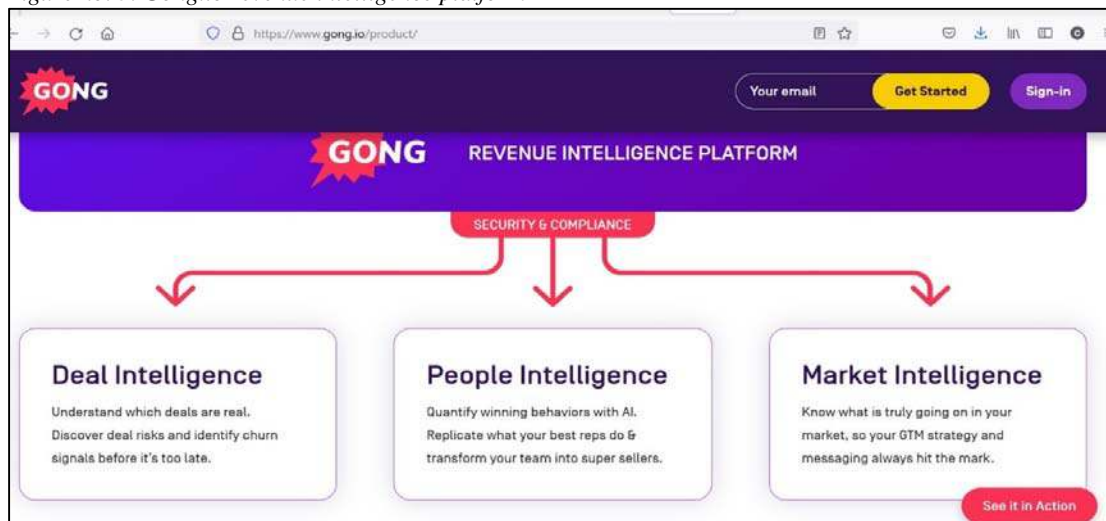


Source: (hootsuite.com)

With Panoramiq Multiview, created by Synaptive developer, the Hootsuite platform enables the management of interactions on Instagram platform and is used for monitoring and responding to comments, mentions and tagging in one stream, no matter the number of Instagram accounts.

The second case study refers to another AI business assistance platform suitable for the development of maritime business. Gong is a real-time assistance conversation intelligence platform that uses artificial intelligence and machine learning to analyze unstructured data by recognizing effective patterns from plenty of hours of spoken conversations between B2B sales. The revenue intelligence app has the role to records, transcribe and analyzes sales calls (gong.io).

Figure no. 3. Gong.io revenue intelligence platform

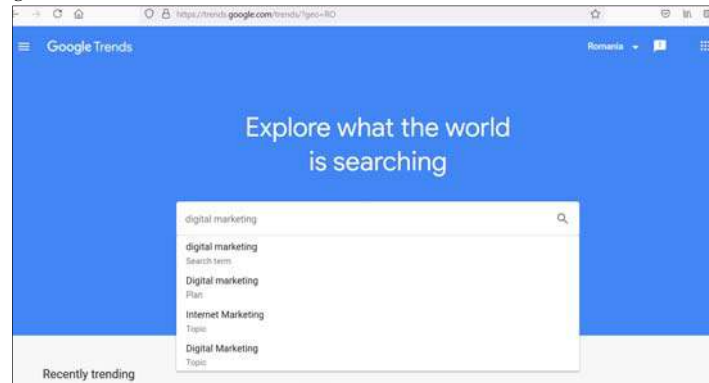


Source: gong.io

The third case study refers to Google Alerts which is an website tool based on content detection and notification service. The tool is also based on artificial intelligence technologies and was offered since 2003 by the search engine company Google. Google Trends website analyzes the popularity of top Google search queries in different regions and languages, using artificial intelligence technologies. The website uses graphs to compare the search volume of different queries over time. In 2008, Google launched Google Insights for Search, a more sophisticated and advanced service that displays search trend data. In 2012, Google merged Google Insights for Search into Google Trends.

The service sends automatic emails to the user when it finds new results - such as web pages, newspaper articles, blogs, or scientific research - that match the user's search terms. When selecting a Google Alert type, a field opens in which the user can note the area of interest for creating alerts. The user can customize the way alerts are searched by selecting the frequency of notifications, sources, language, region, etc. For example, when searching for a randomized word, as “digital marketing”, the engine suggests a number of related options, including “digital marketing” - search term; or “digital marketing plan”, topic “internet marketing” or “digital marketing topic”, representing possible associations to the search indicated by the user (Fig. 4).

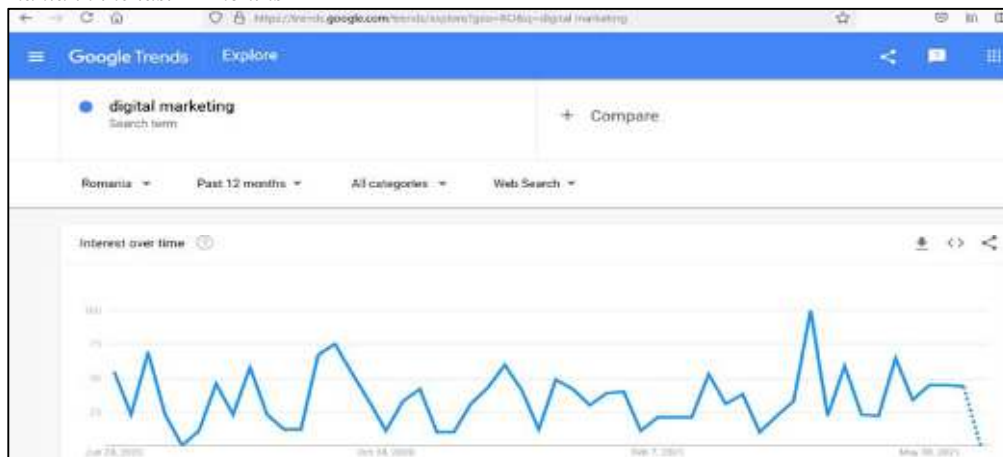
Figure no. 4. Google Trends website



Source: trends.google.com

The search result for trends for the field of interest “digital marketing” indicate modest values when searching for the term for Romania geographic area (Fig.5). The returned result consists of a maximum frequency of 75 searches of the key term “digital marketing” with a peak of results in the period February-May 2021.

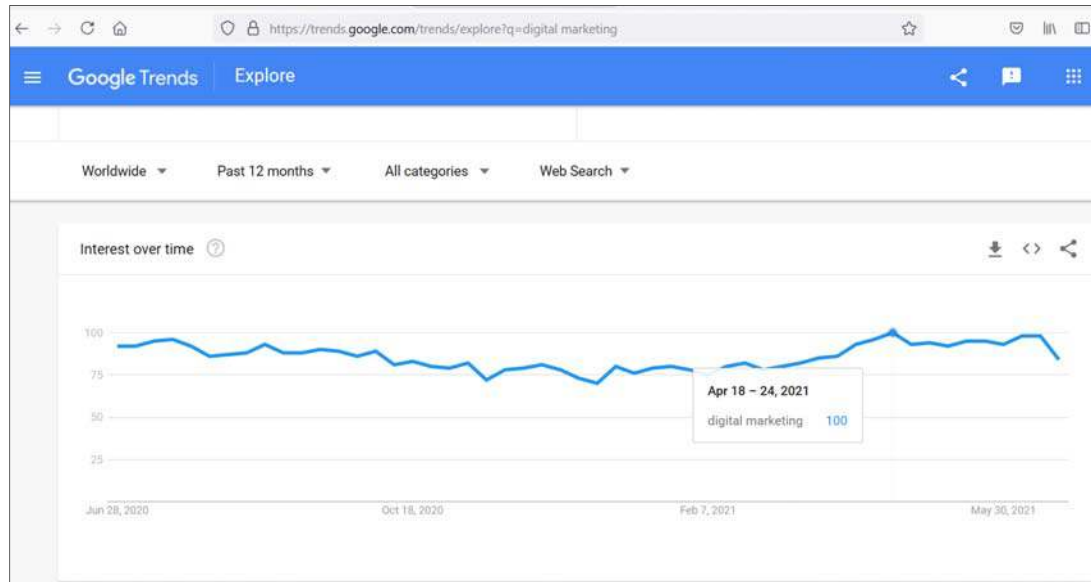
Figure no. 5. Trend results regarding the interest of searching for the key term “digital marketing” in Romania in the last 12 months



Source: trends.google.com

At the global level, search results are represented in Fig.6 indicating a higher search frequency of the key term “digital marketing”, as compared to the area of Romania, highlighting a peak in the number of searches also in February-May 2021. A possible explanation for these similar values may be the orientation of companies towards digital marketing services and providers before the beginning of the summer season, being expected a recovery of the economy after the COVID-19 pandemic.

Figure no. 5. Trend results on the interest of searching for the key term “digital marketing” globally, in the last 12 months



Source: trends.google.com

4. Findings and discussions

In recent years, the number of companies adopting artificial intelligence has grown steadily and now is considered more than 9 out of 10 companies have continuous investments in technologies based on artificial intelligence. As shown in the Table 1, there are various accessible platforms and marketing tools using AI with payment plans or with free access. More and more organizations in different industries are beginning to implement AI in a variety of applications as part of their marketing strategies. In Table 1 is included a comparative analysis of technology advancements met in the three case studies of artificial intelligence assisted platforms and tools useful for enhancing business: Hootsuite, Gong and Google Trends.

Table no. 1 Comparison between AI platform/tools that can be successfully used in the maritime sector

Platform/tool	Similarities	Differences	Remarks
Hootsuite	1. All three tools have incorporated AI technology. 2. All of them provide records analysis useful for appropriate decisions 3. Although the tools are intuitively and easy to use, the user (beneficiary) must have basic digital competences and	Maritime company can analyze their social media presence (posts, replies, feedbacks, questions, actions of registration or shari g	Paid subscription needed. Several plans are available. Results are used to strengthen the power of the company in the online environment.
Gong.io		Maritime company can analyze sales calls recordings.	Paid subscription needed. Several plans are available. Results can be used in assessing selling teams
Google trends		Maritime company can analyze the popularity of top Google search queries in different regions and	No paid subscription needed. Results can be used to identify the points of interest of users.

	IT&C literacy to be able to use the results	languages.	
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Source: own study

There are several ways in which artificial intelligence changes the future of digital marketing will be presented.

One of the biggest changes brought about by artificial intelligence in digital marketing is in the field of data collection and processing. We are in an era of collecting large volumes of data (Big Data), and the data we are going to collect in the coming years will grow at an exponential rate. The Internet of Things (IoT) means that more and more devices are connected to the Internet every day, which means that a significant amount of data is collected. As data is better collected, users become better at advanced data processing.

In the period 2020-2021, machine learning algorithms have already become better at fast processing of huge amounts of data, and AI technology allows to improve the use of collected data. Among the most obvious changes that occur due to advanced data processing is the over-personalization of marketing messages. At the moment, the most significant personalization in marketing is based on the fact that, voluntarily, consumers provide a lot of data necessary for the development of marketing campaigns, while data collection based on AI runs in the background (on social networks, website websites and other platforms). With the additional help of emerging technologies such as face recognition, companies now have the ability to target customers and create hyper-personalized marketing messages without having to rely on consumers to provide information.

Artificial intelligence helps marketers discover the type of content that is most effective based on the behavior of their target customers. This is a change with a significant impact on the future of digital marketing, as it allows the use of content that contributes to optimal results without unnecessary consumption of financial resources and time for tests, studies or surveys needed to find out what content works best for the public. aim.

At the level of 2020-2021, there are already content tools based on artificial intelligence that provide the necessary feedback and information to content creators in order to achieve better results related to the effort. These artificial intelligence tools can help create content, including:

1. Write blog posts based on data that is well differentiated for rankings
2. Writing optimized posts on social networks that stimulate the involvement of participants
3. Personalize emails and copy the site for higher conversions
4. Conduct effective keyword research to meet the user's intent.
5. Asses selling teams efforts and suggest way of improvements
6. Provide an overview on the latest trends and point of interests of users, based on geographical areas or other criteria, and compare trends in time etc.

5. Conclusions

In an age of dynamic change, such as the one we are in, the algorithmic age, where a major focus is placed on artificial intelligence technologies implemented in companies and especially in digital marketing tools, is necessary for maritime companies to look to the close future and intuit what changes they need to make to uptake the emerging digital context.

Further development of this research can be a qualitative study based on secondary data analysis on the use of artificial intelligence technologies can be applied for the development of maritime business.

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Traditional Gastronomy in the Perception of Romania’s Z Generation

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Abstract

Today the world is facing a continuous evolution, and in this process all age categories are affected. This is all the more obviously for the Z Generation, a generation born at the outskirts of the communist regime, or at the end of the cold war and at the beginning of the technology driven society. Among the many challenges that imply adaptation to this changing environment is that regarding food habits, that are dramatically influenced by the introduction of technology in all life aspects, including here eating routine. One of the goals for this study was to identify the interests of young people in eating traditional food and also to underline the factors that influence their decisions to eat this type of food. The research ended with a test of knowledge regarding the origins of some traditional food products from different Romanian countryside.

Key words: traditional product, z generation, youth consumers, innovation

J.E.L. classification : D10, L66, L83

1. Introduction

After 1990 a new generation was defined by the specialized literature, namely Generation Z, this being preceded by Generation Y (Millennials). The members of Generation Z include people who were born since the 1990s and make up about 25% of the global population (Kasasa, 2019). People belonging to this generation are characterized as being great users of mobile devices, people who adopt a more conservative behaviour regarding debt purchases, who love authenticity and freedom of expression, who have an entrepreneurial spirit and are competitive, people who easily adapt to changes and prefer independence (Clark, 2019). These people have accessed the labour market and as a result they started to obtain their own income. This last aspect becomes important for goods producing companies or service providers, including those related to traditional gastronomy.

The definition of the traditional product concept was done from several perspectives such as (Fibri & Frøst, 2019): the experts' perspective, the social perspective, the consumers' perspective and the ingredients' perspective. These definitions are limited only to the presentation of the definition of traditional products in accordance with the specialization of those who formulated them. (Bardonea & Spalvėna, 2019). It is believed that this hierarchy is an instrument to protect national and regional agro-food products. The industry producing traditional products mentions that for a product to be considered traditional, its production must be mostly local (Fernández-Ferrín, et al., 2018).

The consumers' perspective is a little different. For example, a study done in Austria and Croatia shows that Austrian consumers see traditional products as fresh and tasteful, while Croatians believe that traditional products are safer products and also products that are associated with elation (Cerjak, et al., 2014). Consumers from Belgium, France, Italy, Norway, Poland, Spain

associate the concept of traditional products with health, elaboration, heritage, variety, habit, origin, simplicity, special occasion and marketing. (Guerrero, et al., 2010).

2. Literature review

The lifestyle of young people has undergone a spectacular change with the development of telecommunications equipment and especially with the emergence and evolution of smart phones - the first authentic smart phones were those produced by Apple in 2007 - iPhone, but urbanization accelerated the shift towards dietary consumption, towards "western" diets high in sugars, fats, animal-source foods, processed and packaged products (Colozzaa & Avendano, 2019). The world we live in has become hyper connected, which has made it easier for people to communicate with each other, sending information but also accessing information (Guaragni, et al., 2016). Asgar & Chauhan (2019) point out that progress never means the death of culture, tradition and heritage. This change was also manifested in terms of eating habits. Food consumers have become highly concerned not only about the taste of food but also about quality, cleanliness and authenticity (George, et al., 2019). However, in these harsh competitive conditions, certain traditional products enjoy popularity, which stimulates entrepreneurs to propose to consumers traditional products tailored to the needs of today's consumers, such as attaching to the existing products new services. (Pieroni, et al., 2016). Vanhonacker, et al. (2013) mention that consumers are open to innovation in terms of traditional products. The changes that highlight the tradition are on the top from acceptance point of view, while at the opposite pole there is the introduction of vending machines for traditional products. It is estimated that nearly 255 million people with sufficient incomes form the potential market of traditional products (Fibri & Frøst, 2019). According to the study done by Vanhonacker et al. (2013) consumers in Belgium, France, Italy, Norway, Poland and Spain are open to innovation in the field of traditional products, an innovation that needs to be done carefully, especially regarding the intrinsic characteristics of the products (Guerrero, et al., 2009). The same are the consumers of Belgium, Italy, and Hungary as Kühne et al. (2010) show in their study. The market success of the innovation mainly depends upon the perception and traits of consumers as Roselli et al. (2018) state.

Higgs & Thomas (2016) point out that eating behaviour is strongly influenced by the social context. People tend to consume different products when they are in the company of other people compared to when they are alone. Ma (2015) emphasizes that food is not only a source of nourishment for people but also that it plays different roles in our lives; that it has to do with people's beliefs and the fact that it can have economic connotations. Batat et al. (2019) say that eating food becomes a journey that involves the enduring cognitive and emotional pleasure consumers gain from savouring the multisensory, communal, and cultural meanings of meal experiences. Food can be used by people to display their social position. Rare and expensive food is often used to display people's wealth and social status. Sometimes traditional products fulfil this role of displaying social status (Balogh, et al., 2016). (Ma (2015), Lee et al. (2014) also point out that people tend to eat the same food that they are used to, even when they are established in other countries. Research has shown that the consumption of products, even traditional ones, is influenced by the consumers' status - married or single. Single persons tend to consume home meal replacement that is a food prepared in a store and to consume it at home or in store which require little or no preparation on the part of the consumer (Kim, et al., 2018).

Lorenzo et al. (2017) points out that gastronomic experiences have become an important component of tourism, and recent studies mention, among others, the consumption of local traditional products as main reasons for travel and (Testa, et al., 2019), and Chen & Huang, (2015) state that food puts its mark on tourism in both the pre-travel phase, travel phase and post-travel stage. Beaufort (2014) considers that food has a close relation to culture, hospitality, friendship, solidarity, intimacy and care. Food is important not only for our survival but also for its social, cultural, and religious meaning.

3. Research methodology

We conducted an exploratory research aimed at determining the interest of young people to traditional products.

For our research we established the following goals: *1. Determining young people interest for traditional products; *2. Importance of gastronomy in choosing a destination; *3. Types of products consume during holidays; *4. Testing the influence of social and demographic factors on young people consuming traditional products.

We used survey in order to achieve the goals of our research. As a data collection tool, we used self-administrated questionnaires. We used the snowball method for the distribution of the questionnaires – due to low cost for type of data collection and also to the possibility of obtaining relevant information in connection with the research topic.

We did an exploratory research. In the group for our researched we included people with ages between 18 and 35 years (according with the Youth Act no. 350/2006. s.2 (2)(a) a youth is a citizen which has its age between 18-35 years), male and female, with internet access. We used the online platform www.isondaje.ro to create and collect our information's.

The link to the questionnaire was distributed by email to all the contacts of the researchers, with the request to distribute it to their contacts also, in order to complete the “snow ball” effect. The questionnaire had 13 questions.

The pilot study had 186 respondents (table no. 1), on which 74.7% had high school studies, and the rest have university and postgraduate studies. One third of respondents comes from Muntenia while the other regions share the rest. The majority of people who answer to this questionnaire were young people with age between 18-25 years old, 90.4 % of them (Z Generation), while the rest were between the ages of 26-35 years, 9.6% of them.

Table no. 1 Sample structure

Gender						
Male			Female			
32.8			67.2%			
Age						
18-25 years			26-35years			
90.4%			9.6%			
Education						
High school	Post-secondary school	University	Postgraduate course/ Doctoral studies			
74.7%	1.1%	18.8%	5.4%			
Region of origin						
Banat	Bucovina	Dobrogea	Moldova	Muntenia	Oltenia	Transylvania
0.5%	2.7%	4.8%	12.9%	67.2%	8.6%	3.2%
The average net monthly income						
Less than 1500 lei	Between 1500-2499 lei	Between 2500-3499 lei	Between 3500 – 4499 lei	Between 4500 – 5499 lei	Over 5500 lei	
45.2%	32.3%	8.6%	7.5%	2.7%	3.8%	
Family status						
Married with children	Married without children	In a relationship		Unmarried	Single	
2.7%	2.2%	37.1%		14.5%	43.5%	

Source: Authors' own calculations

4. Findings

Regarding youth interest to traditional products the considered variables were eating behaviour during vacation and the connection between religious holidays and the willingness to consume traditional products.

Accordingly to results more than half of respondents declared that they are eating 1 up to 2 local dishes during their vacation, while ~27% of them declared that they are consuming mainly dishes specific to the visited area. An important percent of them declared that they eat custom food. Only

~5% of respondents have declared that they consume just dishes specific to area that they are visiting. Regarding the consumption of traditional products during holidays 54.3% of respondents agree that they consume traditional products while 3.2% of them declared that they strongly disagree or are undecided regarding this question. 31.72% of respondents strongly agree that they consume traditional product during holidays.

Figure no. 1 Importance of Gastronomy in choosing a destination

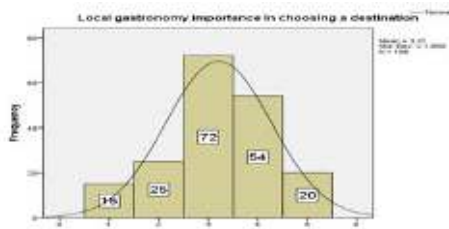
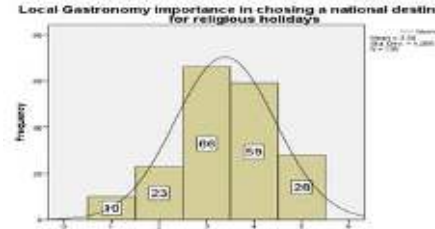


Figure no. 2 Importance of gastronomy in choosing a destination for local religious holidays



Source: Authors' own calculations

Analysing the importance of traditional gastronomy as a factor of choosing the holiday destination, we reached the following results: for vacations associated with the traditional holidays, the respondents gave a greater importance to the traditional gastronomy (3.39 average score of the answers compared to 3.21), in comparison with other vacations over the year.

Table no. 2 shows the main options for consuming traditional products among young consumers. Thus, approximately one in five people consumes, mainly traditional bred during their vacation, while 41.9% of them combine local traditional bred with non-traditional one. The results showed that male consumers tend to consume more local traditional bread compared to female consumers who prefer moderation. Moderate consumption is also present among those with high incomes and university studies.

Table no. 2 Consumption of traditional products during vacation

	Only	Mainly	Moderate	Rare	Never
Traditional bread	0.5	18.3%	41.9%	32.8%	6.5%
Local Wines	4.3%	8.3%	35.5%	24.7%	17.2%
Products from meat	3.8%	28.5%	33.9%	19.9%	14%
Local cheese	1.6%	24.7%	34.4%	25.3%	14%
Fish products	3.8%	14.5%	29.6%	30.6%	21.5%
Jams and compotes	6.5%	22%	32.3%	30.1%	9.1%

Source: Authors' own calculations

Another investigated aspect was the consumption of wines from local vineyards. Thus we found that one third of the respondents consumed local wines in moderation. Here we also notice the very high percentage of respondents who did not consume or rarely consume wine, 41.9% of them. The results confirm this trend also among young people who prefer whiskey and vodka (Muller, n.d.).

Regarding the consumption of meat products, we notice that there is a relatively uniform distribution regarding the choices of young people, so one third of them declares that they do not consume meat or rarely consume it, one third declares that they consume it moderately and one third declares that they consume mainly or only local meat products. These results somehow undermine the perception that Romanians are great lovers of meat, especially of pork.

Local cheese products are not that famous amongst young respondents, almost 40% of them declaring that they never or rarely consume this type of products. The results confirm the latest statistics in the field according to which Romanians consume almost seven times more imported cheese (Economica.net, 2018).

Other products that are not that popular are fish products, 52.1% of the respondents declaring that they never or rarely consume it. Romania is somewhere at the bottom of the ranking list regarding the consumption of fish at European level, and in terms of the origin of the consumed fish, it comes in most cases from imports, 2/3 of the total quantity (Etveş, 2018).

Jams and compotes are among favourite traditional products of Generation Z. 28.5% of them declaring that they consume this type of products, while 32.3% declaring that they eat it with moderation. Research has shown that women tend to consume more of this type of product.

We note the important percentages of people who never eat local fish products or drink local wines, results confirmed by official statistics indicating low consumption for the two categories of products.

Trying to analyse whether socio-demographic factors influence the consuming of different traditional products, the main correlation were summarized in table 2. Fish products are an interesting example of how the family status influence consumption. According to our results people who are married or in a relationship tend to consume more fish (fish products) than people who are single.

As for the interest in pickles, we found out that it is higher among men than among women. 80% of them tend to consume pickles with moderation. It was found that women mostly consume local pickles during holidays, namely 39%. The research revealed a medium to strong connection between the respondents' sex and pickles consumption.

Table no. 3 Factors that are influencing consuming of traditional products

Variable	Variables	Pearson Chi-Square / Likelihood Ratio (Asymp. Sig (2-sided))	Phi/ Cramer'sV
Family status	Fish products	L – 0.037	C - 0.187
Gender	Pickles	P – 0.05	C – 0.226
	Soups	P – 0.015	C – 0.275
Monthly income	Poultry meat	L – 0.004	C – 0.230
	Meat from sheep's	L – 0.044	C – 0.199
Region of origin	"Mici"	L – 0.002	C – 0.249

Source: Authors' own calculations

Another aspect that was noticed was that is that men tend to associate sour soups with cream and dried beans with smoked ribs sour soup with Muntenia or Oltenia while women associate them with Moldova, although the specialists consider them to be specific to Transylvania or Banat.

We tested also if gender has an influence on drinking local wines, as there is a common knowledge that men are drinking more than women, but we didn't find any such connection, as it is also concluded by (Coros, et al., 2019).

At the end of the questionnaire we also investigated the degree of knowledge, among Generation Z, of the origin of some traditional dishes. The history and geography of Romania have led over the years to certain specific gastronomic particularities of the main regions, which, in the last century, have expanded at national level. Starting from associating some dishes or groups of culinary products with a certain region and with specific origins from a geographical area, but consumed at national level, it results that the level of recognition of their origin is the following:

- 53.8% of the respondents correctly associate the category of "Mici, sausage or other grilled and frying meat products" as Romanian specific dishes; 33.4% of them believe that they are specific to the South of Romania while the rest believe they are specific to the Northern Regions of Romania;
- 86% of the respondents incorrectly associate the category of "poultry meat dishes, turkey tray steaks, goose or duck on cabbage" as specific dishes of Moldova; 51.6%, of the respondents believe that these dishes are rather coming from the south of Romania; 91.4% of the respondents incorrectly associate the category "lamb or sheep meat dishes" with dishes specific of Dobrogea; they perceive these dishes as specific to Romania in general or to Transylvania / Banat;
- 29.6% of the respondents correctly associate the category of "sour soups with cream and dried beans with smoked ribs sour soup" as being specific to Transylvania and Banat, while the rest associate these dishes with Moldova (23.1%), Muntenia and Oltenia (20.4%);
- 86% of the respondents incorrectly associate the category "poultry meat dishes, turkey tray steaks, goose or duck on cabbage" (which are dishes specific of Moldova). The majority of the respondents consider that the south of Romania is the region those dishes come from.

- 23.7% of the respondents correctly associate the category "Vegetable sour soups, dishes of various vegetables with or without meat" as specific to Muntenia and Oltenia. A significant 22.6% of the respondents consider these dishes are specific to Romania in general and not to a particular region.

5. Conclusions

The results of the research have revealed that young people are open minded in connection with the consumption of traditional products. But according to other researchers they like products that are adapted to nowadays consumers (Vanhonacker, et al., 2013). We note that more than half of our respondents tend to consume 1 or 2 traditional products during their vacations. We want to point out that young people consider that there is a strong connection between consuming traditional products and religious holidays. This also supports the conclusions of (Grunert, 2019).

Most of the respondents consider that the existence of local gastronomy plays an important role when choosing the next vacation, fact that is also highlighted by Testa et al. (2019) and Chen & Huang (2015). We also note that among youth there is a low demand for traditional products for fish and local wines, fact also confirmed by official statistics (Muller, n.d.), (Etveş, 2018).

According to the authors of the study, the consumers who are part of Generation Z have difficulties associating traditional products with the regions of Romania, which denotes the lack of an appropriate gastronomic culture. They tend to associate the dishes mentioned in the research with the regions from which they come, not really thinking about the specificities of each region.

As a main limitation for this study is that the sample is not representative at national level, but the results come to complete the existing literature in the field of traditional products. The results could be use also by the entrepreneurs in the field to proper orientate their campaign of promotion when targeting the members of Generation Z.

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Social Media and Public Universities. Theoretical Aspects

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Abstract

The massive and dizzying irruption of Information and Communication Technologies that we are currently witnessing has substantially transformed the way in which people learn, teach, communicate, work, and, basically, how they live. It has affected nearly every fact of life, including the educational process. The universities, both public and private, have begun to increasingly rely on the Internet, and especially on social media, to reach out and get closer to students. As a result, social media marketing has received increased attention in marketing for higher education. This paper aims at clarifying some of the concepts of marketing communication in public universities and set the theoretical background for future research.

Key words: higher education, Romania, social media, literature review, public universities

J.E.L. classification: M31

1. Introduction

Every society needs a public sector, whose main function is to define the guidelines of society (Florescu, Malcomete & Pop, 2003). The second role of the state administration is to provide public services of vital importance to the public interest, such as the defense and organization of the army. Central and local governments consider that they should be responsible with the provision of essential public services, such as law enforcement, infrastructure, education and health care etc. (Kotler and Lee, 2008). The third role is to provide the necessary public services that neither the private companies nor the non-profit organizations want or can provide with existing resources. Thus, administrations usually provide assistance to those in need independently or together with non-profit institutions.

Like any other organization, educational institutions develop specific activities in a very dynamic business and social environment. Demographic trends and technological developments, global changes, the economy, the international labor market and the standard of living of citizens have significantly affected the higher education system and its image in society. In addition, in the context of the economic crisis, both businesses and individuals place greater responsibility on higher education institutions for the efficiency of graduates and their adaptability to the requirements of employers. In turn, universities face various problems rising from specific macroeconomic development, and their response to local community demands is sometimes considered to be slow.

2. Theoretical background

The reform of higher education in Romania began in the 1990s, in the context of post-revolutionary economic transformations. Like many other ex-socialist states, the number of Romanian universities increased significantly, from 46 in November 1989 to 63 in 1993 and then to 126 in 2000. The number of students also increased from 533,152 in 2000/2001 to 907,353 in 2007/2008 (Romanian National Institute of Statistics, Romanian Statistical Yearbook (2011)). The demand for higher education programs was very high in the first decade after the revolution, which led to the phenomenon of market expansion and diversification. As a result, competition between higher education organizations has increased dramatically and the market has now become

saturated, and in addition to a high level of competition, Romanian universities have faced many threats in recent years. Consequently, in the last years, the main concern of Romanian universities has been to attract enough students to ensure the survival of academic programs and faculties and their maintenance in universities.

More and more universities, whether public or private, are looking to promote professional performance among students (Ali-Choudhury & Bennett, 2008). They seek a solution to address the coherent challenge of higher education in attracting and retaining young people in their curricula, given the significant societal and labor market dynamics.

The arguments are also outlined from the perspective of the desideratum, imperatives and recommendations for higher education existing in the agendas and official documents of the European Union. The Europe 2020 strategy imposes as major objectives at the level of the European Union and the Member States the reduction of the early school leaving rate below 10% and the increase of the share of the population with higher education between the ages of 30 and 34 (NESET (2013).

Consequently, at the national level, the objective of increasing the share of tertiary education graduates to 26.7% was assumed in 2010, emphasizing that for this purpose reforms are needed not only in education, but also in the economy meant to support the expenses with education. Also, one of the national objectives of Horizon 2030 is “placing the education and training system in Romania at the level of superior performance in the EU; significant proximity to the EU average in terms of educational services provided in rural areas and for people from disadvantaged or disabled backgrounds.” (Romania's National Strategy for Sustainable Development Horizons 2013-2020-2030).

Although the share of the population aged between 30-34 with a level of tertiary education registered a constant increase of approx. 5% in recent years, the graduation rate of tertiary education is one of the lowest in the EU (25.6% in 2015, compared to 38.7% in the EU). According to reports published by the European Commission (European Commission: Monitoring Education and Training 2017), these are some of the most relevant measures proposed to increase the graduation rate at university level:

1. Increasing the number of high school graduates and attracting more types of students - candidates who come from disadvantaged backgrounds or socio-economic places, who belong to ethnic groups or who have a disability.
2. Elimination of financial obstacles.
3. Improving guidance and counseling for students to help them choose a suitable course (pre-college guidance).
4. Development of educational infrastructure - increasing the number of educational units, increasing investments in technology.
5. Improving the quality of higher education and increasing its relevance to the labor market - for example, by increasing the number of teachers, increasing the number of advisers, increasing the number of active readers of university libraries.
6. Increasing investment and expenditure in research and development.
7. Reducing dropout rates and the time required to complete studies.

3. Findings. The challenges faced by the universities in the context of social media

With the emergence of the internet, the development of the web allowed people to have greater access to information through blogs, forums, institutional accounts and various thematic portals. However, as Koivula, Keipi, Koironen and Räsänen (2018) point out, it was not until 2000, with the creation of social networks, that people had the possibility of living an interactive experience, participating in social circles and interests on various topics, enriching the configuration of his personal self and his environment.

A social network does not only consist of a channel to access information, but it also consists of a platform connecting people and communities. The platforms can be classified as horizontal or generalist (Facebook, Instagram, Twitter), or as vertical or specialized (LinkedIn, Soundcloud, Flickr) when users interact in communities segmented by geographic scope, thematic and / or sociodemographic. Social networks are a space where conversation is generated by sharing and not

the mere passive presence of users in an online world or community (Rodrigo, García and Martín, 2011), connected in real time (Koivula et al., 2018), with access to endless content (Mosquera & Bartolomé, 2017) produced and shared by other users in a natural and interactive way that shape the lives of millions of people (Kurkula, 2011; Clark et al, 2016).

Universities are institutions of great importance for societies and they need to develop more agile processes in order to satisfy the needs of their environment (Hemsley-Brown, 2011). Of course, for any organization that must face a digital transformation, it is a great challenge to adapt to horizontal structures and processes, especially because it requires greater transparency and closeness to users. However, it is a necessary path that must be implemented comprehensively, and not as a commercial or institutional communication aspect (Rivera-Rogel et al., 2019; Çetin, 2004).

The new shared means of communication, such as social networks, require that universities consider two aspects: establish clear goals that they want to achieve and how they will be achieved with the participation of the public, internal and external (Mazza and Palermo, 2019). As Opresnik (2018) explains, the participation of brands in the digital environment requires the design of a SMART methodology that involves the entire organization: the objectives to be achieved must be Specific, Measurable, Achievable, Realistic and structured in an achievable time frame (Time).

The Universities must be aware of this change and adapt to it and to the new situation to take advantage of certain derived benefits (such as the creation of social communities, immediacy and the unreserved availability of geographic time or place, in addition to the valuable dialogue between organization and society (Howard, 2013). But the transition does not seem to be easy, especially in an institution characterized by a bureaucratic and complex administration, composed of a large set of internal and external stakeholders.

In relation to the use of web 2.0, it is worth highlighting the definition used by Filip (2012), who classifies it as "a social phenomenon in relation to the creation and distribution of content on the Internet, characterized by open communication, decentralization of authority, the freedom to share and use, within an approach that treats human relationships as conversations". As generators of conversations, the absolutely key role that users play in shaping the medium in the idea of Web 2.0 is revealed. Without their active participation, a good part of the existing services on the Internet would not make sense. Therefore, the most important thing about Web 2.0 is citizen participation that encourages and provides feedback. Users are no longer mere passive receivers, but interactive receivers, with the ability to create and disseminate information and messages, placing themselves at the forefront of the new generation of the Internet (Cebrián Herreros, 2008; Chapleo, Carrillo Durán, Castillo Díaz, 2011).

This implies a feedback, exchange and discussion, gathering in a participatory community a large number of users. (Cebrián Herreros, 2008; Ramachandran, 2010). Web 2.0 has empowered the user, making him an almost inexhaustible source of content and favoring the emergence of a new concept related, on the one hand, to the media and, on the other, to the fact that the users of the network themselves dedicate themselves to generating content that may be valuable to other users (Peruta & Shields, 2018).

Maringe (2006) considers that social networks are appropriate to use in the educational environment, as they promote communication with students in a bidirectional way. The traditional student has always shown a reactive attitude when it comes to the relationship with the university. However, by using social media, the traditional reactive attitude becomes proactive, since they can express their opinions much easier and faster than before

At the university level, institutional communication is one of the most important tools that these public institutions have (Peruta & Shields, 2018). Any intervention in institutional communication must be framed within a global perspective, which justifies its implementation as part of a broader communication strategy. This strategy must fit within the institutional objectives of the organization and bring together all the communicative interaction policies under the same parameters as the rest of the policies (Losada, 2004).

4. Conclusions

Despite the reluctance, there are numerous studies that testify that universities can effectively use Web 2.0 to communicate and engage with the students (Clark et al, 2016); thus fulfilling its social function as a public institution (Taecharungroj, 2014).

According to Clark et al (2016), University 2.0 is not just an option for educational institutions, but something more important; perhaps a fundamental resource for their survival. In fact, it was suggested a concept that goes even further: University 3.0. In this sense, Ali-Choudhury and Bennett, (2008) spoke about three concepts: “University 1.0 is the traditional model of knowledge transmission; University 2.0 recognizes certain interactivity and diffusion of content on the Internet; and University 3.0 will be social, semantic, understood within the conversational dynamics that we live in”.

Social networks allow and favor the publication and sharing of information, self-learning; team work; communication, both between students and between student-teacher; feedback; access to other sources of information that support and even facilitate collaborative learning and contact with experts. Together, all these applications and resources make learning more interactive and meaningful and, above all, that it takes place in a more dynamic environment.

In conclusion, public universities can benefit from applying marketing techniques and embracing social media technologies. Even if the public university system is influenced by legislative and organizational rigors, public universities can find the way to communicate, interact and engage with the students. What is more, marketing concepts and theories from business can be successfully applied to the public sector, and more precisely to the higher education sector, if properly adapted to its particularities.

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Strategic Planning Role in Organizations in Romania – Part of Management

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Abstract

The organization's resources are limited, and the effects of poor strategic planning available to the organization are felt in a short period of time. Therefore, efficiency aims at saving these resources, in order to be valued in other activities. Knowledge of this analysis is the support for substantiating decisions at the level of an enterprise, and for managers, such an analysis is essential. The strategic planning process directly helps the people involved, by assuming the roles and responsibilities of each, teamwork, employees having the opportunity to create value for the organization, and in addition can create job stability. The key to an effective planning process is to build measures and steps that allow management to follow the results closely at certain intervals. The main purpose of the research study is to analyze managers' perceptions of the strategic planning process.

Key words: process, planning, strategy, organization

J.E.L. classification: M11

1. Introduction

The current situation has produced major changes in the market as a result of the pandemic. Now, more than ever, the strategic planning process has proved useful, requiring a period of reflection on all known data and their modification, in order to maintain a balance. Some managers assimilated the pandemic with a challenge, managing to emerge victorious, without suffering losses, but others failed to adapt, making unfavorable decisions. Not only did the managers face the most difficult decisions, but it was necessary to completely reorganize the activity, the plans created in the past were not suitable for such a situation, new ones were needed. The only source from which they could obtain information were the social media channels, and in this sense, in order to maintain a harmonious state within the company, the managers had to worry about the psyche of the employees. The measures they found referred to improving communication and transparency, special training, teleworking and social support. In order for these measures to be adopted, at the moment of the onset of the pandemic in Romania, the decision-making processes had another dimension, being necessary fast decisions, but also effective ones.

The partial or total reduction of the activity led to negative effects, the revenues froze (especially in the tourism industry, or the organization of events), and the companies whose object of activity they were faced with an unprecedented situation. There have been companies that have predicted such situations, implementing measures in advance if they can not operate, adapting to the online environment and technology, managing to survive for a short time, but some were completely unprepared, pandemics or disasters of this type being very rare.

An important aspect is underlined by the ability to use technology, to promote the content of the platforms in which the company's activity has been transposed, in this way being attracted customers to the products or services offered. Strategic plans that included investments in technology and the creation of an online position have proven to be effective in recent months. This method is used by most businesses today, but there is a possibility that it will become insufficient over time.

The importance of strategic planning derives from the ability of managers to deal with uncertainty in a way favorable to the company, thus achieving efficiency and effectiveness. With a well-defined plan, the disastrous effects of changes in the environment can be reduced, and the definition emphasizes the idea of being a plan that takes into account all the factors of influence, by all the staff concerned, and, last but not least, to can be adopted at all hierarchical levels of the company.

The path followed by strategic planning starts from the mission, the vision of the organization and the triggering idea of the need for such a process. Once the cause or situation that causes this need has been identified, the people involved, the processes, the knowledge and the resources that must be taken into account in starting the process are identified.

It is desirable that the planning be done in accordance with a set of strategies, for the following reason: today's businesses are conducted in a large market, and change occurs at a pace sometimes difficult to imagine, taking through surprise any plans made up to time zero. In the past, strategic planning was done only by some companies, for purposes such as gaining competitive advantage or to create the image of an organization concerned about the future, but today the process is the way to survive. No company can remain in a dynamic market if it does not have knowledge about the situation in which it is and what it is heading towards. The strategic planning process has the role of balance, balancing the company's initiatives with staff revenues and productivity.

2. Literature review

Management can be defined as the process of efficient and effective achievement, through planning, organization, coordination and control, of things through and with people, in order to achieve organizational goals (Fayol, 2005). Starting from this given definition, one can observe the importance of planning, being the first function of management, indispensable for carrying out the activity.

A subdivision of management, strategic management is a task with a high complexity, but it is a useful framework for designing and developing the strategic plans of the organization, in order to achieve the proposed objectives (Fred, 2007). Described as an intellectual map, it deals with a company's strategies, from the design phase of a plan to the subsequent analysis of its implementation. Strategic management is an effort to reap the benefits of strategic thinking (Parnell, 2013). The efforts involved in strategic management are underlined by actions aimed at achieving a path that the organization must follow until reaching a goal, but this path must include the necessary means and analysis, both internally and externally, as well as factors influencing the company (Koufopoulos, 2012).

Achieving through actions and thinking, strategic management has emerged as a necessity in order to reduce the negative effects that could be caused by the environment to the organization in question. Living in a time when change is taking over all sectors, senior management must focus on strategic management, in order to anticipate the events that could take place and at the same time the solutions to remedy these problems, so that the company is ready for any obstacles (Rothaermel, 2020).

Strategic planning has as its starting point the mission and vision of the organization. It can be described as a series of activities aimed at defining and applying all the tools necessary to achieve the objectives and long-term pursuit of the organization's mission. This process is similar to the idea of an investment, whether we refer to material resources, or financial, human or time, being based on well-thought-out decisions by the company in order to use part of its wealth (Koufopoulos, 2012).

Researching in detail the most favorable directions of action, the planning can take several months, depending on the amplitude it has and the final goal to be achieved. Although, by its nature, it presupposes future orientation, it can only be executed with the help of an analysis of the past and present, so that we can identify the correct actions taken so far, the ways and methods for which we know their applicability, and the skills or actions that requires development and refinement. Done

correctly, strategic planning is the process that triggers the desire to learn and improve the organization as a whole (Amason and Ward, 2020).

The major advantages held by companies that resort to strategic planning are directed towards the financial part and towards the part of creating a favorable image in the eyes of its clients or partners. There are five guidelines for taking advantage of a strategic planning process in your organization (Kaplan and Norton, 2020):

- 1) It aims to prevent conflicts in the internal or external environment
- 2) The participation of the staff in the process leads to different opinions and more complex ways of approaching, being combined the ideas of several individuals, a broader image of the events that can be encountered is formed and, implicitly, more solutions to approach and remedy situations.
- 3) The motivation of the staff is achieved, in an indirect way, by their participation in the construction of this process.
- 4) Through the contribution brought by the company's employees, being necessary the team work, the possible divergences between the members of the company can be diminished.
- 5) Since the staff participates, the applicability of the measures becomes easier, being their own ideas it is easier for them to adopt them. In this way the opposition disappears, and the procedures or methods to be implemented are easier to understand and respect in the future.

The big disadvantage of carrying out the process derives from the high costs, to which the company could be subjected in establishing the strategic plan. The costs can be so financial, requiring cash for various meetings, programs, implementation of other processes, but also labor costs, there is the possibility of the need for specialized people, with skills not found in the organization. In terms of time, it can also be a valuable resource that is consumed in the process, requiring a long time to establish all the specific stages of strategic planning.

3. Research methodology

The general objective of the research is the analysis of managers' perceptions on the importance of the strategic planning process within Romanian organizations. The research was quantitative, using a questionnaire-based survey and aimed to analyze how managers carry out the strategic planning process and the importance generated by the benefits resulting from this process organized by several companies in Romania. The sample consisted of 327 managers of companies in the fields: *IT, energy, automotive, production*.

In the analysis of the companies subject to the research study, several modern methods of strategic planning were highlighted:

M1. The G.A Cole model: comprises two stages, the first being oriented towards the correct and clear definition of the goals, and the second aims at reviewing the results obtained from the previous plans implemented. The objectives will be formulated using the well-known SWOT analysis, integrating both stages at the same time.

M2. Hoshin Kanri model: it is mainly applied by companies that want a consistent approach for all hierarchical levels, being optimal for large organizations, where there are at least three levels of management (front-line management, medium and higher). It helps to achieve vital goals, focusing all the attention and efforts of managers towards them, and through the model are provided guidelines for actions to effectively manage change.

M3. Planning with scenarios: the method shows only the part that will follow, the future, being considered by researchers the most useful method in strategic planning because it reduces uncertainty, addressing possible future events in time. Scenarios help to test the disastrous effects that an organization could suffer for certain reasons.

M4. PESTLE analysis: similar to the SWOT method, it draws attention to the past-future anchor, but the big difference between the two is that PESTLE focuses only on external factors, following their evolution, and providing a future perspective. The acronym, in fact, represents the following segments: political, economic, social, technological, legislative and ecological. The factors in each segment have a significant influence on the company, either positive or negative, but in any case they can generate considerable changes.

In order to achieve the established objectives, the research aims at validating the hypotheses:

Hypothesis 1: Identifying how to carry out the strategic planning process;

Hypothesis 2: Identify the benefits of the strategic planning process.

The model tries to use, at maximum, in a scientific way, the informational base, and the procedures for imitating the rational mode of decision making is, in more or less elaborate forms, the conceptual essence of the models.

The steps of the global utility method are as follows:

Step 1. We build the utilities matrix with the elements x_{ij} , $i = 1, \dots, r$ and $j = 1, \dots, n$
Each matrix element is calculated for the maximum criterion with the expression:

$$x_{ij} = u_{ij} = \frac{x_{ij} - x_{i \min}}{x_{i \max} - x_{i \min}},$$

and each minimum criterion with the expression:

$$x_{ij} = u_{ij} = \frac{x_{i \max} - x_{ij}}{x_{i \max} - x_{i \min}},$$

where:

x_{ij} = value of the i indicator associated to the j indicator;

$x_{i \max}$ = minimum value of the i indicator;

$x_{i \min}$ = maximum value of the i indicator.

Step 2. We calculate the global utility for each project, as the sum of the products between the utility matrix elements (the column vector corresponding to the project) and the importance coefficient given for each indicator.

$$UG_j = \sum_{i=1}^r \alpha_i u_{ij}, \text{ where } \sum_{i=1}^r \alpha_i = 1$$

Step 3. We choose the project to which the V_j maximum global utility corresponds.

$$\max\{UG_j\} \Rightarrow V_j \quad j = 1, \dots, n$$

For differentiating a decisional V_i variant (given n variants), and for selecting the best offer by simultaneously considering various assessment criteria (C_j , $j = 1, \dots, n$) we use the maximum global utility method. Finding the best combinations of attributes (characteristic of a variant) forms the object of the multi-attribute problem.

This involves the transformation of all number values a_{ij} (expressed in the associated measure units) and qualitative characteristics in utilities u_{ij} , that is, numerical (dimensionless) values located in the range $[0, 1]$. The basic assumption in the correct operation of the weighted sum method is the independence of the criteria. The largest of the synthesis utilities indicates the best option.

4. Findings

Table no. 1 presents the informational basis of the study, respectively the share of importance that managers give to each method of strategic planning.

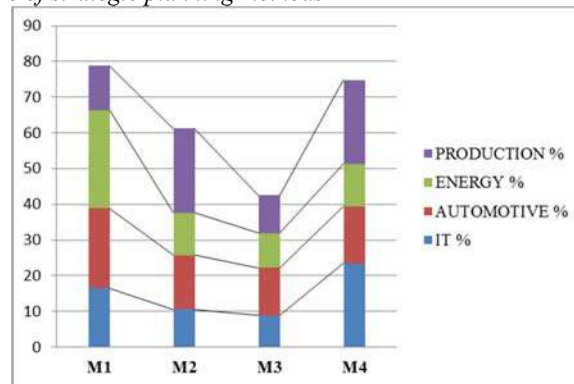
Table no. 1. The importance of strategic planning methods

STRATEGIC PLANNING MODELS	FIELD OF ACTIVITY			
	IT % (v1)	ENERGY % (v2)	AUTOMOTIVE % (v3)	PRODUCTION % (v4)
M1.G Cole model	16.45	22.35	27.5	12.5
M2.Model Hoshin Kanri	10.55	15.15	11.9	23.61
M3.Planning with scenarios	8.9	13.25	9.8	10.54
M4.Analysis PESTLE	23.45	16	11.82	23.55

Source: developed by the authors based on the collected data

The resulting results indicate that the manager first takes into account the strategic planning method: M4. The PESTLE analysis and finally the manager takes into account the M3 method: Planning with scenarios (Figure no. 1).

Figure no. 1. The share of strategic planning methods



Source: developed by the authors based on the collected data

Going through the calculation algorithm involved:

Step 1 - building the unit matrix with the elements x_{ij} Figure no.2

Figure no. 2. The matrix of units

$$\begin{bmatrix} 0,26 & 0,66 & 1,00 & 0,00 \\ 1,00 & 0,65 & 0,90 & 0,00 \\ 0,00 & 1,00 & 0,21 & 0,38 \\ 0,99 & 0,36 & 0,00 & 1,00 \end{bmatrix}$$

Source: developed by the authors based on the collected data

Step 2 - Calculation of global utilities for each organization (Table no. 2):

Table no. 2. Results of the calculation of global units

GLOBAL UTILITY	RESULT
IT	2.25
ENERGY	2.66
AUTOMOTIVE	2.10
PRODUCTION	1.38

Source: developed by the authors based on the collected data

Step 3 - Table 2 shows the calculation of global utilities, the highest global utility of companies in the field of ENERGY. Therefore, following the application of the algorithm for calculating the maximum global utilities method, it can be concluded that ENERGY organizations have best assessed the importance of strategic planning methods.

The first hypothesis, that of identifying the way the process is organized, generated valuable information about the time for which the future is planned: the time horizon being a short one, comprising 1-3 years. According to these results, managers are focused on thinking and building plans for the near future, not for very long periods of time, which can be explained by the fact that unforeseen situations can be expected for a limited time.

The second hypothesis included the identification of the benefits enjoyed by the organization, after carrying out a strategic planning process. The benefits found can be grouped into two categories: employee benefits and organization benefits, viewed as a whole. Managers believe that employees have been encouraged to get involved and collaborate harmoniously in the various actions proposed

following the strategic planning, but they have also been motivated by the consolidated position that the organization has formed in the market, where there is job security.

5. Conclusions

This research can be justified by the need to identify the reasons why the strategic planning process at the level of an organization is important, regardless of its field of activity. The specialized literature offers many similar researches, but for organizations in Romania they are very few, in terms of the importance of strategic planning.

Like any process, strategic planning presents its particularities depending on the country, the specifics of the organization, its dimensions, and the global evolution. In the case of large organizations, this process is broader, while in smaller ones, even non-profit ones, it is easier to accomplish. The usefulness of strategic planning is emphasized in Romania within successful companies, those concerned about the future and who want to reduce uncertainty as much as possible.

The role of strategic management is felt in Romania when the complexity of the environment has reached significant proportions, and the multiple changes encountered in the life of the company, but also of the activity carried out at microeconomic level have imposed the need for deep plans.

Most managers in our country opt for PESTLE analysis, being the most accessible and well-known analysis of the company's environment, addressing the four hemispheres in which it is located. It is an analysis that does not require considerable effort. In addition, for a deeper analysis, they also choose the Hoshin Kanri model, thus obtaining information about the external environment, in order to be prepared for possible situations.

Being more difficult to achieve, and considered resource consuming, the other models, such as GA Cole and Scenario Planning - are avoided by most Romanian managers. These require a longer period of time and availability, both material and financial, to be accomplished effectively.

The costs of the process can be justified by the importance of building a set of advantages and benefits that flow from it, but more than half of the companies are not willing to accept such costs.

Managers go through this process in order to create a foundation on which to support their entire effort, the actions being creative of value, vision and positive results, and a combination of a strategic plan with the facts, the organization will experience a favorable transformation.

The result can be a company that emphasizes responsibility and priority activities, to which are added the following benefits:

- ✓ Better decisions through effective communication: since the vital elements of the legal entity's existence (mission, visions, objectives, values) are established, managers can make the right decisions, adapt and develop new systems, make the right investments, saving in this way the limited cash he has.
- ✓ The tension disappears from the internal climate: the participants in the process express their opinions and are forced to collaborate in order to successfully complete, thus eliminating any tensions or confusion between employees.
- ✓ Increases concentration: all staff involved make efforts in the process, turn their attention to what is important and eliminate other irrelevant issues.
- ✓ Obtaining a competitive advantage: planning gives advantages to organizations, and through the analyzes performed a new market segment can be conquered, or the action can be focused only on that product / service offered to customers, in order to improve it and bring something more competition, gaining a significant share of the market in this respect.
- ✓ It gives confidence and better solutions: at first it can be seen as a difficult, expensive process, but the great advantage is that solutions are thought for the future challenges facing senior management. Preparing for the unpredictable gives a certain degree of security and confidence that the company's revenues will not be severely affected by what follows.
- ✓ Reduces risks: reduces to a certain extent the risk of errors, anticipating change and reaction actions of the company. This ensures a harmonious evolution in the medium to long term, adopting plans for the resources available to the organization.
- ✓ Increases employee motivation and performance: since the participants in the strategic planning process deal with the future plans of the company, establishing exactly the future actions are recorded performance at the level of work performed. Employee motivation arises from the

stability of the organization in the face of dangers, there are pre-created plans with related remedial solutions.

In conclusion, a correctly organized strategic planning process, in accordance with the particularities of the company can lead to a sustainable business over time. If for some companies, the strategic plan has a special importance, for others it is only a process that supports postponement.

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The Return of Major Music Festivals in Romania, Postponed due to the COVID-19 Pandemic: Controversies over Possible Discriminations Regarding Not Allowing the Participation of Non-Vaccinated Spectators

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Abstract

Events play a major role in promoting the localities that host them and in attracting tourists to the respective destinations. Among the various categories of events, sports events, and festivals, especially music festivals distinguish themselves by the large number of spectators.

In the last decade, in Romania, several music festivals have had great success with the public, the number of participants increasing significantly. The measures taken by authorities in the fight against the SARS-CoV-2 virus led to the cancellation, respectively the postponement of important music festivals in Romania, in 2020.

This paper analyzes the situation and evolution of the three most important festivals in Romania (UNTOLD, Electric Castle and NEVERSEA) in recent years and the prospects of their organization in the year 2021. The Romanian authorities have decided to restrict access to major events for the people unvaccinated against COVID-19, a measure which can be considered discriminatory.

Key words: major events, music festivals in Romania, vaccination against COVID-19, possible discrimination, SARS-CoV-2

J.E.L. classification: D63, I10, I14, I18, J71, M38, O10, Z32

1. Introduction

One of the most affected sectors of activity in Romania, during the COVID-19 pandemic, alongside HoReCa industry, travel agencies and passenger transport, was and still is the event planning sector.

The organizers of the festivals established in recent years have had to postpone the events, have tried to maintain good relations with the guests and sponsors, and to rethink the safety and distancing measures for the next events (Hațegan, 2021, p.1).

Unfortunately, the protection measures for these companies, from the Romanian authorities came very late, and some previously announced measures, since the year 2020, were still not being applied by June 2021.

The losses recorded due to the restrictions imposed by the Romanian authorities during the measures taken to protect the population from getting the COVID-19 disease have affected not only the companies organizing the events, but also the local communities, which had a lot to lose. Thus, in Cluj-Napoca, the place where the UNTOLD festival was organized, over 60 million euros remained within the community in 2019, representing the revenues obtained, during the 4 days of the festival, by those who offered services related to accommodation, restaurants and cafes, shopping centers, public transport, etc. Also, in Constanța, the place where the NEVERSEA festival is organized, in the year 2019, the financial contribution of the festival to the local community was over 40 million euros, according to the organizers' statements.

The Romanian authorities' delay in taking the decisions regarding the conditions under which events, such as festivals, will be organized, in the summer of 2021, endangers the organization in good conditions of some of them.

2. Literature review

Many tourist cities are busy creating a competitive advantage, so as to differentiate themselves from others by the events they organize, attracting more tourists and thus succeeding in increasing the benefits from the tourists' expenses in the respective destinations. Major events have become an important tool for many cities, both in terms of the profits obtained from them, and in terms of attracting media attention, stimulating tourism development and generating economic growth (Richards, 2017).

The “eventful city” concept is becoming more and more attractive, within a differentiation strategy, as events can offer many benefits to the community and are flexible, compared to investments in fixed structures and they can have a certain reproducibility (frequency) in terms of their organization (Richards, 2017). Moreover, events can be considered true drivers of economic development (OECD, 2017).

Cities have always organized various events, but only in recent decades have they begun to be seen as an *urban phenomenon*, due to the significant increase in their number and size, all over the world (Quinn, 2005). In the specialized literature, terms such as “*Eventification of place*” (Jakob, D., 2013) or even “*Festivalisation*”, when it comes to festivals (Häußermann and Siebel, 1993) have appeared in recent decades. Gradually, *events* have become more and more common in our daily lives, becoming important marketing tools.

Event planning remains an important element of *communication*, distinguishing itself from the traditional advertising activities. It is “a composite communication system, developed by an organization, by associating its name or brand with a sociocultural event” (Baux, 1991).

Hosting major events is a unique opportunity to rethink or reposition a destination and to support the development of modern infrastructure. Thus, many countries nowadays consider the successful hosting of such events as a vehicle for economic growth, job creation, branding, well-being, and urban regeneration (OECD, 2017).

Special events take the form of carefully planned arrangements, designed to attract the attention of that part of the potential domestic and international clientele for whom the respective events are the main reason for the trip (Getz, 2005, p. 132). However, if the decisions of the authorities are delayed, there will not be enough time for the organization in good conditions of large-scale (major) festivals, in the summer of 2021.

3. Research methodology

In the elaboration of this paper, we have considered that a combination of research methods offers the possibility to conduct a more realistic analysis on the subject of major music festivals' planning during this period (Jupp, 2010; pp.95-97; 102-103; 113-115; 117-119). Thus, the desk research aimed at collecting secondary, quantitative information from the specialized literature on the organization of major events, especially the festival type of events, as well as secondary information on the evolution of regulations regarding the conditions and restrictions related to the organization of events in Romania during the COVID-19 pandemic. We have also carefully monitored the websites of the three music festivals analyzed (UNTOLD, NEVERSEA and Electric Castle), of other similar festivals in Europe and around the world, along with the publications that addressed topics related to the 3 festivals.

As for the direct research, carried out in the form of meetings and direct discussions of the author with representatives of event organizers (festivals) in Romania, as well as with representatives of the public administration in Constanța, we have used quantitative and qualitative information, direct, with a longitudinal profile, which ensured the most complete approach of the researched subject, from several perspectives (Jugănar, 1998, pp. 15-17; 23-25; 29-30).

4. Findings

The Travelship travel agency made a ranking of the most liked festivals in Romania, according to the opinions of the participants (travelship.ro). Among the music festivals, NEVERSEA, UNTOLD and Electric Castle took the first places.

Thus, NEVERSEA ranked first, being organized in Constanța, on a beach, on the Black Sea coast. On its official website (<https://neversea.com/>), the festival is also called "Island of Dreams" and distinguishes itself by the fact that it managed to bring on the same stage, among artists and guests, almost all the types of music existing in the world. UNTOLD, the largest music festival in Romania, organized every year, starting with 2015, in Cluj-Napoca, came second. The third place was occupied by Electric Castle, organized near Bánffy Castle, from Bonțida, a commune located near the city of Cluj-Napoca.

4.1. The most important music festivals in Romania and their evolution

UNTOLD - the largest electronic music festival in Romania

A group of young enthusiasts from Romania managed, starting with 2015, to organize annually an electronic music festival that would get larger and larger, becoming very well-known internationally and even being awarded, with the “Best Major European Festival” award, in 2015. The first edition of the UNTOLD festival took place between July 30 and August 2, in the Romanian municipality of Cluj-Napoca, at Cluj Arena. During the 4 days of festival, on average, 60,000 people participated daily, being the most important event in the action program of the Cluj-Napoca 2016 Program, the European Youth Capital. About 15% of the total spectators were foreigners. The average expenses made by tourists were 100 euros per day, for accommodation, meals, and shopping.



Photo source: Facebook/ @UNTOLDFestival

The fact that, during the European Festival Awards Gala 2015, organized in the Netherlands, UNTOLD received the “Best Major European Festival” award, has attracted the attention of the public interested in this kind of event, thus in the following editions the number of participants increased significantly.

The second edition of UNTOLD took place between August 4 and August 7, 2016. The approximately 300,000 participants spent 23 million euros, 3 million euros more than during the previous edition. A record number of spectators was documented on the third day of the festival, when Armin Van Buuren took the stage. On that day, there were 15,000 more participants than on the best evening of the first edition of the festival. At this edition, about 10% of the participants were foreign tourists. Between August 3 and August 6, 2017, the third edition was organized. Throughout the 4 days of the festival, over 330,000 spectators were registered, and the number of artists present was over 200. The fourth edition of the festival took place between August 2 and August 5, 2018. On the first day of the festival over 84,000 people attended, special guests being the band Chainsmokers, who came for the first time on a stage in Romania (Adevarul.ro, 2018). The audience record was set on the second day of the festival, at about 100,000 spectators. The fifth edition took place between August 1 and August 4, 2019, and during the 4 days of the festival over 372,000 participants were registered (Mediafax, 2019).

The evolution of the budgets allocated to this festival was impressive: from 5 million euros, during the first edition, it reached 26 million euros, in 2019 (Clujul cultural, 2019).

NEVERSEA Festival

It is the largest music festival organized on a beach in Romania, in Constanța (on Neversea Beach).

The first edition took place between July 7 and July 9, 2017, and in the 3 days of the festival on average, 40,000 people attended, per day. The NEVERSEA organizers are the same ones that organized, starting with 2015, the UNTOLD festival, in Cluj-Napoca. The second edition of



Photo source: Facebook/ @NeverseaFestival

NEVERSEA took place over 4 days, between July 5 and July 8, 2018. The third edition took place between July 4 and July 7, 2019. Over 150 musicians sang and it was the first time the American singer G-Eazy came to Romania.

Between the organizing company (Neversea Cluj Ltd) and the City Hall of Constanța a collaboration protocol was signed for organizing a festival with a new identity, adapted to the specificity of the area.

While in the 3 days of the first edition of NEVERSEA, in 2017, more than 153,000 people participated, spending over 30 million euros on accommodation, meals, transport and entertainment, in the 4 days of the 2018 edition there were, in total, over 210,000 spectators, and at the 2019 edition the number of participants reached 240,000, in the 4 days of the festival. Additionally, the festival's budget increased from 3 million euros, in 2017 to 5 million euros, in 2018 and 8 million euros, in 2019.

Electric Castle festival

Starting with 2013, in the commune of Bontida, in Cluj County, located near the city of Cluj-Napoca, in the Bánffy Castle, the Electric Castle Festival was organized every year. The originality of this festival is that it combines a varied musical line-up, from rock, reggae, to hip hop, electronic music, etc. **Bánffy Castle** is a Baroque-style architectural monument, built in the 15th century, located in Bontida commune, located near the city of Cluj-Napoca. The building was neglected during the communist period and it deteriorated, and nowadays is being restored by the Transylvania Trust to be used as a cultural center. Electric Castle contributes to the restoration of the castle through donations and social campaigns.

The first edition, which took place between June 21 and June 23, 2013, was attended by 32,000 spectators, in the 3 days of the festival, over 90 artists performing on 4 stages. The second edition, held between June 19 and June 22, 2014, under the motto "Bigger, Stronger, Better", registered 79,000 participants. The duration of the festival was extended from 3 to 4 days and the number of scenes was increased to 5. It thus became *the largest festival in the history of Romania until then* (Florescu, 2014). The third edition took place between June 25 and June 28, 2015 and documented a new record of spectators (about 97,000 people, in 4 days), over 150 artists performing on the 6 stages, the area occupied by the festival increasing to over 10,000 sqm (Digi 24TV, June 30, 2015).



Photo source: Facebook/ @ElectricCastle

The fourth edition took place between July 14 and July 17, 2016, with over 120,000 spectators. The fifth edition, between July 12 and July 16, 2017, had the motto "The most spectacular EC yet", the duration of the festival being extended to 5 days, and the number of spectators exceeding 171,000. At the sixth edition, held between July 18 and July 22, 2018, under the motto "Meet me at the Castle", the area used for the event increased by 30% (Aldea, July 16, 2018).

The 7th and last edition so far of the festival took place between July 17 and July 21, 2019, under the slogan "All things hidden / All things beautiful".

The evolution of the number of spectators attending the most important music festivals in Romania is presented in Table no. 1.

Table no. 1 The evolution of the number of spectators attending the most important music festivals in Romania

Year	Festival	UNTOLD	NEVERSEA	ELECTRIC CASTLE
2013		-	-	32,000
2014		-	-	79,000
2015		240,000	-	97,000
2016		300,000	-	120,000
2017		330,000	153,000	171,000
2018		335,000	210,000	210,000
2019		372,000	240,000	231,000

Source: Author's own processing of information published by the organizers, as well as information from various articles published by the local media

4.2. The great return of music festivals in Romania, in the year 2021, under the new conditions and constraints of the COVID-19 period

Although there are high expectations from music lovers in Romania and from abroad, who want to participate in festivals, due to the Romanian authorities' delays in taking the decisions regarding the announcement of the conditions under which these events can take place, there are still some great uncertainties regarding their organization in 2021.

2021 UNTOLD Festival

The 2020 edition was scheduled to take place between July 30 and August 2, but due to restrictions implemented after the emergence of the COVID-19 pandemic, the organizers announced on June 2, 2020 that they postponed it for the year 2021. Initially, the announced period was August 5-8, 2021, but it was rescheduled for September 9-12 because the Romanian authorities delayed the announcement of the new conditions for "relaxing" the restrictions regarding the organization of major events. UNTOLD could thus be one of the few international festivals that will take place in 2021 worldwide (Actual de Cluj: July 7, 2021).

According to the new regulations, issued by the Romanian authorities, starting with August, outdoor events can be organized without limiting the number of participants, if they are all vaccinated against COVID-19. Edy Chereji, the UNTOLD representative, stated that the limit on the number of participants is given by the capacity of the location. There will be 100,000 people per day "without the pressure of an exaggeratedly large audience" (Digi 24TV, 08.06.2021).

Immediately after the announcement, by the organizers, of the period in which the 2021 edition of UNTOLD will take place, the price for accommodation in Cluj and its surroundings has suddenly increased, in hotels, villas, campsites or rooms in yards, the rental rates being sometimes even 10 times higher than usual, for the September 9-12 period, which demonstrates the particularly high demand from the public (Digi 24TV, 08.06.2021).

NEVERSEA Festival

Due to the pandemic restrictions, the 2020 edition of the festival had to be canceled. For the year 2021, the festival was initially scheduled to take place between July 8 and July 11, but it was necessary to reschedule the event, for a date still unknown. Given that the organizers of NEVERSEA are the same as those of UNTOLD, it is unlikely that they will be able to mobilize for the organization of NEVERSEA in September of this year. Most likely, the festival will be rescheduled in 2022.

Electric Castle Festival

Due to the pandemic restrictions, the 2020 edition had to be postponed to 2021, between July 13 and July 17.

Considering that, according to the provisions of the National Committee for Emergency Situations in Romania, from May 14, 2021, the events that will take place during June will not be allowed to have more than 2,500 spectators, in order to avoid organizing an edition of compromise,

the organizers had to postpone this event for a year. However, they set out to continue the discussions with the Romanian authorities, so that "plans to offer the Electric Castle experience this summer, even in a modified and adapted form, could take shape" (HotNews.ro, 17 May 2021).

Thus, on June 8, 2021, the organizers of Electric Castle stated that the festival will still take place in 2021, but in a different formula, between August 6 and August 15, this being a *special edition* ("EC_Special", which will be organized in 30 different locations, both in the city of Cluj - Napoca and in the commune of Bonțida. On the official website of the festival, it is specified that EC - Special in 2021 is "a different kind of festival" created by Electric Castle, which will last 10 days in total and will have an extended number of venues (30 stages and 400 concerts). And, further down, an important clarification is posted for the participants: "according to the rules in force, vaccination is the only possibility to participate in the EC - Special" (Electriccastle.ro).

4.3. A controversial measure of the Romanian authorities: the admission to events only of the persons who are vaccinated against COVID-19

The Government of Romania adopted Decision no. 580/2021 of 27 May, which modified some provisions of Decision no. 531/2021 on the extension of the state of alert on the Romanian territory starting with May 13, 2021, as well as the establishment of the measures applied during the state of alert in order to prevent and fight against the COVID-19 pandemic. According to this decision, in the counties and localities where the 14-day cumulative incidence of COVID-19 cases is less than or equal to 3 per 1,000 inhabitants, the participation of more than 1,000 spectators is allowed, on the condition that the 2 sq m distancing between the persons is respected, as well as wearing a protective mask. However, participation is *only allowed for persons vaccinated against COVID-19*, after at least 10 days have elapsed since the completion of their vaccination scheme (Government of Romania, 2021).

The Romanian Government Decision (GD), contested and partially annulled by the Cluj Court of Appeal

However, the Cluj Court of Appeal annulled some provisions of GD no. 531/2021, as amended by GD no. 580/2021. The provisions allowing the participation in events only for those vaccinated or with a negative PCR test were annulled, being considered *discriminatory provisions* and not legitimately justified. The court pointed out that there are many people who cannot be vaccinated, either because of health problems or religious beliefs, and the measure instituted by the Government's decision would exclude these people from sports, cultural, and social activities. Furthermore, the court also invoked the fact that in Romania the average net salary was, at the time of adopting the decision, about RON 3,500 net (approximately 700 euros), and many people have low incomes, not having the necessary financial resources to pay for anti-COVID-19 testing services, being thus forced to resort to the vaccine, which is free, in order to have the right to participate in these activities. The judgement of the court was pronounced in a public hearing on June 7, 2021 and is not final, being appealed by the Government of Romania (Cluj Court of Appeal, 2021). It remains to be seen whether this judgement will be upheld by the higher court. The Government may be forced to change this regulation.

Associations in the field of event industry accuse that the relaxation measures taken by the Romanian authorities severely discriminate against event organizers

Several relevant associations reacted quickly, through a joint statement, after the relaxation measures announced by the Romanian authorities on May 14, 2021. In this statement, the signatories accuse the authorities that these "relaxation measures" are, in fact, harsher than those valid a few months ago and that activities in this sector are being discriminated against compared to other sectors. They challenge the regulation according to which the infection rate, at county or locality level, of over 3 per 1,000 people is considered a criterion that can lead to the prohibition of all events, even if the persons admitted to participate cannot transmit the virus, since they are vaccinated, they have a negative result of the anti-COVID-19 test or they have a certificate which attests their having gone through the disease. The signatories of the statement expressed their perplexity regarding the fact that authorities consider that cultural events held outside are

considered more dangerous than sporting events, which have the possibility to receive, on stadiums, tens of thousands of spectators (Ionescu, 2021). On the other hand, the organizers of the UNTOLD and NEVERSEA festivals accuse the lack of vision of the authorities and the lack of predictability regarding the conditions for organizing the events. They consider that, through these adopted measures, the authorities managed to compromise the month of July 2021 also, in terms of the organization of events in Romania. Moreover, they point out that the restrictive measures, such as the 2 sq m distancing between the persons at the event, are no longer useful if all the participants in a concert are vaccinated.

A legislative initiative on banning the discrimination on grounds of vaccination

A group of parliament members from the "Alliance for the Union of Romanians" party has initiated a bill which intends to ban and sanction any form of discrimination on the grounds of vaccination. The draft stipulates that "any form or measure of exclusion, segregation, restriction, limitation, distinction, preference or differential treatment exercised over a person or categories of persons, based on the administration or not of any vaccine", which, under the provisions of this law, represents discrimination on the grounds of vaccination (Romanian Senate, 2021). The explanatory memorandum of this legislative initiative also presents some official data on the vaccination situation, on May 20, 2021. Thus, at that time, almost three quarters (78.85%) of the eligible population of Romania (aged over 16 years) was not yet vaccinated with a vaccine against SARS-CoV-2, respectively a number of 12,044,803 people. Given the objectives announced by the Romanian Government on the national vaccination campaign, the initiators of this bill believe that a new social problem could be created, which could harm social relations, favoring "confining, excluding, restricting or conditioning" of an increasing number of Romanian citizens' rights, based on the criterion of prior administration of a vaccine against SARS-CoV-2. However, given that the party to which the initiators of this bill belong is in opposition, it is unlikely that this bill will soon be debated and approved in the Romanian Parliament.

It remains to be seen, however, whether or not the competent courts in Romania will annul the controversial provisions of the Government's Decision on the non-admission of unvaccinated persons to major events.

Have the Romanian authorities done wrong in connection with their attitude towards the organizers of concerts and festivals?

Although there have been numerous meetings between the representatives of this field of activity and policymakers, it has not been possible to reach a clear understanding regarding the date, period or timeframe when such events will be allowed again by the authorities and under what conditions.

Even after pilot events were organized in other countries to check whether or not there was a risk of COVID-19 infection if spectators were vaccinated, with the results as obvious as possible, in the sense that not many cases of infection were reported, the Romanian authorities continued to postpone taking decisions on this subject.

Former Romanian Minister of Labor, Violeta Alexandru, drew attention, in a post on her Facebook page, to the fact that in the concert industry work qualified people who, in the absence of clear perspectives on resuming these activities, will have to look for work in other fields of activity, in order to have something to support themselves and they will be difficult to replace when the respective activities would be resumed. She added that there was a need for predictability, that this category of events requires their preparation in advance and that the organizers cannot risk preparing a concert or a festival (with all the related expenses), and one day before the start date the authorities not allow the event to take place, on the grounds that a certain vaccination rate has not been reached, and such an evolution could not be attributed to the event organizers. One cannot allow such uncertainty and the risk of canceling an event already prepared. From this point of view, there is a need for financial assistance provided by the government to concert organizers in such situations (Ziarul Bursa, May 16, 2021).

On the other hand, Professor Răzvan Cherecheș, an expert in public health policies, argues that the Romanian state authorities were wrong when the restrictions were lifted for the entire population and not only for the people vaccinated against SARS-CoV-2 virus, as it would have

been normal. Thus, the motivation to get vaccinated of those who have not yet been vaccinated and are undecided will largely disappear (Iacob, 2021).

Some strategy mistakes regarding vaccination and some hesitations of the Romanian authorities have led to the situation of a relatively low vaccination rate so far, which makes uncertain the possibility of organizing large events in late summer and early autumn of 2021, given that a fourth wave of COVID-19 disease is expected in early autumn with more contagious strains of SARS-CoV-2 coronavirus. There is thus the risk of a rapid increase in the number of diseases with the new variants of SARS-CoV-2 and the resumption of measures to restrict the organization of major events in Romania. A new wave of restrictions would severely affect event organizers.

5. Conclusions

More and more cities are concerned with hosting and promoting events, having several objectives, mainly attracting tourists (as far as possible, in other periods than at the peak of the tourist season), in order to promote a better image of the destination.

In Romania, in the city of Cluj-Napoca, two music festivals appeared and developed, reaching impressive dimensions, from the point of view of the number of attracted spectators: UNTOLD and Electric Castle. Moreover, the UNTOLD organizers initiated and developed, in the city of Constanța, on the beach, by the Black Sea, another important festival - NEVERSEA.

Event organizers, along with travel agencies, aircraft carriers and HoReCa units suffered the most in Romania after the restrictions implemented during the COVID-19 pandemic. Practically, the events with a large number of participants were completely banned, from the spring of 2020 until the summer of 2021, and the Romanian authorities failed to provide, in due time, support measures in order to allow the survival of the organizers of such events. In the year 2020, due to the restrictions imposed by the authorities during the COVID-19 pandemic, all these events had to be postponed to 2021. However, due to some hesitations of the Romanian authorities in making decisions, the fate of many events planned to take place in the summer of 2021 remains uncertain.

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Modern Means of Promoting Flower Sales in Constanța

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Abstract

The development, considered spectacular, undergone by direct and digital marketing at the present time is due to the Internet and the digital technologies' innovations (smartphones, tablets, and other digital devices, but also the variety of digital platforms available on mobile, such as social media platforms). The companies' focus on the implementation of direct and digital marketing is materialized in the development of a new business model, able to ensure success by increasing the satisfaction of the wishes of different categories of customers. At the same time, direct and digital marketing tools are increasingly accepted by customers, who perceive them as modern means of promotion, able to develop close, interactive relationships (with offerers and other customers).

This study draws attention that promotion activity is changing, and the implementation of direct and digital marketing tools can be an opportunity to develop a successful business, even in the flower market.

Key words: direct and digital marketing, promotion, flower market, marketing research

J.E.L. classification: M30, M31, M37

1. Introduction

Flowers represent something normal, natural; they are part of the daily life of each of us, in many ways and in different moments. We see, admire, and enjoy flowers on the streets of our places of residence or where we travel, in gardens, parks, courtyards, at the windows and balconies of homes, institutions, but also inside them. We enjoy listening to music and reading poems about flowers, we love paintings, tapestries, fabrics, frescoes with floral motifs; sometimes we offer and / or receive flowers, but how many of us are aware of these aspects?

For an entrepreneur from Constanța, flowers represent the product around which he initiated and developed a business, but under a new, modern concept, correlated with the use of the technological progress. In this study we have included the presentation of a theoretical approach regarding the impact of the progress of digital technologies on the entire marketing activity of the company (regardless of its size and object of activity), but especially in terms of the modern means of communication, a marketing analysis of the flower market and a case study of a new company on the flower market in Constanța, which has implemented modern methods of activity, thus managing to achieve success.

2. Theoretical background

In the specialized literature, new concepts are brought to attention, such as digital marketing, online marketing, social networks marketing, mobile marketing. These are expressions of the modern tools used in marketing activities, which have emerged and developed with the help of the Internet and the expansion of digital technologies' innovations.

While in its traditional form, direct marketing was achieved through the sale of catalogs, by mail, television or by telephone (telemarketing), nowadays it is materialized as online marketing (through websites, online advertising, e-mail, online videos and blogging), social media marketing, mobile marketing and other digital devices (Kotler and Armstrong, 2015, pp. 370-372, 450).

The digital age has brought a new dimension to business, in the sense that people and companies can connect with each other (with the help of digital networks) anytime and anywhere. Statistics show the trend of business growth in the digital environment, and the forecasts of the specialists (based on studies on the changing of customers' behavior, but also as a result of the changing economic context, caused by the Coronavirus pandemic) suggest the continuation of this upward trend. In support of this evolution, we draw attention to the characteristics of the most commonly used digital marketing tools.

Website marketing gives to the company the opportunity to interact with the customers in order to get them to make a direct transaction (Kotler and Armstrong, 2015, pp.373, 448).

The brand's website aims to present the brand's content, which involves consumers and contributes to the creation of a brand community, and closer relationships are built with customers through their involvement (Kotler and Armstrong, 2015, pp. 452-455).

Online advertising refers to advertising that occurs while a person is accessing a site or is browsing through different digital platforms, and it involves sending or displaying ads or ad searches of the same category.

Email marketing is considered a very commonly used digital tool, which consists of sending personalized messages to a target group, aiming to foster relationships with them. The downside of this tool is the possibility of that email being sent to spam, which means it will not be seen / read (Kotler and Armstrong, 2015, p. 456).

Viral marketing is the transmission of various content, but especially videos, through social media networks (such as Facebook, YouTube) or direct communication channels (such as WhatsApp), and those who receive them will forward them to their acquaintances / friends / colleagues (Kotler and Armstrong, 2015, pp. 456-457).

Blogs (web journals) are used by individuals and companies to post opinions or articles on various, yet well-established topics. Bloggers access social networks, such as Facebook, Twitter for promotion. For companies, using blogs as marketing tools has the advantage of a new, inexpensive and personal way to engage in online conversations with the consumers, with the intention of listening to them, monitoring them and getting them involved in developing relationships (Kotler and Armstrong, 2015, pp. 457-458).

At present, the almost generalized use of the Internet and of digital technologies and devices has led to the emergence and diversification of the social networks. They represent independent and commercial online communities where people come together to express and exchange views, opinions, information. Facebook, YouTube, Twitter, Instagram, Snapchat, TikTok or Pinterest are among the best known, but also the most used social networks. It is increasingly noticeable that they are part of the companies' marketing mix, and marketing specialists are involved in capitalizing on the benefits offered by their use.

The activity within the social networks is targeted, personalized, interactive, fast; it can be used anytime and anywhere; it is considered to have the greatest capacity for customer involvement and socialization. Social network marketing is the process of creating brand communities, respectively the place where those who are fans of the brand can share ideas, experiences, and information (Kotler and Armstrong, 2015, pp. 460-462).

It should be noted that social networks' marketing subjects the companies to permanent challenges, from many points of view, and consumers have control over the content of the social networks. While there is a rapid increase in the use of social networks, companies are turning to the use of platforms as communication tools (Kim and Ko, 2012).

Increasingly, companies are turning to combined marketing actions, namely the *marketing of integrated social networks* (Kotler and Armstrong, 2015, pp. 460-462).

Mobile marketing means that messages / the content are transmitted using smartphones, tablets or other mobile devices. The number of people owning mobile devices is high and it keeps growing, and web traffic is also growing. Under these conditions, companies are increasingly

expanding mobile marketing, in order to lead customers to immediate purchasing actions, to facilitate the purchasing process, but also to develop relationships.

Even if digital technologies' innovations have been quickly integrated into marketing, one can notice from the current practical activity of the companies that they are combined with traditional marketing techniques, and the future will surely surprise us with new creative strategies.

3. Research methodology

In order to achieve the objectives pursued in this study, we have combined several types of research (Jupp, 2010, pp. 95-97, 102-103; 113-115; 117-119) (Silverman, 2004, pp. 41-43; 48-54). We have used desk research, based on gathering secondary information from the specialized literature regarding the theoretical approaches to the current impact of the digital technologies' progress in the promotion / marketing communication activity of the companies, on the one hand, and on the other hand to be able to highlight the particular aspects of the flower market. Furthermore, we have used secondary data, collected in a longitudinal and transversal profile, represented by the economic indicators of the analyzed company (Jugănar, 1998, pp. 15-17; 23-25; 29-30). The field research, used mainly with the help of the observation method, has been used to conduct the case study, respectively the strategy for implementing modern means of promotion within the activity of a newcomer company on the flower market in Constanța.

4. Data, results, and discussion

We consider that a marketing approach of the "flowers" product brings to attention interesting, particular aspects, with implications for all the categories of participants present on the flower market. There is the opinion, based on archaeological evidence, that man's attention to flowers has manifested itself since ancient times, especially for their decorative and medical role (<https://ematoader.ro/prima-florarie-o-incursiune-istorie/>). Regarding the cultivation of flowers for decorative purposes, it is considered that it began to be practiced during the slavery period, and the meticulous work, needed for their growth and care, was done by the slaves (Milițiu and Ailincăi, 1967, pp. 17-25).

The production, especially floral arrangements, is gradually becoming a real art, which has evolved over the centuries, within different civilizations. The Japanese school of Ikebana is famous in the world for the beauty of its floral arrangements, which is why it is assumed that the first flower shop appeared in this country.

The demand, as a component of the flower market, must be analyzed starting from people's need to be surrounded by beauty, to express / convey a variety of feelings (of joy, esteem, gratitude, love, admiration), on different occasions and events. Most often, the demand for flowers refers to cut flowers, arranged in bouquets, garlands, wreaths.

The final buyer of flowers is often represented by natural persons / individuals, sometimes by legal persons / entities (Limited Liability Companies, firms, institutions, organizations, etc.). It is less common for a person to buy a flower arrangement for himself/herself. At the same time, flowers are bought to be given to individuals, which is why they are considered gifts. From a marketing research perspective, all these mentioned aspects represent particular aspects of the flower market.

It is opportune to analyze the buyers distinctly from those who use, consume, benefit from a certain product (a category known in marketing as end users / consumers), respectively the persons to whom the flower gift-product is offered. In order to research the flower market, these two categories (the flower buyers and those who receive the flowers) must be identified and studied, the factors involved in shaping the purchasing and flower offering decision must be known, the purchasing behavior, the aspects that intervene in the satisfaction felt by buyers, but also by those who receive the flowers as gifts, what marketing actions can be used to retain the customers and increase their satisfaction (Cătoiu and Teodorescu, 2004, pp. 13-20).

There are particular aspects, from one country to another, brought together in a code of manners when it comes to offering flowers as a gift - only flowers are offered or together with other gift-products on certain occasions, to whom flowers can be offered, the connection between the

assortments of flowers and certain events, the significance of the color of the flowers, the interpretation of the number of flowers and the size of the bouquet / arrangement, the way the packaging is done, etc. (Toma, 2009, pp. 68-74 ; <https://ematoader.ro/prima-florarie-o-incursiune-istoric/>).

For the marketing specialists, these represent directions for conducting research on the demand and behavior of flower buyers in order to organize the activity of the offer representatives, in terms of modernization and correlation with the demand.

The offer of flowers is represented by national and international producers, distribution limited liability companies / firms (wholesale) having in their structure stocking / storage centers, adequate means of transport, equipped with installations capable of ensuring certain temperature and humidity parameters for an adequate storage of the flowers, as well as exhibition and sale spaces (in the case of the retailers). The merchandising principles are applied both inside and outside the flower shops / retail spaces and represent elements of individualization / personalization of the offer, but also of attracting the demand (Mouton and Paris, 2009, pp.19-26; 245-263; 299-307).

The flower market is marked by an intensification of the direct competition, manifested in the increase in the number of offerers-sellers, and also by the diversification of the sale, payment, communication means with the customers.

The trends in the evolution of demand and supply of flowers are determined by the cumulative action of various general factors (including the level of economic development, the standard of living, the degree of culture and civilization), but also specific / local factors (traditions, customs, tastes, preferences, personality, lifestyle, motivation, religion values, etc.) (Datulescu, 2006, pp. 23-24) (Cătoi and Teodorescu, 2004, pp. 47-53). The technological progress is a factor which has strongly marked the entire economic and social activity in the last century, implicitly the production, distribution, promotion, but also the behavior of flower buyers (Kotler *et al*, 2010, pp.45-54). Perceived as an opportunity, both customers and offerers have shown a real phenomenon of acceptance and integration within their work of information technology elements. In this context, the traditional marketing activities have been rethought, reconfigured, and the consequences have materialized in the creation of new communication channels, the development of new market forms, the reduction of the time and space lag.

The company Darux Flowers SRL (Limited Liability Company) from Constanța was established in 2019 and since July of the same year, it started the activity of selling cut flower arrangements by means of a vending machine (unique in Constanța, in the year 2019; currently, there are over 15 such devices in Romania). This appliance, with the appearance of a refrigerated display case, is located inside a shopping centre in the city center, it has a special equipment, with a control system for temperature and humidity values, as well as software that gives the user the opportunity to monitor it remotely, informing him/her in real time about all the operating parameters. The capacity of the vending machine is 18 floral arrangements.

The promotion strategy of Darux Flowers SRL expresses a modern vision, structured on the use of digital, online marketing, social network marketing and mobile marketing. The inauguration of the vending machine, in July 2019, also represented the moment of the company's appearance in the digital / online environment on the Facebook, Instagram and Google MyBusiness platforms. With the creation of digital profiles on the Facebook and Instagram platforms, the company began to use the Business Suite promotion tool. Towards the end of the year 2020, the company expanded its selling methods by inaugurating an online store (webshop), integrating Google Ads into the promotion activity.

The combined use of these online promotion techniques offers the advantage of a great openness towards various customer segments, the permanent monitoring of their purchasing behavior, being reflected in the increase of its results. The information submitted online is the general identification data of the company (name, address, field of activity, visual identification elements of the brand), ways to contact the company, aspects related to the product offer and the opening hours.

At the same time, the use of online marketing means not only the transmission of information to customers, but also a framework to develop the communication with them, to gather information from them, to build a database on the perception of the company's offer and the level of desire satisfaction. The processing and interpretation of this information, within the marketing research, is

the starting point for reaching decisions regarding the successful organization and management of the company's activity.

A permanent concern is to follow the evolution of certain indicators considered representative for the activity of the company Darux Flowers SRL. Thus, in the case of the vending machine, the following indicators are monitored: the sales volume, the time and date of their realization, the payment method used by the customers (cash or card), the performance of each product and its share in the sales volume.

For the online store, other categories of indicators are followed, respectively: the frequency of website traffic, the source of website traffic, the time spent by users on the website, the sales volume, the product performance, the performance of posts and ads on social networks, recurrence of visitors, the reviews received, the activity of the competition and its performances.

Table no.1 The evolution of the sales (in terms of value) by months and years

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2019	-	-	-	-	-	-	1,980	3,900	3,840	4,090	5,560	15,150
2020	4,020	3,665	6,180*	0	0	0	1,520	3,570	5,340	3,710	3,630	3,500
2021	5,490	7,950	15,090	6,730	7,210	7,920	-	-	-	-	-	-

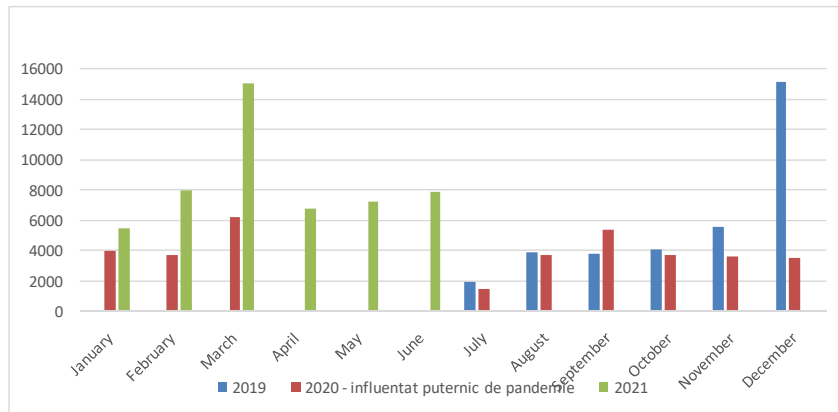
Source: internal records of the company

For the interpretation of the data in the table, we call attention to some aspects pertaining to the economic situation specific to the last two years. In July 2019, at the beginning of the activity of Darux Flowers SRL, the general economic situation was within normal parameters. Even though it entered a highly competitive market, the evolution of the value of the sales volume increased in July-December 2019, which shows that, from the very beginning, the company's offer (representing the sale of floral arrangements through the vending machine) attracted more and more customers from Constanța. The high volume of sales in December 2019 correlates with the theoretical aspects we have presented in this study, namely that flowers are a gift-product, and during that month there are many opportunities for offering flowers (St. Nicholas, the days of Christmas, St. Stephen, New Year's Eve, but also the organization of events - weddings, baptisms).

In the first three months of 2020, the activity continued to grow, registering a significant increase in March, due to the events specific to that month. From March 20 until the beginning of July 2020, the activity ceased, due to the restrictions imposed by the authorities during the Coronavirus pandemic. After the elimination of some restrictions, the activity recovered, but in December, the commercial units in Constanța municipality were closed on weekends and people's movements were restricted, these measures being imposed by the authorities as a result of the evolution of the Coronavirus pandemic. Additionally, between March 2020 and February 2021, there were permanent movement restrictions for people, bans on organizing parties and other events, which is why the demand for flowers decreased considerably.

Knowing better and better the customers' behavior, correlated with the evolution of the market situation (sometimes difficult to anticipate and without the possibility to influence it through microeconomic measures), at the end of 2020 the decision was made to open an online store (webshop), also integrating in the promotion activity the digital tool Google Ads. This new strategy has meant for the Darux Flowers SRL company an increase in visibility, communication and attraction of new customer segments, which was reflected in the significant increase (from one month to another, starting from January 2021) of the value of the sales volume. It should be noted that, in March 2021, there was an almost equal level of the sales volume (15,090 u.m.) to the one recorded in December 2019 (15,150 u.m.).

Figure no.1. Representation of the evolution of the value of the sales volume in the case of Darux Flowers SRL, by months and years



Source: internal records of the company

The evolution of the sales volume, throughout the entire period of the company's existence, shows that the decisions taken regarding the organization and management of the company's activity, especially in terms of the marketing activity, had the capacity to contribute to the development of the business.

5. Conclusions

The last 30 years emphasize the growing access of people and companies to the Internet, the growing use of a variety of digital devices, which has posed new challenges for online / digital marketing activity, but also for the purchasing and / or consumption behavior.

In the promotion / communication activity, traditional media sources, such as TV, radio or magazines have started to be replaced, more and more, by social networks and media platforms for researching information. The viral content, which disseminates information among people through social networks, is much more powerful than traditional media sources, such as TV, radio, and print advertising. Communication knows new forms and dimensions of manifestation. Through social networks, consumers are quickly connected to each other, but also with brands and vice versa (Wolny and Mueller, 2013).

Being aware of these directions of evolution, a company established in June 2019 included in its development strategy elements of online / digital marketing. In June 2021, the Darux Flowers SRL company was using for the promotion / communication activity a combination of digital / direct marketing tools; specifically, the company has a website, www.vitria-constant.ro, an email address, office@vitria-constant.ro, a Facebook account VitriaConstanta - <https://www.facebook.com/VitriaConstanta>, an Instagram account @VitriaConstanta - <https://www.instagram.com/vitriacostanta/?hl=en>, a profile within Google MyBusiness - Vitria Constanta vending flower machine.

Its online presence grants to the Darux Flowers SRL company the following advantages: increased flexibility and adaptability in the evolution of customer needs; knowledge and careful monitoring of consumer behavior; improving customer relations, presenting and promoting the product offer.

In the communication strategy of the Darux Flowers SRL company, other digital marketing tools will be introduced both in line with the trends of technological progress, and with the changes in customer behavior. These decisions aim to increase customer satisfaction, improve its image and strengthen its position on the flower market in Constanța.

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Implementing Marketing Principles in Pre-university Education, during the Covid-19 Pandemic

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Abstract

The global context changed, unexpectedly, in 2020, due to the COVID-19 pandemic. The entire human activity was disrupted, and the decision-makers had to find solutions to solve all the problems which ensued.

The assimilation of ICT in the modernization of education has been a topic of interest for over two decades for various European and national organizations. By the beginning of 2020, many approaches had stopped at the debate and proposals' phase.

Ensuring the continuity of the education activity in the pandemic context has meant the start of the widespread use of ICT, but under very different conditions.

This study puts emphasis on the perceptions of pupils, parents, and teachers from a general school in Constanța regarding online education, but also on the awareness that the use of marketing principles is the way to correlate supply with educational demand, promote and strengthen the image of the school within the community.

Key words: online education, coronavirus pandemic, education marketing

J.E.L. classification: I10, I18, I20, I28

1. Introduction

The complex approach to education reflects its importance in ensuring personal / individual and humankind progress, as a whole.

The history of humanity shows that education has developed at the same time with society, being both cause and effect, always acting as a factor of progress. Economic and social transformations have led to changes in education. Access to education has been different, over time and from one society to another. While, in the past, education was considered a privilege of the high-income social classes, today it is approached (by organizations, institutions, in national and international educational policies) as a fundamental human right. Comparative analyses show that between the level of economic and social development and the educational system of a country there is an obvious interdependence.

The change in the global context, due to the pandemic generated by the new Coronavirus (SARS-CoV-2), at the beginning of 2020, disturbed the entire economic and social activity, including the international education system.

Suddenly, the national school network units interrupted their traditional teaching activity and, being unprepared, began to look for solutions in the online environment, in order to ensure the continuity of pupils' education.

The onset of the COVID-19 pandemic led to the widespread implementation of digital education (as a new, modern form, whose importance has been discussed since the 1990s), but it also accentuated / intensified the practice of educational marketing in order to correlate the needs with the educational offer, in the new context.

2. Theoretical background

It is clear that the increasing use of ICT (Information and Communications Technology) and digital technologies in the last two to three decades has brought both economic and professional, and social changes (Qualform, 2021). Many of the changes generated by digitalization are not yet understood in terms of the impact they might have, in different time horizons, from a social and economic point of view.

Undoubtedly, the rapid pace of the spread of the Internet and ICT has contributed to the development of the digital society and economy.

In the digital age, a concept used by certain specialists to characterize the current dimension of ICT, we are witnessing multiple changes; however, in the subject matter / content of this study we are defining a few modernization trends of education correlated with educational marketing aspects, in the new conjuncture, generated by the Covid-19 pandemic.

Issues related to the trend towards reorganizing education and training systems in Europe were widely debated at the Lisbon European Council in March 2000. It was emphasized, at that time, that education and training systems must adapt to the new realities of the 21st century. Digital technology is transforming every aspect of people's lives (Commission of the European Communities, 2000).

In this context, it was estimated that it was time for the education systems in all the countries of the world to be substantially reformed in terms of the forms and methods of conducting their activities, but also in terms of the behavior of the teaching staff, school managers, parents and, last but not least, pupils.

Education and training have been included in the 11 priorities of EU cohesion policy in the 2014-2020 period. The European Social Fund (ESF) and the European Regional Development Fund (ERDF) support the activities which contribute to the modernization of the education and training systems, including investment in educational infrastructure (European Commission, 2021). Education is approached as an absolute priority by the governments of many states, and the United Nations included it in the Sustainable Development Goals of the 2030 Agenda.

In Romania, the digitalization of the education and training system has become a priority topic starting with 2016, when the Presidential Administration launched the country project entitled "Educated Romania" (Ministry of Education and Research, 2021). In the 2018-2020 Government Program, in the Chapter - Policies in the field of education, it is specified that: "We regard education as a strategic factor for development. Education has been and will remain an area of major interest, always on the public agenda" (Romanian Parliament, 2018; Government Program 2018-2020).

In the document "Education unites us. A vision for the future of education in Romania", drafted by the Ministry of Education and Research, the most relevant aspects related to the role of education are specified. It is assessed that education "has always had multiple roles for the individual and for the society, as well as significant implications for the economic prosperity of each individual, each community, each nation".

Marketing, at present, is a part (whether consciously or not) of any activity we carry out at work, at school, at home or in our free time. Marketing, as a science, has been defined differently, in certain stages of the economic and social evolution. Without intending to analyze the changes in the content of the definitions, we bring to attention some aspects related to the essence of marketing.

Professor Kotler considers that marketing "represents an economic and social mechanism through which individuals and groups satisfy their needs and desires through the creation and *exchange of goods, services and ideas between peers*" (Mâlcomete, 2003, p. 381). Professor Kotler also emphasizes that current marketing must be understood as the concern to "meet customer needs", a "process" that "creates value for the customers" and ensures "the development of close relationships with them" (Kotler and Armstrong, 2015, p. 5).

To put it simply, we can say that marketing represents the actions aimed at satisfying needs / desires through an *exchange (transfer / transactions)*.

On the other hand, education, seen as a result of the pedagogical activity (DEX, 1998) is considered a social process (Commission of the European Communities, 2010), a human activity carried out consciously in order to transmit scientific, technological, cultural, ethical, religious, etc. values (between people, generations), being considered the most important component of human society.

One can notice the presence, in the two activities - marketing and education - of the exchange / transfer / transmission of ideas, beliefs, knowledge, products and services.

Exchange is understood as the act by which someone obtains something he/she needs, from someone else, who is offering, by giving up something else, for what he/she receives. In the classical form, economic exchange takes place in the form of trading goods for money, but in the case of education (especially when we refer to compulsory education, provided by the state), exchange means the transfer of knowledge from the teaching staff in a school unit to the individual (pupil), without the latter giving up anything, for the moment (maybe, eventually, gratitude, satisfaction, admiration, attachment, etc.).

Educational marketing is a specialized field, aimed at implementing marketing optics in activities in the field of education, especially in teaching (Olteanu V., 2003, pp. 407-408).

In educational marketing, the representatives of the offer are (in most cases) school / educational units (in collaboration with the local and central administrations), the bearers of the demand (customers) are the individuals - pupils/students (influenced by parents, families), and the offer is represented by the educational services provided by the teaching staff.

Educational marketing uses traditional marketing concepts and tools (respectively the market, market segmentation, educational market participants, marketing mix, consumer behavior, analysis of the marketing environment, orientation of organizations towards the outside, i.e., knowing and meeting consumer needs / desires), but with certain peculiarities, specific to this field of activity.

Educational marketing can be understood as a useful tool in the effort of educational organizations to know, adapt and meet, as well as possible, the educational needs of their customers (pupils, parents, representatives of various organizations / associations), to organize, to cope with the changes in the environment, but also to promote and strengthen the image of the institution. Educational marketing supports school units to orient themselves towards the outside (respectively to the environmental changes and the expectations of the carriers of the demand for educational services), to create lasting / attachment relationships with their pupils, parents, the local community, to attract funds and other forms of support for teaching and extracurricular activities (Kotler and Armstrong, 2015, p. 5, p. 30).

3. Research methodology

In the present study, we have combined two types of research (Jupp, 2010, pp. 95-97; 102-103; 113-115; 117-119; Silverman, 2004, pp. 41-43; 48-54).

The desk research, based on the collection and interpretation of secondary information from the specialized literature and documents of some institutions and organizations, has been used to present the theoretical framework regarding the importance of education, the approaches to the current need for reforming education and correlating it with the ICT trends.

For the case study, we conducted (between 01.12.2020 and 15.01.2021) a type of direct research, a selective survey, in which we used three types of questionnaires, administered to the three samples: one consisting of pupils, another of their parents, and the other one of teaching staff from a school in the city of Constanța, where primary (grades 0-IV) and middle school (grades V-VIII) education is provided.

For the processing of the direct, quantitative information collected using questionnaires, we have used the IBM SPSS software, version 20.

4. Data, results and discussion

Certainly, in the history of the world, the March 2020 moment will remain a turning point for the entire evolution of the economic and social activity. The World Health Organization made it known, on March 11, 2020, that we were facing a pandemic generated by COVID-19. This change

in conjuncture was immediately perceived as a danger / threat to all mankind, which is why the leaders of most countries have started to introduce political, economic, social measures in order to protect the population. The educational activity, at international level, was quickly reconfigured.

In Romania, decisions started to be taken immediately, so that the activities of all pre-university education units were suspended starting with March 11, 2020 (Government of Romania, 2021).

Shortly afterwards, on March 16, 2020, due to the evolution of the number of people infected with COVID-19, a State of emergency was declared for 30 days, and classes in all educational units and institutions were suspended, tough restrictions being imposed regarding the movement of people. Other regulations followed, which extended the state of emergency on the Romanian territory, so that by the end of the second semester of the 2019-2020 school year, the teaching activity (throughout the state education system) was carried out using "alternative teaching-learning-assessment methods, in an online format" (President of Romania, 2020).

Starting with March 16, 2020, pupils and teachers were separated, isolated at home, restricted in terms of travel, distraught during the reconfiguration of the educational activity in an online format (there had been no, with very few exceptions, previous attempts in Romanian schools to use the new digital technologies).

Gradually, multiple technical-organizational problems have started to stand out, regarding the implementation of this mode of education: the lack of or inadequate endowment with digital equipment necessary for online activities, the limited skills (of some pupils and teachers) in their use, lack of or difficulties in connecting to the Internet, difficulties in adapting, concentrating and understanding, on the part of the pupils (especially the younger ones), the low interest of some teaching staff in finding suitable teaching methods, less teachers' control over pupils' knowledge acquiring process, etc.

Regarding the educational activity in the first semester of the 2020-2021 school year, it can be mentioned that several scenarios worked, applied differently, from one period to another, throughout the territory of the country; however, online school was predominant.

The marketing research that we have carried out for this article aimed to identify and quantify the main issues faced, for almost two semesters (the second, of the 2019-2020 school year and the first, of the 2020 -2021 school year), during the COVID-19 pandemic, by the pupils, their parents, and the teaching staff from a representative school unit in Constanța municipality.

In order to gather information, we have developed three types of questionnaires - one for each category of participants in the educational activity. We have considered that the closed-ended questions and the use of statistical-mathematical tools, such as semantic differential and Likert Scale are the most appropriate in order to achieve the research objective. We also point out that while in the questionnaires there were some common questions, which were addressed to the three samples, we also asked questions that were specific to each sample. Given that this educational unit is a "general school", and the educational offer targets primary (grades 0-IV) and middle school (grades V-VIII) education, we have used a sample of pupils in grades II, IV, VI and VIII (these being the classes that, at the end of the school year, are to undergo an evaluation, according to Law no. 1/2011).

The questionnaires were available to be filled in online, between 01.12.2020 and 15.01.2021. The research results represent the processing of the answers obtained from 231 questionnaires completed by pupils, 28 questionnaires completed by teaching staff, and 228 questionnaires completed by pupils' parents. All the responses to the questionnaires were processed using IBM SPSS software version 20.

We will selectively present certain relevant aspects extracted from the results of the research.

The sample of pupils had the following structure: 32.46% from the second grade; 10.83% - fourth grade; 33.34% - sixth grade; 23.37% - eighth grade. Also, 120 pupils in the sample are girls (51.94%) and 111 are boys (48.06%).

The main aspects resulting from the processing of the information obtained from the 231 questionnaires completed by the pupils are the following:

- 43.21% of those surveyed stated that they felt comfortable with carrying out online activities;
- 49.78% stated that, in the first semester of the 2020-2021 school year, the online activity improved, compared to the second semester of the 2019-2020 school year (the period from the beginning of the pandemic), but, when asked to compare it with the first semester of the same

- school year (2019-2020, a period in which the teaching activity was conducted under normal conditions), 54,11% of them stated that they perceived a decrease in the quality of education;
- the main aspects that hindered the teaching activity, from the pupils' point of view, were: lack of good Internet connection (25.97%), lack of extracurricular materials adapted to the online system (22.94%), lack of adequate space at home for teaching activities (22.51%) and lack of a personal PC / laptop (20.77%);
 - 87.12% of pupils considered that the classes took place according to the schedule and 69.26% of them received individual worksheets;
 - regarding the online system, pupils consider it suitable for: teaching and doing exercises (72.29%); discussions and debates (74.45%) and viewing audio-video materials (66.23%);
 - 71.42% of pupils needed help from their parents and / or a tutor in order to carry out school tasks / activities;
 - 83.11% of pupils do not consider online school to be the future of education.

The sample of teaching staff used in this research had the following structure: 64.28% of them have a seniority in education of more than 25 years; 53.57% are teaching staff carrying out primary education activity and 46.43% - middle school education activity; 96.42% are women.

The main aspects resulting from the processing of the information obtained from the 28 questionnaires completed by the teaching staff are the following:

- 57.14% of teachers answered that they felt comfortable, to a large extent, with online school;
- 71.43% had the opinion that in the first semester of the 2020-2021 school year the way of conducting the online activity had improved, compared to the second semester of the 2019-2020 school year (the period from the beginning of the pandemic); however, 53.57% considered that there was a decrease in the quality of education, compared to the first semester of the same school year (2019-2020, when the teaching activity was conducted under normal conditions);
- the main aspects that hindered the teaching activity, from the teachers' point of view, were: lack of a good Internet connection (57.14%), lack of pupils' participation / motivation (46.42%) and lack of a PC / personal laptop (39.28%);
- 75% of teachers consider that they have managed to adapt the educational content and type of teaching to the needs of all the pupils;
- 60.71% of teachers answered that they will use elements of online education after returning to the traditional system for the following types of activities: teaching (46.42%), homework (39.28%), assessment (53, 71%), guidance/tutoring and extracurricular activities (28.57%);
- 10.71% of teachers considered that the transition to online education had a positive effect on pupils;
- 17.85% of teaching staff stated that the transition towards online is the future of education.

The size of the parents' sample (228) was very close to the size of the pupils' sample (231), which shows the interest and participation in the education of their children. In terms of structure, the sample consisted of: 37.71% parents of pupils in the second grade, 15.8% parents of pupils in the fourth grade, 5.44% parents of pupils in the sixth grade and 21.05% parents of eighth grade pupils; 84.65% of the parents are women and 15.35% are men.

The results obtained from the processing of the information from the 228 completed questionnaires are the following:

- 73.25% of parents considered that online education is not suitable for their children;
- 63.59% believe that, in the first semester of the 2020-2021 school year, the online activity improved, compared to the second semester of the 2019-2020 school year (the period since the beginning of the pandemic); however, 61.4% of them considered that there was a decrease in the quality of education, compared to the first semester of the same school year (2019-2020, when the teaching activity was conducted under normal conditions);
- among the main aspects that hindered the teaching activity for their children, the following were mentioned by the parents: lack of a good Internet connection (29.82%), lack of extracurricular materials adapted to the online system (33.34%), lack of a high-performance individual PC / laptop (17.53%) and lack of adequate space, at home, in order to participate in classes (15.78%);
- 77.19% of parents had the opinion that the type of teaching and the educational content were not adapted to their child's needs;

- in a proportion of 62.72%, it was more difficult for the parents to supervise the online education activity of their children, in a context in which they themselves carried out their professional activity from home or in the workplace;
- 50.44% resorted to the supplementation of the children's training;
- 70.22% appreciated, to a large extent, the effort made by the school in terms of transferring the teaching activity to the online system;
- 13.15% of parents considered that online school had a positive impact on their child;
- 76.75% of parents do not consider online school to be the future of education.

5. Conclusions

The research has brought to our attention the main aspects faced by each category of participants in the educational activity (pupils, teachers, and parents) in a representative school unit, in Constanța municipality, for two semesters, during the COVID-19 pandemic.

The conclusions presented are specific to the school unit analyzed. It has existed for over 50 years (being founded in 1968), was noted for the quality of the managerial act, aimed at forming a team of well-trained teaching staff, able to apply teaching methods appropriate to the needs of the pupils, but also correlated with the requirements of a modern, high-performance education. Furthermore, the material base of the school has been constantly improved and modernized, so that the pupils could benefit from appropriate conditions for carrying out the didactic and extra-didactic activities.

These aspects, along with the knowledge and implementation of marketing principles are factors which contributed to a good preparation of generations of pupils (recognized via the results obtained by them in the National Test, at the end of the 8th grade, in competitions and Olympiads), and also to creating a positive image for this school. This explains the increased interest of pupils and parents in choosing the educational offer of this school.

The results of the quantitative research, obtained for this study, were capitalized by the school unit's managerial staff, in order to make decisions aimed at adapting the educational offer to the needs expressed by the pupils and their parents regarding the teaching activity in the online system, but also in order to develop the communication between the three parties so as to improve the quality of education.

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Can Companies Achieve Their Quality Goals Using the Right Strategies?

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Abstract

In the face of increased market competition due to the globalization of the economy and rapid innovation, organizations need to find new ways to maintain their market position and gain new markets. Among the various strategies that organizations can use to achieve this goal, such as marketing strategies, pricing, promotion, etc., are quality strategies. The authors of this paper wanted to exemplify how the implementation of a well-chosen quality strategy determined significant results in the activity of the analyzed company.

Key words: quality strategy, customer satisfaction, quality management, efficiency

J.E.L. classification: L15

1. Introduction

Strategic management involves the efficient exploitation of the organization's resources, the identification of means to overcome the competition, the orientation towards finding solutions to ensure the development of the company. One of the solutions that contributes to the company's development is the optimal identification of quality assurance solutions, as well as the choice of quality strategy that will bring the competitive advantage for your own organization.

Quality management has proven to be an efficient tool for increasing the competitiveness of companies in the market. The concept was developed and put into practice in the 60s of last century, but it is still widely used because it has proven its effectiveness, bringing benefits to both the organizations that implement it and their customers and society (Priede, 2012, p.1468).

In the face of globalization and rapid technological change, companies need to find new methods and apply various strategies to cope with increasing competition and changing customer needs.

In this paper, the authors made a presentation on how a quality strategy was implemented by a company from Brasov. First, the concepts of quality, quality management and quality strategy were presented, as well as the vision of these concepts in the literature, then a brief description of the analyzed company and a description of how the certification strategy was implemented at this company. The paper ends with the conclusions that the authors drew after analyzing the company.

2. Literature review

There are a number of definitions for the term quality, which would express a special meaning for each area. However, there are more commonly accepted models of definitions:

- suitable for use;
- in accordance with the requirements;
- a set of characteristics of an entity that gives it the ability to meet expressed or implied needs (SR ISO 8402: 1995);
- the extent to which the set of intrinsic characteristics meets the requirements;

- the ability of a set of intrinsic characteristics of a product, system or process to meet the requirements of the customer or other stakeholders.

Quality improvement must be found in all the objectives of the various functions and in the general objectives of the organization.

Total quality management is a management philosophy that orients to the client all the activities of the company in order to obtain long-term benefits. The total quality management ensures the satisfaction of the clients' requirements in the conditions of minimum costs, with the involvement of the entire staff of the company. Total quality management is based on the idea that nothing is perfect, which means that everything can be improved. In achieving total quality, all departments and all employees of the company are of equal importance. The ISO 9001: 2000 standard emphasizes TQM as a quality-oriented management system, introduced in all activities undertaken in organizational structures, based on a culture and philosophy of the organization in the spirit of quality, through the participation of all employees, ensuring long-term success by satisfying customers.

According to the ISO 9000: 2015 standard there are 7 principles of quality management. These are (Guzman *et al*, 2018, p.26): Customer orientation, Leadership, Staff commitment, Process-based approach, Improvement, Evidence-based decision making, Management of relations with stakeholders.

As Priede (2012, p.1468) says, Quality Management is an efficient tool for companies to improve competitiveness, in the conditions of globalization and increasing competition. This idea is also found in Sameh M Saad and Mohamed A Khamkham (2018, p.587), who state that the importance of quality management is due to its role in enabling organizations to achieve outstanding performance in the field of quality. The aspects that are improved by implementing a quality management system, as stated by Johannsen (2013, p.1000) are: enhancing the employees' culture, improving the operation performance and satisfying the customer's requirements.

In order to be able to stay on the market and exist in the future, companies must use new high-performance operational methods to ensure their success in the future, among the best known being Total Quality Management (Zakuan *et al*, 2010, p.188; Sinha & Dhall, 2018, p.4). As mentioned by Herzallah *et al* (2014, p.639), companies implement TQM to improve their business performance, by differentiating products and gaining a competitive position in the market.

For the successful implementation of TQM, an essential role is played by the organizational culture, which must be a culture appropriate to the quality. If the business environment is competitive, then the organizational culture is also oriented towards change. This change in organizational culture, as stated (Gimenez-Espin *et al*, 2013, p.680), changes the attitude of employees, which is an important factor in the successful implementation of TQM. The implementation of TQM involves an adequate coordination of procedures and methods which, in turn, will lead to a continuous improvement of all business units, in order to meet customer expectations.

For an organization, the strategy, originating in the military field, involves using all the resources of an organization (army) to achieve its goals (equivalent to military victories) by establishing long-term plans and objectives and how to achieve them in practice.

Strategy is the long-term horizon (purpose) and direction of an organization. It defines the uniqueness of the organization, how it differs from the competition. The strategy sets out the advantages of the organization by configuring resources in a competitive environment, to meet the needs of the market and the expectations of shareholders.

According to Madar (2020, p.41), quality strategies are a valuable tool that, chosen according to the objectives and possibilities of the organization, can lead to the realization of high quality products / services and at the same time to an increase of efficiency by reducing non-profit costs quality.

Quality strategies are considered in the literature as competitive strategies, because the mission of quality is to ensure organizations competitiveness in the market. The implementation of quality strategies aims at: satisfying the company's needs and customers' needs, establishing the level of quality characteristics, according to the conditions imposed by the competitiveness requirements, integration in the company's vision and mission, changing the staff mentality (Todoruț, 2007, p.84). These strategies indicate how resources are used to achieve the set quality objectives.

3. Company description

Located in Braşov, Romania, ICCO Group is a Romanian group of companies founded in 1990 based on a strong entrepreneurial spirit. The group has developed, through its companies, an extensive set of skills, which allow the realization of large projects, integrate specialized staff and provide terms and costs.

ICCO's mission is to contribute to the construction and development of its business and customer satisfaction through complex projects and professional services. The group owns a number of 22 companies in Romania and in 2 other countries: Hungary and Bulgaria, with activities divided into eight areas, each with its own specifics (real estate developments, energy, assembly construction installations, industry, electronics, construction, medical, services). Each company has its own specialized business management team on which the company provides products or services.

In this paper, the activity of ICCO Systems will be described and analyzed.

At the end of 2019, ICCO Systems had a turnover of 31,783,773 lei, which brought it a market share of 9.62% in Braşov County, respectively 3.81% in the Center area and 0.39 % on Romania, according to the study made by Romanian Universe (<https://www.romanian-universe.ro/>). The market share is increasing on all regional markets, respectively Braşov, the Center area and at the level of the whole of Romania, as can be seen in Table no.1.

Table no 1. ICCO Systems market share in 2019

	Total turnover of hte group (lei)	ICCO Systems turnover (lei)	Share of ICCO Systems (%)
Braşov	330.333.015	31.783.773	9,62
Transilvania	1.835.887.121	31.783.773	1,73
Center	835.081.039	31.783.773	3,81
România	8.099.976.788	31.783.773	0,39

Source: <https://www.romanian-universe.ro/>

Table no. 2 shows the evolution of some financial indicators of ICCO Systems in the period 2014-2019.

Table no.2 The evolution of the financial indicators of the organization in the period 2014-2019

Financial indicators	2014	2015	2016	2017	2018	2019
Turnover (Euro)	4 875 184	5 470 293	6 001 469	5 912 647	5 901 443	6 650 299
Net profit (Euro)	26 503	79 253	111 556	23 240	34 172	123 971
Average number of employees	113	114	119	125	124	132

Source: <https://www.romanian-companies.eu/icco-systems-srl-4522937/>

The data in Table 2 show an upward evolution of turnover and staff in the analyzed period, which is in line with the evolution of the company's market share.

ICCO Systems has selected as suppliers of components for these systems a lot of internationally recognized companies, whose competence and professionalism is certified by standardized documents. The main suppliers come from the member countries of the European Union, but also from the United States of America, Japan or China, the determining criterion being the proof of competence and professionalism through the existence of quality and conformity certificates.

The market for integrated security systems addresses a wide segment of the market, offering security systems for state and private institutions, banks, hotels, hospitals, as well as for individual users, tenants' associations, under conditions of authorization in the field of consulting, installation and service. Its main customers are mainly companies in the industrial sector, where investments have been made for the construction of new production facilities or for the expansion of existing ones. Clients also include public authorities supported by investments made by municipal authorities, most of the projects being financed by European funds. Thus, the main clients are the companies for which the ICCO group of companies develops and builds production spaces and

offices. At national level, among the main competitors we can mention as the most important UTI Group (UTI Systems), Helinick, Civitas (Polystart group), Schrack Seconet AG, Critical Technologies, Honeywell Life Safety Romania S.R.L., Avitech or General Security, Technosec.

4. Research methodology

The general objective of this paper is to explain how ICCO Systems implement the quality strategies, and to present the results it obtained later.

The research methodology mainly aims at two concepts - that of quality management of products or services and that of strategies used to increase the quality of products or services - wanting to highlight the links related to their common approach. In this sense, the theoretical research consisted in gathering information, organizing them in a logical way, analyzing the most significant of them, as well as formulating conclusions; consulting the specialized literature, consulting certain specialized sites. The specific working tools used in the paper were: specialized books, articles and documents specific to the analyzed company.

The information was collected by consulting the bibliographic sources within the library of Transilvania University Braşov and by accessing the databases provided by the university (Science Direct, Web of Science - Core Collection, InCites Journal Citation Reports, Derwent Innovations Index, CABI Forest Science Database).

5. Findings

ICCO Systems develops projects that require "turnkey" solutions for electronic security (burglary, fire, access control, video surveillance), structured voice-data networks, telecommunications and other low and medium voltage installations, ensuring perfect coordination and safety of all works.

ICCO Systems' quality policy represents the organization's intention and direction regarding quality as officially expressed by its top management.

The strategy chosen by ICCO Systems is that of certification and is a strong long-term strategy of the organization that determines a continuous improvement of products and services while stimulating the ability of the management team to meet customer needs and at the same time create conditions to increase labor productivity and thus profit.

By choosing this strategy, ICCO Systems aims to increase the overall efficiency of the company. Thus, through this strategy, ICCO Systems has chosen to implement the procedures required by the quality standards (ISO 9000).

The main objective of ICCO Systems is the continuous increase of the quality of the services provided by increasing the efficiency of the activities in order to satisfy the exigencies of the clients, of other interested parties and to raise its own competitiveness towards the competitors.

The secondary quality objectives of ICCO Systems are:

1. Satisfying the requirements and expectations of customers (customers, local community and other stakeholders) ;
2. Optimizing the costs of quality by focusing on the costs of prevention and evaluation;
3. Training, motivation and performance optimization of staff;
4. Ensuring a safe working environment;
5. Respecting the quality of services provided and works performed;
6. Zero accidents - 75% reduction in the incidence of accident rates at work and occupational diseases.

The certification of quality systems was effectively achieved by obtaining the certifications granted by RIG CERT no. SR EN ISO 9001: 2015. The approach to the implementation and development of the Quality Management System within ICCO Systems consisted of several stages and included the following:

Phase I - A quality representative of the company was appointed to participate in the implementation of the certification, as well as in the subsequent monitoring. In this first phase, an analysis was made of the organizational structure and organization of activities that had functioned until then in society. At this stage, the needs and expectations of customers and other stakeholders

were determined and an analysis was made of the processes within the organization and the problems faced by their development and it was established what is the way to achieve the highest degree of quality. compliance with standards. The internal evaluation of ICCO Systems was performed based on the analysis of the current state of the organization in terms of resources and performance. After the internal evaluation, an external evaluation was performed, respectively of the external environment through various surveys, studies, analyzes. Based on the evaluation of the external and internal environment, a projection of the future performances of ICCO Systems was made.

Phase II - This phase involved the design of the Quality System within ICCO Systems and was carried out in close connection and especially with the involvement of all department heads.

- Identifying the processes in society;
- General medium and long term objectives;
- Process map (interaction between processes);
- Elaboration of the Quality Manual;
- Elaboration of system procedures;
- Elaboration of Work Instructions.

Phase III - This phase involved the implementation of the Quality System within ICCO Systems and was carried out with the collaboration and full involvement of all staff and involved:

- Internal audits in all departments of the company;
- Analysis and evaluation of the system performed by management;
- Permanent improvement of the system;
- Improving the system;
- Simplification and optimization of procedures and processes.

Phase IV - This phase involved the certification of the Quality System within ICCO Systems and was carried out with the collaboration and full involvement of all staff and involved:

- External certification audit;
- Implementation of the Quality Management System;
- Constant monitoring of the Quality Management System.

ICCO Systems aims to lower all costs of quality improvement than the resulting savings. The savings obtained are due to the fact that additional work is reduced due to the correction of mistakes, waste and other direct costs related to defects are reduced.

Various expenses were incurred to obtain the certification. For easy highlighting, in the case of ICCO Systems, these certification costs were divided into three categories:

1. Pre-certification expenses; 60,000 lei
2. Expenses for the certification itself; 59,745 lei
3. Expenses after obtaining the certification. 180,064 lei

The implementation results were analyzed in relation to the proposed objectives:

Objective 1 - The number of complaints decreased from 10 in 2017 to 2 in 2019.

Objective 2 - The share of expenses with the repair of non-compliant products decreased on average by 1% in the total expenses of the company, both in 2019 and in 2020.

Objective 3 - In 2019, ICCO Systems had 0 work accidents and 2 work incidents (ie a 33% reduction in incidents).

Objective 4 - The objective has been met, following the training of all staff on the policies and procedures required by the quality standards.

Objective 5 - In 2019 30% of employees were employed since the date of establishment of the company and a percentage of 55% employees who have more than 3 years in the company.

Objective 6 - In the period 2018-2020, ICCO Systems ensured its compliance with legal requirements and requirements applied in the organization, confirmed by the fact that it did not receive any sanctions from the state authorities.

6. Conclusions

ICCO Systems chose the certification strategy because it is a strategy that in the long run will contribute to the image and competitiveness of the organization. In addition, the implementation of this strategy proves that the management team has modern managerial concepts, and these two elements combined contribute to the development of the organization.

As a result of the implementation of the Quality Management System, ICCO Systems identified the following benefits: the image of the organization was improved, which led to its placement on the competitive market in an advantageous position; the coordination and management of the activity of the entire organization was carried out in a planned and systematic way; increased planning, internal communication, and decision-making capacity; increased supplier tracking capacity; increased customer satisfaction and retention; losses caused by operating errors were reduced; increased discipline at work; resources were used more efficiently; increased the organization's ability to adapt to change; credibility has been improved and customer confidence has been strengthened.

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The Consumer Explained through the Extended-Self

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Abstract

The concept of extended-self gains group very fast and grow to be a subject of research for many studies. Although we shall never put an equal sign between possessions and the inner self, it is true that the self will always look for something alike. But, with the new era of social media and digital possessions, the new ‘me’ is extended online and we might represent us in a larger manner. Our research aim was to see the items of extension in different situations and on a distinct timeline; in other words, was to obtain a ‘windows in time’ of the consumer and its extended-self. Our findings allowed us to make conceptual maps of the items integrated into the self, and helped our exploratory research generate enough hypotheses and give great insight for other researchers which will want to follow the same subject.

Key words: extended-self, possessions, conceptual maps

J.E.L. classification: D11, D12, D31, E21

1. Introduction

The concept of “extended-self” was first designed and postulated when Belk (1988) posited in his first researches that “knowingly or unknowingly, intentionally or unintentionally, we regard our possessions as parts of ourselves”. In his work he suggested an individual self with just an inner core, which lies beneath all and in the center of all is consider self, as well as some “aggregate selves” extending from family to neighborhood up to nation. Various possessions stand at the base of these various self-constructions, each possession in part is having a different degree of centrality towards either just the individual sense of self, which is rarely found and we may speak of a very intimate possession, or towards different aggregate senses of self.

In our research, we start from Belk’s theories and we focus on what possessions played an important role in kind of a timeline. We started with the past, and scoped the items which stand behind the formation of nowadays identity. Items with both good and bad effect on us, do become representative to the self, and grow to be one of the most important possessions in the creation of the current ‘I’. Next, we wanted to see the current self and extended-self of the consumer. So we did this by taking into account the two possible representations: one which is on the inside, and thus the items highly stimulate us and just us, and it might be that those items will remain hidden forever, or they may never get into the eyes of another; the second representation, is especially made for others, and express us in the social context, allowing others to see our true nature. In the end, the extended-self will always want more from the future, so we tried to see what wanted items would appear as a general direction.

The problem we identified relies in the fact that it is sometimes hard, almost impossible to understand the multiple reasons for which people incorporate items into their extended-self. It is right to believe that this items which are integrated into the extended-self get there mainly because it helps the individual represent something they associate with and want to display, but that might

not be universally true, as each individual exhibit different behaviors and patterns in their mind. This is why some individuals incorporate such items that would be able to give them some extra features, such as a plus of confidence in any given situation or they had an impact onto their personal formation and development in time. But the problem here is to make the differentiation between the items that did had an impact and such extra feature from the items that are simply incorporated into the extended-self in order to express the self.

Having this set we can create some conceptual maps which would allow for a better representation of such items, and bring some extra knowledge for future research in this vast domain. It is also an interesting to see what items are considered as representative when it comes to perceive others way of expressing identity, and if these items collide with the possessions some might think as relevant to their own identity.

2. Theoretical background

Considering the fact that Belk (1988) original definition of extended-self, presumed the fact that there is only one core self, which extends over possessions, people and place, during the years this statement was rejected and combated by many (e.g. Ahuvia 2005, Tian and Belk 2005, Bahl and Milne 2010), the extended-self-required some theoretical updates. Given this fact, Belk (2013) comes with some new added aspects and constructs, five changes were required: among the most important are the process of dematerialization and re-embodiment, followed by sharing and co-construction of self, and last but not least distributed memory. These changes are bonded and judged in terms of the effects in our perception of the self, the nature of possessions, and to the affiliations with different things in the new digital world.

"The expanded self" is another conceptualization of the extended-self, which was first stated and theorized by Aron and Aron (1986), and it was supposed to be a way of "including others in the self". Put it simple, we view our closest persons - such us our parents or friends – as parts of self. However, as Connell and Schau (2013) noticed, some consumer behavior researchers have used the Aron and Aron (1986) framework to include and research the love for consumer objects incorporated as a part of self (e.g., Ahuvia 2005), and not only not only for people, as its authors might imply. A self-expansion model was recently used by Reimann and Aron (2009) in the realm of consumption in order to concentrate the efforts on the incorporation of brands within the self, which prove to be very successful and had led to the creation of another scale, named Inclusion of the Brand in the Self (IBS). A rather different image and idea of how the self gets bounded to objects is created by consumer researchers who sustain that the self of an individual ought to be conceived of as involving multiple or plural selves (e.g., Ahuvia 2005; Bahl and Milne 2010). In this interpretation of the extended or expanded self, we gather different selves for which we might feel different attractions, repulsions, bonding, and separation with regard to a particular item or possession.

Furthermore, we can observe that when some psychologists cite Belk's extended-self, they do it in relation to the incorporation of items, and not persons. Consequently, we can easily differentiate the two methods based on whether the discussion involves the incorporation of material things or just persons.

Furthermore, as we already stated, there are different conceptualization of the extended-self (e.g. expanded mind, extended mind, multiple selves or narratives, and Actor Network Theory) which bring in new ideas and views about how the mind and the possessions, or the things which surround us, interact between each other, or get incorporated into one another due to a natural process made by our mind. The current emphasize at the moment is made on the consumer narratives, as the association to the multiple selves, which from time to time come in conflict, but luckily, there are ways in which the conflict is solved (Ahuvia 2005, Mittal 2006). The different between the concept of "I" and "Me" is quite obvious and the distinction between is quite clear, as when we speak of "I" we speak about how a person perceives himself, and "Me" is how a person believes others see him or her. Also, there are several ways by which the extended-self-incorporates items, according to Mittal (2006) there are 6 such methods

3. Research methodology

The main purpose of this research is to discover the layers of the extended-self for both men and women. These layers are separated in time, and suffer changes consequently. The purpose for integration is also important. We do this to know if we speak of a positive connotation or a negative one. Having this done, we tend to provide useful data, such as what type of objects are used to boost confidence, express yourself or what items played a positive or negative role in the formation of their personality, and if there could be seen a pattern in the mind of the current generation of consumers. We tend to find out what items they possess, what items they would like to possess and what items they formerly possess and integrated into the extended-self, in order to express better in front of others. We also want to find out if these items are placed at a different 'distance' from the core self, and so we plan to provide a conceptual map with the types (and uses) of such items, in order to provide useful insight for further research and a clear start in scoping the extended self of one's person.

The method used in this exploratory study is the semi-structured interview, and analysing all in an interpretivist manner. Pre-defined questions applied on the sample population were made using the scale made by Sivadas and Machleit (1994) in order to measure the objects incorporated into the extended-self. In developing their scale Sivadas and Machleit draw primarily from Belk's (1988) view of extended-self. Considering the fact that the extended-self is composed out of the self plus possessions, and it also the contribution and effects of possessions to individual identity. Their scale is composed of six items scored on 7-point strongly disagree to strongly agree scales. As for validity, exploratory and confirmatory analysis, item analysis, and some correlation-based tests were conducted to derive the final form of the scale, test scale dimensionality and internal consistency, and offer evidence of validity. Furthermore, since its creation, no other scale of such type has been created, and most researchers agree on it and used it as a background in their research.

Research objectives

- O1. To find out what possessions had an impact on formation and helped the consumer express.
- O2. To identify possessions incorporated into the extended-self, oriented to the representation on the inside.
- O3. To identify possessions incorporated into the extended-self, oriented towards the representation on the outside.
- O4. To identify wanted future possessions that would allow a better representation of the self.

Sample

The sample consists of 154 undergraduate students from the Faculty of Economics and Business Administration, University 'Alexandru Ioan Cuza' Iasi. All of the questioned persons were registered in the last year of study, and were randomly selected from all the four departments this faculty has. The reason for choosing such a sample stands in the fact that it is assumed to find a certain homogeneity among these students, even though we speak of different study specialties and most probably interest, there is more than likely to find a larger degree of similitude among these students from the same generation with relatively close age, than by assessing the general population in Iasi. Moreover, considering that we are building a conceptual map of the nowadays consumer, it would be normal to focus on a specific niche which is consistent of young Romanian students, which would become the future adult consumers.

From the total of 154 students interviewed, only 39% is represented by the male population and the rest of 61% were females. Meaning that 60 respondents were from males, and 94 were given by women, all this from the total of 154 students interviewed. As of age, the average for both groups stand at 22.62 years old, with the maximum age of the oldest student interviewed being 27 years old and the smallest being 21 years old. The average age for the male population is 22.68 years old a bit higher than the one for the women which is 22.59 years old.

As of place of origin, most students are coming from the urban area, with 86 answering that they were raised and born in an urban area and the rest of 68 interviewed students stated that they come from the rural areas. From the total of 86 students coming from urban area, just 22 of them had a job, or at least a part time job. As for those from the rural area, the number is smaller with just 12 having a work contract at the moment of the interview. The results are shown above in the

In terms of income, we had to consider the fact that our sample consists of students and most of them are still dependent to their family. Although, some might be working, as shown above, 22% of the students interviewed had a full-time or part-time job, we consider relevant to question how much money is left aside each month after they divide the total family income to the number of members in their family.

4. Findings

- O1: To find out what possessions had an impact on formation and helped the consumer express

Another so called function of the items incorporated into the extended-self, is that of making changes onto ones' formation and development in time. Thus, some items we think that represents us and we perceive as part of whom we are, also play a toll on our development. In order to assess this objective, we asked the responders to specify one item which had played an important role in its formation many years ago. The question used to get the responses was:

'I would have been a different person today, unless I had my _____ many years ago.'

Next we search to see what objects people view as having a good or a bad impact on their formation, we begin by gathering those objects with a good impact on their formation, then will turn our attention on the objects with negative effects. Both type of such items should be incorporated into the extended-self, and thus the questions we put had this in sight. The subjects were allowed to use same objects as for the previous question, but what is central to this question is that this time they have to focus on the positive impact of that specific item.

'Beside the fact that I consider it part of myself, the _____ played a positive role in my formation.'

In the case of the women, from the total answers, 54 of them included the word 'Books' with is the most associated word with the item that provides a positive impact onto ones' formation and it is also incorporated into the extended-self. On the second place we have the computer (16). On the 3rd and 4th place we have the TV (11), and the phone (8).

When it comes to interpret he collected data from our male sample, things are clearer. We have a more stratified data sample with just 3 important layers. We have on the 1st place, with 20 answers out of 60, the computer or laptop which are similar. The computer is closely followed by 'Books' (19). On the 3rd position we have 'console' which incorporated all kind of consoles, from PlayStation to Nintendo DS or any other kind of gaming station.

On the other side, it is clear that we also incorporate items into our extended-self which don't necessary had a positive effect on our formation, as the extended-self-incorporates items that might find representative for us, but not necessary good for our development or maybe health.

'Although it is central to my identity, the _____ which I have/had played a negative effect onto my formation and development.'

Men the first placed cigarettes, with 35 answers out of the total of 60. On the second place we have video games (11), meaning that this guy's find as a negative effects playing so many video games. On the 3rd place we have 'car' as having a negative effect on their lives. The answers given by all the women are much more fragmented. On the first place, we have cigarettes with 47 answers, followed by phones (10), computers (9), TV (8), earphones (8), jewellery (7), makeups (5) and others.

- O2. To identify possessions incorporated into the extended-self, oriented to the representation on the inside

What we plan by achieving this objective is to find the objects or the type of items integrated in the extended-self that people usually consider as good enough to represent them in front of others. With this information at hand we could easily observer any pattern or cluster, if they exist.

'Besides the fact that it is central to my identity, the _____ makes me feel more certain that I show myself to others in the way I want.'

We shall begin with the females, as their response prove to be much more diverse and complex. According to the answers, we can clearly see that the most frequent answer is the 'Purse' which appeared in 37 of the interviews. A quite normal answer, considering that a purse is a woman 'prostatic extension' and it is an accessory well known and used by any woman in this world. All

the respondents were instructed and the researcher fully explained the respondents that they should pick just one items which seems the most appropriate in the context, no matter its provenience, its use or if it's part of something larger. Plus, the respondents were supposed to state the first word that comes into their minds. Next on our list are the accessories (26) a women wear, which in most cases are summed as being jewelry such as armllets, headpins, rings, earrings, necklaces, broches, necklaces up to some handmade jewelry. Because they all are accessories made from precious metals or stones, we decided to categorize them as 'jewelry'. Next on our list is the smartphone (11), and it's one of the most widespread gadget nowadays, most students owning one.

As for males, the results are more stratified. On the first place stands one of the most used tools of our decade, the smartphone counts for 19 of the answers. Next on our list, are the cigarettes (18). The rest of the answers are quite equal, as for example the wallet which might resemble the fact that we might feel more secure when we have money at us. Next, we have a tie between the watch and lighter, both with 5 responses. We decided to count them separately because a watch and a lighter might also be considered as fulfilling necessities.

We also wanted to identify possessions incorporated into the extended-self, oriented towards the representation on the outside (perspective on others). The point of this objective is to search and see what possessions are considered as representative when it comes to consider others personality. In this way we will be able to see if there is any difference in terms of how a person perceives herself, and according to which factors he perceive others. Because it is expected to see differences in between how I see others, and how I see myself. Although we cannot fully compare the results, as we are limited by the nature of our exploratory research, some conclusions will be draw in the end.

'I consider others _____ as being representative in the way in which they express their identity'

The above question was applied, in order to gather the data regarding the items which are to be considered representative for the items which are to be considered as means of reading others.

Out of 94 respondents, 29 answered that clothes are what they consider when it is to read others personality. Next we have 'shoes' (19), followed by 'Purse' (13). On the 4th place we have car (11) and on the 5th jewelry (8). On the last positions we have 'Make-up' (3), and on the last position a tie between 'Watch' and 'Lipstick' both with just 2 answers.

As in the case of the men, the results are somehow similar, as seen below. We have 'Clothes' (20), being the most representative possession by which other express identity, that at least in the minds of our interviewed. Closely followed by 'Car' (14), being the second most representative item for expressing identity. 'Phone' (9) comes right after, closely followed by 'Cigarettes' (8).

- O3: To identify possessions incorporated into the extended-self, oriented towards the representation on the inside.

Not all our possessions are meant to represent us on the outside. This might happen due to the nature of those objects, as they might not be able to express something in the eyes of someone else that ourselves. Mainly because we are the only ones who know the true extent and story behind that item, which cannot be express to others, as feelings are hard to transmit in such a way, and we do have feelings attached to that item.

Or simply said, we like to keep that possession hidden from others, as it has a deep meaning for us, and if others would know about it we would feel like our privacy will be invaded or that the possession in cause would be 'desecrated'. The consumer might think that this would result in the loss of the special effect or distinctive matter possessed by that item. Thus we have designed the following question, in order to gather the specific items in accordance to this orientation towards the integration in the extended-self.

'Although few persons know about it, I feel like the _____ is at the base of my identity.'

Unfortunately, we must admit that this question is a bit biased, and that some respondents might have omitted the true answer, as they were either too intimate or they would have felt ashamed in front of the interviewer. Or they may never had considered the existence of such item. We can only assume that the answers were genuine.

For women, the most answers were accounted for jewelry. As expected, the jewelry is common as gift from parents or lovers, and thus the association is quite obvious. Although we don't really know the reason for choice, we can only assume that this pieces of jewelry have deep former

meaning in the minds of the interviewed women. On the second position we have 'flats' (13) which are, regardless of the theoretical difference, shoes. Next we have wallet and smartphone, both with 11 answers, both of them quite common, although some doubts would exist in relation to the appearance of the smartphone. Regardless, it might be due to the fact that a smartphone is used for hours on a daily basis, thus the attachment led to the incorporation into the self. Other 26 fragmented answers were reported, among which the most answers were for hat, scarf and make-up case. The rest of them were singular, were in a very small number, and we couldn't categorize them properly.

For men, we had computer on the first place with 14 answers, followed by shoes with 9. This two seem to have most answers, and are identified by the respondents as the most representative in the given situation. Next we have jewelry with 6 answers. As in the case of the women, these jewelry items are filled with meanings, we could not assess. Next, we have a tie between watch and car, both with 5 answers, and both quite representative for men. Other 14 answers were reported, combining 7 different items.

- O4: To identify future wanted possessions that would allow a better representation of the self.

The idea behind finding wanted objects to be incorporated into the extended-self, stands in the fact that some objects might be hard to be achieved or might never be achieved, due to different reasons, such as money. But, these items could be associated with a future wanted self. The validity of this object still stands, because it doesn't matter if you own or not that object which is incorporated into the extended-self, as time you believe it as part of the extended-self, as displayed by Lastovicka (2005). For this we modify one question related to the extended-self, made by Sivadas (1995) in his study, and implemented the want of a specific thing which might help them to achieve a better method in which they could express identity in a better way. The question is as follows:

'I think that, if I would own an _____ I would be able to express my personality better.'

One observed problem with this question was the fact that most respondents had so many option that they were insecure to choose just one. We indicated them to choose the most wanted object, regardless that there is a remote possibility to gain that possession soon. The self can be imagined or posed in a future state, with much ease by most consumers.

For women, on the first place we have jewelries (22). Some of the respondents added the word 'expensive' in their answer. On the second we have the word 'villa' (20), closely followed by car (18). To be noted that in the word 'Car' we did not include any kinds of brands, as we don't touch this concept at all. Our research was only oriented towards physical objects. Some respondents had to rephrase the answer as they added a brand nearby. Most answers can be associated with 'exotic' car. On the 4th place we have 'iPhone' (15), followed by 'Driving License' (7) and Expensive Glasses (4). We also have encounter 'Smart Watch' (4) and other 4 single answers such as tablet, rifle, expensive painting and motorcycle.

As for the results from the male, we can speak of more define and closely related layers, and not so much diversity. The most answers are attributed to 'Luxury cars' (34), sometimes also called 'exotic' by a part of our sample, summing more than half of the males. On the second place we have the word house (12), and it's quite expended. Closely followed by 'Expensive Watch' (6) and iPhone (5) and 3 other answers like 'Gaming laptop', 'PS4' and 'VR glasses'. The results from the men seem to be a bit more stratified mostly around the most expensive items one can get.

Three Layers

Considering the fact that we encounter so many possessions integrated into the extended-self, it is right to believe that there is a certain distance and difference between them. How many different layers exist between them it is hard to say and might be dependent from a person to another, but for the purpose of the present discussion only 3 layers will be assumed: close to the self, medium distance and distant possessions. We used the following question in the interview to make the respondents thing at different layers. We allow just one answer.

'Although is somehow part of me, the _____ is not as central to my identity as the _____ and definitely not as much as the _____ is to my personality.'

The answers prove to be very complex, in order to understand the difference between them, and their appearance they should be presented altogether. Furthermore, we calculated an average in order to find out which is the most recurrent possessions, as they would be representative now that we don't ask for just one item, the most representative, but we offer a wider range of delimitations for the items which appear to be the most integrated into ones extended-self (see Figure 1, below).

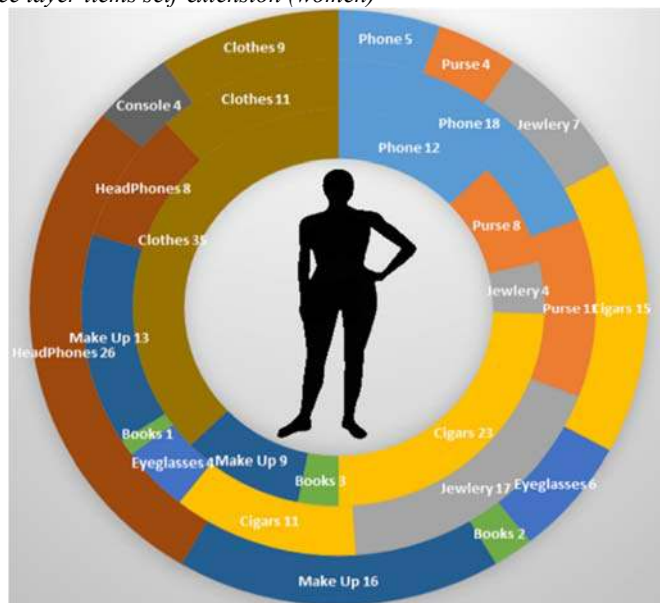
Figure no. 1. Three layer items self-extension (men)



Source: Self-elaboration

As shown above, and after we sum up the results, we get to know that the most recurrent item is represented by Cigarettes (44), most of them in the ‘Far’ section of the extended-self. Next being the Smartphone (32) closely followed by Car (25). Next we have Computer (19), Console (14), Sunglasses (11), Lighter (8), TV (7), Bicycle (6), Headphones (5), both Wallet and Watch with 4, and on the last position Guitar with just 1 answer.

Figure no. 2. Three layer items self-extension (women)



Source: Self-elaboration

In the case of the women (see Figure 2), the most recurrent possession is represented by clothes (55), closely followed by cigarettes (49). These items seem to appear in many cases and at the other questions, meaning that they must have great importance for most of our sample, regardless the distance from the self and the impact onto the development of the extended-self. Next, we have make-up (38), followed by phone (35) and headphones (34). The list continues with jewelry and purse, the first having 28 and second just 23 answers. At the end of the list, and at far distance from the other possessions, we have eyeglasses (10), books (6) and console (4).

5. Conclusions

Considering the results from the research presented above, several conclusions according to the objectives can be mentioned. The conclusions will usually be presented by gender, and possibly together if there are similarities present in the results.

First conclusion, made in accordance to the second objective, is that most female students consider that the 'purse' and 'jewelries' would give them enough exposure on the outside and also be part of their extended-self. Considering that 'purse' had most answers with almost 40% of the total sample, it seems to represent the highest ranked item to give women confidence when within others, not only due their utility but also because handbags are being used in the process of status consumption (Grotts & Johnson, 2013) and that allows women to be perceived better. The next items or category of items, which help the consumer express when within others, is represented by all kinds of jewelry, as we had very complex answers, ranging from silver or golden bracelet, armllets, headpins, rings, earrings, necklaces, broches, necklaces up to some handmade accessories with all kind of precious stones. It is well known that this kind of accessories usually have a certain emotional meaning or at least a narrative story behind, this allow people to make sense of who they are and provides a connected identity from past, to present, and into possible imagined futures (Ahuvia 2005). Thus, these items would exhibit a certain image, and why not enhance beauty. As for men, the smartphone and the cigars stand to be the best possessions which bring confidence when within a group. A certain thing is to be consider as of placing the cigarettes one of the first, as some studies suggest that nicotine has been demonstrated to calm down addicted smokers (Gehricke 2009) giving them the needed confidence, or fighting away any bad thoughts. Cigarette smoking in college is seen as a social activity by those who partake in it, and more than half of the students that are users do not consider themselves smokers Levinson (2007). These items seem to be very representative on the outside.

As for the representation on the inside, we have made use of the third objective. The items in this section were more diverse, and had different connotations. But they also consisted from jewelry, meaning that this kind of items might have deep subjective value and an important narrative story behind. Jewelry appear more in the women sample, and clothes too, as it would be obvious. As for the men, they had computer on the first position, but clothes and shoes next, together, having more answers than the computer. These items with representation on the inside poses great subjectivity, and thus further research is required. We also suggest this as hypothesis for a further study in the field.

The Second conclusion which we draw from the first objective, is that our sample, both men and women, considered the books and the computer/laptop as having the highest positive impact onto their formation of what they are today. Which is to be expected, as if we analyze the demographics of our sample we came to realize that all we can easily fit our sample as being 'Millennials'. According to Oblinger (2003), 'Millennials' are those born after 1983, who were brought up with technology and expect to have access to computers, cell phones, pagers and PDAs. Thus the appearance of the computer in such position is expected, and as for the books, they will always remain as symbols for learning and be associated with their positive impact, and being in responsible for the current formation of the self.

On the other side, we also wanted to see what items incorporated into the extended-self had a negative impact onto the formation of our sample, but were still representative. And we came to realize that in this section we have a detached winner with at least 3 times more answers than its follower. This famous item is represented by cigarettes, which is perceived as having a negative

impact on the development but still representative for the extended-self.

The third conclusion made in relation to the fourth objective, is about what people want or wish to have for a better representation of the self, and what items are representative when perceiving others personality. And not surprising at all, we came to realize that most of the wanted items for a better representation of the self prove to be high-priced items, such as cars, different types of jewelries, houses and other accessories, such as expensive smartphones, glasses or watches. This might also be somehow related to the demographics, as most of the students have a monthly income per capita in between 501 to 2000 lei, which is not enough to afford such possessions.

The main conclusion of this study is to emphasize the fact that the possessions incorporated into the extended-self don't just represents the person owning them, but depending by the item, it also offers diverse functionalities, such as building trust in the eye of the beholder, interfering into their formation, both positively and negatively, and presenting yourself in front of others in the best manner possible.

Surprisingly or not, we came to realize that not all items incorporated into ones extended-self prove to be relevant to the other persons from outside. For example, certain piece of jewelry incorporated into the extended-self might be very representative for the person owning and wearing it, giving him a certain feeling of confidence and well-being - as he knows the narrative story behind that possession. But for a person from outside, this items might never be noticed, and he will analyze others character based on different possessions, such as his clothes or vehicle, possessions which hold more visibility. We analyze such difference in our study, and now can see a clear difference between the possessions oriented for the expression on outside, and the items oriented on the inside.

In the end, we come to be aware of the fact that up to a certain degree, there is a homogeneity in the items our sample integrated into their extended-self, this being highly dependent on the trends and timeframe they lived in. In the case of our study, considering the fact that we can categorize all of our sample as being Millennials, we came to realize that to a large extent a big part of the possessions incorporated into the self prove to be electronics and other digital stuff (such as smartphones, laptops, smartwatches and computers). We thus indicate the research of the differentiation in incorporating items and using them to express on both the inside and outside, as a hypothesis for further research.

Limitations

The fact that this research is exploratory in nature, which makes us have some limitations and biases. The lack of quantifiable data and the advantages of some quantitative research types and questions, makes our research limited to the generation of ideas and further research, and gave us weak conclusive power. But it helps to do the exploratory study as methodically as possible, if it is going to be used for major decisions about the way we are going to conduct our next study” (Nargundkar, 2008, p.41). Although we managed to sample a large sample of the total population of students, the interview was limited in manner and had to be very short in order to obtain more answers, but the fact that the time was limited represented a bias in the research, as consumers might require time to remember and fully analyze their answers.

The most obvious limitation is represented by the population sampled, although we managed to achieve a sample big enough for inferencing about third year students, especially the students from the faculty of Economics and Business Administration, we still lack diversity. Although the demographics provided by the undergraduate students fit the profile of the millennial student, we simply cannot generalize this results to the entire population. According to the study made by Henrich, Heine & Norenzayan (2010), a sample which is to be called WEIRD (an abbreviation from white, educated, industrialized, rich and democratic) cannot be generalized to the entire population, especially on self-concept factors. Our sample fits this profile, although with some notable exceptions.

Another limitation of this study was the instrument based on the scale developed by Sivadas and Machleit (1994), which lacked details. Although there were some previous research, they required the researchers to predefine the items on which the extended-self to be measure (Sivadas and Machleit 1994, Sivadas and Venkatesh 1995, Dodson 1996).

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Values, Attitudes and Lifestyles Based Typologies as Predictors for Consumer Impulsiveness

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Abstract

The paper examines the influence of some psychological typologies and demographics on the impulsive behavior of the consumers, trying to analyze if the personality typologies can predict the degree of consumer impulsiveness and proving information regarding the extent of the presence of impulsive consumers.

The study was realized using a multiple cluster sampling method, surveying state employees from each domain of activity except for the special services and army, due to the existent information gathering restrictions.

Through the association of a personality type generator questionnaire (VALS survey) with a Likert scale of impulsivity (Puri's Consumer's impulsivity scale, 1966), the general hypothesis is that consumer typologies based of Values, Attitudes, Lifestyle and demographic factors predict the consumer impulsiveness.

Key words: VALS typology, consumer impulsiveness, consumer prudence, hedonic response

J.E.L. classification: D11, D12, D31, E21

1. Introduction

Due to the fundamentally different nature of the acts and processes that define consumer behavior, how people behave economically is not a summation of repeated acts mechanically, but the result of the accumulation of life experiences. Simple registration and quantification of consumer acts is not enough, you have researched and psycho-physiological processes that determine these acts and explained the interdependence between them.

Besides being very careful how they spend in a store, Romanians began to have very many places from which they buy. Loyalty is to work increasingly harder. Consumers have now begun to look increasingly more to consuming in terms of health, looking at organic products, products with a lower salt content and freshness. Before they were less careful, but now they have become very responsible.

This research was designed to analyze the consumer behavior, beyond the impact of the economic and marketing environment, by focusing on psychographics information that along with demographics information contribute to understanding a wide range of factors that provide perspective about why consumers behave the way they do.

The research focused on the consumer behavior of employees because, having a monthly income they have the necessary means to engage in the purchase processes and, as they are employed, their age is big enough to assume that their personality is more stable than the personality of adolescents and teenagers. The study was made concerning state employees, as they represent a big number from the total number of employees from Romania and they are said to be more financially secured in terms of job stability, and also by the fact that the majority of the population chooses as a first employment alternative to be a budgetary, due to this stability.

2. Literature review

Even though no precise definitions of impulsive buying can be found, early researchers considered that it is a sudden experience that pushes the customers into engaging in immediate purchase, action driven by a somewhat powerful and persistent urge. (Rook, 1987, p.191)

This impulsivity of the consumer usually does not come with a twinge of conscience regarding consequences. (Rook et al. 1993, p. 27).

The impulsive purchase is made even though the individual was not actively looking for that item (Hubert et. al, 2018, p.120) and had no pre-shopping plans referring to purchasing that item, and also the time interval between seeing the item and buying it is rather short because the decision to buy is made rapidly without thoughtful consideration and alternative information of choices. (Moayery et al., 2014, p. 363).

Iyer (2020, p. 399) explained that an impulsive consumer has not made plans to buy that specific product category nor did he realize that he has that specific need to fulfill. They described this action as non-reflective and it is triggered by a buying desire.

Zheng (2019, p. 158) define the impulsive purchasing as an act of pleasure caused by hedonic behavior, which is sudden and compelling, opposite to the utilitarian behavior that is seeking for alternative options, functional benefits and economic values.

Values do influence the way in which a consumer might react to advertising, packaging, pricing and selling staff, so it is necessary that marketers should have knowledge on the mix of values within the area of his activity (Teng, 2018, p.51), and also incorporate them when creating a marketing campaign (Graham, 2017, p. 101). Retailers also have to pay attention to this problem (Biswas, 2017, p. 7723), as some products and services might not be embraced by society (Becker-Leifhold, 2018, p.788). Values provide insights on how a society operates (Razzaq et al., 2018, p. 1232) and the society's goals are also being perceived as the drivers of individual values (Ladhari et al., 2017, p. 703). It is believed that values are the ones that set the goals towards how behaviors are enacted (Nikolov et al, 2020, p. 9). So values dictate peoples' day by day actions. (Mayasari et al., 2018, p. 333). In other words, the behavior represents the instrument used to achieve a particular value state. Consumers are engaging in all kinds of activities as a result of their values (Sharma et al., 2017, p. 81).

Attitudes, in terms of consumer attitudes, represent a composite of beliefs, feelings and behavioral intentions regarding a product. Having positive beliefs or feelings towards a product makes a consumer have a specific behavioral intention towards that product (Perner, 2010, p.241).

An attitude can be developed as a result of a positive/negative experience from the past. They can be influenced by other people and are usually long term (Razzaq et al., 2018, p. 1231).

Lifestyle is used in consumer behavior research as a factor that differentiates the way in which people live. Consumer choices are determined by the desired lifestyle and they represent also a reflection of their actual life style. Factors that influence lifestyle and change the consumer behavior are social ideal, education level, occupation, income, residence and aspirations. Religion and culture also shape lifestyle.

The VALS test (stands for Values, Attitudes and Lifestyle) that is going to be used in this research represents a survey framework that segments individuals into eight distinct types based on psychological traits and key demographics, explaining each type and also the reasons of their preferences and attitudes.

The VALS test was first developed in the year of 1978 by Arnold Mitchell, a social scientist and consumer oriented futurist, along with the help of his colleagues from Stanford Research Institute (today known as SRI International). The instrument was developed in order to tailor products and services for the people who were most likely to purchase them. Advertising agencies were thrilled to use this consulting service from SRI as it was embraced very quickly.

The VALS survey is based on the work of David Riesman (1950), Harvard sociologist and developer of the concept of social character and also on the work of Abraham Maslow, sociologist and developer of Maslow's hierarchy of needs. The VALS test represents a weighting algorithm of demographic factors, lifestyle variables, values and attitudes.

Nowadays, The VALS test assigns individuals eight primary types, Innovators, Thinkers,

Believers, Achievers, Strivers, Experiencers, Makers and Survivors as well as the secondary type that represents the group that the individuals are next most likely be part of. The test is based on 35 attitudinal and five demographic questions.

Each of the VALS types is described on a customer base profile along with some lifestyle and psychological characteristics. In the table below can be seen a representation of the VALS framework.

Table no. 1. VALS type according to motivation, resources and innovation

VALS Type	Primary motivation			Resources	Innovation
	Ideals	Achievement	Self-expression		
Innovators	✓	✓	✓	High	High
Thinkers	✓			High	High
Believers	✓			Low	Low
Achievers		✓		High	High
Strivers		✓		Low	Low
Experiencers			✓	High	High
Makers			✓	Low	Low
Survivors	-	-	-	Low	Low

Source: self-elaboration

As it can be observed in the table above, six of the VALS types, fall into one of the three primary motivations. This horizontal dimension separates typologies into three categories that represent motivation drivers: ideals, achievement and self-expression. The consumers motivated by ideals are driven by knowledge and principles rather than by desires for approval. The consumers who look to demonstrate success and seek approval from the others are primarily motivated by achievement. Consumers that are primarily motivated by self-expression, desire, social and physical activity, variety and risk taking.

Resources, the vertical dimension segments people based on the degree of innovation and a range of resources such as psychological, physical, demographic, material means and capacities consumers have drawn upon, including income, education, self-confidence, health, intelligence, leadership skills and energy level.

All of the eight typologies of the VALS test are described taking into consideration their lifestyle characteristics, their psychological characteristics and their consumer characteristics. The description of each type of VALS will be further provided. Following these reasons, we have formulated the following research hypotheses, all of them inspired of Arnold Mitchell research.

- H1: Innovators have a higher degree of prudence than impulsiveness.
- H2: Thinkers have a higher degree of prudence than impulsiveness.
- H3: Believers have a higher degree of prudence than impulsiveness.
- H4: Achievers have a higher degree of prudence than impulsiveness.
- H5: Strivers have a higher degree of impulsivity than prudence.
- H6: Experiencers have a higher degree of impulsivity than prudence.
- H7: Makers have a higher degree of prudence than impulsiveness.
- H8: Survivors have a higher degree of prudence than impulsiveness.

3. Research methodology

Considering the problems presented in the previous stage, this research aims to analyze wherever there are VALS typologies that are more prudent types or more hedonic types, wherever there are significant differences between the degrees of impulsiveness regarding gender, income and education, and also determine if there is a pattern of typologies when it comes to genders.

The primary objective of this research is to analyze the degree of impulsivity of the consumers as they can be framed by a VALS type.

The secondary objectives are:

- O1. Analyze the degree of impulsivity of the consumers as they can be framed by a VALS type in relationship with gender.

O2. Analyze the degree of impulsivity of the consumers as they can be framed by a VALS type in relationship with age categories.

O3. Analyze the degree of impulsivity of the consumers as they can be framed by a VALS type in relationship with education levels.

O4. Analyze the degree of impulsivity of the consumers as they can be framed by a VALS type in relationship with income levels.

Even though every person is a product and service consumer, employers are a more attractive and suitable market for this research as they have the advantage of being able to be fund themselves through their monthly salary, thus they have the resources to engage in more shopping than unemployed people. They have impulse buying habits as they have a stable income and are very much influenced by the Internet and TV and in-store advertising. The employees surveyed are residents of Iasi and have an age range from 18 to 66 years and, as it is necessary to be at least 18 years and the maximum employment age for state employees is 66 years.

Employees have been chosen to study because: are exposed to diverse range of advertising channels; they engage often in the process of buying; tend to spend higher amounts compared to other segments; they buy a wider range of products than young people as they engage in household shopping.

In order to the define the population researched, a multi-stage cluster sampling method was used and because the problem studied is a novelty in marketing research in Romania, it was treated as an exploratory research that provides information necessary for further research using a representative sample.

As concerning our research, for our population of interest, the budgetary employment cluster is selected and is further divided into the following sub-clusters representing domains of activity: administrative, financial, judiciary, defense (the Army), internal affairs (the Police), special services (ex: Bureau of secret state information, Bureau for Preventing and Combating Money Laundering), educational, medical, cultural. Due to imposed restriction of providing any type of data information, workers from the army and the special services sector were not surveyed.

In order to achieve this research a number of 140 employers were surveyed. From the 140 questionnaires resulted from the data collecting process, 12 of them were not taken further into consideration due to partially completion of the forms, remaining with a sample of 128 respondents. Both males and females were surveyed in order to see if there are significant differences between the two sexes regarding the topic of the research.

The method of research chosen was the survey in order to obtain statistically representative data regarding VALS type, impulsivity degree and demographic characteristics of buyer.

The instrument was the questionnaire, divided in three parts:

Part 1: The first part represents the actual VALS framework that is a closed-ended questionnaire used to determine the physiological characteristics of consumers, categorizing individuals into eight lifestyle types. After receiving the questionnaires, the VALS test was introduced for every respondent on the official Strategic Business Insights (SBI) website (www.strategicbusinessinsights.com) that offers the possibility to fill online the questionnaire, generating afterwards the primary and secondary VALS type.

The format of the VALS survey was followed precisely as the official one, excepting for the question regarding income. As the average income of US and Romania are significantly different, it was established first the difference, and that difference was then applied for every interval. It was determined that the average monthly household income of Romanians is ... in \$, that represents 18,4% from the average monthly household income for Americans, thus, each of the income interval was brought to 18,4% of its initial value, and then computed into Romanian lei.

Part 2: The second part of the questionnaire represents the Puri 1996 Customer Impulsiveness Scale (CIS) that is used to measure the chronic values of people toward impulsiveness. It is a two factor measure composed of a prudence subscale and a hedonic subscale. This framework determines if the consumers behave more impulsively (indices of hedonism) or more in a controlled manner (indices of prudence).

The two factors are distributed in the following way: the attributes self-controlled (3), farsighted (5), responsible (6), restrained (7), rational (9), methodical (10), and planner (12) represent the indices of prudence, where the attributes impulsive (1), careless (2), extravagant (4), easily-

tempered (8) and enjoy spending (11) represent the indices of hedonism. Respondents indicate the degree to which each of the previous adjectives describes them on a seven-point scale. The adjectives scores are summed within subscales, forming two independent variables, indices of prudence and hedonism. According to the author, the mean scores are provided by summing up the attributes scores of the two sub-dimensions of the CIS framework and the dividing by the number of scale items per dimension.

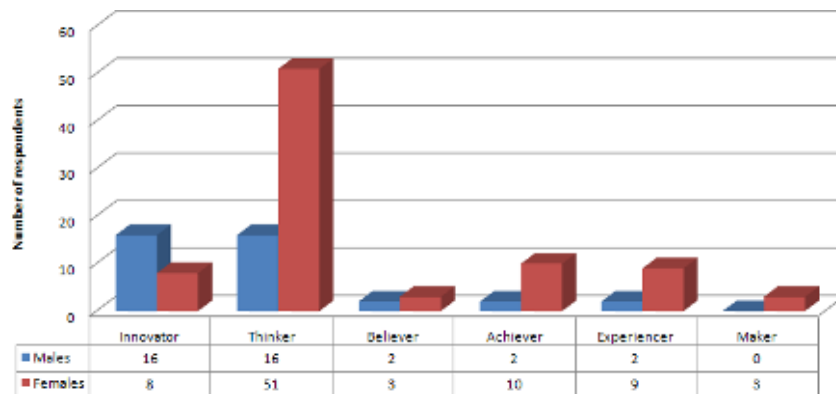
Part 3: demographic questions.

The general framework of the research from the image below, presents the idea that the consumers Values, Attitudes, Lifestyle and demographic characteristics segments them into the VALS types (Innovator, Thinker, Believer, Achiever, Striver, Experiencer, Maker, Survivor) that can predict the degree of consumer impulsiveness.

4. Findings

Figure 1 presents the distribution of the primary VALS types of the sample. It can be observed that the majority of the consumers are Thinkers (67 respondents) followed by Innovators (24 respondents). Also, another observation can be made regarding the fact that only 6 of the VALS types are present as primary types, with Striver and Survivor missing.

Figure no. 1 Primary VALS type distribution

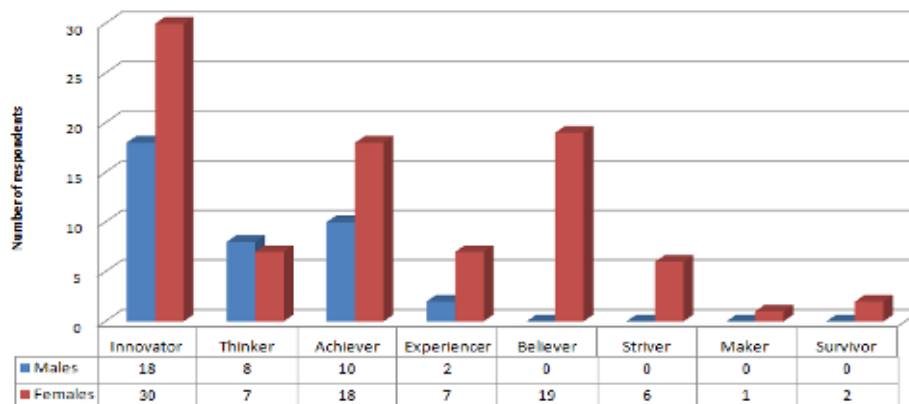


Source: self-elaboration based on research findings

Thus, overall, regarding the VALS type distribution of the data and taking into consideration the descriptions provided for every VALS type, the sample is characterized mostly by VALS types that are strongly motivated by Ideals, Achievement and Self-expression, in special by Ideals as the majority of the respondents are Thinkers (52%). Due to these results, it can be concluded that the majority of the customers are rational decision makers, which search for durability and functionality.

As regarding the secondary VALS types, it can be observed from Figure 2 that all of the VALS types are present. Innovators (48 respondents) and Achievers (28 respondents) were the types that predominated as secondary types, followed by Believers (19 respondents) and Thinkers (15 respondents). Scoring less were Experiencers (9 respondents), Strivers (6 respondents) and least were Survivor (2 respondents) with Maker (1 respondent).

Figure no. 2 Secondary VALS type distribution



Source: self-elaboration based on research findings

Regarding the secondary types, the sample is strongly motivated by Ideals and Achievement, as the majorities are Innovators (37%) and Achievers (22%). Thus, it is clearly the consumers are also favoring sophisticated products that reveal their tastes and also to demonstrate their success to the others.

As a general conclusion drawn from the distribution of the typologies, both primary and secondary, it is highlighted that state employee consumers are mostly rational decision maker consumers, which seek for the utilitarian benefits of products and also consumers that are seeking high-end technologies products, sophisticated products, which are bought for self-reflection or to show off.

Making a Cross Tabulation in SPSS, it will be analyzed the intersections between the primary and secondary VALS types.

As a result, we have Table 2, and it can be distinguished that, for example, from 67 respondents being described as Thinkers by their primary VALS type, on their secondary VALS type there were 34 Innovators, 19 Believers, 10 Achievers and 4 Strivers.

Table no. 2 Primary and Secondary VALS type Crosstabulation

Primary_type * Secondary_type Crosstabulation

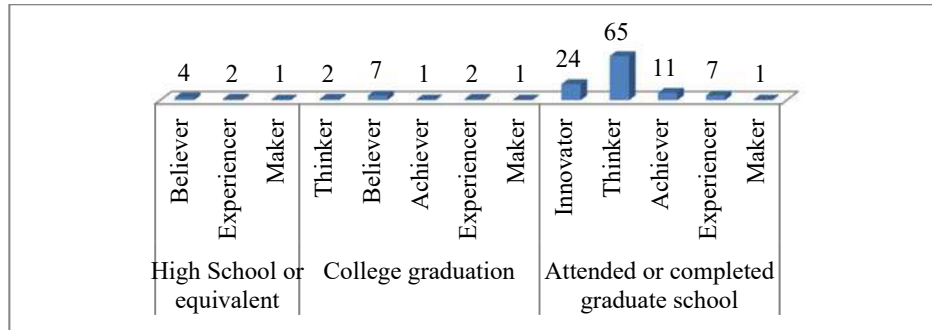
Count		Secondary_type								Total
		Innovator	Thinker	Believer	Achiever	Striver	Experienter	Maker	Survivor	
Primary_type	Innovator	0	8	0	10	0	6	0	0	24
	Thinker	34	0	19	10	4	0	0	0	67
	Believer	0	4	0	5	1	0	0	1	11
	Achiever	7	3	0	0	0	2	0	0	12
	Experienter	7	0	0	2	1	0	1	0	11
	Maker	0	0	0	1	0	1	0	1	3
Total		48	15	19	28	6	9	1	2	128

Source: self-elaboration based on research findings

The primary VALS types described above represent only typologies situated in the upper part of the VALS framework, meaning that the majority of the respondents are consumers highly motivated by Ideals, Achievement and Self-expression, having also high resources and being characterized also by high innovation.

In order to see if there are differences of VALS types among levels of education it can be observed from Figure 3 that the respondents that graduated only High School or equivalents are the majority Believers, following Experienters and a Maker.

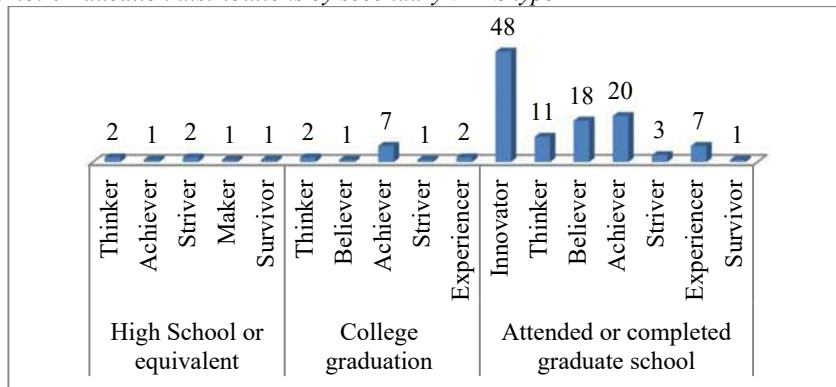
Figure no. 3 Education distributions by primary VALS type



Source: self-elaboration based on research findings

It can observe from the distribution of the VALS types that education plays an important role in establishing the typology, as Innovators are present only on the highest education level.

Figure no. 4 Education distributions by secondary VALS type

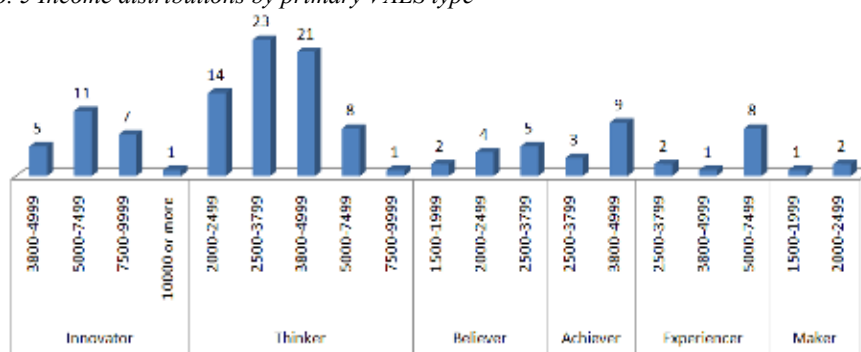


Source: self-elaboration based on research findings

Thus, as a general conclusion for both primary and secondary VALS types, the majority of the consumers had attended or completed graduate school and are reasoned consumers and seekers of products for expressing their fine tastes

For the distribution of the income level, segmented on the primary VALS type, Figure 5 shows that Thinkers and Innovators have higher monthly household income, thus having a higher purchasing power than the rest of the respondents.

Figure no. 5 Income distributions by primary VALS type



Source: self-elaboration based on research findings

For the primary VALS typologies we compared the means calculated following Puri’s specifications. We intended to measure the predisposition toward impulsiveness, by the two factor measure composed of a prudence subscale and a hedonic subscale. This framework determines if the consumers behave more impulsively (indices of hedonism) or more in a controlled manner (indices of prudence). The findings are resumed in Table 3:

Table no. 3 Hedonic (impulsive) vs. prudent predisposition. Primary VALS typologies

VALS type	Hedonic Mean	Prudence Mean
Innovators	5.25	1.92
Thinkers	5.56	2.84
Believers	5.65	2.94
Achievers	3.35	3.46
Strivers	-	-
Experiencers	2.62	3.22
Makers	6.6	2.09
Survivors	-	-

Source: self-elaboration based on research findings

Comparing the means between the hedonic (impulse) and prudence behavior for each type of VALS we obtain that there are differences that sustain the hypotheses. Due to the fact that the sample did not provide two typologies (Strivers and Survivors), we could not verify these hypotheses.

For the secondary types we resumed the findings in Table 4:

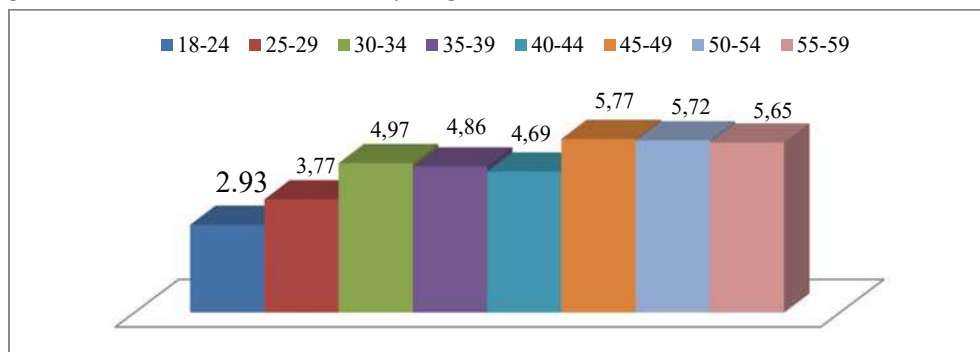
Table no. 4 Hedonic (impulsive) vs. prudent predisposition. Primary VALS typologies

VALS type	Hedonic Mean	Prudence Mean
Innovators	4.64	2.8
Thinkers	5.37	2.34
Believers	6.01	3.23
Achievers	5.23	2.64
Strivers	5.30	2.78
Experiencers	3.71	4.42
Makers	3.80	4.00
Survivors	6.70	2.21

Source: self-elaboration based on research findings

Making a comparison of the mean through a segmentation of the age groups, it can be seen that the hedonic mean increases with age.

Figure no. 6. Hedonic mean distribution for age intervals



Source: self-elaboration based on research findings

As these items are reversed, the higher the value of the hedonic mean, the lower the impulsivity degree, it can be said that the impulsive buying decreases along with the increases in age, so there is a negative relationship.

5. Conclusions

Overall, this research was created to investigate the consumer purchasing behavior, as a result of personal characteristics. It was intended to find significant results for each of the VALS types and correlate them with their impulsivity scores, but as sample size was narrow, for several VALS types like Striver, Maker and Survivor the number of respondents was too small so the correlations could not provide significant information.

Comparing the hedonic mean for the primary VALS type it can be observed that Experiencers and Achievers are the ones that are the most characterized by impulsivity and the least are Makers.

Comparing the hedonic mean for the secondary type, it can be observed that the Maker respondent is the most impulsive, followed by Experiencers, and the least characterized by impulsivity are Survivors and Believers.

Also we observed that those with the lowest income are the ones that are less impulsive, but there isn't a pattern of increases and decreases of impulsivity degree simultaneously with the increasing or decreasing levels of income. For education, it can be observed that the hedonic means do not differ significantly from an education level to another, so a significant difference was not found between the degree of impulsivity and the education level. Taking into consideration the Income levels, primary VALS type and hedonic mean it was intended to found out if there are any significant differences. It can be observed that segmenting the sample through levels of income, Achievers and Experiencers remain the ones with the highest degree of impulsivity, for each level of monthly household income. Regarding income level, Thinkers and Innovators have higher monthly household income, thus having a higher purchasing power than the rest of the respondents.

Taking into consideration the education, primary VALS type and hedonic mean it was intended to be found out if there are any significant differences. It can be observed that college graduated Believers and Experiencers are more impulsive than high school graduated Believers and Experiencers. And college graduate Achievers are less impulsive than graduate school Achievers.

Taking into consideration the education, secondary VALS type and hedonic mean it was intended to found out if there are any significant differences. It can be observed that High school Thinkers are less impulsive than college graduated and graduate school Thinkers. It can observe from the distribution of the VALS types that education plays an important role in establishing the typology, as Innovators are present only on the highest education level.

Making a segmentation of the impulsivity degree by education level, no important differences were found; a reason might be that the sample was concentrated on the graduate school consumers. Thus, relevant data was found only for graduate school consumers; the majorities are Thinkers and Innovators.

Taking into consideration the age, hedonic mean and primary types no significant differences were found between the degree of impulsivity of the VALS types based on categories of age, except that Innovators with ages between 30-34 and 50-54 are less impulsive than those with ages between 35-39 and 40-44. Regarding age and the impulsivity degree a negative relationship was found, in the sense that impulsivity declines as age increases.

No significant difference was found between the degree of impulsivity regarding men and women, but it was found that the majority of women are Thinkers, whereas the majority of males are Innovators.

The findings indicate that overall state employees are mature and educated consumers, with a low degree of impulsivity, that seek products reflecting their taste and that prove to be useful and durable.

Several limitations must be taken into consideration regarding the results of this research. First of all, the study was limited to the analysis of state employees, with the possibility that private employees might generate different results. A further research can be made to determine if there are differences among state and private employees. Due to time and budget constraints, the sample size is a small one and could not cover a sufficiently diverse and meaningful number of respondents for each category of VALS type, age categories and education level, as statistical procedures are very sensitive when it comes to number of subjects. If the research could have been done on a larger sample size, the results would have been more conclusive. Respondents could not be drawn from the special services and the army due to their restrictions of providing information.

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The Influence of the COVID-19 Pandemic on Tourism in Romania

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Abstract

The epidemic diseases frequently experienced in human history have caused both significant loss of human life and many psychological, economic and sociological effects. Covid-19 acts as a sensor of the current situation at national, European and global level; the situation created by the Covid-19 virus is seen by the whole world trying to understand its tendencies, to decipher the causal relations and to anticipate the evolution. There is no doubt that the adage "nothing is more practical than a good theory" attributed to Immanuel Kant mobilizes specialists to expedite the development of specialized works that provide theoretical support in assigning meaning to the current and future situation that is markedly dependent of the evolution of this virus. The transition of the virus has an impact in all areas of activity, bringing with it an imminent wave of changes that are felt socially, personally, financially and extrapolated to the economic, political, diplomatic and international levels.

Being one of the most widespread pandemics in the world, the COVID-19 pandemic has caused many losses in all areas of activity, but especially in tourism. In order to make inferences about the effects of COVID-19 on the tourism industry, it should be analyzed in comparison with the period before the pandemic. Thus, the role of this paper is to highlight the impact of the pandemic on tourism in Romania compared to the previous one. For this, a comparative assessment will be made in terms of the impact and rates of influence of the disease and its effects on accommodation structures, on tourism as a whole, but implicitly also on tourists.

Key words: COVID-19 pandemic, tourism, Romania

J.E.L. classification: Z32, L83, R11

1. Introduction

By June 2021, COVID-19 had infected more than 173 million people and killed more than 3 million worldwide. In response to the virus, most countries have closed their borders to visitors and tourists in the past period. The UN World Tourism Organization reported in the second quarter of 2020 for the first time that 100% of global destinations have introduced travel restrictions (Volkmann, C., Tokarski, K.O., Dincă, V.M, Bogdan, A., 2021). As a result, international tourism has been almost completely suspended, and domestic tourism has been limited by the blocking conditions imposed in many countries. Today, although some destinations have begun to open slowly, many people are afraid of international travel or not and can no longer afford it due to the economic crisis.

Tourism is a critical sector of the international economy. In 2019, the tourism sector accounted for 29% of global service exports and approximately 300 million jobs globally. It is an important source of income and jobs for developed and developing countries. The global contraction in tourism arrivals has had devastating economic consequences, given that developing countries were dependent on tourism. In some countries, such as several small developing island states (SIDS), tourism accounts for more than half of GDP.

In this context, our country was implicitly affected, which suffered very large economic losses during the pandemic. Tourism in Romania has also experienced a lot of trials and challenges, being on a downward slope during this period, as the statistics show. The decrease in the number of tourists was reflected in the profitability of small, large and medium-sized enterprises in this field, which were particularly affected by the decrease in travel in general. Moreover, all events organized for tourist purposes were canceled or postponed during this period which led to an even greater decrease in the number of tourists in Romania.

2. COVID-19 pandemic

Pandemic diseases are defined as events that cause a high level of costs for individuals and communities, the results of which cannot be predicted, but which can be restored. Pandemic diseases can occur in different forms and can affect different organs of the body. However, respiratory diseases have a higher share among epidemic diseases. It is known that, with regard to this type of respiratory disease, which has been frequently observed throughout history, epidemics and pandemics have a destructive force that severely disrupts the community and the economy and causes a high level of costs on a global scale. All the more so their impact on the health and services sector is huge. (Moran, Del Valle, 2016, p.2).

SARS (severe acute respiratory syndrome) broke out in China (Foshan, Guangdong) on November 16, 2002, with a large number of SARS-CoV-associated coronaviruses constantly being discovered, and studies have shown that they spread from the natural reservoir, respectively the bats, which generated the reporting and identification of a new coronavirus (Cov-19).

The 2019 CoronaVirus outbreak, known as COVID-19, is a general health crisis that has caused mental resistance and is the largest outbreak of infection globally since the 2003 SARS outbreak. (Wang and all, 2020, p. 19). The epicenter was reported in Wuhan, China. First called "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" because of its genetic similarity to SARS (whose outbreak was observed in 2003). Several groups of patients with pneumonia of unknown cause were reported in late December 2019 in Wuhan, the capital of Hubei Province, China. It was later identified as being caused by a new coronavirus.

The World Health Organization declared a pandemic on March 11, 2020 and framed the evolution of the Covid-19 virus as its trigger. At that time the number of confirmed cases exceeded 118,000 people, being present in 114 countries and to this balance is added 4291 deaths (Europa Libera Romania, 2020).

The first confirmed case of infection in Romania was registered on February 26, 2020, confirming the nature of contacting the virus through the direct contact the patient had with an Italian citizen from Rimini, who came on vacation in the country.

In order to slow down the spread of coronavirus, to protect the health and well-being of all Romanians, it was necessary to impose safety measures, the most important of which was the state of emergency that lasted 30 days and was established by presidential decree on March 16th, 2020, signing the extension of the decree on April 14 by another 30 days.

The constant spread of the pandemic, unfortunately, has negatively affected the areas of economic and social life, especially the health system of all countries. The initial public health guidelines for workers during the COVID-19 2019–2020 pandemic focused on ensuring workers stay home when they are sick, minimizing non-essential travel and practicing good hygiene to slow down the transmission of disease between workers and community members (CDC, 2020).

3. International tourism in the context of the COVID-19 pandemic

The tourism industry is considered to be going through an unprecedented period of crisis, which is already projected in recent trends, with the operation of hotels, resorts, tour operators, airlines and other tourism-related services being blocked. Due to the Covid-19 pandemic, the tourism sector is facing exceptional challenges. The pandemic triggered both health insecurity and the economic recession. In a few months, the framing of the global tourism system has shifted from super-tourism to non-tourism, vividly illustrated by statistics and newspaper articles.

Determining the relationship between the pandemic and travel is essential in order to better understand health security and global change. Although tourism research has developed at least a brief overview of the potential systemic effects of global climate change, there has been no similar assessment of the systemic effects of the pandemic, with studies tending to focus on the country's individual impacts rather than a challenge directly to the tourism system. Thus, in the current context, travel is incompatible with the pandemic, given that these are the central pillars that must be deactivated to monitor the pandemic and prevent the spread of the virus.

The spread of the Covid-19 virus has affected tourism all around the world, bringing with it drastic travel restrictions both inside and outside the countries. As a result of travel restrictions and roadblocks, global tourism has slowed significantly, with the number of global flights falling by more than half, as the number of cases has increased, and travel bans have limited an increasing number of carriers.

The United Nations Tourism Organization (UNWTO) estimates a loss of 850 million to 1.1 billion international tourist arrivals, 910 million to 1.1 trillion dollars in export earnings and 100-120 million jobs in depending on the opening of the borders in July, September or December. Most destinations were fully closed in April and May 2020, opening only slowly in some northern regions by summer 2020. UN WTO forecasts have shown considerable uncertainty about the duration of the pandemic, in addition to the government's response to economic activity (UNWTO, 2020).

Given that most hotels are closed or facing a sharp decline in the number of tourists, industry revenue forecasts indicate a significant decline. Domestic markets can be expected to recover the first losses, but it is currently unclear how hotel companies will achieve this, especially the large chains that will have to reconsider their global supply sources and the dependency structures they create.

A major problem in the pandemic context is that many workers have direct contact with tourism. There are many employees in travel agencies, airlines, ships, hotels, restaurants, shopping malls and various tourist attractions where COVID 19 can be most easily transmitted.

4. The influence of the COVID-19 pandemic on tourism in Romania

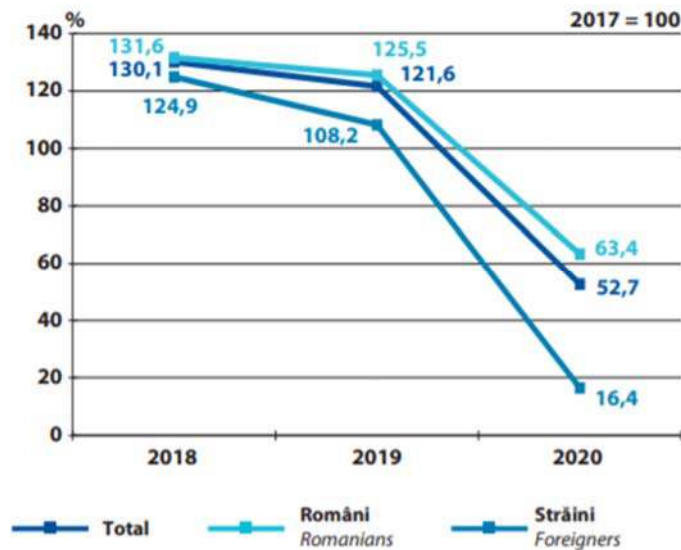
COVID-19 produced dramatic effects for the tourism industry, and Romanian businesses were not bypassed. Romanian travel agencies reported that in 2020 their business decreased by 80-90% compared to previous years (Biz, 2020). Unfortunately, Romania had a deficient strategy of communication and promotion among foreign tourists, and during the pandemic, the number of foreign tourists decreased even more.

Romania, like all other countries affected by the pandemic, has instituted measures to restrict the operation of economic operators in the field of tourism. In this regard, the Government, by Law 55/2020, imposed restrictive measures on accommodation units and restrictive measures or even the closure of food establishments, which had a direct negative impact on enterprises in the food and tourism sector, leading to suspending their activity for reasons not attributable to them. In order to help the economic structures in the field of tourism, the Romanian state offered support measures to help them cover part of the losses caused by the restrictions imposed by the pandemic. The purpose of these measures was to ensure the continuity of tourism.

The measures applied according to Decree no. 195 of March 16th, 2020 on the establishment of the state of emergency on the territory of Romania, were gradually applicable and also aimed at the gradual closure of state border crossing points, the gradual prohibition of road, rail, sea, river or air traffic on certain routes, such as and the temporary closure of restaurants, hotels, cafes, clubs, casinos, association headquarters and other public places. These limitations have implicitly led to a drastic decrease in the number of tourists and to huge losses in the field of tourism in Romania, as in most countries of the world.

In Romania, the number of arrivals in tourist reception units decreased by 50% in 2020 compared to the previous year (Digi24), a decrease that was maintained in January 2021, the indicator losing 40% compared to the same month last year (See graphic 1.)

Graphic no. 1. Tourists accommodated in tourist reception structures with accommodation functions

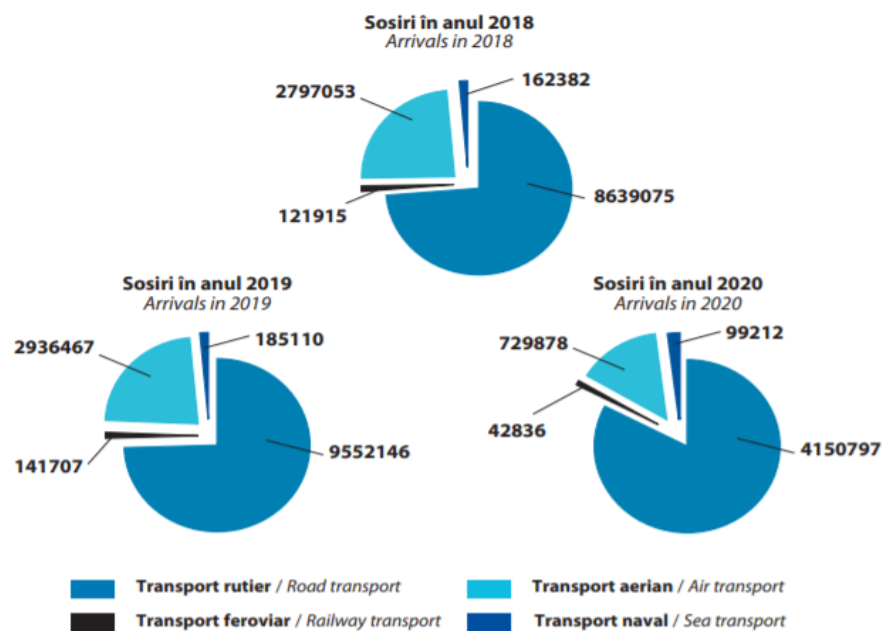


Source: National Institute of Statistics

The tourist accommodation units were extremely affected, being able to carry out their activity only with a very limited capacity. Thus, the most affected were those in the Danube Delta and on the Romanian coast that lost many customers in 2020. Mountain resorts were the most visited by Romanian tourists during the pandemic, but also accommodation structures in mountain areas they lost a lot of tourists and experienced a major economic downturn.

Regarding the number of foreign tourists, which was small anyway, it decreased even more during the pandemic, knowing a downward trend in the period 2018-2020 (See graphic 2). This drastic decrease was primarily caused by restrictions on travel and the use of means of transport of any kind.

Graphic no. 2. Arrivals of foreign visitors in Romania, by means of transport used



Source: National Institute of Statistics

Starting with the year 2021, the Romanian tourism and the one from all over the world started to recover in safe conditions, which allowed the resumption of the activity of the main economic operators in this field. Governments have begun to gradually remove travel restrictions and free movement, but in a coordinated way so that people can travel safely. Moreover, through the *Communication COVID-19: EU Guide for the progressive resumption of tourism services and for health protocols in tourist reception structures* (EURO-Lex, 2020), principles have been established since 2020 according to which European states, including Romania, can resume their activities in the field of tourism based on protocols for tourist reception structures, which have the obligation to reduce the risk of infection to a minimum, both for tourists and for hotel staff.

5. Research methodology

The tourism industry is an inherent dimension of contemporary social life and is one of the most complex industries in the world, involving the whole society. Having as object of study the quality management in the hotel industry in Romania, we chose as barometer the comparative numerical evolution in relation to the influence of the Covid-19 virus on the evolution of the hotel industry.

The clear intention is to express from a numerical point of view the most precise known variables, relevant aspects and the approached discipline that was behind some scientific researches by presenting the evolution at national level, the evolution and impact of the pandemic on the hotel industry in Romania. The data collection was carried out with the help of statistical directories available at national level and the information for 2020 was structured in a limited way in relation to the pandemic situation encountered worldwide.

Indicators chosen to analyze the evolution of tourism during the Covid-19 pandemic in Romania are *the tourist reception structures with the function of tourist accommodation and the overnight stays in the tourist reception structures with the function of tourist accommodation*; data collection was available with the help of official data provided by the National Institute of Statistics of Romania.

6. Findings

The selected indicators are numerical dynamizing elements that are subject to national calculation and follow the accuracy of information simultaneously with the manifestation of conclusions that appear as a result of the application of quality management in the hotel industry in Romania doubled by safety and social measures imposed by the Romanian government.

We analyzed the number of arrivals in the tourist reception structures with accommodation functions in the first quarter of 2019, 2020 and 2021 and thus, compared to the base year, we can highlight the numerical influence of the pandemic on this indicator.

Table no. 1. Number of tourist arrivals in the tourist reception structures with tourist accommodation function in the first quarter in the years 2019-2021

Year	Arrivals of tourists in tourist reception structures		Total of arrivals	Dynamics		Rhythm	
	Romanians	Foreigners		I _{i-1}	I _i	R _{i-1}	R _i
Q1 2019	1,873,767	443859	2,317,626	-	-	-	-
Q1 2020	1,480,163	282,643	1,762,806	76.06%	76.06%	-23.94%	-23.94%
Q1 2021	1,345,966	64,492	1,410,458	80.01%	60.86%	-19.99%	-39.14%

Source: made by the author based on data from statistical yearbooks

According to the previous table the average number of arrivals of 1,830,297 is highlighted, so that the arrivals in the first quarter of 2020 represent 76.06% of the arrivals in the first quarter of 2019, the arrivals in the first quarter of 2021 represent 80.01% of the arrivals in the first quarter of 2020 and 60.76% of the first quarter 2019.

The number of tourist arrivals in the first quarter of 2020 decreased by 23.94% compared to the first quarter of 2019, the number of tourist arrivals in the first quarter of 2021 decreased by 19.99% compared to the first quarter of 2020 and 39.14% compared to the first quarter of 2019.

In the first quarter of 2019, the share of the number of Romanian tourists in the total arrivals was 80.85% and the share of foreign tourists was 19.15. In the first quarter of 2020 the share of the number of Romanian tourists in total arrivals was 83.97% and the share of foreign tourists was 16.06% and in the first quarter of 2021 the much-changed share in terms of the number of foreign tourists who were present in Romania, so that the number of Romanian tourists in total arrivals was 95.43% and the share of foreign tourists was 4.57%.

All these decreases in the number of arrivals indicate the negative numerical impact that the Covid-19 pandemic had on tourism, both in terms of the number of Romanian and foreign tourists.

Table no. 2. Number of overnight stays of tourists in the tourist reception structures with tourist accommodation function in the first quarter in the years 2019-2021

Year	Overnight stays of tourists in the tourist reception structures		Total	Dynamics		Rhythm	
	Romanians	Foreigners		I _{i-1}	I _i	R _{i-1}	R _i
Q1 2019	3,595,596	892,829	4,488,425	-	-	-	-
Q1 2020	2,855,728	608,086	3,463,814	77.17%	77.17%	-22.83%	-22.83%
Q1 2021	2,459,760	149,077	2,608,837	75.32%	58.12%	-24.68%	-41.88%

Source: made by the author based on data from statistical yearbooks

Similar to the previously analyzed indicator, the evolution of the number of overnight stays in the tourist reception structures in Romania can be observed. The number of overnight stays of Romanian tourists in the first quarter of 2019 represents 80.11% of the total number of overnight stays in the first quarter of 2019, and the overnight stays of foreign tourists represent 19.89%.

The total number of overnight stays in the first quarter of 2020 represents 77.17% of the number of overnight stays in the first quarter of 2019, more precisely this indicator decreased in the first quarter of 2020 by 22.83%; the share of overnight stays of Romanian tourists represents 82.44% and the share of overnight stays of foreign tourists represents 17.56% of the total overnight stays in the first quarter of 2020.

The total number of overnight stays in the first quarter of 2021 represents 75.32% of the number of overnight stays in the first quarter of 2020 and 58.12% in the first quarter of 2019, this indicator decreased in the first quarter of 2020 by 24.68% compared to the first quarter of 2020 by 41.88 compared to the first quarter of 2019. The share of overnight stays of Romanian tourists in the first quarter of 2021 represents 94.29% and the share of overnight stays of foreign tourists represents 5.71% of the total overnight stays in the first quarter of 2021.

Table no. 3. Number of overnight stays of tourists in tourist reception structures with tourist accommodation in the period 2019-2020

Tourist reception structures	2019	2020	Rhythm
Hotels	21,989,605	9,357,868	-57.44%
Hostels	847,246	322,033	-61.99%
Motels	440,135	226,224	-48.60%
Inns	3,622	1,697	-53.15%
Touristic villas	1,031,616	588,039	-43.00%
Touristic cabins	263,794	164,753	-37.54%

Touristic pensions	2,275,335	1,123,569	-50.62%
Agro-tourism pensions	2,368,369	1,428,714	-39.68%
Camping	208,515	169,085	-18.91%
Tourist stops	62,278	36,148	-41.96%
Holiday villages	15,874	7,811	-50.79%
Bungalows	122,516	95,672	-21.91%
Student and preschool camps	181,734	4,259	-97.66%
Tourist houses	43,447	49,498	13.93%
Accommodation on ships	16,272	14,380	-11.63%
Total overnight stays	29,870,358	13,589,750	-54.50%

Source: made by the author based on data from statistical yearbooks

For this indicator we analyzed the evolution of the number of overnight stays of tourists in the tourist reception structures in 2019-2020, the absolute difference between the total number of overnight stays was 16,280,608, respectively the total number of overnight stays in 2020 decreased by 54.5%.

The category with the most significant difference is the accommodation in the camps for students and preschoolers which decreased by 97.66% in 2020 compared to 2019, followed by accommodation in hostels and hotels which decreased by 61.99% and 57.44%, respectively.

The only category of accommodation that experienced an increase in 2020 compared to 2019 was accommodation in tourist houses which increased by 13.93%. The category with the lowest decrease was accommodation in places by the sea, which decreased by 11.63% in 2020 compared to 2019.

7. Proposals and recommendations

The measures applied according to Decree no.195 of March 16th, 2020 regarding the establishment of the state of emergency on the Romanian territory had a gradual applicability and targeted the tourism sector through the following measures:

- isolation and quarantine of persons from risk areas, as well as those who come into contact with them; quarantine measures on buildings, localities or geographical areas;
- gradual closure of state border crossing points;
- restricting or prohibiting the movement of vehicles or persons in / towards certain areas or between certain hours, as well as leaving those areas;
- the gradual ban on road, rail, sea, river and air traffic on certain routes and the metro;
- temporary closure of restaurants, hotels, cafes, clubs, casinos, association headquarters and other public places.

In order for the tourism ecosystem to return to the normal path, it is necessary to relax these measures and the coordinated reopening of services and touristic units. Moreover, small and medium-sized enterprises in the field of tourism need financial support through the introduction of EU aid and funding schemes. Thus, the responsible restart of tourism requires that future operations be guided by a science-based approach to support governments, businesses and local communities to understand the trade-offs of decision-making processes aimed at aligning hygiene and health protocols with sustainability criteria.

The most effective recovery strategy for tourism organizations in the post-viral world is to allow people with SARS-CoV-2 coronavirus vaccination to travel freely. Airlines, hotels and spas should be the first to offer them various discounts and packages. A small percentage of cured people may need rehabilitation, which means that there may be some special offers for those groups of travelers.

There is, however, a doubt that the world will fully recover from the COVID-19 pandemic, as it has always done, because it is the first time, we have seen a global pandemic of such magnitude and on an unprecedented scale, broadcasted in real time. The number of infected and dead is reported to us every minute, which makes us feel vulnerable. However, information and communication technologies that help us to be constantly online and track the spread of the pandemic could also help us to effectively stop its progress.

8. Conclusions

The sharp decline in tourist arrivals and demand in the tourism sector caused by COVID-19 has caused millions of job losses and economic difficulties and eliminated many companies, especially micro, small and medium-sized enterprises in the field of tourism or related industries. In all countries of the world and implicitly in Romania, norms have been established that have provided hard traffic restrictions that have greatly affected both international and domestic tourism. As protection measures have been put in place by imposing restrictions, states have been forced to provide support to tourism organizations so that tourism does not collapse. Moreover, in order for tourism to recover, governments need to develop a step-by-step approach. In the early stages of the pandemic, many governments introduced extensive containment measures, such as strict blockades, which made tourism almost impossible. As the level of new infections decreases, governments decide to relax some restrictions, especially with regard to the movement of people on their own territory.

So, although the pandemic has had an extremely large and severe negative effect on global and national tourism, there is hope that, with the help of state governments and promotion, the return of tourism will become a short-term goal.

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Strategies for Improving Management in Hotels on the Romanian Coast

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Abstract

Before a travel company can do business, before it can market its tourism product, before it can even plan its tourism product, it must first plan its strategy. Decisions about the type of business the company wants to be in, the market segments it wants to follow and the type of tourism products it wants to develop for the market must be carefully planned in the form of a strategic plan.

The general strategic method presented in this article is a standard strategic planning cycle and a classic approach to strategy. However, it should be noted that the success of a strategy depends on the accuracy of many of the analyzes contained in the plan. Much of the analysis involves forecasting, and the future is notoriously unpredictable. Moreover, the classical approach presupposes a special rationality of those who work in tourism organizations on which it cannot always rely.

Key words: tourism, management, hotels, performance

J.E.L. classification: L66, L83, O18

1. Introduction

In recent decades, the application of management as a term and as a practice has moved decisively beyond business and even public administration, to various organizations, including hospitals, universities and museums, and has even penetrated everyday life - a development that some authors they usually referred critically to "managerialism." Most authors looked at management from their own points of view and, during the evolutionary process of management, different thinkers focused on different expectations.

Today, management is a universal phenomenon. It is a very popular term and widely used. All organizations - business, political, cultural or social are involved in management, because management is the one that helps and directs various efforts towards a defined goal.

This article provides an overview of organizational management and strategy in tourism. Without strategy, organizations are susceptible to a strategic drift - a consequence of the failure to monitor and respond to changes in the external environment. Organizations that do not use strategic planning tend to make ad hoc decisions and are more reactive.

According to Johnson and Scholes, "Strategy is the direction and scope of a long-term organization that gains an advantage for the organization by configuring resources in a changing environment to meet market needs and meet stakeholder expectations." Managerial strategies can be undertaken by the full range of organizations in the tourism sector.

2. Literature review

Management means "studying the management process in order to systematize and generalize concepts, laws, principles, rules, and the design of new systems, methods and techniques to contribute to increasing the efficiency of activities to achieve objectives."

Management is defined as a process in which the manager operates with three essential elements, namely: ideas, things and people. This process aims to achieve the proposed objectives through other people.

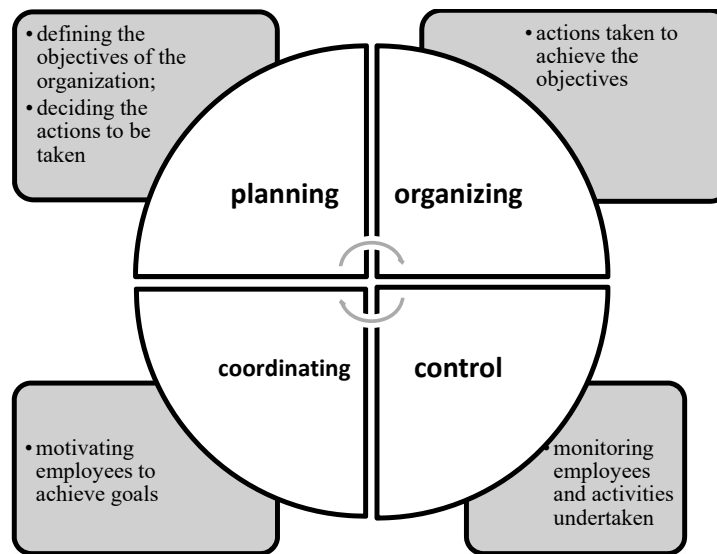
Another definition is that “management is the art of doing things through/and with people in formally organized groups, the art of creating an environment in such an organized group in which people can perform as individuals and yet cooperate, in order to achieve the group's objectives, the art of eliminating roadblocks to performance, the art of optimizing efficiency in achieving objectives effectively”. Thus, there is a need to introduce appropriate scientific managerial practices in the activity of enterprises, in order to act against the growing pressures faced by the tourism industry, infrastructure and investment.

As an integrated part of management, tourism management refers to everything related to the hospitality and tourism industry. It offers extensive training opportunities for leading positions in the tourism, accommodation and food industries. Tourism management may also include working in associations or agencies that are directly involved in tourism services.

Each organization, regardless of size or environment in which it operates has developed and implemented its own management concepts so that it works smoothly and achieves the vision, purpose and objectives it has set. As such, the basic functions of management, divided into four different areas, allow it to manage strategic, tactical and operational decisions (Becherel, L. and Cooper, C., 2002).

The four functions of management are: planning, organizing, coordinating and controlling (fig. 1)

Figure no. 1. Management functions



Source: Authors' contribution

• **Planning**

Planning is the basic component of all management functions. It is the foundation on which the other three areas should be built. The planning aims to assess the position of the company in the present and where it would like to be in the future. At this stage of planning, an appropriate action plan is established and implemented to achieve the company's objectives. (Robbins, 2007, p. 276).

Planning involves making decisions and choosing between alternative courses of future action. It also sets standards for control and provides a rational and fact-based procedure for decision-making. Planning offers greater chances of success, focuses on the organization's goals and helps to adapt to the changing environment. Objectives and plans can become the standard against which performance measurement can be made. (Robbins, 2007, p. 279).

Further planning is necessary to set specific objectives. Managers need to develop an elaborate network of organizational plans to achieve the overall goals of their organizations. After that, managers establish the premises or assumption on which the action statements are built. Next, managers decide how to move from their current position to their goal or in the identified area. They develop an action statement detailing what needs to be done, when, how and by whom. The quality and success of any planning depends on the quality of the assumption on which it is based throughout the planning process, the assumptions monitored and updated.

- **Organizing**

The organization includes occupying the positions in the structuring of the organization and the management of human resources. The organizing process involves designing and developing the structure of relationships between team members or the group designated to perform the planned task. It also includes the work of occupying and maintaining positions in the organization. If the available human resources do not match the skill set for the company's strategy, then the organization is responsible for hiring additional staff or training existing resources (Cornescu, Mihailescu, and Stanciu, 2003, p. 23).

- **Coordination**

Leadership refers to the process of motivating, directing and guiding the people in the organization to carry out their activity according to plans and objectives. The leader plays a crucial role in organizing the business. A leader is the person who guides the staff towards a common goal and motivates them to achieve it. Every organization needs efficient management to make full use of staff skills in order to achieve business objectives (Marinescu, 2003, p. 27).

Leadership is important in any organization, the leader being the one who determines the success or failure of an organization and therefore the company should be able to optimize the performance of its employees, the performance of the organization will get satisfactory results if there is good communication, an effective management and motivation. Effective management should provide direction for all employees' efforts to achieve organizational goals. Without leadership, the relationship between individual goals and organizational goals may not be one-way.

- **Control**

Management control is a process in which the organization strives to achieve the planned or desired results, or "performance". In doing so, organizations can take various actions to minimize the negative effects arising from the external and internal environment. Management control is a method of managing the organization's performance. (Giraoud, Zarlowski, and Saulpic, 2011, p. 167).

The control process is not a linear process. The essence of the control is not to "assess" whether the planned objectives have been achieved or not, but to monitor progress towards the objectives. This progress is not determined at the end of the planning period, but rather during the implementation of the organization's plans. (Giraoud, Zarlowski, and Saulpic, 2011, p. 169).

Finally, control from the manager's point of view covers the whole business. The manager must be able to report all aspects of the business, gather information from all departments and correlate these activities so as to complete the company's action plan as specified.

In order to improve the management, in the field of tourism, as well as in the other fields, it is necessary to realize a managerial strategy. The improvements of the management constitute a continuous necessity as a result of the evolution of the Romanian companies in the context of the major changes that each one has to face, reason for which we analyzed the possible development strategies.

The term of a strategic management officially entered the theoretical language in 1973, during "The First International Conference of Strategic Management" which was organized by I.H. Ansoff at Vanderbilt University. Today there is no unanimity of perspectives on the definition of the term strategic management and strategy, thus, we encounter a variety of definitions given to the term strategy.

Hofer G. and Schendel D. (1979), define the strategy as "the fundamental structure of the development (representation) of present and projected resources and interactions with the environment that indicate how the organization will achieve its objectives." A little later, Brian Quinn presents the strategy as "a model or plan that integrates the major goals of the organization, policies and action sequences into a coherent whole" (Freeman, 1984, p. 245). There are four key elements of the strategy:

- Mission: It determines what an organization is trying to achieve and provides the purpose and direction of the strategy;
- Strategic analysis: It provides information to an organization about the strengths and weaknesses of its internal resources and the obvious opportunities and threats in its external environment;
- Strategic choice: this is where an organization generates, evaluates and chooses an appropriate strategy;
- Strategic implementation: This shows how an organization implements its strategy.

It is difficult for an organization to formulate a strategy without a clear idea of its overall purpose. The mission of an organization can be thought of as what the organization is trying to achieve; what is its purpose and objectives and where it is trying to move in the medium and long term. Objectives can be written in a closed or open form. Closed targets describe quantifiable targets and should be in line with SMART principles and thus be: specific; measurable; agree with those who need to touch them; realistic and quantifiable.

The next step in formulating the corporate tourism strategy is strategic analysis. This involves taking into account the major influences that affect the organization's ability to fulfill its mission in terms of resources and environment. Strategic analysis reports on current and future strengths and weaknesses and opportunities and threats (SWOT) that the organization is facing. (Kotler, 1991).

Strategic choice refers to the generation of strategic options, to an evaluation of strategic options and the selection of the strategy. In simple terms, an organization seeks to gain an advantage over its competitors either by selling a product cheaper than the competition, or a product that is better than the competition, or a product that is cheaper and better. These are the key strategic options available. During any phase of the strategic review, a number of strategic options will be generated from the strategic analysis. The preferred option will pass the adequacy, feasibility and acceptability tests. (Atkinson, Berry, and Jarvis., 1995, p. 173).

The agreed organizational strategy will generally be set out in a formal document, and the effort should then be geared towards strategic implementation. This stage involves translating a strategy into a series of operations and objectives with clear performance objectives. Resource planning is a crucial part of strategic implementation. Thus, it is necessary to plan financial, human, technological resources, etc.

3. Research methodology

For the research carried out in this article, we chose one of the large hotels located on the shores of the Black Sea to present an example of a strategy for improving tourism management. Hotel Zodiac is located in Tabăcăriei Park, in the northern part of Constanța, in the immediate vicinity of Mamaia resort.

The hotel is a large organization composed of several different departments, each department having its own set of objectives, rules and methods of operation. But, although each department functions as an individual unit, they are not autonomous. Departments are a cohesive set of units that all strive to achieve common company goals. Thus, within the guidelines of the corporate plan, a hotel management strategy was developed to target each department and at the same time the organization as a whole.

Hotel Zodiac is an accommodation-restoration unit that has been designed for those people who want something special and new when they are looking for tourist stays, as well as for business people, who want to organize various events, seminars, conferences, private receptions, exhibitions, fashion shows or concerts. The hotel has in its structure a restaurant, located in the basement of the building, a cafe, located on the ground floor of the unit, as well as a conference room, located on the fourth floor of the building.

For food and catering services, the company has a cafe, located on the ground floor of the building, with a capacity of 40 seats and a restaurant, located in the basement of the building, with a capacity of 150 seats. For accommodation services, the hotel has a number of 19 rooms, with a total of 38 accommodation places. Of these, two are apartments, six rooms are twin and 11 rooms are with double bed. All accommodation is arranged on three floors. The unit also has a conference room with a capacity of 30 seats. This service is on request.

Thus, we presented in this article, through the method of observation, the current strategy of the organization and some suggestions for improving it.

Regarding the establishment of the hotel's objectives, on all levels, I chose to use a more complex way of establishing all the activities and areas of the foundation, in order to perform a complex examination that allows the detachment of all fundamental objectives, which are the major components of global company policies.

The EFQM model is a tool used to perform a complete, systematic and ongoing examination of an organization's activities and results, by comparing it with a performance model called a self-assessment model. The EFQM model is based on the principle of customer satisfaction, staff satisfaction and integration into the life of the community and how results are obtained through leadership, policy and strategy, staff management, resources and processes. All this ultimately leads to excellent operational results.

In order to formulate proposals to improve the company's management strategy, we first defined the company's mission and performed a SWOT analysis.

• **Mission**

The hotel organization's mission is to satisfy tourists by offering the highest quality services where the perfect harmony between the elegance of modern architecture and British sophistication is combined with the warm and pleasant atmosphere, given by the four-star comfort of the hotel to pamper tourists., from the first to the last moment of their stay.

• **SWOT Analysis**

Within the organization, the identification of weaknesses was done with the help of SWOT analysis. This type of analysis is used both to evaluate certain activities within the project, optimizing their potential and risks, to decide which is the most appropriate way to minimize them.

The SWOT analysis	
Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Autonomy and stability; ➤ Large production and sales capacity; ➤ Increasing the number of employees; ➤ Satisfying the needs of consumers at a high-quality level and in conditions of economic efficiency; ➤ Observance of classification norms; ➤ Existence of a management strategy; ➤ Cleanliness and pleasant appearance of the rooms which are spacious and airy; ➤ Providing quality services; ➤ Professionalism of the employed staff; ➤ Existence of a conference room; ➤ Offering breakfast; ➤ High level quality services at the restaurant level; ➤ Using communication strategies. 	<ul style="list-style-type: none"> ➤ Excess and waste of food in the restaurant; ➤ Offering hotel services similar to the others existing in the area; ➤ Lack of a flow of services; ➤ Lack of adaptability and reliability to the market; ➤ Lack of a larger number of new customers; ➤ High costs of management strategies; ➤ Shortening the summer season; ➤ Targeting customers.
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Developing and maintaining functional managerial relationships; ➤ Rationalization of differences by reducing the service provider; ➤ Allowing a flow of services in such a way that no part of the system is overloaded; ➤ Developing strategies to better understand the client and his expectations; ➤ Modernization of services and adapting to the modern market requirements; ➤ Diversification and customization of stay offers; ➤ Complexity and quality of infrastructure. 	<ul style="list-style-type: none"> ➤ Existence of high market competition and market pressure; ➤ Finding, retaining and keeping people can contribute to increasing the competitiveness of organizations and has become a crucial factor; ➤ Impossibility to diversify the clientele; ➤ Productivity is threatened by factors such as: weather conditions; increasing customer desires and needs; decrease in the number of tourists, etc.

In Table 1 are presented the main indicators of performance of the hotel in the period January 2018 - December 2020.

Table no. 1. Main indicators of hotel performance

Indicator name / Year	2018 (01.01 - 31.12)	2019 (01.01 - 31.12)	2020 (01.01.-31.12)
Annual net turnover (lei)	1.891.789	2.768.122	1.617.487
Average number of employees (people)	18	26	25
Labor productivity (lei / person)	105.099,39	51.968,84	64.699
Profit (lei)	413.588	-153.328	-209.748
Commercial profitability (%)	21.86%	-	-
Salaries (lei)	281.691	242.726	412.748
Average salary earnings (lei / employee)	1.304,13	1.064,59	1.377

Source: Authors' contribution

In Table 2 is presented the business management analyze of Hotel Zodiac in the EFQM base model.

Table no. 2. Analysis of business management in the hotel Zodiac

Categories	Actions taken
Human resources	<ul style="list-style-type: none"> ➤ recruitment, selection, training and management of staff; ➤ capitalization to maximize the potential of every person employed on the basis of a rigorous selection; ➤ the important role in building the company's image.
Leadership	<ul style="list-style-type: none"> ➤ manager's work is characterized by flexibility, adaptability and creativity; ➤ leaders have as main objective the development of the mission, vision, values and ethics that play the role of models of the culture of excellence; ➤ promoting strategic activities specific for improving relations with clients/beneficiaries
Policies and strategy	<ul style="list-style-type: none"> ➤ creating policies and strategies based on information obtained by measuring performance, research, learning and related external activities; ➤ permanent improvement of the market approaching technique and of the tourists.
Processes	<ul style="list-style-type: none"> ➤ use of suitable methods for implementing the changes.
Results in relation to consumers	<ul style="list-style-type: none"> ➤ development and on other segments of the market; ➤ improving the resolution of complaints.
Results in relation to employees	<ul style="list-style-type: none"> ➤ providing feedback's; ➤ providing an increased focus on requests submitted by employees.

Source: Authors' contribution

Correlations between elements of the EFQM Model that relationships cause and effect are the true ones that make the whole system of management to operate the better results, successful sustainability and adaptability; so the hotel succeeds in maintaining the position and to meet their objectives.

4. Findings

Following the results obtained, there have been proposed the following objectives which are to be made on the managerial level at hotel Zodiac (table 3):

Table no. 3. Strategic objectives of Zodiac Hotel's management

Structures	Objectives
Processes	<ul style="list-style-type: none"> ➤ increasing the productivity of the employed staff; ➤ adapting the equipment and apparatus used in daily activities; ➤ opening a new working point of the unit
People	<ul style="list-style-type: none"> ➤ developing the client portfolio; ➤ improving customers and to employee's satisfaction;
Policy	<ul style="list-style-type: none"> ➤ increasing the market share by 5%; ➤ increasing the level of environment protection; ➤ improving the quality of services provided.

Source: Authors' contribution

Establishing the needed resources in order to achieve the objectives proposed is a very important step in the process of drafting the strategy of development of the company. There is a major probability that in the framework of this process to occur major difficulties, especially in terms regarding the aspects of quality and the connection to the culture of the organization (table 4).

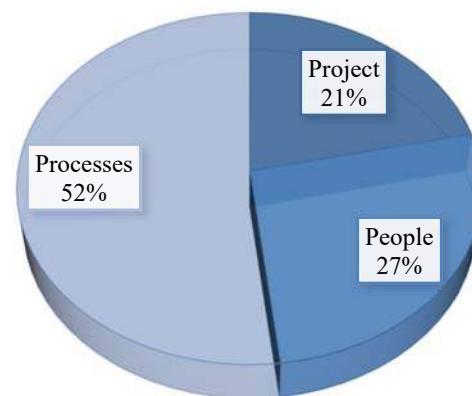
Table no. 4. Dimensioning of the resources necessary to achieve the strategic objectives

Information resources	Material resources	Human resources	Financial resources
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Source: Authors' contribution

The following graphic shows how is going to be allocated the budget to fulfill the strategic objectives proposed in function of the dimensions of the action. A strategic plan for allocation of financial resources is absolutely necessary for the realization of activities and operations proposed.

Figure no. 2 Budget allocation



Source: Authors' contribution

In terms of setting deadlines for the achievement of objectives and progress of strategic options, is the setting of final deadlines, but also intermediate, regarding of the nature, complexity and difficulties of it assumed aims and the strategic options. Periods of time related to achieving the established objectives have to meet certain criteria: (a) have to be as short as possible; (b) have to be realistic; (c) to be correlated in function with the logical relations between the targets and their ability of embodiment (Table 5.)

Table no. 5. Setting the deadlines for achieving the objectives

Objective / action	Time for achieving
• increase the productivity of the staff employed	1 month
• adaptation of equipment and appliances used in daily activities	6 months
• opening a new place of work of the unit	1 year
• developing the client's portfolio	6 months
• improving the customers and employee's satisfaction	1 month
• increase of market share by 5%;	6 months
• establishing efficient relations with the media	6 months
• increasing the level of protection of the environment	1 year
• improving the quality of services provided	6 months

Source: Authors' contribution

The implementation of the strategy is the last stage of the process of improving the company's management and is a complex stage that requires a rigorous organization.

In order to prepare the implementation of the strategy for improving the management, the organization analyzed the realized preparation program and implementation of the strategy (table 6).

Table no. 6. The program of preparation and implementation of the strategy for improving the management of Hotel Zodiac

Measure	Necessary resources	Responsible	Period of application	Remarks
Increase productivity	<ul style="list-style-type: none"> • information resources; • technological resources; • human resources. 	<ul style="list-style-type: none"> • managers 	1 month	<ul style="list-style-type: none"> • using new operation technologies; • employee training; • improving restaurant services.
Opening a new work point	<ul style="list-style-type: none"> • human resources; • financial resources; • managerial resources; • marketing and promotion resources; • material resources. 	<ul style="list-style-type: none"> • managers 	1 year	<ul style="list-style-type: none"> • extensive and quick analysis of the market; • attracting funds; • construction of the space for the new work point; • space arrangement.
Increase share of market	<ul style="list-style-type: none"> • human resources; • material resources 	<ul style="list-style-type: none"> • managers • staff 	6 months	<ul style="list-style-type: none"> • making synthetic and analytical records of expenses; • effective forecasting and planning
Improving the quality of services provided	<ul style="list-style-type: none"> • financial resources; • human resources 	<ul style="list-style-type: none"> • managers 	6 months	<ul style="list-style-type: none"> • purchase of software that facilitate the actions carried out by the personnel unit; • continuous improvement of the quality management system; • improving procedures for organizing and running the main processes at firm level, like

				contracting, sale or supply.
Improving employee satisfaction	<ul style="list-style-type: none"> • human resources; • financial resources. 	<ul style="list-style-type: none"> • managers 	1 month	<ul style="list-style-type: none"> • delegation of tasks; • effective communication; • provision of bonuses; • periodic evaluation; • monthly meetings; • permanent motivation of staff.
Creating a relationship with the media	<ul style="list-style-type: none"> • human resources; • financial resources. 	<ul style="list-style-type: none"> • managers 	6 months	<ul style="list-style-type: none"> • developing media relations; • plan to combat the negative media publications; • transparency of the operations carried out by the organization.

Source: Authors' contribution

The effective application of the necessary changes for the improvement of the management is achieved by finalizing and operationalizing the strategy. Operationalization of the strategic changes requires implementation of changes to fund both in terms of procedural components, as well as the structural ones of the company.

Improving management in the hotel by operational changes of the strategic changes, aimed at the following aspects (table 7):

Table no. 7. Operationalization of the strategic objectives

Aspects	Operations
Technically	<ul style="list-style-type: none"> ➤ use of new operating technologies; ➤ acquisition of programs for staff training; ➤ space for the new work point; ➤ spaces for storage and supply; ➤ purchase of furniture; ➤ spaces useful and modern which are meant to attract customers;
Economical	<ul style="list-style-type: none"> ➤ ensuring the material resources necessary to improve the quality of services; ➤ ensuring the resources necessary opening a new point of work; ➤ promoting a new management principle;
Human Objectives	<ul style="list-style-type: none"> ➤ increasing the number of employees; ➤ provision of bonuses and trainings for employees; ➤ improving the working conditions; ➤ capitalization to maximize the human potential and permanent motivation of it;
Management	<ul style="list-style-type: none"> ➤ developing the mission, vision, values and ethics plays the role of models of cultural excellence; ➤ promoting specific strategic activities to improve relations with suppliers; ➤ making available to the staff the necessary information to achieve the objectives of the organization;
Marketing	<ul style="list-style-type: none"> ➤ online promotion; ➤ media promotion; ➤ launch of efficient promotional campaigns; ➤ elaboration of the marketing plan and promotion strategies.

Source: Authors' contribution

As we can see, the implementation of strategic changes is a complex process, easy to achieve theoretically, but much more difficult to implement. The success of the managerial improvement strategy consists in knowing and mastering all the variables that may appear along the way.

5. Conclusions and recommendations

Due to the fact that the management strategy has an essential role in the design and foundation of the hotel business, being based and organically related to the prediction function, it requires deciphering and anticipating change, the methods that have to be made in the interior of the hotel and the ties of those with the environment, maximum responsiveness to new, dynamism and flexibility in all management functions, so as to avoid inconsistencies between demand and supply, between new and old, ensuring high competitiveness.

Given the important role of the management strategy, perfecting or continuous improvement is absolutely necessary for a hotel that wants to occupy a place as high as possible in the tourism market and to satisfy its customers. To this end, the Zodiac Hotel has developed a plan to improve its management strategy by setting clear and achievable objectives within a reasonable period of time so that it can provide high quality services and motivate and satisfy the staff employed to raise service quality standards.

The proposed objectives will be achieved through their operationalization and the allocation of financial, material, informational and human resources.

In conclusion, the strategy of improving the management of the Zodiac Hotel must go through all the necessary steps to develop the strategy and allocate all the resources at its disposal to satisfy the consumer.

It is recommended to continuously improve the managerial strategy of the hotel by operationalizing the objectives in all its departments. It is also recommended to evaluate the annual activity of the hotel in order to achieve a strategic plan according to the needs that appear to be in line with the market.

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Overview of Change in Organizations. Resistance to Change. A Literature Review

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Abstract

Global economy continues to influence the way in which companies carry out their business more and more. Therefore, the current business environment, impacted by globalization, has forced these organizations to manage change in an effective and efficient manner, and change management has become one of the key management skills in organizations.

In this context, change management is an essential component in company success, which is why the literature describing the success initiatives of change management is increasingly extensive.

The topics most studied in the literature imply resistance to change, employees’ readiness for change, leadership effectiveness, employees’ involvement, participation and commitment in change processes, and the roles and skills required for the success implementation of organizational change.

The purpose of this study is to present two major topics discussed in the literature, namely, resistance to change and employees’ readiness for change.

Key words: change, change management, resistance to change, readiness for change

J.E.L. classification: M10, M12, M19

1. Introduction

We must prepare for “the future that has already happened”, according to the statement of the management theoretician Peter Drucker (Kinicki & Williams, 2020, p.376). There are super trends that specifically shape the future of business (Kinicki & Williams, 2020, p.376):

- “*The market is becoming more segmented and oriented towards niche products*”: in the recent past, managers could think in mass market terms - mass communication, mass behaviour and mass values. Nowadays, we are facing a “demassification” process, the client groups being broken down into smaller and more specialized units and responding to commercial messages directed in a more restricted manner. Such marketing messages can even be modelled and customized through artificial intelligence, allowing robots, for example, to engage in conversations with individual consumers or with small consumer groups. Some suggest that this type of customer-oriented marketing can help create relationships leading to customer loyalty and repeat business.
- “*The competitors providing specialized solutions are steering the faster launch of products on the market*”: companies that need too much time to make their products available for sale may not succeed in using a narrow window of opportunity before their competitors.
- “*Know-how rather than information is the new competitive advantage*”: since information technology covers more of the work previously performed by humans, even in high technology sectors, many employees formerly considered “knowledge workers” are now recognized as “data workers”.

Change involves the dismantling or restructuring of organizational structures, hierarchies, culture and strategies to facilitate new flexible work models which will accommodate the potential issues arising out of resistance to change (Awoke, 2020).

Change management is not a distinct discipline with rigid and clear-cut boundaries. On the contrary, change management theory and practice rely on several disciplines and social science traditions. For example, management education and learning theories, which help us understand the behaviour of those in charge of change management, cannot be thoroughly discussed without reference to psychology theories. The latter, in their turn, cannot be discussed without "mentioning the theory of knowledge (epistemology), which is a genuine philosophical field per se" (Raza *et al*, 2018).

2. Literature review. Overview of Change in Organizations

Change is a migration from the current situation to a desired future situation. Change management as a practical activity is aimed both at configuring the desired situation and at managing the successive transition through several intermediary stages until the desired situation is reached. Change in organizations is represented by any change in the organization's state of affairs. As a discipline, change management focuses on voluntary organizational change in response to environmental factors, or on the organization's own initiative, a change that must be managed in order to achieve a desired future condition (Srivastava & Agrawal, 2020; Georgalis *et al*, 2015).

Change management has been also defined as "the process of continually renewing an organization's direction, structure and capabilities to serve the ever-changing needs of external and internal customers" (Sundus *et al*, 2017, p.17). It also refers to the adoption of an idea, procedure, process or behaviour that is new to an organization. The major objective of change management is "to maximize the collective benefits for all people involved in the change and to minimize the risk of failure to change. The major obstacle to change management is resistance to change" (Sundus *et al*, 2017, p.17).

This being said, it has been acknowledged for a long time that change in organizations tends to focus on achieving one of the three following types of outcome: individual change, group change or system change (Sandelands, 2010).

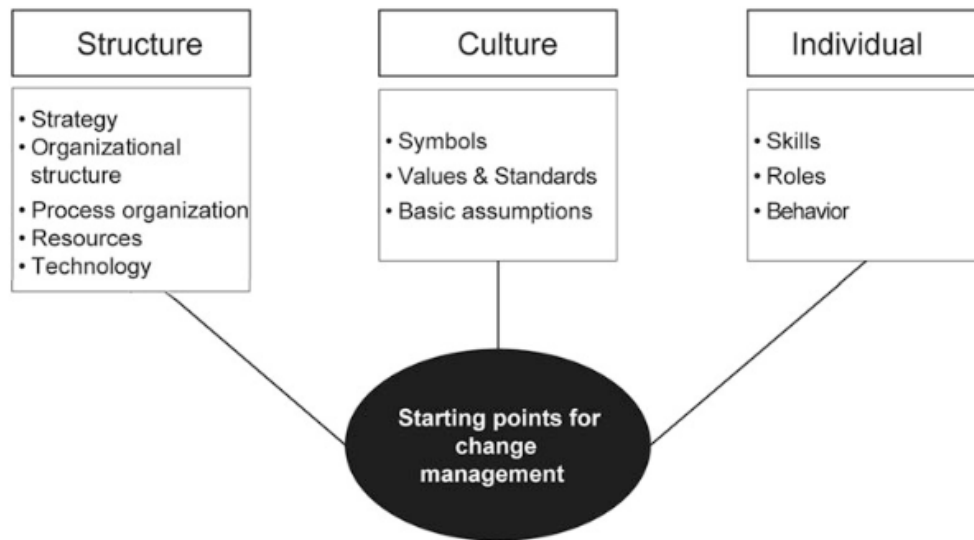
For example, Maslow and the early human relations movement focus predominantly on the role of motivation and individual behaviour. Lewin and Schein, while acknowledging the importance of individual behaviour for the overall performance of the organization, claim that a change in group behaviour is the best way to improve performance. Senge, however, adopts a systemic approach to improvement. He considers the interconnectedness of organizational life as "the most important factor and consequently, the starting point of change" (Burnes, 2017, p.8).

Change management refers to the achievement of an optimal design of the path leading from the starting point to the goal. Pursuing this interpretation of the concept, change management does not involve defining the content of the goal itself, nor developing the methods to achieve such corporate goals or strategies (Guidetti *et al*, 2018).

Since change management refers primarily to handling change by taking into consideration the human factor, the related methods can be applied to three elements (Lauer, 2021, p.7):

- "*Individuals*: they form the smallest social elements of organizations. Without their active participation, change in organizations is not possible". Change management in relation to individuals means not only the adjustment of skills to new challenges, but also the promotion of a positive attitude required for the change goals and the involvement in it.
- "*Corporate structures*: they include the formal structural and processual organization, as well as the strategies and resources". Their change is simple on paper, but the informal structures which tend to develop in the long term and through evolution often resist such changes.
- "*Corporate culture*: the permanent, rather informal structures which are responsible for attitudes, values and informal rules of behaviour form the corporate culture and are independent of the individual to a significant extent". A change at an individual and structural level, without the involvement of corporate culture, is often affected by considerable issues or even bound to fail completely.

Figure no. 1. Starting points for change management



Source: (Lauer, 2021, p.7)

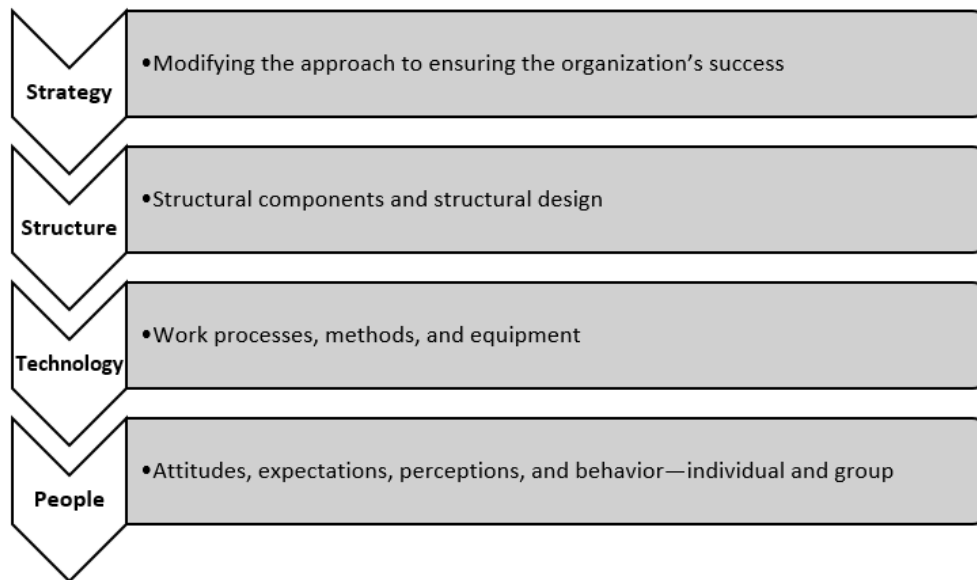
Change management is therefore a complex task, which not only starts at different levels, but must bring together in a constructive manner the most diverse interests of those involved. In this respect, knowing the potential causes of failure is as important as knowing the factors which contribute to its success (Lauer, 2021, p.8).

Managers have to deal with four main areas of change: strategy, structure, technology and people (figure no. 2). Strategy change means a change in the manner in which managers ensure company success. Structure change includes any modification of the variable structures, such as reporting relationships, coordination mechanisms, employee skills or job reconfiguration. Technology change includes “changes in the working manner or methods and the equipment used”. People change refers to “changes in individual or group attitudes, expectations, perceptions and behaviours” (Robbins *et al*, 2018, p.213).

A classification of changes, of high importance for change management, is from the perspective of the types of events that generate the need for change. Based on these types of events, there are three main categories of change (Kinicki & Williams, 2020; Brisson-Banks, 2010):

- “closed change”: there is certainty as to what has happened, the causes and the measures to be taken;
- “contained change”: there is reasonably certain knowledge of what has happened, the causes and the measures to be taken;
- “open-ended change”: there is broad disagreement as to what has happened, the causes and the measures to be taken.

Figure no. 2. Four Types of Change



Source: (Robbins *et al*, 2018, p.213)

The process of change in organizations comprises six steps, in a cyclical model (Georgalis *et al*, 2015):

- perceiving an opportunity or a problem;
- diagnosing the situation and generating ideas for change;
- adopting a change proposal;
- planning to overcome resistance to change;
- implementing the change;
- monitoring and assessing the results.

The forces that generate change, both from outside and from inside the organization, are those which impose the need for change in organizations. The forces operating from outside the organization are represented by four types of external forces, as follows (Kinicki & Williams, 2020, p. 381-382):

- “*Demographic features*”: age, education, level of skill, gender, immigration.
- “*Technological progress*”: technology does not refer only to computer technology; it is any machine or process allowing an organization to obtain a competitive advantage in changing the materials used to produce a finite product.
- “*Social and political pressures*”: social events may generate considerable pressure.
- “*Shareholders, customers and market changes*”: changes in customer preferences, national and international competition, mergers and acquisitions.

The forces originating from the organization are internal forces affecting the organization, such as low job satisfaction. Internal forces may be of two types:

- *Human resource concerns*: unsatisfied needs, job dissatisfaction, absenteeism, low turnover and productivity, weak participation/involvement of the employees, complacency, bureaucracy.
- *Management behaviour*: conflicts, leadership, remuneration system, structural reorganization, change of goals.

As can be seen in figure no. 3, the need for change is catalyzed by dynamic environmental changes, which generate new requirements for success in the organization’s market. New customer requirements bring about a need for new business strategies, which require changes in the organization in order to be carried out. They may include changes in the structure, systems, business processes or technology (content). If such changes in the organization are sufficiently relevant, the organizational culture must change in order to change the manner in which the people within the

organization perform their activity. Culture change generates changes in behaviour and thinking among both leaders and subordinates. Figure no. 3 shows that the driving forces of change switch from external and impersonal (environment, market, organizations) to internal and personal (culture and mentality) (Anderson & Ackerman Anderson, 2010, p.32).

Figure no. 3. The Driving Forces of Change



Source: (Anderson & Ackerman Anderson, 2010, p. 32)

3. Research methodology

Management research deals fundamentally with the creation and legitimation of various forms of knowledge associated with management practices. Traditional approaches to management research involve a varied combination of key processes, observation, reflection, theoretical conjunctures and testing of theories and hypotheses, creation and development of models to acquire the essence of management realities (Partington, 2002).

The present study is based on qualitative research methods, which is a form of social action that emphasizes the way people interpret and give meaning to their experiences in order to understand the social reality of individuals and organizations. Qualitative research uses interviews, journals, articles and observations to obtain, analyze, and interpret the data content analysis of visual and textual materials (Mohajan, 2018). Qualitative research is exploratory and seeks to explain “how” and “why” a certain phenomenon works as it happens in a certain context (Mohajan, 2018).

The roots of qualitative research are found in social and cultural anthropology, philosophy, psychology, history and sociology. The purpose of qualitative research is to systematically describe and interpret problems or phenomena from the point of view of the individual or population studied and to generate new concepts and theories (Mohajan, 2018).

In this respect, the present study analyzes the concepts of change in organizations and resistance to change. Thus, we tried to highlight the aspects of organizational change, the forces that generate change, types of change, change management, resistance to change, techniques for reducing resistance to change and change readiness.

Therefore, the present study has the following specific objectives:

- To provide a theoretical foundation, based on the study of the literature, of the concepts of change in organizations, change management, resistance to change and change readiness.
- To provide sufficient information to understand change in organizations and resistance to change.

- To briefly describe the forces that generate change, types of change, resistance to change, techniques for reducing resistance to change and change readiness.

We mention the fact that this study is a starting point for conducting a quantitative research that aims to study organizational change in IT companies in Romania.

4. Findings. Resistance to Change

Resistance is a phenomenon that affects the process of change, delaying or slowing down its commencement, hindering or preventing its implementation and increasing the implementation costs. Resistance to change is "a tridimensional negative attitude towards change which includes affective and behavioural components and must be overcome or removed" (Sundus *et al*, 2017, p.17).

Resistance to change is a topic of frequent concern in the literature. The process of change is "delayed because of such resistance, which is perceived as a collateral damage of change efforts". Resistance may take many forms, such as "deliberate tardiness, resignation, strikes, sabotage of the organization's property, etc." (Sundus *et al*, 2017, p.17; Amarantou *et al*, 2018; Ford *et al*, 2008).

Srivastava & Agrawal (2020) consider that the human dimension is the most important element in the successful implementation of change, being manifested in the employees' feedback concerning change. Change in organizations has been explained in the literature as a transition from the known to the unknown, which is generally not supported by employees unless there are significant reasons for change that have been duly communicated to them. Therefore, employees often show resistance to change in their tendency to preserve the status quo, whereas the change process focuses on the modification of the status quo.

The reasons why employees usually show resistance to change are the fear of the unknown, the misunderstanding of the need for change and of its repercussions, and a low tolerance towards change. According to Dent & Goldberg (1999), people do not actually resist the concept of change but rather the loss of their status, benefits or comfort.

Collinson 1994 (Srivastava & Agrawal, 2020) defined resistance as a behaviour in employees that challenges, disrupts or inverts prevailing assumptions, discourses and power relations.

Robbins *et al* (2018) state that the main reasons for resistance to change in organizations are uncertainty, habituation, concerns about personal loss and the belief that change is not in the interests of the organization. Change replaces the known with uncertainty. Another cause of resistance is that individuals tend to do things out of habit, and when confronted with change, their general tendency to respond in the usual manner becomes a source of resistance. Change threatens the individuals' investment in their status quo. The more people have invested in the current system, the higher their resistance to change (Ford *et al*, 2008).

According to organizational researchers, the success of change initiatives can be determined by the individual's feedback to change. The functioning of an organization is determined by the functioning of all its members. Thus, it can change only when its members' behaviour changes. "It is impossible for an organization to change significantly unless its employees believe, think and behave differently" (Sundus *et al*, 2017, p.17).

Gardner, Pierce and Dunham 1989 (Sundus *et al*, 2017, p.18) have suggested three types of individual response to change: "affective, cognitive and behavioural. The affective response refers to the individual's reaction to change, whether it is satisfaction or anxiety. The cognitive response consists of opinions on utility, necessity and the knowledge required to cope with change. Instrumental behavioural responses refer to the actions that have already been carried out or are to be carried out in order to cope with change" (Rahe & Morales, 2005; Ford *et al*, 2008).

Employees' resistance to change must be managed by means of support and involvement from their managers. Employee involvement and empowerment are frequently mentioned in the literature as being helpful in reducing resistance to change. Kotter and Schlesinger 2008 (Sundus *et al*, 2017, p.18) presented a better perspective to encourage and support employees in coping with change, by stating that "the context and content of change per se vary significantly among organizations and should determine the adequate response". They emphasized several approaches, from education to constraint, describing who should use them and when in order to reduce resistance, and detailing the pros and cons (Amarantou *et al*, 2018).

Enders *et al* (2020) stated that resistance to change is, despite its negative connotation, a natural propensity of human disposition. This innate resistance behaviour is the individual's intrinsic desire to maintain a psychological balance offering a sense of security and control. Thus, this intended balance may be disturbed by behavioural change, which is why individuals usually avoid initiating or actively embracing change. However, the reasons for resistance are either active or passive: active resistance is defined by conscious rejection motivated by contradictory beliefs or traditions or by functional issues. In contrast, passive resistance occurs even before the actual assessment of an innovation and is caused by a general aversion to behavioural or attitudinal changes (Guidetti *et al*, 2018).

Concerning the techniques used to counteract resistance to change, Robbins *et al* (2018, p.218) have mentioned: "education and communication, participation, facilitation and support, negotiation, manipulation and cooption, and coercion respectively". These techniques are summarized in table no. 1. Managers should use such techniques as instruments, selecting the most appropriate amongst them based on the type and source of resistance.

Education and communication can "help reduce resistance to change by helping employees see the logic of the change efforts". This technique assumes that resistance is mostly determined by misinformation or poor communication (Robbins *et al*, 2018, p.218).

Participation means "involving the people directly impacted by the proposed change in the decision-making process". Participation allows these individuals to express their feelings, thus enhancing the quality of the process and increasing the employees' commitment to the final decision (Robbins *et al*, 2018, p.218).

Facilitation and support imply "helping the employees cope with the change-related anxiety". This help may include counselling, therapy, development of new skills or short-term paid leave of absence. Negotiation involves "exchanging something of value for an agreement to reduce resistance to change efforts". This technique may prove quite useful when the resistance comes from a strong source. Manipulation and cooption refer to "the attempts to influence other people with respect to change". Coercion can be used to cope with resistance. Coercion involves "making use of the managers' authority to punish the subordinated staff's behaviour" (Robbins *et al*, 2018, p.218).

Table no. 1 Techniques for Reducing Resistance to Change

Technique	When Used	Advantage	Disadvantage
Education and communication	When resistance is due to misinformation	Clear up misunderstandings	May not work when mutual trust and credibility are lacking
Participation	When resisters have the expertise to make a contribution	Increase involvement and acceptance	Time-consuming; has potential for a poor solution
Facilitation and support	When resisters are fearful and anxiety ridden	Can facilitate needed adjustments	Expensive; no guarantee of success
Negotiation	When resistance comes from a powerful group	Can "buy" commitment	Potentially high cost; opens doors for others to apply pressure too
Manipulation and co-optation	When a powerful group's endorsement is needed	Inexpensive, easy way to gain support	Can backfire, causing change agent to lose credibility
Coercion	When a powerful group's endorsement is needed	Inexpensive, easy way to gain support	May be illegal; may undermine change agent's credibility

Source: (Robbins *et al*, 2018, p.218)

While changes can generate acute reactions in the process of organizational change, employees are also interested in how being open to change can bring them benefits. Change readiness, as opposed to resistance to change, is another concept subject to debate in the literature. Until now, readiness "has been considered a fundamental precursor for the implementation and management of productive changes" (Bateh *et al*, 2013).

The concept of "change readiness" is reflected in the Lewis model of organizational change, which requires that organizations should first unfreeze the existing mentalities and develop a sense of emergency before actually starting to implement changes. Some employees are more loyal to relationships whereas others are more loyal to the organization's structural components, which are often based on principles such as efficiency, tradition or creating an acceptable match with counterpart organizations (Chenevert *et al*, 2019).

Usually, both elements must be approached during the organizational change process. In order to facilitate employee readiness and overcome resistance, some employees need to know that the organization's staff is being treated fairly during the process, whereas others are more concerned about the logic of the decisions in connection with the structural change.

To facilitate preparedness and overcome resistance, those employees who are more concerned about relationships must be convinced that certain staff changes are necessary and will be made with utmost respect and fairness. The employees concerned about structure may question whether the change is actually necessary and useful or, on the contrary, is a capricious idea of the top managers who want to leave a mark without fully considering the implications. These employees are more likely to adopt a position depending on which change brings about few benefits but many obstacles. They will probably accept the changes if they can be convinced that short-term challenges will ensure long-term benefits. In order to engage them in the change process, "they must be convinced that the long-term benefits will be more rewarding than the inherent short-term disruptions and inefficiencies of the change process" (Bateh *et al*, 2013, p.114).

5. Conclusions

Global economy continues to influence the manner in which companies run their business. All workplaces are subject to change. The pace of change is substantially different from one place to another and frequent changes may create a stressful environment for employees. Change in organizations is an ongoing daily challenge. However, the current business environment, impacted by globalization, has made it necessary for organizations to manage change, and change management has become one of the key management skills.

The purpose of this study is to present two major topics discussed in the literature, namely, resistance to change and readiness for change.

Change is a migration from the current situation to a desired future situation. Change management as a practical activity is aimed both at configuring the desired situation and at managing the successive transition through several intermediary stages until reaching the desired situation. Change in organizations is represented by any change in an organization's state of affairs. As a discipline, change management focuses on voluntary organizational change implemented in response to environmental factors or on the organization's own initiative, a change that must be managed in order to achieve the desired future condition (Srivastava & Agrawal, 2020).

Change management is a complex task, which not only starts at different levels, but must bring together the most diverse interests of those involved in a constructive manner. In this respect, knowing the potential causes of failure is as important as knowing the factors which contribute to success (Lauer, 2021).

Resistance to change is a topic of frequent concern in the literature. The process of change is delayed because of such resistance, which is perceived as a collateral damage of change efforts. Resistance may take many forms, such as deliberate tardiness, resignation, strikes, sabotage of the organization's property, etc. (Sundus *et al*, 2017, p.17).

Employees' resistance to change must be managed by means of support and involvement from the managers. Employee involvement and empowerment are frequently mentioned in the literature as being helpful in reducing resistance to change. Some authors (Sundus *et al*, 2017, p.18) have presented a better perspective to encourage and support the employees in cope with change, by stating

that the context and content of change per se vary significantly among organizations and should determine the adequate response.

While changes can generate acute reactions in the process of organizational change, employees are also interested in how being open to change can bring them benefits. Change readiness to, as opposed to resistance to change, is another concept subject to debate in the literature. Until now, readiness has been considered a fundamental precursor for the implementation and management of productive changes (Bateh *et al*, 2013).

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Telework - Between Obligation and Solution During the COVID-19 Pandemic

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Abstract

Modern society presents itself as a network of companies that appear, develop or disappear. Under these conditions, human resources are a common resource and, at the same time, a vital resource, today and tomorrow, of all companies, which ensures their survival, development and competitive success. The year 2020 came with a major challenge for companies, to meet the demands of the market and to adapt the way employees work, namely teleworking. The paper presents a brief foray into the emergence of telework and its intensification in a pandemic context, highlighting the challenges that companies must face. At the end of the research, five tips for the company's management are presented in order to ensure an efficient telework and to fulfil the organizational objectives.

Key words: Telework, COVID-19, crisis, human resources

J.E.L. classification: O15

1. Introduction

Telework emerged in the mid-1970s, after the first oil crisis, strengthening the idea of saving energy by limiting travel. "Change in work has been encouraged rather than change in people" (Alix, 2001). This work practice experienced little development until the late 1990s. But since then, the continuous improvement of computer technologies, combined with their declining cost, has changed the rules. The so-called internet boom has greatly contributed to the development of teleworking practices. While work on the assembly line comes from industrial development (especially in the automotive industry), telework comes from the virtual economy (Alix, 2001).

In 1994, only a few million teleworkers could be identified in Europe (Korte and Wynne, 1996). Undoubtedly, this development has intensified, given that telework depends on innovations in computer technologies. Additionally, the idea to optimize the autonomy of the individuals in organisations corresponds to the current state of empowerment within organisations.

Telework represents remote operations supported by computer and internet (Gray et al., 1993). "The most obvious difference between domestic workers and traditional employees is the absence of any direct supervision and thus the emergence of another type of supervision" (Gauthier and Dorin, 1997).

Other definitions include other criteria for specifying telework. For example, Daniels et al. (2001) characterize telework with five variables. The first two are the usual variables (location and use of ICT) to which the authors add the following three variables:

- Knowledge intensity - the degree of knowledge required to perform the tasks, indicated by, for example, the ease of implementation and autonomy from work [...].

- Intra-organizational contact - the frequency and range of intra-organizational contact [...].
 - Extra-organizational contact - the frequency and range of extra-organizational contact [...]
- (Daniels et al., 2001).

2. Theoretical background

Telework reflects a work environment that is always volatile and unconventional, characteristic to this century (Lee, 2014). Many economic entities offer opportunities to work flexible in time, space and exceeding organizational boundaries; this is also possible if we consider the rapid transformation of widely applicable advanced ICTs (Eurofound, 2020). According to (Eurofound, 2020; Hardin et al., 2007) teleworking in economic entities attracts qualified human resources, that do not want to be linked or limited by a certain work location and this allows to reduce operational expenses. In past decades, ICT contributed to the improvement of organizational performance; this is evident not only in the business sector, but also in other domains, such as education, health care, cultural and arts activities, and entertainment industries. Working in the virtual environment is becoming more popular if we consider the potential reduction of costs. For an economic entity it is also a way to become more agile and cope with accelerating market changes and multiple crises (Bhat et. al., 2017). An example of extreme relevance is the global pandemic COVID-19 facing nowadays, which caused many employees to change their working place from their offices to their home, for self-isolation.

Many researches show that telework is increasing globally, the trend being accelerated, so that their number of teleworkers is expected to increase constantly (even double) every year (Ramage, 2017).

The explanation of telework also includes a geographical appreciation or identification and human resources dependence on technology when it does not refer to communication (Raišienė, 2013). Particularly, a virtual organisation can be associated with “a collection of geographically, functionally and / or culturally distributed entities, which are connected by electronic form of communication [...] and which use technological means to communicate and coordinate the realization of a certain final goal or task” (Stachova, 2018). A well-known or popular form of virtual work arrangements is teleworking; it supports employees so that they can strike a balance between personal and professional life, teleworking even reduces real estate costs and can be considered a tool used by companies to attract and retain highly qualified professionals.

Practitioners' interest in telework was also supported by the flexibility obtained but also by the benefits observed both for the business in general and also in terms of human resources. We can mention some of the reasons why virtual companies have become popular: the possibility or even the opportunity to attract and hire qualified staff living anywhere in the world, expanding the company's business to 24 hours a day, regardless of time zones and thus operationalizing objectives as well as increasing international competitiveness (Mogale, 2010).

Telework has advantages not only for the company, but also for its human resources: the flexibility of companies in terms of working time and workplace of human resources is very useful, because it helps motivate members of the company, allows companies to respond better human resources needs, helping them to balance work and private life, maintain health and productivity, plan flexible working hours, experience less communication stress, work without being constantly controlled by managers and save time traveling to and from work (Snellman, 2014).

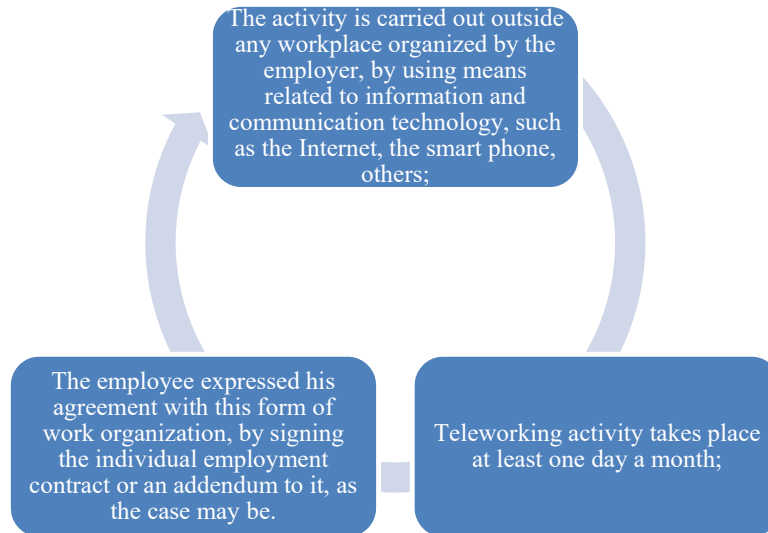
On the other hand, research has shown that teleworkers face some challenges such as the need for socialization, blurred boundaries between free time and work, lack of boundaries between work and personal life and even difficulties in maintaining cooperation and effective communication with colleagues and managers (Daim, 2012).

The percentage of people employed in the field of work, working from home, has increased slightly over the years from 7.7%, as it was in 2008, to 9.6%, in 2017. In general, the people who work most often from home are those who are self-employed (18.1%). Only 2.8% of employees sometimes work from home.

In Romania, work from home is regulated by Law no. 81/2018, which entered into force at the beginning of April 2018, and concerns the telework activity. Thus, the approach to telework reflects a form of work organization in which an activity, which could be carried out at the workplace

organized by the employer, is carried out by an employee, outside of the workplace, regularly and voluntarily, using information and communication technology, based on an individual full-time employment contract or an addendum to it, subject to certain conditions, as presented in Figure 1.

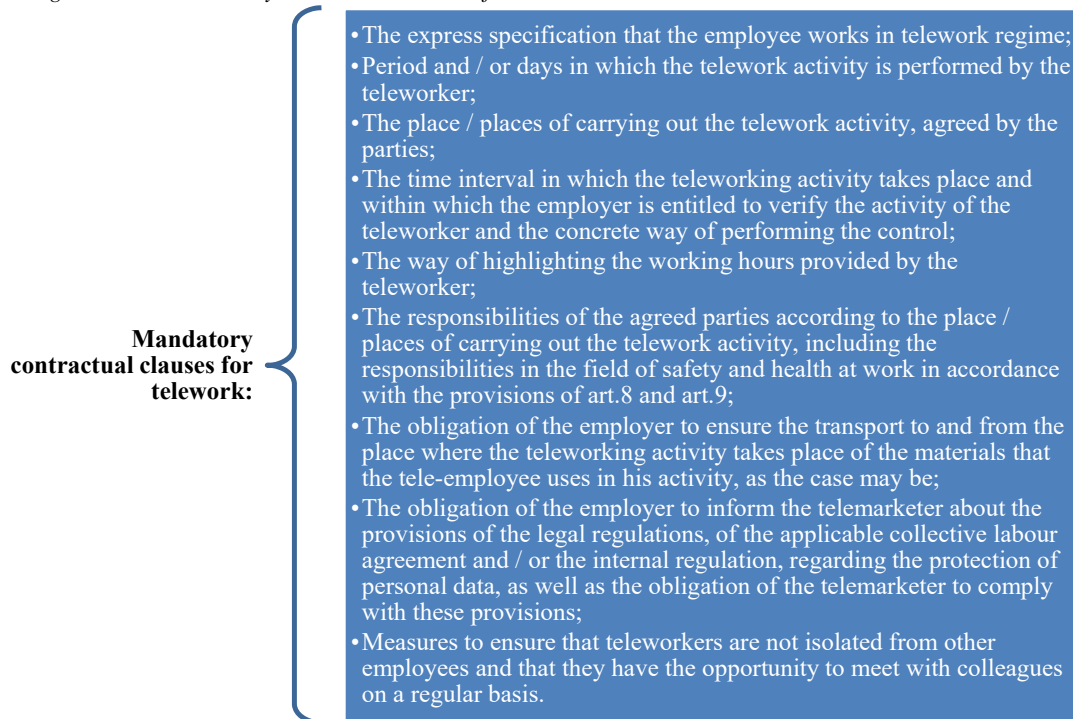
Figure no. 1. Conditions for teleworking in Romania



Source: Own projection of the authors according to Law no. 81/2018 regarding the telework activity

In the case of the telework activity, the individual employment contract contains, in addition to the elements provided in art. 17 par. (3) of the Labour Code, a series of additional information, as shown in Figure 2.

Figure no. 2. Mandatory contractual clauses for telework



Source: Own projection of the authors according to Law no. 53/2003 regarding the Labour Code

The law stipulates that the employee's refusal to carry out the telework activity cannot constitute a reason for his disciplinary sanction.

When the employment contract provides for a probationary period, it must be mentioned that teleworking activity cannot be carried out during that probationary period.

The law stipulates that overtime is prohibited for teleworkers.

3. Research methodology

This article represents a basic research of the specialized literature and of the statistics published in the field of telework. The phenomenon of telework increased exponentially in 2020, when companies suffered a major crisis in terms of human resources, supply, sales, production process, etc. The paper comes in support of companies with practical solutions for organizing and streamlining the activity of employees in telework, as a solution to an immediate and future crisis.

4. Findings on the telework times of crisis

The coronavirus pandemic of 2020 has led to a relocation of jobs to the places of employees, with many economic entities around the world being forced to implement telework. (Riso, 2020).

A new report published in May 2020 presents, once again, Romania's major handicap compared to the rest of the European Union. This time, we were last at home working in the pandemic. Compared to the other member countries of the European Union, Romania had the lowest share of human resources that allowed themselves to work from home. This information was confirmed by a report by Eurofund which sought to provide an overview of the EU labour market during the COVID-19 pandemic.

Out of the total number of Romanian employees, less than 20% allowed themselves to work from home through the concept of telework. This statistic is all the sadder as Romania is constantly in the top of the countries with the fastest internet connection.

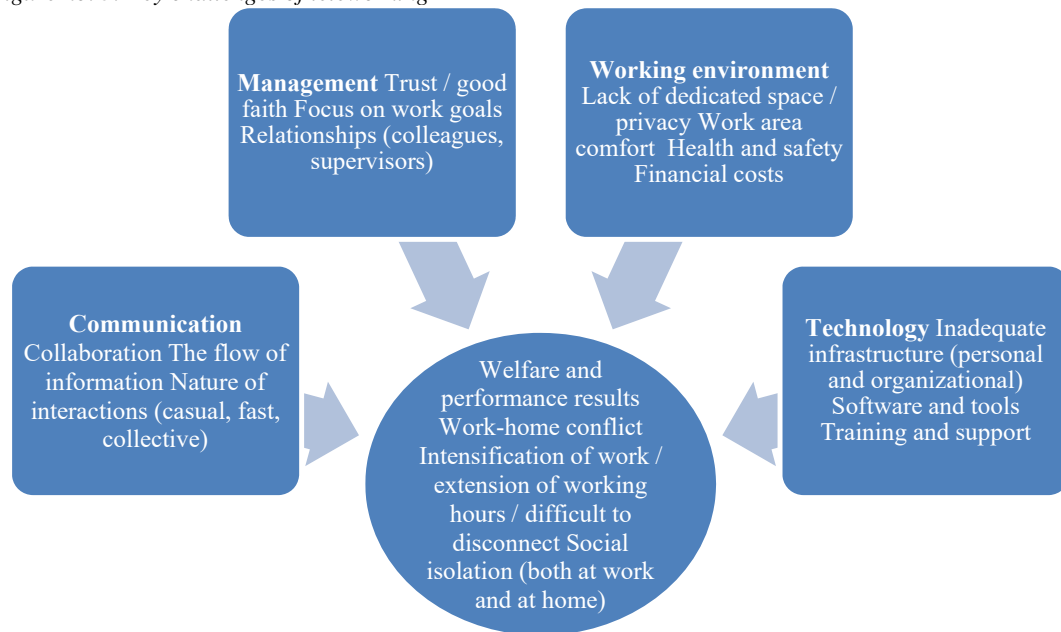
Bulgaria, which in theory is a significantly poorer country than Romania, had about 10% more workers who worked from the comfort of home during the pandemic. We are talking about the country with the lowest percentage of population that has used the Internet at least once in the last year (68%, compared to 74% in Romania, which is on the penultimate place in the EU). In addition, Bulgaria is the EU country with the lowest share of households with internet (only 75%, compared to 84% in Romania in 2019).

However, overcoming the disadvantaged situation of Romanians, at the level of the entire European Union, over a third of employees (37%) started working from home in a pandemic. The Nordic countries were in the first places. In Finland, about 60% of employees went to work, followed closely by Luxembourg, the Netherlands, Belgium and Denmark, with over 50%.

During the quarantine, a large number of articles appeared in the press about the challenges of teleworking, starting from the advice and recommendations of business consultants on work organization and collaboration (Kawashima et al., 2020), continuing with the recommendations of human resources consultants on maintaining the productivity of human resources (Bouziri, 2020) and up to comments or opinions of psychologists on the balance between life and well-being while employees work from home. (Culo, 2016; Verburg et al., 2013). However, the advice and recommendations during the pandemic shared by experts and consultants are based on the knowledge gained before the pandemic and, although the number of scientific studies on telework during quarantine increases (Belzunegui-Eraso and Erro-Garcés, 2020), the relevance of the problem loses importance. It is important to study telework and gather substantiated evidence, independent of the culture and / or laws of the country that governs labour relations, to capture specific changes in human resources attitudes toward telework, which may be important in addressing human resource management challenges. This raises the legitimate question whether the experience of those who joined the teleworkers, after working so far only at the job offered by the company, is particular and has specific characteristics.

The transition to a new way of working, either in business as usual or in response to interruptions, changes both the employment contract and the psychological contract between companies and employees (Jaakson and Kallaste, 2010). If companies do not recognize the change in these dynamics, the potential effectiveness of teleworking may be limited (Eckhardt et al., 2019). In a brief review of the literature we have extracted the key challenges of telework, which are reflected in possible technological challenges in the work environment, communication and management, which are interconnected and, without paying attention to these areas, telework can have negative effects, such as social isolation, work from home conflict, and work intensity (Bentley et al., 2016; Eddleston and Mulki, 2017). These, in turn, can have a negative effect on well-being (physical and mental health) and work performance (Eurofound and ILO, 2017; Gajendran and Harrison, 2007). The main challenge areas for teleworking are illustrated in Figure 3.

Figure no. 3. Key challenges of teleworking



Source: (Green, Tappin & Bentley, 2020)

In a growing market, companies could afford to ignore the inefficiency of certain categories of human resources. In a crisis, when it is necessary to survive, we often reduce fixed costs - reduce staff, increase the efficiency of remaining human resources and optimize business processes become vital. The rapid spread of COVID-19 infection left neither managers nor human resources a choice - an urgent need to restructure the business so as to ensure efficient remote management of the company, efficient human resources work from distance and the achievement of key business indicators.

Often, the transfer of full-time human resources in telework reduces their productivity, reveals errors in the management system, which were previously hidden by personal relationships, "manual" control and pressure from managers. Management "suddenly discovers" that within the company

- There is no clear division of responsibility;
- Business processes are not regulated, many orders are made by human resources, at will;
- There are no mechanisms for establishing and managing regular orders and tasks, there are no regular reports;
- Control over the implementation of tasks and responsibilities takes place spontaneously.

Different categories of employees have different levels of responsibility within the company. In their work, quantitative, qualitative indicators and unique tasks are combined in different ways.

Therefore, their performance matrices will differ from each other. When constructing a human resource performance matrix, each indicator has a weight, planned and actual values and a plan fulfilment factor.

Next, we propose some solutions for the efficient organization of employees in telework, so that the company's objectives are pursued and fulfilled.

I. Organizing virtual teams

With the proliferation of teleworking, many companies have begun to form virtual teams of telework employees to carry out specific projects. There are several types of virtual teams. These can be teams with a different number of participants, whose members join the activity as needed, special purpose teams working in parallel with regular teams or teams for quick problem solving. The type of virtual team chosen must correspond to its tasks.

When managing the work of a virtual team, which is made up of people from different parts of the globe, it is necessary to take into account the differences between national cultures - then collective work will be coordinated and more efficient. It is recommended to organize general meetings / team meetings establishing mandatory rules for their conduct. It is proposed to use visual aids to facilitate communication between team members. Collective success is made up of factors such as the competence of team members, the coherence of their virtual interaction, the presence of trusting relationships between them, the effectiveness of staff training, the quality of management decisions and the smooth running of production processes.

II. Implementation of the telework control program

Before implementing a telework human resources management program, it is recommended that financial calculations be made to decide whether this form of work is generally appropriate for the business entity. One of the main advantages of telecommuting is the reduction of costs - for example, the cost of renting workspaces. In addition, the ability to switch to remote mode strengthens the motivation of human resources. The company has the chance to find employees all over the world, including in countries with cheap labour. The main disadvantage of remote work is that it is difficult to control such employees. In the absence of personal communication between the employer and employees, misunderstandings may arise regarding some issues. In addition, the transfer of staff to a form of remote work does not always lead to cost savings. It may be necessary to purchase and install special technical means for communication with remote human resources or to pay extra for their training.

Support for this program needs to be identified in the early stages of its implementation, such as the appointment of employees to organize teleworkers and assign them tasks. The responsibilities of other employees will include choosing the appropriate model for managing remote work (there are four such models in total: at the corporate level, applicable to only one unit, individual and used for a specific project) and participants in the training program. You need an employee (leader or supervisor) responsible for arranging jobs remotely and searching for resources.

III. The environment where the human resources activity in telework takes place

There are several types of distance jobs, such as:

- Home Office. Human resources that do not need sophisticated equipment or large quantities of consumables to work can do their job without leaving home.
- Remote workspaces. This is a reduced version of a typical office space, not far from where human resources live, often with a less strict work environment.
- Shared workspace. The human resources of different companies work in the same office, but at different times - for example, in shifts or according to a pre-agreed schedule.
- Virtual office. Human resources can work wherever they can connect to the Internet: in a cafe, library or even in their private car.
- Temporarily rented office space. Human resources in telework rent a job for a while in a hotel, office centre or any other location.

The equipment of a remote job is determined by the tasks faced by human resources, as well as the company's specialization. A remote employee may need a desktop computer, laptop, digital organizer, fax machine, closet, and a printer and copier. In some cases, human resources will need to

have access to the corporate network and special computer programs. There are a number of Internet applications available to help telemarketers organize their work and keep in touch with each other, and there are currently many options and possibilities to ensure the success of their work and communication.

If a person is employed, the company may reimburse the cost of purchasing the necessary equipment. In this case, the company should require proof of purchase and payment from the employee, as well as a commitment that the equipment will be used only in connection with telework.

When setting up a remote job, occupational safety issues must be taken into account. In 1999, the US Occupational Safety and Health Administration issued an ordinance holding employers responsible for the safety of human resources working from home, but due to numerous complaints, it was cancelled a year later. However, the prevention of accidents for telecommuting staff should be a high priority. From the point of view of modern insurance legislation, working in a home office is no different from working in a regular office. Therefore, if the economic entity's human resources are injured while working from home, that economic entity will pay for the insurance. At the same time, however, teleworkers must independently insure themselves against accidents that may occur at home, but outside of work.

IV. Employee or independent contractor

Managers of the company must make a clear distinction between independent contractors or full-time employees working remotely. The way in which teleworkers are contracted affects the amount of taxes that the economic entity pays, and the misreporting of information about staff can lead to penalties and other problems. In the United States, an employee is considered a full-time employee if the employer controls the working methods and the timing of its implementation. Unlike full-time employees, independent contractors choose the means and methods to do the work themselves. The degree of control over human resource actions is the first thing the US tax authorities pay attention to when determining the tax status of staff. According to US tax law, the degree of this control is of three types.

1. Full control over activities. If the employer has full control over the activities of the human resource, such an employee is considered a full-time employee.

2. Financial control. If the employer regularly pays employees' salaries and reimburses them for work-related expenses, such an employee (with rare exceptions) is also considered a full-time employee.

3. Control based on the type of employment relationship. If the economic entity employs an employee for an indefinite period, such an employee is considered a full-time employee. If the economic entity hires a person for a predetermined period or to participate in a certain project, such an employee is considered an independent contractor.

It is recommended to choose the payment method for teleworkers which is the most suitable for the company. Business consultants and creative professionals (journalists, programmers) are the best paid for each completed project. Hourly wages are adequate when the results of the work are easy to quantify (for example, typing). The timing of the project and the return on investment must be taken into account when setting the salaries of human resources in telework.

V. Increasing the productivity of teleworkers

The major challenge for employees is to develop the habit of working in a home office, as if they were working in a regular office. They must strictly follow the work schedule. Sometimes, in order to get better at work, such employees should adhere to a business dress code. In addition, they should learn to maintain a work-life balance, take regular breaks and exercise. Teleworkers need to be good at prioritizing tasks. Depending on the degree of importance, all tasks should be divided into three groups. Tasks in group # 1 should be completed immediately, tasks in group # 2 if time allows, and in group # 3 only if tasks in the first two groups are completed.

Leaders need to learn to identify the early signs that telecommuting is doing worse. It is recommended to continuously monitor the performance of telework staff. The company must be interested in the results and not in the progress of the work, which it cannot yet control. The productivity of employees must be weighed against that of their regular counterparts. It is recommended to set production targets for teleworkers. It must be explained in detail what, why,

how and by what date a task must be performed, but also describe the criteria according to which the task will be considered completed.

When assessing the effectiveness of telework, special attention must be paid to quality, volume, timeliness and economic impact. It is recommended to ask employees to make as few mistakes as possible, to maintain high productivity, to deliver on time and not to spend extra money. Clear workloads must be set for them, with a certain level of difficulty. It sets and discusses how often and when employees should contact the company, and, very importantly, provide regular feedback on the quality of their work.

It is also recommended to implement a system for peer review of human resources in telework. The proposed methodology makes it possible to assess how effectively human resources interact with each other in a remote format, what problems and "hotspots" exist in work teams, where there are areas of non-productivity, working "for two" and solving problems and which mimics only violent activity.

5. Conclusions

COVID-19 has affected most countries in the world, regardless of nation, race, social status, financial strength, wealth or poverty. Fear and hysteria maximized the effects of the economic and social crisis, and the population, governments and economic entities reacted in the most unexpected ways, some through exaggerated, even extreme measures, and others ignoring the situation by continuing life and activities as if the virus had or does not exist (Morosan-Danila & Bordeianu, 2020). The question is: who reacted correctly and took the right measures? The reality is reflected in the number of patients and deaths, the unemployment rate, the number of companies in bankruptcy or which have ceased their activity. Regardless of the situation, time cannot be restored.

While focusing on a company's survival during a crisis, management strives to sustain relationships with key constituencies. Specifically, companies are adapting their strategies at an unprecedented pace in response to the developing COVID-19 crisis. Strategies involve significant changes caused by restructuring and downsizing (Hao et al., 2020); cost reduction and cash saving (Hotel Business, 2020); drastic changes in operations, including changes in service delivery methods (Alonso et al., 2020); adoption of new technologies (Baum et al., 2020); and compliance with new hygiene and safety standards (Sigala, 2020). Although these strategies could be seen as positive actions that improve the adaptability and survival of the economic entity during the crisis, they create tension among key stakeholders, as actions involve layoffs, cost reductions and loss of profit for shareholders (Erkama and Vaara, 2010).

Thus, companies must not forget that the most important resource they have at their disposal and that can always adapt (with the right impulses) is the human resource. Organizing employees in telework was a necessity in 2020, but it has become a long-term solution to the company's cost-cutting needs and efficiency. In this context, companies must always look for solutions and methods for organizing employee work, supervision, motivation and evaluation of telework.

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Quality Strategies Applied on the Market of Integrated Security Systems

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Abstract

Security is one of the basic needs of people, with integrated security systems becoming an important technology in today's society. Quality in the market of integrated security systems, involves the provision of products and services that meet the expressed or implicit needs of customers.

This paper analyzes the most important quality strategies applied in this market and the authors conducted a quantitative marketing research to identify the opinions and perceptions of potential customers regarding the quality of integrated security systems and their role in ensuring the security climate.

Key words: quality management, quality strategies, security systems, customer satisfaction, marketing research

J.E.L. classification: L62, M11, M31, Q56

1. Introduction

Over time, achieving a climate of security has been one of the most important concerns of any society. Any activity from the simplest operation to state policies certainly has a crucial security component, because a safe and quiet environment is the very basis of a stable organization.

Security is one of the basic needs of people, so the need and usefulness of security systems today is not in doubt. Integrated security systems (fire alarm systems, access and control systems) have become increasingly an important life-saving technology in many aspects, such as applications for detecting, monitoring and controlling any danger fire. Companies spend significant amounts of money annually on the installation and maintenance of integrated systems (alarm systems, fire protection systems in buildings) in order to protect properties and lives from unexpected events that could cause significant damage to the lives of employees or partners; damage to property. At the moment, there are several methods on the market that aim to improve daily in order to reduce costs as well as increase quality of the products and services offered.

The emergence of globalization has led to the emergence of a global market and thus led to a greater degree of competitiveness, so that an organization, in order to survive in the market, must provide products that meet all the needs of its beneficiaries. The market of integrated security systems has an extremely high degree of competitiveness, especially due to the large number of companies operating in this sector.

In order to analyze the quality strategies applied on the market of integrated security systems and how consumers perceive the quality on this market, the authors conducted a quantitative marketing research. The non-random sampling method was used, and the data collection technique was CAWI - Computer Assisted Web Interviewing. The research results show that most respondents did not install a security system at home, but want to purchase a customized but more expensive security system, and the purchase decision would be mainly influenced by specialists or consultants from specialized companies. Although the research has limits on the number of

respondents, its results can be the basis of new research, at a broader level, to better highlight how the application of quality strategies in this market have a key role in increasing the competitiveness of companies.

2. Literature review

Quality has existed in people's lives since ancient times. In the simplest way, the quality of a product or service can be defined as its ability to meet the expressed or implicit needs of customers, through all its characteristics. Some specialists make a direct link between total quality and total quality management, considering that the first is the goal, and the second the means of achievement or that the two are equivalent. There are also points of view which state that total quality management would in fact be an element of total quality. The level of quality of a product is given by the extent to which it meets the stated needs or expectations, which are generally implicit or mandatory (Madar, Neacsu, 2020, p. 689). It is increasingly important to accurately measure the level of quality in services (Gencer, Akkucuk, 2017, p. 951) and beyond.

Currently, organizations are striving to implement integrated management systems (quality, environment and occupational safety). The development of these systems continues. Environments change dynamically and organizations must react in order to survive (Pelantová, Slaichová, 2017, p.632).

Kélada (1991, p.27) considers total quality as a broader notion that includes meeting the needs of customers in several respects: the quality of products or services, delivery in the required volume, at the desired time and place, at a cost smaller, in the conditions of pleasant and efficient relations with them and of an administrative system without errors, starting with the elaboration of the order and until the payment of the invoice.

Related to the notion of total quality, the concept of total quality management (TQM) can be defined. This is a management philosophy that orients all the company's activities towards the customer in order to obtain long-term benefits. TQM ensures that customer requirements are met at minimum cost, with the involvement of all company staff. TQM is based on the idea that nothing is perfect, which means that everything can be improved, with the participation of all staff. In achieving total quality, all departments and all employees of the company have equal importance (Ilieş, 2003, p.79).

Security is the ability of a system to preserve its constructive-functional characteristics under the action of destructive factors that could endanger it for the environment and the lives of people at risk, or cause material, informational or moral damage (Roşca, 2012a, p.28). Security is the only concept that can meet the safety and stability requirements necessary for the proper functioning of systems in the current conditions. As an emerging process, security has as its main objective the stability of systems.

The integrated security system is the technical component of the response to specified threats and vulnerabilities (fire, natural disasters, burglary, vandalism, terrorism) in an objective that requires protection. From a structural point of view, a security system means the set of specific equipment, devices and subsystems, constructively and functionally interconnected, which fulfill protection functions for people and goods, in a given objective (Roşca, 2012b, p.55).

3. Analysis of quality strategies applied on the market of integrated security systems

The market for integrated security systems is a segment of the security industry and encompasses all productive activities and services that contribute to achieving a security climate within each company. Integrated systems are based on software platforms that offer multiple functions of configuration and graphical visualization, interconnection with each subsystem of the building, efficient control, centralization of events in a database.

Most of the key players are in the national and regional markets. Currently, in Romania, there are a considerable number of alternative competitors of larger or smaller dimensions. At national level, among the main competitors we can mention as the most important: UTI Grup (UTI Security & Fire Solutions), ICCO Sysytems (part of ICCO group), HELINICK company, Civitas PSG

(Polystart group), Schrack Seconet AG, Critical Technologies, Honeywell Life Safety Romania SRL, Avitech, General Security, Technosec and GTS.

In the market of integrated security systems, in order to be more competitive, companies apply various quality strategies.

The strategy of domination through quality is promoted by companies that assume the role of market leader. The company gains supremacy in quality through the levels of performance that its products or services obtain.

An example of a company that applies the strategy of domination through quality is the company Honeywell Life Safety Romania S.R.L. This company is the representative office in Romania of Honeywell Life Safety Austria GmbH, which was established in April 1989 and distributes products with the "ESSER by Honeywell" brands (fire detection and alarm systems, electroacoustic systems for voice alarm and public addressing). From the beginning, it had an international character, and today it is a company listed in Fortune and is present globally. The company also has an organizational culture that encourages meeting and exceeding quality requirements and regulations.

The strategy of differentiation by quality is based on the knowledge of the forms of manifestation and the level of achievement of the quality characteristics of the products or services. This strategy is used by UTI Security & Fire Solutions, which is part of UTI Grup, which includes a number of companies in Romania and which began its activity in 1990. The group started its activity with the establishment of Infocon SRL in 1990. The company is active in the IT field, being specialized in computer equipment. UTI Grup has developed in four areas, namely in security systems, traffic management, information and communication technology and construction. The company has expanded its business abroad, having subsidiaries both in Europe and in the Middle East. UTI Security & Fire Solutions is the largest company in the UTI group, with business in security and IT & C systems and separated from the UTI group in 2015.

UTI Security & Fire Solutions offers innovative solutions and quality services for the largest airports in Romania. Protecting critical objectives for national security requires a complex and dynamic approach, both in terms of the technical solution offered, but also in terms of quality, which is vital in a national objective of major importance. In implementing the strategy of quality differentiation, UTI has been constantly concerned with the development of solutions and technologies adapted to the increasingly diversified requirements for this type of objectives,..... UTI is the main provider of port infrastructure services and provides the entire process of construction, installation, commissioning and maintenance for complex projects in the airport field (passenger terminals, airport infrastructure, endowment with specific equipment - beaconing systems, parking systems , anti-terror security equipment, power supply, etc. - and their integration into computerized management solutions, which allow permanent control and efficient management of resources.

The strategy of diversification through quality, offers the company the possibility to capitalize on the research and development potential and different technologies, through which new markets are conquered and superior quality classes are offered in relation to the competition.

All companies that dominate the markets for integrated security systems apply this strategy. For example, Honeywell Life Safety Romania S.R.L started by selling fire detection and alarm systems. Today, however, the company also sells access systems, or anti-burglary systems, and integrated security systems.

The company UTI, initially sells construction alarm systems. Today the company offers complex solutions of integrated security systems such as traffic and public transport management, public safety solutions and emergency management centers, environmental protection solutions, urban rehabilitation solutions, eGovernment solutions, infrastructure underground communications.

ICCO Systems initially developed vehicle alarm systems and then construction alarm systems. Today the company is one of the leading systems integrators and solution provider in the field of security and communication systems.

The strategy of concentrating on a quality level is the characteristic of companies that cannot or do not want to change a certain level of quality but have the capacity to achieve it. This strategy was used by the LINX company from Braşov. Although the company has been operating since 1992, it was the first company to focus only on CCTV video surveillance systems, its main

customers being municipal authorities (especially due to the investments made by them considering that most projects were financed by European funds).

The global quality strategy is based on the concept of "total quality management" (TQM), which includes the concerns of managers and executors for quality assurance in all phases of product or service and capitalizing on the operation of the product to the user.

A good example of a company that applies the global quality strategy is ICCO Systems. This company is part of the ICCO group, which includes a series of companies from Romania and which started its activity in 1990. The company implements integrated security systems, and the most important projects are those projects that require "turnkey" solutions for electronic security (anti-burglary, fire, access control, video surveillance), structured voice-data networks, telecommunications and other installations. low and medium voltage. The global quality strategy within ICCO Systems means that a process system is applied within the organization which, due to the interactions of these processes, as well as their management, is considered a "process-based approach". Continuous improvement and the involvement of all employees in quality assurance has made the overall quality strategy benefit ICCO Systems.

The strategy focused on quality costs, expresses the company's intention to accept the allocation of financial resources to the activities involved in achieving quality, as well as to control the level of profit reduction due to defects removal costs. Expenditures on quality improvement will be made until the additional profit equals the cost of obtaining it. HELINICK company was established at the beginning of 1991, and the managers had as main objective the solution of the electronic security and safety problems faced by potential customers on the Romanian market. HELINICK has implemented a strategy focused on quality costs.

4. Research methodology

In order to determine the attitudes and perceptions of Romanian consumers regarding the quality of integrated security systems, a quantitative marketing research was conducted based on a sample of 220 respondents residing in Romania.

The main objective of the paper was to know the opinions and attitudes of Romanian citizens regarding the quality of integrated security systems and how they perceive the quality strategies applied in this market.

Considering the issue of the paper, the specific objectives of the research were:

- Identifying the perception of potential customers in Romania of integrated security systems (video surveillance, burglary, anti-fire) regarding the quality of these systems;
- Determining the strengths and weaknesses of the products and services provided by the market of integrated security systems in Romania;
- Identify the views of potential consumers on the standards needed for products and services in the integrated security systems market.

In the present paper, the sampling method being non-random, the voluntary sampling of the respondents was put into practice, based on a survey (Catoiu et al., 2009, p. 526). The method of survey conducted in the electronic environment was used to collect data. The questionnaire (which includes 22 questions) was designed on the Google Forms platform. Perioada în care a fost realizat acest studiu este februarie 2021 - martie 2021. Colectarea datelor s-a bazat pe un chestionar la care au răspuns 220 persoane. After collecting the information using the questionnaire, the processing of statistical data was done with the SPSS system (Statistical Package for Social Sciences).

Table no. 1. Descriptive information of survey participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 – 24 years	26	11.8	11.8	11.8
25 - 39 years	76	34.5	34.5	46.3
40 – 54 years	84	38.2	38.2	84.5
55 – 65 years	34	15.5	15.5	100.0
Total	220	100.0	100.0	

Source: Authors' own research

The structure of the sample according to the sex of the respondents shows that 46.82% are men and 53.18% are women. Regarding the distribution according to age, the age range in which the respondents fall is 18-65 years (Table 1). The majority of respondents (75%) live in urban areas and 25% in rural areas.

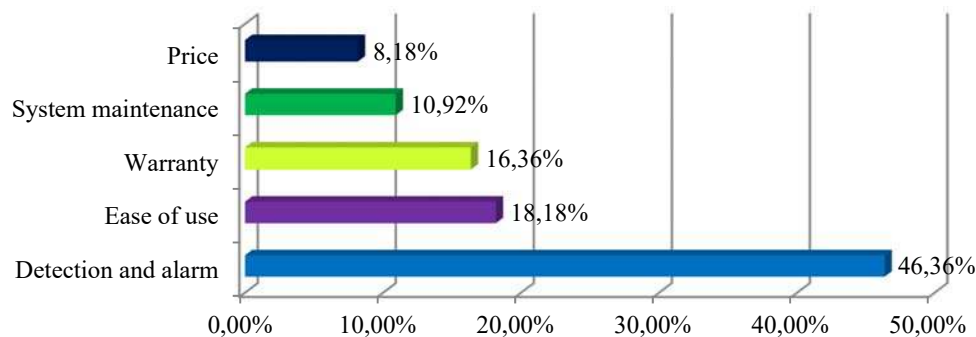
5. Findings

The main results of the research will be presented below.

The first question sought to identify whether the crime rate in the area where they live gives them a sense of security. To this question only 10.9% of the respondents consider that they live in an area with a maximum level of security, the majority considering that the area in which they live has a comfortable level of security (63.18%). This means that an integrated security system could be useful to improve the level of security. Of the respondents, 70.9% do not have a security or fire-fighting system at home and if they choose to install one, they will opt for both a video surveillance system and an anti-burglary alarm system.

The most important characteristics of a security or fire-fighting system from the respondents' point of view are the detection and alarm, respectively the capacity of the warning system of the owner and / or security company (46.36%), followed by the ease of use (18.18 %), warranty (16.36%), system maintenance (10.92%) and then the price (8.18%) (fig. 1).

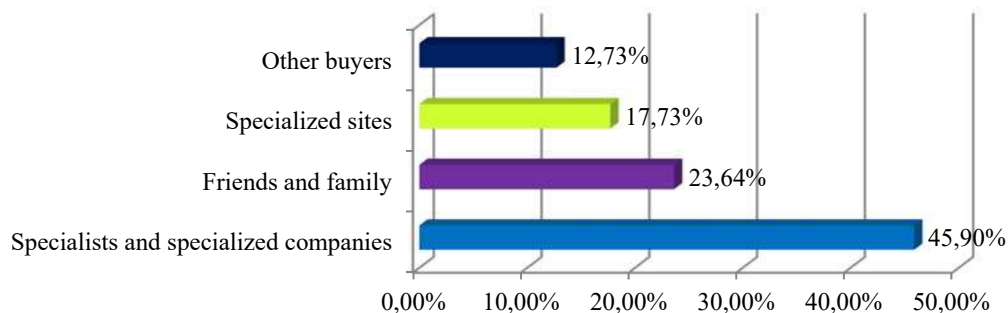
Figure no. 1. The most important features of a security system



Source: Authors' own research

Regarding the choice of a predefined or customized system for individual needs, most respondents would prefer to purchase a customized but more expensive system. The decision to purchase the respondents would be mainly influenced by specialists or consultants from specialized companies (45.9%), followed by friends and family (23.64%), specialized sites (17.73%) and other buyers (12.73%) (fig.2).

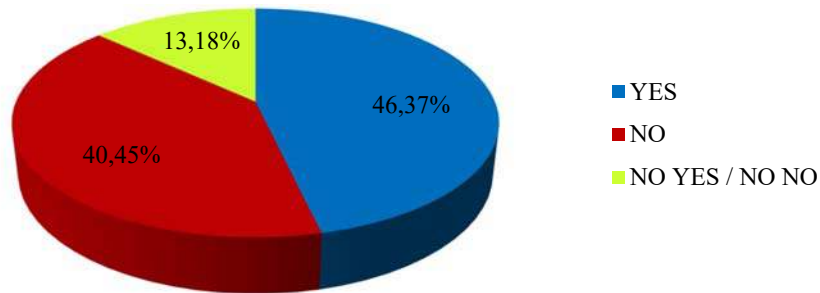
Figure no. 2. Who influences the respondents in the acquisition decision?



Source: Authors' own research

Most respondents believe that the most important role of an integrated security system is detection, followed by alarm and only then prevention, although most companies in the market for integrated security systems put prevention first. Regarding the risk of such a system harming privacy, 46.37% of respondents consider this to be true. The segment of those who do not believe this is 40.45%, and a small part of the respondents is undecided on this issue (13.18%) (fig.3).

Figure no. 3. The risk of a security system compromising privacy

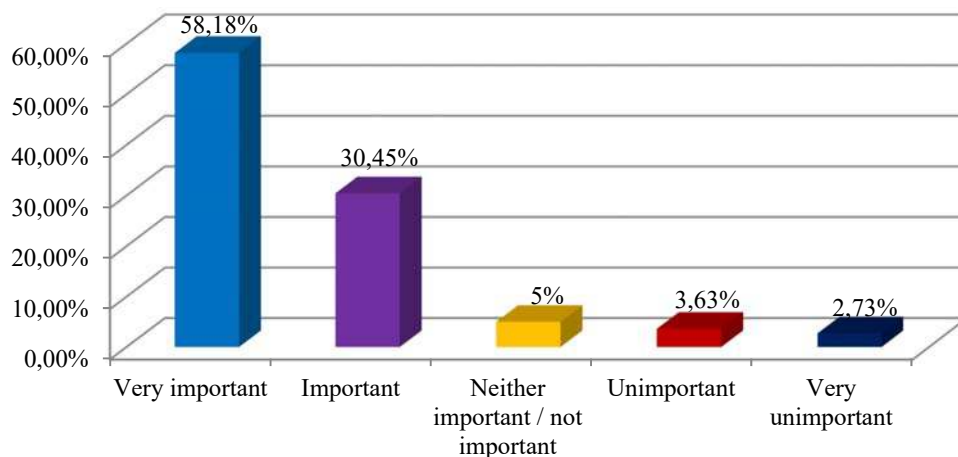


Source: Authors’ own research

The researchers wanted to know the opinion of the subjects on certain aspects of sustainability of these security systems. One such aspect is the energy consumption of an integrated security system.

Reduced energy consumption is considered very important for 58.18% of respondents, important for 30.45% of respondents, neither important / not important for 5% of respondents and unimportant and not important for 6.36% of respondents (fig.4).

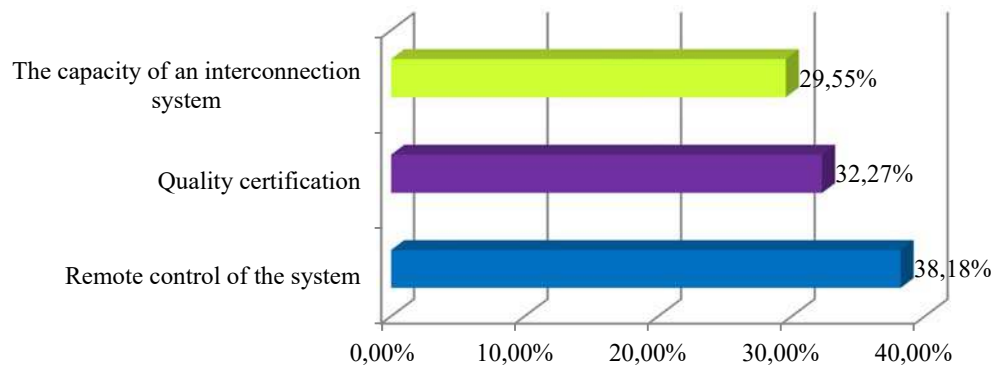
Figure no. 4. The importance of low energy consumption of an integrated security system



Source: Authors’ own research

The research wanted to identify which are in the opinion of the subjects the most important quality characteristics of an integrated security system. The majority of respondents (38.18%) indicated the ability of an integrated security system to be controlled remotely, through technology, followed by the quality certification of companies involved in the marketing and / or installation of an integrated security system (as well as the observance of the national or international quality standards of the component equipment of such a system) (32.27%) and of the capacity of an interconnection system that would allow it to interconnect with the already installed systems (29.55%) (fig.5).

Figure no. 5. The most important quality features of an integrated security system



Source: Authors' own research

The research results showed that for most respondents the quality and characteristics of an integrated security system were generally considered to be of significant importance throughout the process of installing such a system. Each stage of the complete process of installing an integrated security system is considered very important by most respondents.

6. Conclusions

In a world characterized by change, the future is a world of interconnectivity. In this context, companies face a new range of security risks which has generated the market for integrated security systems.

A successful company in this market is one that manages to offer products and services that satisfy and even exceed the requirements and needs of customers.

In the current economic context, quality has become a source of competitive advantage, and organizations that want to achieve excellence must perceive quality as something natural, natural, just as, without human or financial resources, an economic organization cannot function.

The interest shown by the top management teams of the organizations towards quality is mainly due to the threats generated by real or potential market losses, determined by non-quality. Quality is seen as a strategic contribution that cannot be neglected to achieve competitiveness. Increasing the company's competitiveness through a quality-focused strategy can ensure long-term success.

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Aspects of Tourism Promotion in the Vama Veche - 2 Mai Area

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Abstract

This article presents a study of the coastal area in Romania with reference in particular to its southern area, ie the area that includes the localities of Vama Veche and 2 Mai, within which is the only marine nature reserve in Romania, Vama Marine Coastal Aquarium Old - May 2. Ecourism will be developed in the Danube Delta region, with Tulcea as the center of this type of tourism. This means that services, facilities and the environment meet the tourism development criteria set out in international standards. The fulfillment of these preconditions will be achieved through integrated regulations and plans. A tourism development plan sets out the directions of action, in correlation with the principles of integrated coastal zone management and other planning tools. All planned measures must be adapted to the specificity of the area. This applies to both mass tourism and ecotourism.

Key words: coastal area, ecotourism, development strategy, protected areas

J.E.L. classification: L83, Z39

1. Introduction

The coastal area of Romania represents the geographical area that includes surface and ground coastal waters, the coast, adjacent lands, including their surface and groundwater, islands and salt waters, wetlands in contact with the sea, beach and seafront.¹ Due to the importance Its extensive protected natural habitats (Danube Delta Biosphere Reserve, Vama Veche Nature Reserve, lakes and lagoons) on the eastern border of Europe, the coastal area requires concentrated protection and management measures for sustainable development (Chiotoroiu, 2005).

The coastal area of Romania is divided into two main areas, in terms of economic and social structure: the northern area that stretches between Musura Bay and Cape Midia and the southern area that stretches between Cape Midia and Vama Veche.

The northern area consists of a protected delta area, which includes the Danube Delta. The Danube Delta Biosphere Reserve is established on the territory of the Danube Delta. Romanian and international legislation requires that economic activities be developed in this area in accordance with the status of nature reserve, thus maintaining the ecological balance.

The southern area is considered to be the developed area. The more permissive conditions regarding the economic activities, lead to a concentration of them in the southern area. Thus, the most important urban center of the coastal area is located in the south, Constanța being the second largest city in the country, the most important port on the Black Sea, being included in the administrative boundaries of the city (Ciocârlan, 2001).

2. Literature review

The coastal zone development strategy is based on the existence of national and regional sectoral policies in the fields of agriculture, tourism, industry, infrastructure development, nature protection, fisheries. In preparing the National Strategy for Integrated Coastal Zone Management, the European Union Recommendation on Integrated Coastal Zone Management, the Water Framework Directive, as well as international guidelines and recommendations in the field were taken into account, with special emphasis on the Black Sea Regional Strategy on integrated coastal zone (Godeanu, 1995). The aim of the National Strategy for Integrated Coastal Zone Management is to guide and support government agencies at regional and local level to achieve sustainable development of coastal and marine areas through better integration, coordination, communication and participation. The strategy promotes a collaborative approach integrated in the management process involving all stakeholders.

The national strategy must include:

- development of good practices of integrated coastal zone management;
- promoting dialogue between coastal stakeholders;
- implementation of sectoral legislation and policies compatible with the integrated management of the coastal zone;
- developing dialogue between coastal stakeholders;
- disseminating information and raising public awareness and participation in decision-making.

Integrated coastal zone management is an ongoing management process whose overall purpose is to implement sustainable development and conservation in coastal areas and to maintain their biodiversity (Mohan, Armean, Georgescu, 2001). Finally, integrated coastal zone management seeks, through an efficient household, to establish and maintain best practices and levels of sustainable development and to improve the physical condition of the coastal environment (as defined by the European Commission). The need to apply integrated coastal zone management is due to pressures on marine and coastal natural resources, produced by unsustainable development. Integrated coastal zone management aims at the sustainable development of the area, reducing its vulnerability and its inhabitants to natural hazards and preserving the main economic processes and biological diversity. It strengthens and harmonizes sectoral management in the coastal zone, preserves and protects the biological and productive diversity of the coastal ecosystem, maintaining attractive values.

In order to develop a comprehensive understanding of the roles of local and national government authorities in the protection, management and exploitation of coastal and marine resources, it is essential that policy and decision-making in various parts of the coastal area be harmonized. internal plan (Stănciulescu, Bran, Țițan, 2004). Also, an increase in cooperation between the two levels of government (local and national), aiming at the effective development of the partnership, is necessary for the implementation process of integrated coastal zone management (Mureșan, 2002).

By developing opportunities for the implementation of integrated coastal resource management, states provide local and national benefits, intensify economic development and improve the quality of life. These benefits include protecting the environment, water quality, biodiversity and adapting to climate change. Thus, it contributes to the protection and sustainable development of the world's coastal resources.

The main objective of the National Strategy for Integrated Coastal Zone Management is to promote a collaborative approach to coastal zone planning and management, with a view to its sustainable development (Neagu, 2000).

In accordance with the provisions of the European Commission's recommendation, the specific objectives of the National Strategy for Integrated Coastal Zone Management are (Stănciulescu, 2002):

- identification of tools for implementing the principles of integrated coastal zone management;

- identifying the role of the different parties involved and the mechanisms for their coordination;
- development of strategic plans for the coastal area, ensuring the control of over-urbanization and exploitation of non-urban areas, respecting the natural environment of the coastal area;
- identifying measures to promote initiatives and public participation in the issue of integrated coastal zone management and its resources;
- identification of mechanisms to ensure full and coordinated implementation, as well as the application of common policies and legislation;
- supporting the implementation of the National Strategy for integrated management through education and training programs.

Based on the principles set out in the European Commission's recommendation, the National Strategy for Integrated Coastal Zone Management is based on:

- broad perspective (thematic and geographical) that takes into account the interdependence and differences of natural systems and human activities with impact in coastal areas;
- a long-term perspective that takes into account the precautionary principle and the needs of present and future generations;
- local specificity and great diversity of European coastal areas, which makes it possible to meet practical needs with specific solutions and flexible measures;
- working with natural processes and respecting the resilience of ecosystems, making human activities more environmentally friendly, socially responsible and economically efficient in the long run;
- involvement of all stakeholders (economic and social partners, organizations representing coastal residents, NGOs and the business sector) in the management process, through agreements and on the division of responsibilities;
- supporting and involving relevant administrative bodies at national, regional and local level, between which appropriate links need to be established or maintained in order to improve the coordination of the various existing policies;
- the use of a combination of tools to facilitate coherence between sectoral policy objectives and between planning and management.

3. Research methodology

In the realization of this paper was used a mixed research that involves an analysis of quantitative and qualitative methods regarding their possibilities to be integrated into a whole or a coherent system that would lead to the achievement of a well-defined research objective.

The research methods used are better suited to this process, and others less so. Also, certain methods are useful to achieve specific objectives at different stages of a complex research. The analysis of classical qualitative and quantitative methods in the perspective of their integration in complex, mixed methodological structures represents an important and topical research objective.

Several analytical-descriptive methods are used, and their choice was made to achieve a double objective. On the one hand, it is about the evaluation of specific elements of these methods, in relation to the perspective of mixed methodologies. On the other hand, it is desired to analyze these methods in relation to the empirical part of the paper, where they will be used to test certain hypotheses regarding the use of research methods in the field of sustainable development.

As a result, the research applied of this paper is methodological in nature and focuses on the presentation of specific elements regarding the following research methods: qualitative method and meta-analysis, as a quantitative method.

4. Findings

4.1. Risks of development in coastal areas and measures to eliminate them

Romania's coastal zone faces significant problems in terms of habitat destruction, coastal erosion, water pollution and impoverishment of natural resources. Rapid population growth, tourism development, large-scale exploitation of natural resources and rapid development of infrastructure have led to severe degradation and declining quality of the Romanian coastal area, while other areas such as the Danube Delta Biosphere Reserve are already managed and protected by national and international regulations. The coastal area of Romania is a fragile environment from a geomorphological point of view, in a continuous process of modification and as such, permanently threatened with the deterioration of the balance. The change in the coastline is a consequence of the combined action of the sea, erosion agents and human activities.

The biggest risk to which the coastal area is subjected during construction works and tourist arrangements is erosion. In many coastal areas of the world there has been a narrowing of beaches due to erosion, respectively a negative sedimentary balance (the contribution of sediments mostly of terrestrial origin, brought by watercourses and deposited along the shore by sea currents surface or by the sea does not balance the loss by erosion). In Romania, the strongest erosion takes place in the southern part of Mamaia resort, where the shoreline will retreat by more than 40 m in the next 20 years, if no measures are taken to counteract this phenomenon.

Other factors influencing the retreat of the beaches are the works carried out on the rivers and streams, the port development works, which have changed the direction of movement of sea currents near the shore and the movement of sediments. Urbanization and tourist attendance destroyed the relief of dunes that were sand reserves for beaches, by removing the vegetation that fixed these dunes.

Another risk to which the coastal area is subjected during development works is pollution. The most important pollutants are:

- microorganisms that grow near the areas of wastewater discharge;
- various chemicals such as detergents, chemical fertilizers, pesticides, discharged into the sea;
- accidental spillage of fuel or other petroleum products, leaked from construction equipment.

Pollution, as a result of human activities, has also had negative effects on fishing activities, aquaculture and tourism.

Another harmful factor on the coastal area is its excessive urbanization. This urbanization was both the effect of the numerical growth of the population in the coastal areas and that of the desire to create real tourist regions, respectively of new resorts that would offer accommodation capacities of tens of thousands of beds. The gradual and irreversible deterioration of the coastal zone requires the design of new spatial planning solutions and administrative protection measures that limit the urbanization process and reduce the anthropogenic pressure exerted on this area.

The development of the coastal area requires a lot of reason and attention to ensure its functionality and survival and to avoid fatal accidents to the environment, which can occur during the development and development of the coastal area.

4.2. The natural tourist potential of the coast

The natural tourist potential is made up of all the tourist resources made available by the natural setting of a space:

- units, types of relief;
- climate types and subtypes;
- surface and groundwater.

The natural tourist potential of the Romanian Black Sea coast is imposed both by the beach and the sea water, as well as by the spa resources (territorial waters, sapropelic muds, marine bioclimate, lakes with very salty water) giving the Romanian coast conditions to respond to a wide range of tourist motivations: rest, leisure, spa complex: prophylactic, therapeutic, recovery, etc.

The beach of the Romanian coast is either sheltered at the base of the cliff, in the sector between Constanța and Mangalia, or has a wide opening in the rest of the coast. Unlike most European beaches, the Romanian beach has a predominantly eastern orientation which leads to its exposure to the sun throughout the summer day, even over 10 hours a day, which is found on the few beaches in Europe. The beach is generally natural, made up of quartz, calcareous or organic sand with high purity and fine to medium granulation, being almost always dry. The sand of the beach is part of the spa complex specific to the sea and offers excellent conditions for heliotherapy and psamotherapy, thus contributing to the body's recovery.

The relatively low salinity of 17-18 g / l and its chemical composition (chlorinated, sulfurized, sodium water) is favorable to the body in terms of therapeutic and osmolar. The water-air thermal contrast, the mechanical effect through the action of waves and aerosols coming from their breaking and floating in the sea air, is a natural factor that generates a special form of cure, thalassotherapy, indicated in diseases of the circulatory system, locomotor, nutrition diseases.

The marine bioclimate on the Romanian Black Sea coast is the result of interference between the steppe climate and the Pontic influence, characterized by slightly excessive shades of overload of the body, with average annual temperatures much moderate compared to the surrounding regions (summer season), with diurnal oscillations. and annual attenuated, with rare and short rains. In summer, the duration of sunshine is 10-11 hours a day, with about 25 days a month in summer, registering in a year over 2,500 hours of sunshine, which favors sunbathing throughout the year.

Mineralized waters enhanced by drilling, or existing through salt lakes, associated with therapeutic mud, are natural tourist resources of prime importance in supporting the spa. Deep mineralized waters with 618-1038 mg / l salts and mesothermal brought with the help of drilling, are from a climatic point of view: bicarbonate, calcium, sulfurous, chlorinated. The salt waters of Lake Techirghiol and the sulphurous waters of Lake Mangalia are used in external treatment, especially for the treatment of rheumatic diseases.

Therapeutic mud is one of the most important natural healing factors with beneficial action on the body due to the mineral and organic substances contained.

The sapropelic mud is found in some lakes on the coast, imposing itself by quality and quantity: the mud from Techirghiol, with exploitable reserves and special therapeutic value, used in the spas in Eforie Nord and Eforie Sud, Carmen Silva.

On the coast there are other natural or man-made tourist attractions that are of interest for seaside tourism. These are the freshwater lakes that enrich the landscape aspect of the coast and allow the practice of nautical leisure. Also, the surrounding forests (Comorova and Hagieni), the dune reserve from Agigea, the parks and green spaces, the protected areas represented by clusters of oaks from Neptun, the cave from Limanu, are important elements in setting the resorts, but also maintaining a toned and unpolluted microclimate.

The technical-material base, together with the tourist potential, contributes to shaping the tourist heritage of the coast, facilitates the attraction in the tourist circuit of the areas with tourist resources, capitalizing on the components of the natural and anthropic tourist fund. As an essential part of the secondary tourist offer, the technical-material base polarizes - in proportion to the size, functionality, degree of modernization and integration in space - stronger or lower tourist flows, and contributes to the tourist arrangement of the territory, changing the physiognomy and structure of the natural landscape. .

The material base includes a great diversity of facilities for accommodation, food, recreation and treatment or entertainment and sports, which is a premise of the tourist traffic.

The accommodation base is the essential component of the technical-material base, with a special role in supporting all forms of tourism. It includes all forms of accommodation, from classic (villas, hotels) to modern (campsites, cottages), functionally adapted to new forms of mass tourism with increased mobility, which ensures the rest of tourists for a certain period of time. , based on certain tariffs.

The public alimentation, together with the accommodation, the leisure base and the treatment diversifies the offer, contributing to the increase of the attraction power of the resorts, to the contouring of their profile. The catering establishments were grouped into four categories, namely:

- restaurant units;
- bar type units: day bar, night bar, cafes, discos;
- confectionery - pastry units;
- fast food units: self-service, brasseries.

The great wealth of natural healing factors available at the seaside has also impressed leisure structures with a wide spectrum, diversified by facilities and endowments, which in addition to the many treatments it offers, also requires serious funds necessary for maintenance, modernization, endowment news related to medical investigations and analyzes. The main motivation of seaside tourism is the heliomarine cure, based on elements offered by nature (salt, sand, breeze, sea water), but also on elements that depend on man (equipment, facilities, maintenance).

The resorts: Eforie Nord, Eforie Sud, Jupiter, Aurora, Venus, Saturn, Mangalia, May 2 are characterized by a strong technical-material base, a particularly pleasant architecture, whose effect is reflected on the tourism that comes to spend vacation here. In each resort there are independent public catering units, fishing-specific units, with folk programs.

Mangalia, founded by Greek settlers in the 4th century BC. under the name of the fortress of Callatis, it is today a modern tourist resort, with numerous hotel and catering establishments. The Mangalia hotel and restaurant company owns 36% of the seaside accommodation capacity, of which 71% in hotels. Some of these units operate throughout the year due to the specific treatment conditions in the Mangalia Sanatorium Complex.

The resorts of Venur, Jupiter, Aurora and Saturn were created between 1971-1972, unlike Mangalia and May 2, much older settlements, with a less modern material base, but with an older tourist tradition.

The technical-material base of tourism is constituted by the totality of the funds that participate in the development of the tourism activity; it consists of the fixed own funds of the tourism sector, as well as those endowed with other sectors of the national economy that complete the tourism activity. Within the fixed funds from tourism, a larger share is held: buildings, production accessories and household inventory, means of transport. The database for calculating the statistical indicators on endowment with fixed assets is the technical-operational records and the accounting records. The technical-material basis of tourism can be characterized by a series of sub-indicators that express the existing capacities and their use.

The tourist capacity represents the numerical expression of the accommodation space, table, balneoclimateric treatment and of the special means of transport for tourists, which the hotel and tourist units have at a certain moment or in a certain period of time.

The technical-material tourist base in the 16 resorts and treatment has a great diversity of facilities for accommodation, food, recreation and treatment or entertainment and sports.

The tourist accommodation units in the seaside resorts, including the cities of Constanța and Mangalia, have 775 units totaling 120,458 places.

The situation presented reveals the large share of hotel capacity (62.70% of the total number of places), followed by the forms of para-hotel (cottages and campsites), which have 20% of capacity.

The structure by comfort categories demonstrates the low degree of comfort offered by the accommodation units, in their vast majority (86.4% of units and 93.2% of places) being classified in the categories of 2 and 1 stars or not classified, while , in countries with developed seaside tourism, mainly the classification of units is 3 stars. High-comfort hotels (4 and 5 stars) represent only 10% of their number and 9.6% of capacity. The existence of a small number of 4 and 5 stars demonstrates the low level of competitiveness of hotels on the coast on the foreign market.

5. Conclusions

The current physical condition of hotels is below the standard of similar comfort units in competing countries. The initial deficiencies, materialized in the non-adoption of measures for insulation and protection of buildings against low temperatures and humidity, were added to the lack of funds for maintenance, current repairs and capital of the units. The negative effects of these

situations had repercussions on the buildings, but also on the interior technical-sanitary installations, especially on the units classified in low comfort categories (1 or 2 stars or not classified). In some cases, it is even necessary to decommission and remove some units from the tourist circuit (eg mini-hotels in Jupiter resort or Saturn resort). In the same situation are other non-hotel structures classified in category 1 star or not classified, such as villas and bungalows (75% of units and 86.2% of capacity), as well as camps with 18.6% of accommodation capacity. the coast, totally unclassified.

The low degree of comfort of the accommodation capacities of the seaside resorts also results from the comparison with the average level of comfort of the reception structures of Romania. Thus, the accommodation capacities classified in category 1 and 2 stars of the seaside resorts hold 45% of the total number of places, compared to the weights of 39% in category 2 stars and 28% in category 1 star, at country level. The same situation is encountered in the case of hotel units: 63.6% of the seaside hotel capacities are classified in the 2-star category (compared to 57.9% in the total country level) and 24.1% in the 1-star category (compared to 24.3% at country level). If at the total capacity, the average degree of comfort of the reception structures on the coast is higher than the one registered at country level, at the accommodation units of the coast with the rest of the accommodation capacities of Romania.

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Training and Professional Improvement throughout the Teaching Career in the Romanian Secondary Education System

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Abstract

The training of the teaching staff in secondary education must have a continuous value through the permanent training of the teaching staff and their adjustment to the changes occurring in the secondary education system. Even though they benefitted from training and qualification through the higher education system (teachers) or the high school and post – high school education system for primary teachers and teachers of practical instruction, it is necessary that they be trained on different pedagogical or educational management topics periodically. The training models of the teaching staff in the secondary education system can be achieved with the help of higher education institutions, of public organisations for the training of the teaching staff or of private firms whose purpose is the training of employees. The purpose of the paper is to identify the impact of training and improvement of human resources in Romanian pre-university education, on the efficiency of teaching, making a correlation between the need for training, the training methods used and the impact on improving teaching.

Key words: professional training, professional development, career development, professional improvement, career

J.E.L. classification: M12, M53

1. Introduction

As the national economy is in a state of continuous change, so is the secondary education system affected by permanent and major changes, which entails the continuous training of the teaching staff. The managers of the secondary education system must attach special importance to the training of the teaching staff, since the level of knowledge, the teaching methods, the teachers' skills must be permanently adapted to the existing changes. The necessity of training the teaching staff should not be ignored or underappreciated (Barbu et al, 2019, p. 29). It is advisable that the planning of training the teaching staff in secondary education be achieved by means of long – term plans but at the same time take into consideration the permanent changes of the needs of the secondary education establishments so that they can be adjusted, and in some cases there is even the notion of altering or changing these plannings of staff training. The manner of designing the planning strategy must provide some concrete answers which are attentively quantified taking into account the need to plan the training of the secondary education staff (Tziner et al, 2015, p.4).

2. Literature review

Secondary education organisations must envisage the achievement of planning the training courses of the teaching staff in the secondary education system. This planning must be regarded as a tool of strategic planning with the purpose of obtaining good results regarding the continuous training of the staff. This planning should not be regarded as an attempt to impress the partners of education establishments, as it must represent the necessity of the courses to be completed by the teaching staff with a view to adjust to the permanent changes of the environment in which the secondary education schools unfold their activity (Currie, 2009, p.209).

Career planning is a complex process comprising on the one hand establishing the objectives regarding career evolution regarded both from the perspective of the organisation and of the employees, evaluating the employees' performances and also self – evaluation, the analysis of the opportunities for evolution in particular conditions, which are specific to organisations, and evaluating the planning activity on the whole(Manole, 2013, p.142) .

Another modern method for the training of secondary education teachers is represented by the training organised by teaching – staff resource centers, which are organisations subordinated to county school inspectorates and whose activity aims at offering training courses for teachers in secondary education.They must take into account both the teachers' requirements and the training needs of the secondary education system. Normally the courses offered by Teaching – Staff Resource Centers offer a wide variety of specialised courses, educational management courses, management courses, pedagogy courses, methodology courses, psychology courses, etc. The main advantage of the courses offered by Teaching – Staff Resource Centers is the financial aspect that should be paid by the school, and as these resource centers are subordinated to county school inspectorates, they will not expect to obtain profit and the venues for the courses will be the classrooms when these spaces are no longer used for teaching students. Another advantage is represented by the adjustment of the course offer to the teachers' needs and requirements.

The organisation of teacher training through online training platforms and systems. This type of training has as its main advantage the flexibility represented by giving teachers the possibility to access them whenever they want. The training of the teaching staff can be achieved even by means of good practice models presented at pedagogical reunions or teachers' debates. This can be considered one of the most accessible methods of teacher training and its main feature is that it does not involve expenses from teachers or education establishments. Both teachers' debates and pedagogical reunions take place periodically, normally every semester and are usually compulsory for teachers (Manolescu, 2001 p.75).

3. Research methodology

The research methodology aims to highlight the impact of forms of training and improvement on teaching by studying the literature in the field of human resources management and identifying the most appropriate training and development methods applicable to teachers in Romanian pre-university education. Following the critical analysis of the specialized literature, we selected the main training methods used for **vocational training and professional improvement** which can be used in the training of the pre-university education staff (Tabel no.2).

One must take into account the fact that teacher training also consists in their individual training with a view to keep up both with the latest discoveries of science and technology and with the modern methods of teaching.

Another classification of teacher training is the one taking into account the training period as continuous training programmes and discontinuous training programmes(Nicolescu et al, 1999, p.456) .

Continuous training programmes are those extending over a continuous period of time, without interruptions. The main advantage is the fact that the trainee can focus on the training contents, and there is also communication among the trainees, as they exchange ideas, knowledge, etc. The disadvantage is that the teachers attending the training courses must be substituted for the teaching classes comprised in their didactic norm if the training takes place over a long period of time.

Discontinuous training programmes for teachers. These are characterised by training teachers over several training periods, with a view to minimise the impact of substituting the trainee teacher during the teaching process.

4. Findings

The factors that influence career planning are individual factors, which are connected with the employees' interests and individual aspirations, their level of qualification, their professional experience, and also organisational factors belonging to the organisation's managerial policy, the

policy regarding human resources, the scope of the organisation, the manner in which the evaluation of the employees’ performance is conducted, etc.

As mentioned before, the training strategies must take into account the requirements of the environment but at the same time have a certain uniqueness, as there is also the need for a well-planned development.

The school management together with the schools’ management boards must take full responsibility for the designing of the strategic planning of the training of the staff in secondary education establishments but at the same time must take into consideration the school’s requirements and the training necessities of the teaching staff. In this regard, it can be said that the manner of the strategic planning of the training of the teaching staff in secondary education will still remain easy to accomplish as far as the planning is concerned, but it will take into account the social feature both of the employees’ needs and the needs of the secondary education establishment and especially of the beneficiaries of the secondary education system and of the local community

The requirements of the local community are of the utmost importance in designing the continuous training plan of the employees in the secondary education system. Thus, the areas where the industry is very well developed need certain types of training programmes, both for teachers and students, while the training programmes in the areas where tourism is well-developed will have different training needs.

As far as the training means are concerned, one can mention the training programmes of the teaching staff within training sessions organised by higher education institutions which support secondary education teachers with different modern methods and techniques of teaching and with the adjustment of the level of knowledge to the latest technological breakthroughs.

The continuous training of secondary education teaching staff (Table no.1) is organised under the guidance of the Ministry of Education and Research by means of certain institutions which ensure the quality of the training of the teaching and management, guidance and control staff in secondary education.

Table no.1 Secondary Education Staff

Teaching Staff	Management, Guidance and Control Staff	Auxiliary Teaching Staff	Non – teaching Staff
Teacher	General School Inspector	Chief Secretary /Secretary	Janitor
Primary School Teacher	Deputy General School Inspector	Chief Accountant/ Accountant	Stoker
		Documentarian	
Kindergarten Teacher	School Inspector	Laboratory Assistant	Mechanic
		Asset Manager	
Shop Teacher - Instructor	Manager of Teaching – Staff Resource Center	School Pedagogue/Technician	Guardian
	School Manager	Librarian	Driver
	Manager of Students’ Clubs	Computer Scientist	Electrician/Carpenter

Source: Developed by author

At the level of the Romanian secondary education system, the activity of performance assessment is achieved annually for the entire staff: teaching, auxiliary teaching and non – teaching staff according to the annual assessment sheet drawn up by the Ministry of Education and Research by Order of the Ministry. The assessment process is based on the annual Methodology of

evaluation of the activity of the didactic and non – didactic staff , which establishes the unique frame of evaluating the activity in the field of education by establishing the assessment criteria, the calendar of the annual evaluation, the performance criteria.

The continuous training of the teaching, guidance and control staff is substantiated on the observance of quality and professional standards as well as on the competences that are specific to the profession:

- Participating in methodical – scientific activities within the school, at the level of methodology committee;
- Participating in semestrial pedagogical meetings organised at county level by the county school inspectorate, on school subjects;
- Participating in scientific and methodical paper sessions organised in the form of partnerships, symposia, round tables, etc. at regional, county, national or international level and accredited by Teaching -Staff Resource Centers and the Ministry of Education and Research ;
- Participating in training courses for special training in the field of methodics and pedagogy;
- Participating in courses/colloquies for specialised training for didactic degrees exams;

The teaching staff in the secondary education system has to participate in continuous training, having the obligation to cumulate 90 transferable credits over a five – year period, which is achieved by completing training/ professional development courses organised by accredited institutions under the coordination of the Ministry of Education and Research. (Tabel no.2)

Table no.2 Characteristics of vocational training and professional improvement for the teaching staff

Vocational training – characteristics	Professional improvement - characteristics
acquiring new knowledge	improving current knowledge and skills
acquiring a new qualification	continuing the learning process
learning a trade	making connections between the acquired knowledge
acquiring new practical skills	practical application of acquired knowledge

Source: (Manole, 2013, 106)

The organisation of teacher training courses through non – profit organisations or associations. These entities support the teaching staff and education establishments with a variety of courses addressed to their needs. One of these aspects is that these organisations will only aim to cover their operating expenses and not gain profit.

The training of the teaching staff according to career evolution stages is achieved through training programmes structured as follows:

- Training programmes for the full – time professional degree;
- Training courses in the field of the didactics of teaching;
- Training courses in the field of school pedagogy and psycho -pedagogy;
- Training programmes for the second teaching degree;
- Training programmes for the first teaching degree;
- Training courses/programmes in the field of educational management;
- Programmes of re-training;
- Participation in study programmes in a different specialization, other than the one previously obtained by the teaching staff in secondary education.
- Participating in different courses in order to acquire new professional competences and qualifications;
- Participating in training courses especially designed for the management, guidance and control staff in secondary education;
- Graduating post – university courses ;

- Graduating master’s degree studies ;
- Graduating doctoral studies;
- “Acquiring new didactic specialisations”, other than the initial didactic specialisation.

5. Conclusions

A special place is taken by administrative issues represented by the funds allotted for the necessity of completing training courses and the choice of the time periods that are necessary for the successful training of the teaching staff. The training at secondary education level targets the improvement of knowledge in the field of the didactics of teaching the school subjects, school pedagogy and psycho – pedagogy, as well as scientific training. The teaching staff in the secondary education system have the right to participate in training and professional development courses stipulated in the Methodology of continuous training of the staff in secondary education, organised both nationally and abroad. The planning of the continuous training of the employees in the secondary education system will have to be well- structured and also there has to be an easy implementation of the training programmes at secondary school level. The practical applicability of this research is to apply the most appropriate training methods for human resource development, at the level of pre-university education units, to integrate the knowledge and skills acquired through training programs in current activities. The personal contribution consists in selecting the most effective training methods in accordance with the existing training needs at the level of pre-university education and in integrating them into the training programs.

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Designing the Coaching and Mentoring Strategy in Romania under the Pressure of the Pandemic Caused by SARS-Cov2 Virus

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Abstract

This paper wants to be the starting point for designing a coaching and mentoring strategy applicable in Romania, strategy whose implementation can reduce the effects of the human resources crisis. The work data were collected through a questionnaire. Using QCA analysis, the opinions of coaching and mentoring service providers were analyzed to adapt the strategy to the needs of the market, a constantly changing market, especially in terms of the pandemic aspect caused by the SARS-Cov2 virus.

Key words: coaching, mentoring, strategies, workforce, human resources

J.E.L. classification: J21, J23, J24, M12, M53

1. Introduction

This paper is intended as a continuation of the research in the aforementioned field, starting, first of all, from the paper “Human Resources Shortage – Decisive Factor in Substantiating the Personnel Attraction Strategy” (Micu, 2019), where we found that the organizations performing vehicle repair and maintenance activities (tailored for Galați City) are facing labor shortage due to various causes. We have identified and analyzed the causes and proposed general redress solutions, and, in this paper, we aim at achieving a wider study to this effect, starting with the identification of the situation generated by the national crisis, particularly due to the SARS-Cov2 virus, then highlight the extent to which certain tactics, which are part of a coaching and mentoring strategies, may decisively contribute to reducing the identified human resources shortage.

2. Theoretical background

According to a Eurostat study done in 2016, Romania was considered to be the second most competitive labor market in what concerns the costs, Bulgaria coming in first. Domestically, foreign investors could recruit employees as qualified as those in the developed countries, but at a low cost of only 5 Euro per hour. (Eurostat)

Romania’s competitive argument over the last years – low labor cost, ceased to be topical. The talent part became another criterion analyzed at the recruiting moment. The university studies graduates possess a consistent baggage of theoretical knowledge, but when they get employed, the employer’s need for training investments is obvious. (Profit.ro, 2016)

Compared with the last 10 years, 2017 was considered to be the best for the human resources market, given the fact that the recruitment level grew by approximately 40%, and the shortage was felt in all the fields according to the data presented by Adecco Romania. (Profit.ro, 2017) According to the Smartree Workforce Index, still in the year 2017, the number of employments grew by approximately 12%. At the same time, there was a 11% growth in the bonuses awarded in the private sector. According to the analyzed data, there were employments in all the activity fields, mainly in

telecommunications, financial services, audit and consultancy, pharma, production of car parts, BPO services, software development, digital services and IT consultancy. (Smartree)

In 2018, the Romanian Government took the measure to double the number of non-EU foreign workers. As an immediate result, the Romanian organizations, having access to a new recruitment market, started hiring more and more workers coming from exotic countries, such as Thailand, Philippines, Vietnam, Nepal etc. Limits were modified to 8,000 permanent workers and 2,400 temporary workers. (Dinca, 2018)

Relating to the hotelier field in Romania, we may say that the year 2018 witnessed the most severe human resources crisis of the past 28 years. In the beginning of the summer season, 99% of the hotel owners were facing a human resources shortage in excess of 50%. (Iancu, 2018)

The questionnaire issued by the Foreign Investors' Council (FIC) in the year 2018, which was broadcast in its own network, illustrated an entirely new aspect – Romania was no longer competitive in regard to the availability of the qualified workforce. (Profit.ro, 2018a)

In the year 2018, a series of organizations face the human resources market difficulties and the negative impact of the staff volatility on the business. At the same time, profits dwindle due to the increase in the workforce costs. The negative aspects referring to the workforce market are more frequently mentioned. One of them is the low training level of the higher and secondary education graduates. Secondly, personnel volatility triggered by the Romanians' access to the EU workforce market is invoked. A third aspect refers to the higher costs due to the new laws or the successive increases in the minimum salaries. (Panaite, 2018)

Further to research, we identified the Benefitonline.ro platform, which represents an innovative idea on the Romanian market as to the motivation of the companies' employees. The system, imported from more developed countries, is intended to be an alternative to the classical meal vouchers awarded to the employees, medical services subscriptions or others. The concept is simple: the organizations with 50-2000 employees enrol on the platform and allot a budget for benefits ranging between 150 lei and 700 lei monthly. Partners from various fields to which employees have access within the limits of the established budget operate on the platform. The main advantage is the flexibility due to the fact that the benefits are from various categories of interest: health, private pensions, tourism, transport etc. At present, 2883 providers are registered, who offer 3906 types of benefits. (Benefit Online)

The pandemic has changed the way in which young human resources relate to career – they get employed earlier and at the same time have realistic salary expectations. Therewith, they seek promising fields. The crisis that was also felt on the workforce market over the past months had marked implications on the way the young relate to the professional life, even those who experience their first job. The last half a year triggered an attitude change with immediate visible effects, in the sense that the candidates with ages ranging between 18 and 24 years applied to a smaller extent than those from the 25-35 years and 36-45 years categories. Sales and IT are the fields that attract the young the most according to the results of the latest survey. This trend arises from the fact that the jobs in this field are assimilated to above-average revenues. Another factor significantly contributing to this trend is that the long-term professional development perspectives are more numerous. The customer relations/call center field, followed on a par with the marketing, human resources and accounting are also fields that attract the young. (Profit.ro, 2020a)

Further to a study conducted within the context of the pandemic among the representatives of the human resources departments, it followed that the most sought for human resources will be those having IT competences. Other categories who will easily find a workplace are those working in: e-commerce and digital, retail, automation and medicine. From a different perspective, those working in the confections and textiles industry or in real estate, will have to either wait longer than usual until finding another job, or they have to participate in professional reconversion programs. 80% of the respondents believe that the number of companies offering their own employees the facility to work from home as well will be growing. Another category, amounting to 38%, consider that another significant change that will occur on the labor market will be related to the companies' behavior. They will have the tendency to call for freelancers or specialists with whom they will work on temporary projects. (Profit.ro, 2020b)

The concept of remote work suffered notable changes given the new economic and social context. Thus, the reporting of employees and employers in this process has changed as well. The number of available remote (from home) jobs witnessed an ascending trend. It tripled since March 2020, compared with the same period of the previous year. Similarly, the search for candidates to fill in such positions increased. Applicants became aware of the fact that the employers have become more open until now to such a system. "Within the European Union, Romania is still the country with the lowest remote work percentage. Yet, things seem to change, even if this change was somewhat forced and determined by the new dynamics on the labor market. Yes, remote work and employment is a protection method and a measure to reduce as much as possible the risks of contacting or spreading the virus. But, where proof can be made that this kind of work has no negative impact on the business, on the long term, we will most likely see more remote jobs on the market and more employees working from "home", says Bogdan Badea, CEO eJobs Romania. It was found that not only companies manifest a growing interest in this direction, but candidates as well. Since the beginning of March 2020, the searches for the jobs involving the work from home grew by more than 400%. Secondly, part-time jobs were the most sought for. They grew by 151% compared with the previous year March. To a large extent, the nurse and human resources specialist jobs were searched by applicants. In both cases, there was an evolution of approximately +80% compared with the same period of 2019. (Profit.ro, 2020c)

Stefano Scabbio, president of Mediterranean and Eastern Europe from Manpower Group asserted that 65% of the primary school children will have a currently unknown job. The new workplaces will focus on depth skills (leadership, communication, creativity etc.) and less on what is defined as hard skills. The work process will also undergo modifications. Its tendency will be on horizontal – collaboration and not on the vertical - hierarchical. (Petcana, 2016)

3. Research methodology

During the data collection research, a 3-section questionnaire was used, which were addressed to a target sample of respondents: beneficiaries of coaching and mentoring services, providers of coaching and mentoring services and creators/designers of coaching and mentoring strategies. This method was employed because the questionnaire was broadcast in the online medium by Romanian organizations whose activity object is coaching and mentoring, in which people from the aforementioned categories work. The survey was designed in Google Forms.

The collected data was analyzed by using the fsQCA software, a solution that eliminates the gaps between the quantitative and qualitative methods. The qualitative benchmarking is a new technique that uses the Boolean algebra principles. By this method, data combinations can be achieved, which can be compared with one another and then can be logically simplified by an ascendent pair-comparison process. (fuzzy set/ Qualitative Comparative Analysis)

4. Findings

From the collected data, only the data that emphasizes the extent to which certain elements may influence the quality of the coaching or mentoring act were extracted, so as to obtain a high efficiency. 252 people responded to the questionnaire. The respondents had the possibility to answer all the sets of questions, with the possibility to be included in more categories of answers. Thus, we obtained 385 data sets divided as follows: 161 from beneficiaries, 161 from providers, 63 from creators/designers. In this case we will direct the attention to the category of coaching and mentoring services providers.

A Likert scale was used in the data collection process, then the results were calibrated by correlating the values from the fuzzy array from 0 to 1, thus complying with the QCA methodology. Table 1 illustrates the Likert scale calibration.

Table no. 1. Scale calibration

Fuzzy array value	Likert scale correspondent
1	Total agreement
0.75	Agreement
0.5	Neither agreement nor disagreement
0.25	Disagreement
0	Total disagreement

Source: Table designed by the authors

In this case we will work with 5 causal factors and 1 output variable. We have included among the causal factors:

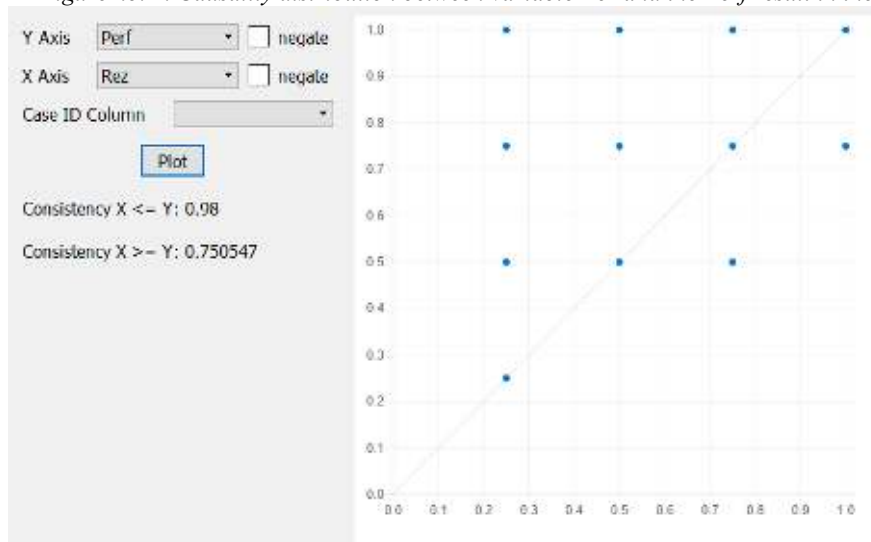
- Reg – the need to regulate the profession of coach or mentor;
- Aut – authorization, namely establishing coaches and mentors as a body of experts;
- Edu – coaches’ and mentors’ education level;
- Cert – coaches’ and mentors’ certification level;
- Aso – affiliation of coaches and mentors to profile organizations;
- Perf – global influence of the aforementioned factors on performance;
- Rez – variable pointing out the calculation result of the fuzzy arrays’ values on the previous causes by the relationship $Rez = \text{fuzzyand}(\text{Reg}, \text{Auto}, \text{Edu}, \text{Cert}, \text{Aso})$. It must be specified that through that function the minimum of the causal variables is calculated.

Further to the calibration of the collected results with the fuzzy array values, a table was obtained for centralization.

In a first stage, we decided to highlight the influence of the previous condition Rez on the Perf output. Thus, we decided to apply function XY PLOT which resulted into Figure 1.

Analyzing the obtained data, we may notice that the consistency score ($X \leq Y$) is 0.98, which means that the variable identified with the causal condition (Rez – cumulation of all causal conditions) may result into the 98% fulfilment of the desired result (identified by Perf output). The coverage score (consistency for $X \geq Y$) is 0.75, which amounts to the fact that among the questionnaire respondents there is a 75% consensus as to the result’s fulfilment. Thys, it may be concluded that the strategy’s success is guaranteed if emphasis is placed in parallel on the implementation of all the measures identified by the analyzed variables.

Figure no. 1. Causality distribution between variable Rez and the Perf result in the XY plan graph

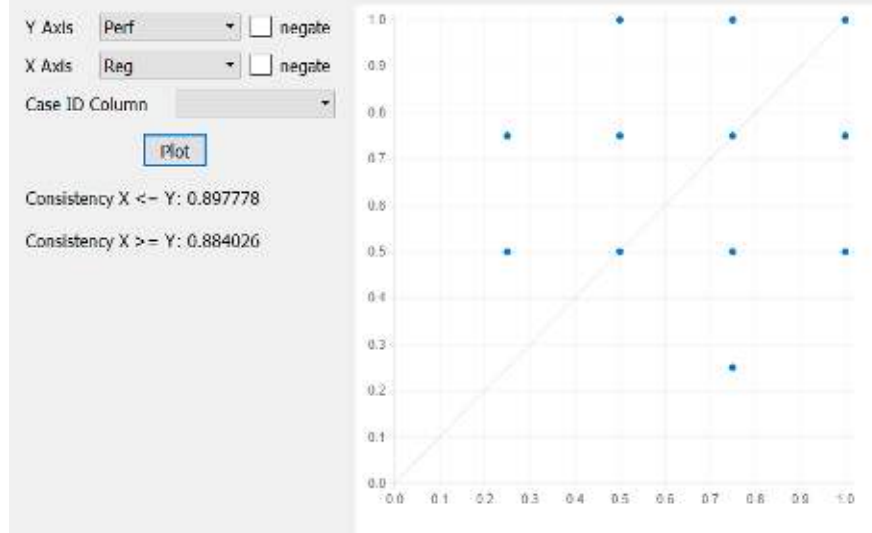


Source: Figure resulting from the use of the XY plot function in the fsQCA software.

Because we wish to establish an impact hierarchy of the proposed development directions on the result intended to be obtained, we continued with the individual testing of each measure in order to establish the extent to which it may lead to the goal’s fulfilment. We will further use the same analysis to achieve consensus in the end.

In Figure 2 we tested the measure to which the causal condition Reg influences Perf result. In this case, we notice a 0.89 consistency score, which amounts to the fact that the goal is 89% fulfilled. In this case, there is an 88% consensus among the respondents, which is highlighted by the 0.88 coverage score. We consider that emphasis should be placed on the measure in question while designing the strategy.

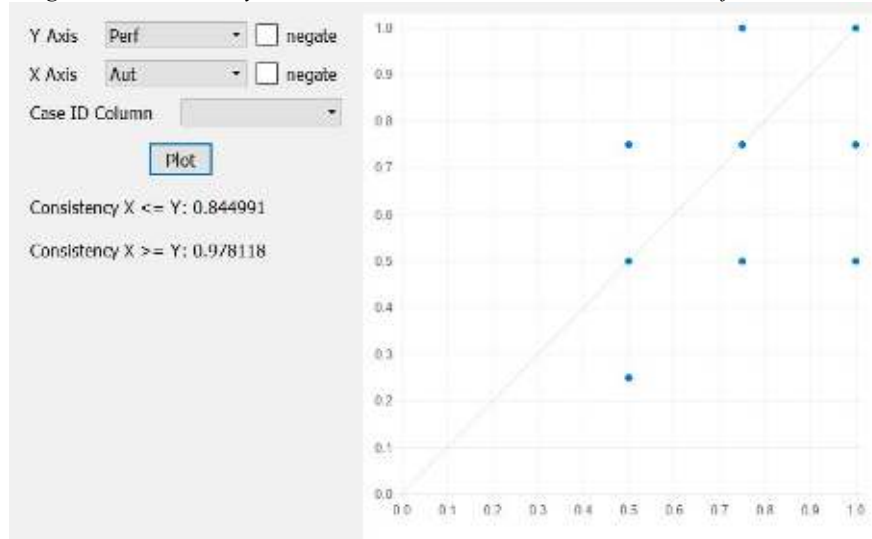
Figure no. 2. Causality distribution between variable Reg and the Perf result in the XY plan graph



Source: Figure resulting from the use of the XY plot function in the fsQCA software.

In Figure 3 the measure in which variable Aut produces the desired Perf result is tested. And the result obtained in this case is more than satisfactory. The consistency result is 84% with a 97% coverage (much higher than the previous analysis). At a first glance, we may state that this measure should have priority over the one previously tested.

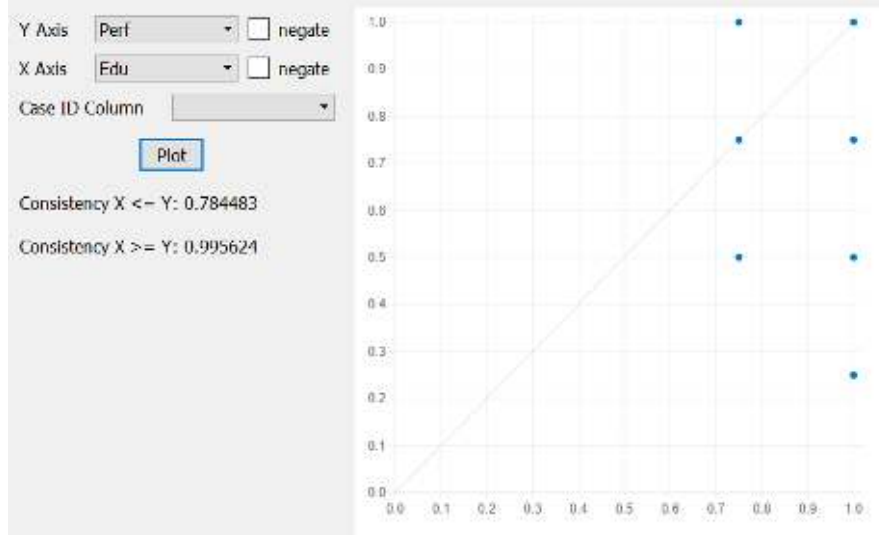
Figure no. 3. Causality distribution between variable Aut and the Perf result in the XY plan graph



Source: Figure resulting from the use of the XY plot function in the fsQCA software

The influence of the previous Edu condition on the Perf output is illustrated in Figure 4. In this case, we notice that the consistency score is 0.78 and the coverage score is 0.99. We deduce that the coverage score is growing, the likelihood for the goal to be fulfilled being 78%, aspect supported by 99% of the respondents.

Figure no. 4. Causality distribution between variable Edu and the Perf result in the XY plan graph

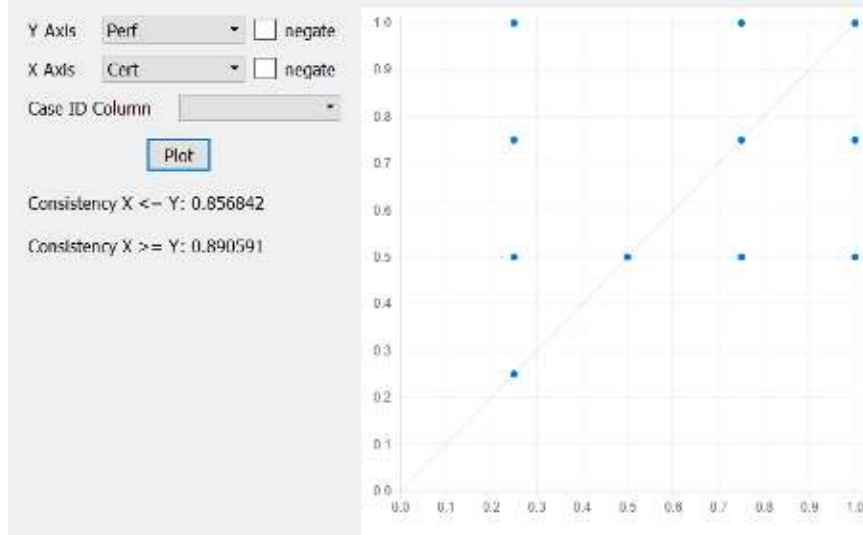


Source: Figure resulting from the use of the XY plot function in the fsQCA software

In Figure 5 we decided to test the measure in which the Cert variable influences the fulfilment of Perf's goal.

In this case we notice that the success hypothesis further to the application of the measure has an 85% success chance, a score supported by 89% of the respondents. Further to the analysis, the 0.85 consistency score and 0.89 coverage score were obtained. In this case, the result is somewhat similar to the one obtained when testing the global influence of the factors.

Figure no. 5. Causality distribution between variable Cert and the Perf result in the XY plan graph

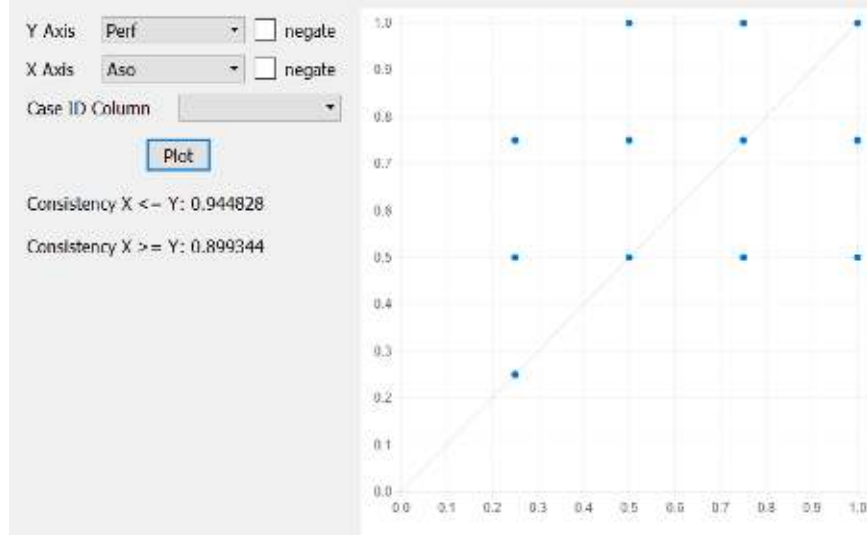


Source: Figure resulting from the use of the XY plot function in the fsQCA software

In Figure 6 the measure in which the Aso causal factor influences the Perf result production is tested. In this case, it was noticed that the consistency score is more than satisfactory, i.e. 0.94, obtained under the conditions of a 0.89 coverage score. We may conclude that 89% of the

respondents agree with the fact that the result is 94% fulfilled if emphasis is placed on this measure when designing the strategy.

Figure no. 6. Causality distribution between variable Aso and the Perf result in the XY plan graph



Source: Figure resulting from the use of the XY plot function in the fsQCA software

5. Conclusions

Previously, we conducted similar studies on the foreign markets in order to be able to establish certain elements that might constitute orientation directions in regard to the design of a sustainable coaching and mentoring strategy in Romania. For the designed strategy to fulfil its goal, we decided that the survey conducted at national level be wider. As previously indicated, the questionnaire comprises several sections to be able to establish the strategy development priorities depending on the perception of each category participating in the coaching and mentoring processes. In order to concretely define the strategy, the future studies must also analyze the sections dedicated to the strategies' beneficiaries and designers.

We consider that the utilization of the QCA analysis method (Rihoux, 2009) of the collected data offers a safety degree on the survey results, this method completing the economic statistical instruments. (Aivaz, 2007)

We consider that at this level a conclusion may be drawn, which could offer some orientation direction. We decided to summarize the results in Table 3.

Table no. 3. Survey results' summary. cases

Variable	Consistency	Coverage
Rez	0.98	0.75
Reg	0.89	0.88
Aut	0.84	0.97
Edu	0.78	0.99
Cert	0.85	0.89
Aso	0.94	0.89

Source: Table designed by the authors

We may notice that the obtained scores are favorable. This aspect is easy to anticipate because the variables' testing on the foreign markets also had a positive outcome. Domestically, given the crisis on the labor market, accentuated by the current pandemic elements, priorities must be established for the implementation result to be quick.

Based on the obtained data we may say that the priority should be on supporting the establishment of a profile organization, such as an association or foundation whose scope is to develop coaching and mentoring programs. We consider that the Aso variable returned the best score further to the testing. This measure is also easy to implement from a legal standpoint. (Guvernul României)

As an immediate measure, emphasis can be placed on certification. Certification offers some degree of safety to the beneficiary that the provider is highly qualified, who can thus meet the demands. Certification can be awarded either by international organizations that are present at a national level, which have the necessary expertise in this field but also by the associations and foundations proposed for establishment at the previous point. We notice that the Reg and Aut variables obtained a similar score to that of the Cert variable. We can state that this connection is valid from the logical viewpoint as a connection can be established between certification, regulation and the establishment of a body of experts. Nevertheless, we chose to consider certification as a priority factor due to the easy implementation, a certain infrastructure existing at the moment. The regulation process is legally laborious because of the state-level officialization process of a profession. Moreover, the establishment of a body of experts' institution involves more activities pertaining to the elaboration of standards and procedures, operating, control and financing regulations.

The last factor that must be emphasized is that of coaches' and mentors' development. We assume that variable Edu returned the poorest results further to testing because the quality training is a long-lasting process and so is the elaboration of training programs. Nevertheless, we consider education to be the factor underlying the professional training, but in view of the poorly developed infrastructure on the coaching and mentoring segment, other measures should be prioritized to obtain immediate results.

Considering that we have the data collected to elaborate the coaching and mentoring strategy at national level and that its complete processing in the near future is obvious, we set out to conduct a wide survey in a different context, in which to analyze the resources available for the successful implementation of the strategy. We consider that both financial and human resources are a key factor for the successful implementation of any project.

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The New Public Management, a Factor of Novelty in the Public Administration

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Abstract

In the last decades, the traditional administration has been subjected to some challenges caused by ample changes, worldwide, in the managerial, political, judicial field, against the globalization and diversification of services.

The changes were based on principles of the New Public Management and meant the achievement of a managerial reform in the methods of operating of public sector organizations, by moving from the traditional model of public administration, governed by the bureaucratic theory of Max Weber, towards a flexible model. of public management; it was pursued to reduce the differences besides the private sector.

The new concept appeared against the background of finding the inefficiency of the public administration system, in the use of public resources and focuses on the takeover in the public sector, of the management techniques, belonging to the private sector.

The paper aims to present the reform process covered by the traditional public administration, beginning with the end of the last century, generated by the emergence of the new managerial formula. There are presented concepts and definitions in evolution, but also, levels of conceptualization of the new current, as reflected in the theories and works of specialists.

Key words: public administration, government, private sector, conceptual approaches, New Public Management

J.E.L. classification: H11, H83, H44

1. Introduction

Since the last decades of the last century, the public administration was subjected to wide changes, at managerial, political, judicial level. In the socio-economic context of the modern developed societies, the public organizations did not have the capacity to respond to the new requirements of citizens, because of the bureaucratic nature of their organizational and managerial structure. (Calogero, 2010)

The changes consisted in the transition from the traditional model of public administration, governed by the bureaucratic principles of Max Weber's theory, to a flexible model of public management, which meant a reform (Katsamunskaja, 2012), in the methods of operating of public sector organizations, attenuating the distinction from those of the private sector; the decision-making power of public managers increase, the supervision through rules of procedure transmitted from the center is relaxed. (Kalimullah, Alam Ashraf, Nour, 2012). At the basis of this process were principles of the New Public Management (Calogero, 2010).

As Marilena O. Moraru (2012) points out, to the origins of the New Public Management are reforms regarding the role of government in the delivery of public services, which have manifested themselves in some developed European countries. (Moraru, p. 115. 2012).

At the basis of the definition of the New Public Management was the aspect regarding "the implementation of management ideas from business and private sector into the public services" (Moraru, p.116, 2012 quotes Haynes, P., 2003).

The paper aims to present the reform process undergone by the traditional public administration, beginning with the end of the last century, along with the emergence of the new managerial form, called, the New Public Management; concepts and definitions are presented, in their evolution, as reflected in the theories and works of specialists.

2. Theoretical background. Conceptual approaches, definitions of the New Public Management

Conceptually, the New Public Management was anticipated by a series of currents of thought (neoclassical, organizations theory, agency theory, ownership theory), associated with the ideology of public choice, flexibility, decentralization of administrative units, privatization (Bouri, 2016).

The emergence of New Public Management is the effect of finding inefficiency in the public administration system and in the use of public resources. The basic element of the concept is the orientation towards the principles of market economy and increasing efficiency in the public administration; the proposed changes should ensure the optimization of public resources use and the improvement of the quality of public services provided to the citizen (Świrska, 2014).

This novelty in public administration management is considered a modern form of management that maintains the (traditional) public principles that are continuous evolving (Samaratunge, Alam and Teicher, 2008, quoted in Kalimullah N. A.; Alam Kabir M. Ashraf; Nour M. M. Ashaduzzaman, 2012, p. 2).

The aim is to reform the public sector by taking over some managerial formulae and mechanisms of the private sector (Amar and Berthier, 2007).

A given definition shows that the management "corresponds to the set of techniques of orientation, setup and administration of an entity, in order to achieve its objectives. The management is not, in fact, a theory, but, especially, a practice comprising a set of technical and relational knowledge" (Amar A. and Berthier L., 2007, p. 2 quotes Alecian et Foucher, 2002).

It is a new form of public management approach that is inspired from the private management techniques (Kalimullah, Alam Ashraf, Nour, 2012).

The New Public Management paradigm suggests reducing the size of government and its role, removing bureaucracy, decentralization, privatization, adopting market principles in public service delivery, emphasis on accountability and performance. There are principles that oppose the characteristics of traditional administration, regarding the conditions of employment and promotion, its indeterminate character, excessive bureaucracy, the form of traditional responsibility, unconvincing elements for achieving performance (Hughes, 2003, quoted in Kalimullah N. A.; Alam Kabir M. Ashraf; Nour M. M. Ashaduzzaman, p. 10, 2012).

The market discipline leads to competition, respectively, in the provision of public services, as such, the supplier agencies are encouraged to improve services; the public becomes the consumer customer of the public sector market.

The requirement to reduce costs and increase the quality of services provided obliges the public service agencies to ensure an optimum of use of financial and human resources they have. (Kalimullah, Alam Ashraf, Nour, 2012)

This new paradigm emerged in the public administration, through bureaucratic tradition, in the form of the New Public Management is constituted as a challenge addressed to the basic principles of traditional public administration (Kalimullah, Alam Ashraf, Nour, 2012). The challenge arises from the tensions that manifest between the institutional side of the administration, which has concrete tasks to perform in the public service, and the managerial side oriented towards the public services, whose stake is the flexibility and work conditions (Bouri, 2016).

The path from the traditional public administration to the new form of flexible public management, oriented towards market principles, manifested itself after the '80s of the last century, which meant a fundamental change in the role of government.

The state has a minimal role, being at the same time, *state - organizer* and *state - strategist* in conditions of market flexibility (Bouri, 2016).

The organizer state is characterized by flexibility and efficiency; the state is no longer the sole receiver of political legitimacy, taking into account aspects such as the delegation of a part of sovereignty towards entities (Bouri, 2016).

The strategist state presupposes a series of features, such as (Bouri, 2016):

- perspective vision in cooperation with civil society;
- is a guarantor of the general public interest (public services, public funds, regulations);
- ensuring social cohesion;
- adapting the administrative structures in order to achieve the objectives;
- participatory democracy.

The New Public Management that emerged in the last decades of the last century, in a series of significant countries, from the development perspective, had various names, such as: "managerialism" (Pollitt, 1993), the "new public management" (Hood, 1991) or "entrepreneurial government" (Osborne and Gaebler, 1993). (Kalimullah N. A.; Alam Ashraf Kabir M. Ashraf; Nour M. M. Ashaduzzaman, p. 8, 9 quotes Pollitt, 1993; Hood, 1991; Barzelay, 2001; Osborne și Gaebler, 1993 2012).

The definitions as well as different names refer to a phenomenon considered by Hood (1991) (Hood, 1991, quoted in Kalimullah N. A.; Alam Kabir M. Ashraf; Nour M. M. Ashaduzzaman, p. 9, 2012), a form of managerial thought, based on the principles generated by the private sector and assimilated by the public sector, the goal being to increase efficiency. (Kalimullah, Alam Ashraf, Nour, 2012).

The term New Public Management was presented as "a group of ideas, variations on a theme or a cluster of ideas". (Androniceanu A., Șandor A., 2006, p., 93 (13) quotes Kerstin Sahlin-Anderson, National, Interantioanl and Transnational Constructions of New Public Management in New Public Management – The Transformation of Ideas and Practice - Edited by Tom Christensen and Per Lægheid, Ashgate Publishing, Cornwell, England, 2003, p. 51);

These interventions in the administration of public management, considered as "modernization" of public organizations have emerged in a new form of public sector considered a model of "managerialism", different from the existing bureaucratic administration. The initiative of "reinventing the governance" has been practiced both in some European countries and in other parts of the continent, respectively, the United States, Canada, New Zealand, Australia. (Androniceanu A. and Șandor A., p. 93, 2006).

For the public sector, the New Public Management involves changes from structural, organizational and managerial perspectives, intervened in the achievement of public services in countries belonging to OECD. The shaping of the concept, expression of a new system of values, is the consequence of the approaches of some specialists in the field, at the end of the last century, respectively: (Hood, 1991; Pollit, 1993; Ridley, 1996; Hood, 1991, 1995; Lane, 1994; Clarke and Newman, 1997 - "The Managerial State"; Stewart and Walsh, 1992; Walsh, 1995; Flynn, 1993; Mascarenhas, 1993; quoted in Androniceanu A., 2007, p. 154)

- a model aimed at reforming administrative systems (Hood, 1991; Pollit, 1993; Ridley, 1996);
- a system of values belonging to the private sector, taken over, for implementation, in the public sector (Hood, 1991, 1995);
- a concept in which the balance of public management values advances those of the traditional administrative system (Lane, 1994);
- it is oriented, through content, towards managerialism (Clarke and Newman, 1997 - "The Managerial State");
- it is a process in which the public services management system, developed on the basis of competitive market principles, replaces the traditional model of operationalizing public services, dominated by the bureaucratic tradition (Stewart and Walsh, 1992; Walsh, 1995; Flynn, 1993; Mascarenhas, 1993).

According to the approaches of some authors, the component elements that singularize the New Public Management are grouped into two categories of values that are manifested simultaneously: (Androniceanu, 2007)

- managerial reforms, with reference to the business managerialism and autonomy to lead;
- the market and competition.

As such, the management is perceived "as a continuum ranging from more managerialism at one end (e.g., decentralization and hands-on professional management) to more marketization and competition at the other [...]" (Androniceanu A., 2007, p. 155, *New Public Management, a Key Paradigm for Reforming Public Management in Romanian Administration*)

John Stewart and Kieron Walsh (1992) consider that "the main objective of NPM is to improve the economy, efficiency, and effectiveness of the public sector and increase the service quality" (Świrska, p. 151, 2014, quotes John Stewart and Kieron Walsh, *Change in the management of public services, Public Administration*, t. 70, 1992, p. 510). The perspective of improving the public sector, considered expensive, excessively bureaucratic, with a pyramidal hierarchy, implies reform based on the elements "Economy, Effectiveness, Efficiency" - the three E's (Urio, 1998, quoted in Amar A. and Berthier L., 2007, p. 3).

To achieve these objectives, some actions are needed, among which (Świrska, 2014):

- the emphasis on the results obtained by public organizations;
- the use of strategic programming and management;
- the distinction between the roles of buyer and of service provider;
- the development of market relations and stimulation of competition in the process of service delivery;
- customer-oriented activities;
- more flexible employment conditions.

The perception of the New Public Management techniques, within the states or even the areas that draw on its methods, is different depending on their expectations, the way of evaluating the results (Kerstin Sahlin-Andersson, 2001; Amanda Smullen, 2004; 2007, quoted in Pollitt C., 2007, p. 111.). Thus, it can be considered (Pollitt, 2007):

- a new form of professionalism of managers;
- a process directly related to the services provided to citizens considered customers;
- a procedure to diminish the level of expenses, taxes;
- form of elimination of central hierarchical control, based on the establishment of agencies.

Regarding the process of the New Public Management, the impact on some dominant elements regarding the management objectives, the authors have different visions. Thus (Van de Walle and Hammerschmiddisting, 2011):

✓ Steven Van de Walle and Gerhard Hammerschmiddisting (2011) (Pollitt, 1990; Barzelay, 1992; Hughes, 1998, quoted in Van de Walle S. and Hammerschmiddisting G., 2011, p. 2.) consider that the term the New Public Management is used, generically, with reference to the trends, respectively, to the changes produced in public sectors within European countries or other areas, in the last decade of the last century, expressed by:

- ⇒ "Managerialism" (Pollit, 1990);
- ⇒ "Post-bureaucratic organization" (Barzelay, 1992);
- ⇒ "Entrepreneurial government" (Hughes, 1998).

✓ Lane (2000, p. 219) considers New Public Management, "a contractualist model" (Steven Van de Walle and Gerhard Hammerschmiddisting, 2011, p. 2 quotes Lane, 2000, p. 219);

✓ König appreciates it a "mixture of management theories, business motivation psychology and neo-liberal economy" (König 1997, 219) (Steven Van de Walle and Gerhard Hammerschmiddisting 2011, p. 2, quotes König, 1997, 219).

✓ Barzelay (2002) considers the existence of four types of the New Public Management: "contractualist", "managerialist", "consumerist" and "reformist". (Barzelay, 2002, quoted in Steven Van de Walle and Gerhard Hammerschmiddisting, 2011, p. 2).

3. Research methodology

The methodology used meant a laborious documentation, from foreign and autochthon literature, given the complexity of the chosen topic, without exhausting the existing resources in the field, the selection and processing of ideas, through the author's own interpretation.

4. Findings. Levels of conceptualization

According to *some opinions* (Dunleavy et al., 2006, p. 96-105; Pollit, 2003a, chapter 2 quoted in Pollitt C. 2007, p. 110), the New Public Management signifies a process that manifests itself, differently, on two levels: (Pollitt, 2007)

A first level - a group of characteristic concepts and practices, within which significantly, by importance, can be mentioned: (Pollitt, 2007)

- the emphasis on performance, quantification of results;
- practicing small, specialized, flexible organizational forms, preferred to large, multifunctional forms (by disaggregating them);
- giving up the prioritized forms of contracting, with a coordinating role;
- the extensive use of market mechanisms, of the competitive purchasing system, of salary motivation related to performance;
- the improvement of the quality of services produced and delivered to users.

A second level – higher, the New Public Management is considered a process through which it streamlines the public sector, by transferring over it, new business methods and techniques (Pollitt, p. 110, 2007).

Another structuring comes to the authors Van de Walle S. and Hammerschmidting G. (Van de Walle and Hammerschmidting, p. 2, 2011), in the paper *The Impact of the New Public Management: Challenges for Coordination and Cohesion in European Public Sectors*; the New Public Management can be thought of from two perspectives, which they call "levels".

The first level - it is established as a combination of managerial novelties whose effect (each of them) can be determined (Van de Walle S. and Hammerschmidting G., p. 2, 2011).

The second level – higher, of the New Public Management, refers to another position of government in society, with a felt effect in the macroeconomic sphere (Van de Walle S. and Hammerschmidting G., p. 2, 2011).

⇒ **A first level** refers to the intervention, from the perspective of managerial novelties, of the New Public Management, on the public sector, signaled by authors, in the analyzes performed:

Haynes (2003) defines the New Public Management as "the attempt to implement management ideas from business and private sector, into the public services" (Van de Walle S. and Hammerschmidting G., 2011, p. 3, quotes Haynes, 2003).

According to Donald Ketl (2000, 1-2) (quoted in Van de Walle S. and Hammerschmidting G., 2011, p. 3), the key elements, determinant for the global changes of the public management, were the commercialization, targeting services, the decentralization, the responsibility regarding the obtained results.

Ferlie et al (1996) consider four forms of the New Public Management: „the efficiency drive, downsizing and decentralisation, in search of excellence and public-service orientation" (Ferlie et al. 1996, 10-15) (Van de Walle S. and Hammerschmidting G., 2011, p. 3 quotes Ferlie et al. 1996, 10-15).

Other authors (Gray and Jenkins, 1995) (Gray and Jenkins, 1995, quoted in Van de Walle S. and Hammerschmidting G., 2011, p. 3) note that, clarifications can be provided through processes such as disaggregation or decentralization and, within organizations, the tasks can be differentiated (regulation, property functions, control functions etc.). One of the basic characteristics of the New Public Management is the orientation, through the chosen solutions of intervention, towards the fragmentation of the public sector, in independent units, and the stimulation of the market competition between these new bodies.

There are changes that have led to fundamental changes in the functioning of the public sector.

⇒ **At the second level – higher**, the New Public Management relates to changing the role of government.

From the perspective of the New Public Management, the conception regarding the role of government is based on the opinions regarding the reduction of the role of the state (Lane, 2000) (Lane, 2000, quoted in Van de Walle S. and Hammerschmidting G., 2011, p. 4), the essential element in governance being increasing trust in the stimulation of market competition.

The managerialism is a concept that concerns new methods of management, the role of the state and of the public manager (Clarke and Newman, 1997). (Clarke and Newman, 1997, quoted in Van de Walle S. and Hammerschmidting G., 2011, p. 4).

Thus, the principles of traditional setup, the universalism, equity have been replaced with efficiency and individualism (du Gay, 2000), the condition of the civil servant and public manager has been changed (Clarke and Newman, 1997), the role of government in providing services, by their outsourcing, has been diminished; the citizens becomes customers (Clarke and Newman,

2007, Fountain 2001) (du Gay, 2000, Clarke and Newman, 1997, Clarke and Newman, 2007, Fountain 2001 quoted in Van de Walle S. and Hammerschmid G., 2011, p. 4.).

There was not outlined a single model of the New Public Management, there are differences between countries, regarding the modalities of taking over the modernizations brought. This manifested itself from a complete orientation towards market forces (Great Britain), to the fundamental reform of the public sector, following the model of the private sector (New Zealand) or some situations of coexistence with the traditional rules of bureaucratic government (Austria, Germany, Japan), as noted by Naschold (1996, p. 19) (Naschold, 1996, p. 19, quoted in Calogero M., 2010, p. 32).

The New Public Management means a change, worldwide, with particular manifestations, at territorial level, which tend towards a new model of government, with various forms of expression. (Calogero, 2010).

It can be considered that the New Public Management signifies a formula of orientation of the public administration towards a modern management, adaptable to changes that should ensure quality norms and initiatives in public administration, the ultimate goal being a results - concerned management that should give priority to the requirements of citizens - clients. (Świrska, 2014).

5. Conclusions

In the practice of traditional public administration, a number of challenges have emerged under the influence of profound changes that have taken place worldwide, in the context of globalization as well as of the diversification of services. (Katsamunskaya, 2012).

The global paradigm, as can be considered the New Public Management, signifies a the consequence of the changes occurred in global plan, from the perspective of production and capitals movement (Androniceanu & Şandor, 2006).

The novelty of the concept, in the management of public administration, is constituted as a modern form of management, which maintains the public (traditional) principles, which are in a continuous evolution.

It is suggested the reduction of the size of the government and its role, removing bureaucracy, the decentralization, privatization, adopting market principles in the delivery of public services, emphasis on responsibility and performance (Kalimullah, Alam Ashraf, Nour, 2012). There are principles different from the characteristics of the traditional administration, with an emphasis on excessive bureaucracy, a form of traditional accountability, unfavorable elements for achieving performance. (Hughes, 2003, quoted by Kalimullah, Alam Ashraf, Nour, 2012, p. 10).

The pursued idea was to signal the trend of replacing the traditional system of providing public services, based on bureaucratic principles, with the management of public service, organized on market principles and increase in efficiency in public administration. (Amar & Berthier, 2007; Moraru, 2012).

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Assessment of Customer Satisfaction in the Luxury Hotels in Bucharest

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Abstract

In the hospitality industry, the quality of the services provided to customers determines the level of business success. In order to support and continuously improve the high level of quality, the hotel managerial staff should constantly assess the level of customer satisfaction, as well as the level of competitiveness as a result of the improvements of the services based on customers' feedback. Such an evaluation begins by identifying the main attributes of the provided services, which make up the quality perceived by the customer and can influence his/her level of satisfaction.

In order to achieve full customer satisfaction and maintain its place on the market, the hotel managerial staff should know, obtain, and maintain a competitive position in the context of the market's dynamic change and create the opportunity for continuous improvement of its services. In this regard, this research seeks to evaluate the services provided by the selected hotels in order to help the administrators monitor their service delivery process, identify shortcomings and take corrective action. Thus, based on the exploratory study of the customers, this paper identifies the key success factors for luxury hotels in Bucharest and develops plans for the hotel managerial staff to improve their services.

Key words: management quality, price, services, expectations, perceptions, experience

J.E.L. classification: L80, L83, L84

1. Introduction

Tourism, as part of the economic system, influences the level of development of a country, the quality of people's lives and the evolution of the population in number and long-term structure (Munteanu Florea et al., 2017).

In addition to elements such as location, price, security, service quality is one of the important factors identified in the selection of the hotel, especially when it comes to hotels that are considered luxury hotels, where quality determines the reputation of the brand. The luxury hotel industry has become a significant section of the general hospitality industry and is experiencing a rapid expansion in our country, too. The luxury hotel sector is truly a distinct area from several perspectives when considering the hotel industry. These hotels offer customers top services and among the most complex lavish facilities, but also present a high degree of risk for developers and owners. Luxury hotels are generally the ones that are expected to have a very high degree of quality, since they are known for their performance and reputation.

The experiences in luxury hotels are largely interconnected with very high quality. These experiences are pursued by the individuals who strive to achieve self-actualization and self-fulfillment through better knowledge, appreciation of beauty, spiritual sophistication, peace, art, culture, and aesthetics. The luxury hotel industry has emerged and evolved as an opportunity for

travelers to dream and experience other lifestyles, benefiting from superior quality. That is why the luxury hotel industry places a special emphasis on guest experience and their satisfaction, since luxury is more an experience rather than a product or a service.

The interception of the experiences of the clients of luxury hotels in Bucharest was carried out with the intention to identify their degree of satisfaction taking into account the importance of the luxury services sector. It should be borne in mind that customer satisfaction differs depending on the hotel, but also his/her expectations. It is assumed that in the case of luxury hotels customer expectations regarding location, service quality, security or price are much higher than customer expectations in budget hotels. Thus, in the luxury hotel industry, quality acquires another dimension, requiring a better understanding of customer needs and requirements, as well as the degree of satisfaction.

2. Literature review

The concept of service quality has been a popular topic for the last two decades, being tackled by both researchers and practitioners, who demonstrated in their previous studies the impact of service quality on customer decision-making (Zeithaml et al., 1996). Accordingly, the quality of services is a key component in the hospitality and tourism industry. For example, Akan (1995) conducted an exploratory study examining the relevance of service quality (SERVQUAL) in Turkish hotels. This early work identified new dimensions of service quality and determined their importance for customers (Azman et al., 2016). Furthermore, in previous studies, researchers suggested that expectations regarding the quality of services may vary depending on individual needs.

Over time, quality has become one of the most important variables in the hotel industry everywhere. Thus, a successful hotel is considered to be the one that offers customers excellent quality services, which are considered the very life of the hotel. In this context, there has been a lot of emphasis lately on the quality of luxury hotel services. This is plausible, especially since luxury hotels visitors have higher expectations regarding the services offered to them. The higher the reputation of a hotel, the higher the expectations of customers. For example, Rhee and Yang (2015) compared customer expectations and their actual experience in luxury hotels. Through a joint analysis, they found that the importance of hotel attributes varies depending on the classification of hotels. In a study on luxury hotels in Ghana, found that although all the dimensions of SERVQUAL influenced customer retention, tangibility and reliability were the most crucial retention factors (Allan, 2016).

Moreover, other research has indicated and explained that the service quality factors of and their priorities, from the customers' perspective, differ depending on the type of hotel. In this regard, Victorino pointed out that there may be a different quality of service when dealing with hotels serving different market segments or countries, which all have different characteristics (Victorino et al., 2005). In another study, Xu and Chan (2010) showed that, in a specific hotel setting, some of the dimensions of service quality differ from the five dimensions described in the original SERVQUAL. Another study by Mohsin and Lockyer (2010) assessed the perception of customers regarding service quality of luxury hotels in India. They provided an opportunity to recognize, in order of their ranking, the features that are considered important by the guests staying in luxury hotels. Although there are studies that measure the quality and satisfaction of luxury hotels' customers, these research studies have mostly focused on developed countries, such as Australia, Korea, the United States, etc. Only a minimal number of research studies related to the quality of service in the luxury hotel industry can be found regarding developing countries.

Although service quality and customer satisfaction are closely linked to each other and even interdependent, the specialized literature still suggests that they are different concepts. Thus, because we have talked about the quality of service, we consider it necessary to refer to luxury hotels' customer satisfaction, in the context of the quality service offered by them. Satisfaction is an antecedent of service quality (Crick and Spencer, 2011). Satisfaction is a specific transaction seen as an evaluative assessment after choosing a hotel service. The studies of Olorunniwo et al. (2006) and Li and Jarinto (2012) suggest that the causal relationship between service quality and customer satisfaction is mediated by the consumer's orientation. If the consumer is cognitively

oriented, he/she perceives this relationship as the quality of service leading to satisfaction. If the consumer is emotionally driven, he/she perceives this relationship in the opposite direction, with the satisfaction that leads to the quality of services. Assuming that customers can assess a service only after its use and interpretation (perception of its value), it is understandable that the perception of service quality precedes satisfaction (Lee G.G. et al., 2005).

Some authors consider quality to be the result of subjective customer decisions. Therefore, it is always better to define it as a subjective perception that refers to the evaluation of the service that the customer has encountered and to focus in particular on the type of services provided. The main responsibility of luxury hotels is to provide high quality services to customers, which suggests that in order to be successful in this sector, the hotel must offer maximum customer satisfaction, as well as a special experience.

When it comes to luxury hotels, customers seem to have higher expectations and thus find it harder to be satisfied with the services they offer, as research in the field shows. In this sense, although we would expect the satisfaction of the customers of luxury hotels to be higher, there is the possibility of being surprised by it actually being lower.

3. Research methodology

Luxury hotels are a less researched area in the studies carried out regarding the hotel industry at the level of our country and capital. In terms of the quality they provide and the degree of satisfaction of their customers, luxury hotels can be quite overestimated. Given that people who use this type of luxury services have very high expectations, the expectation-satisfaction ratio can be quite high.

The study offers an opportunity to ascertain a largely underestimated area of service quality, customer perceptions and the real experience of luxury hotels in Bucharest. The study also offers the opportunity to determine the changes or improvements needed to provide the highest quality hotel services to customers. Thus, the study aims to understand the expectations of luxury hotels' customers and the factors that determine their satisfaction.

This research is characterized as being quantitative, using a statistical analysis process to assess the degree of satisfaction of the customers who visited luxury hotels in Bucharest. Peterson and Wilson (1992) confirm that customer satisfaction appears to be typically measured by surveys. Surveys provide formal feedback to a company and send a positive signal to customers that the company is interested in them (Peterson and Wilson, 1992). This framework approach is carried out in the present study.

For this study, a questionnaire was structured based on the SERVQUAL model; however, it was adapted to the needs and desires of identifying the objectives proposed by this study. Thus, the questionnaire is structured in four essential dimensions for each client of a luxury hotel: appearance, staff, facilities, and performance. Each dimension, in its turn, comprises between 5 and 10 items for which the respondents must give a rating from 1 to 5, depending on the satisfaction they felt (Table 1).

In the second part of the questionnaire there are questions regarding the importance for the customers of the following types of services: valet parking, front desk, room service, cafe / restaurant. Here, the respondents were able to indicate the degree of importance versus performance that providing these services to the highest quality has for them by selecting a number on a scale from 1 to 5 (Table 2).

Therefore, the study uses a scale from 1 to 5, where 5 represents the highest satisfaction or importance and 1 represents the lowest satisfaction and importance; there was no 0, and thus it was excluded from the analysis. The sample of hotels for which the questionnaire was applied includes six 5-star hotels in the capital of our country: Hotel Lido by Phoenicia, Hilton Garden Inn, Concorde Old Bucharest Hotel, Hotel Berthelot, JW Marriot Bucharest Grand Hotel, Grand Boutique Hotel. The respondents are represented by the customers of these hotels who agreed to answer the questions in the questionnaire between 01.02.2020 and 01.03.2020. The sample of respondents consisted of 465 Romanian and international respondents, 283 male respondents (61.0%) and 182 female respondents (39.0%). The age of the respondents ranges between 31 and 72 years. The questionnaires, as mentioned above, were applied to the guests during check-out.

4. Findings

According to the obtained results, as shown in Table 1, the lowest degree of satisfaction was felt by consumers within the Appearance dimension, being less satisfied with the view offered by the hotel (3.9). On the other hand, the highest satisfaction was obtained within the Facilities dimension, the customers being very satisfied with the services provided within the restaurants.

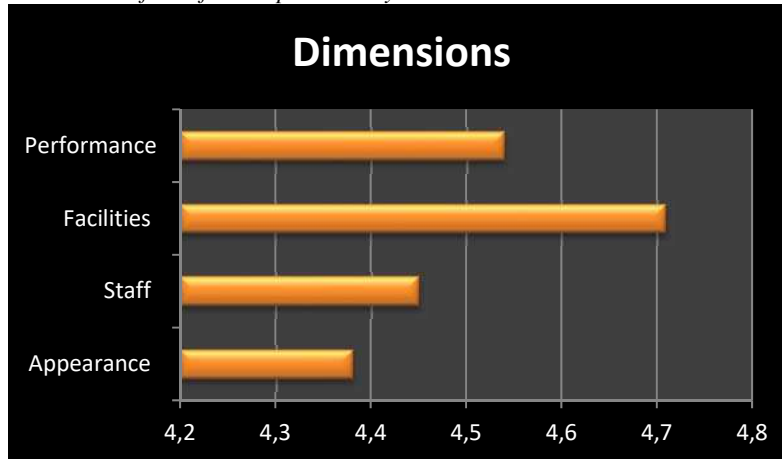
Table no. 1 The obtained results

Dimensions	Degree of satisfaction					Mean
	1	2	3	4	5	
Appearance						
First impression of the hotel			128	197	140	4.1
First impression of the staff's appearance			5	203	256	4.5
The furniture in the room		7	23	89	346	4.7
The ambiance in the restaurant		5	6	82	372	4.8
Cleanliness			98	124	243	4.3
The view		12	143	187	123	3.9
Staff						
First contact with hotel staff			101	123	241	4.3
Friendliness of staff			98	65	303	4.4
Staff's knowledge			34	198	232	4.4
Staff's promptness			45	76	344	4.6
Staff's availability			62	85	318	4.5
Solving requests			55	67	343	4.6
Use of an international language			86	92	287	4.4
Facilities						
Room's dimensions		4	18	45	398	4.8
Room's facilities		6	39	104	316	4.6
Restaurant		8	23	34	408	4.9
Room service			24	57	384	4.8
Valet		12	44	45	364	4.6
Gym and / or spa		3	34	34	394	4.8
Pool		4	23	56	386	4.8
Waking up services			13	56	396	4.7
Business center			47	75	343	4.6
Relaxation room			56	76	333	4.6
Separate luggage entrance		15	23	67	360	4.7
Performance						
Use of new technologies		4	53	66	342	4.6
Online booking system			23	67	375	4.8
Quality / price ratio		32	56	102	275	4.3
24/24 staff availability			59	78	328	4.6
Ability to meet requirements		34	43	106	282	4.4

Source: processing according to the results of the questionnaire.

Among the analyzed dimensions, the one that offered the greatest satisfaction to the respondent clients is the one related to the facilities offered by the luxury hotels where they were accommodated. What has been found is that these facilities are exactly what the guests staying at a luxury hotel are looking for. As a result, the score obtained by the hotels analyzed in terms of these aspects is satisfactory. The lowest score was obtained in the *Appearance* dimension, customers being less satisfied with the view and the appearance of the furniture in the rooms (see Figure 1).

Figure no. 1. The share of satisfaction provided by each dimension



Source: processing according to the results of the questionnaire.

In the second part of the study, an analysis was carried out on the four factors indicated by the hotels, namely: valet parking, front desk, room service, cafe / restaurant.

Table no. 2 The importance and performance provided by the four categories of analyzed services

	Importance	Performance	Difference
Valet parking	4.8	4.3	-0.5
Front desk	4.9	4.8	-0.1
Room service	4.7	4.8	+0.1
Cafe/restaurant	4.9	4.9	0

Source: processing according to the results of the questionnaire.

The prominent services with an average difference of more than 0.5 show a greater difference between the importance given to the services (the expectation) and the real experience based on the performance of the service (the satisfaction). The biggest difference was felt in terms of valet parking, where performance was lower than the importance given to this type of service. This indicates that hotel managerial staff must recognize the significance assigned to these services by the respondents. The difference between the importance and performance scores, as illustrated in the table, also identifies the degree of involvement of managers in those areas, as well as the extent to which it is necessary to make improvements.

The table shows that, in all the responses related to Room service, performance is greater than importance and the difference is statistically significant (Table 2). Furthermore, the scores illustrate the difference between importance and performance, which has managerial implications in improving quality. This case is one which demonstrates the involvement and performance of quality management in providing performant room service, above customer expectations.

The comparison between the importance and the actual performance of the internal cafe / restaurant reflects a different experience, the statistical results being equal. This indicates that customer expectations regarding hotel restaurants have been met.

Table 2 illustrates, overall, that the general importance was assessed more than the performance, and the average score difference of 0.3 indicates the statistical disparity in significance. This leads to an uneven situation, as the expectations of the participating respondents are not fully met, and usually this affects their perceptions regarding the quality of the services. However, two of the

dimensions can compensate for this discriminatory situation given that the scores offered by the cafe / restaurant and the room service equal and even exceed customer expectations.

5. Conclusions and recommendations

The factors which influence the activity of choosing a hotel are very complex. In order to understand these factors, an analysis of the results was performed on four basic dimensions: performance, facilities, staff, appearance. The results based on the dimensions suggest their impact on the repeated choice by the guests of the respective hotel. The model also helps identify the factors that could be changed in order to achieve greater customer satisfaction in the future. In this case, it is recommended to pay more attention to the Appearance dimension. Hotel managerial staff must ensure a positive impression in terms of Appearance from the outset. Given that the shortcomings have been recorded in terms of the view, an aspect which cannot be modified, compensation is required by offering other things that provide visual satisfaction, such as pieces of furniture or decoration. Continuous staff training is also required so as to be able to meet all customer requirements. Continuous improvement and modern times adaptability are absolutely necessary for luxury hotels' success.

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The Organizational Culture of State Operated Healthcare Facilities

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Abstract

The importance of intangible elements is essential to the success of an organization. They often make the difference between success and failure. In this context, we find it useful to tackle this topic in our paper, namely the organizational culture in state operated healthcare facilities. Based on a questionnaire, we aim to identify the dominant norms and values in a healthcare facility so as to obtain an x-ray of the organization that would be a starting point for the managerial staff in order to improve the organizational climate. Tangible/material goods are exclusive, limited. Intangible assets, such as the meaning of the work, its purpose, moral dignity, the feeling of belonging are unlimited. All these are things we can obtain and use in our interest and in the interest of others only in the communities in which we live and work. A revolution in the meaning of work is called for, and a first step is the existence of a strong organizational culture characterized by purpose, principles, and autonomy.

Key words: organizational culture, norms, values, belonging, behaviors

J.E.L. classification: M10, M12, M14

1. Introduction

Among the most important sources of well-being at work are the relationships we have with the people around us. Any large-scale human cooperation, including in an organization, draws its juice from the common myths existing in people's imagination (Kofman et al, 2019). This cooperation is based on a set of people's beliefs centered on what they value, their expectations regarding what others do and say.

Culture exists in people's minds. It is a largely subconscious map of how to proceed in accordance with the rules of the group and how to remain a respected member within it. Organizational culture is a model of the basic assumptions learned, discovered or developed by a certain group, a certain community, which has functioned well enough for a certain period of time and which is to be passed on to new members as the appropriate way to perceive, think and feel about life and work in the organization (Schein et al, 2016).

In the current period, when change is the dominant feature of all the socio-economic systems, it is necessary to manage the organizational culture, so as to ensure the constant adaptation to the permanent changes in the internal and external environment of the organization. The relationship between the culture and the performance of an organization is highlighted by the functions of the organizational culture: it strengthens the cohesion of the team of employees, it improves the external adaptation of the organization, it increases staff's loyalty by encouraging feelings of devotion and loyalty to the organization (Sirbu et al, 2009, pp. 49-54).

2. Literature review

The specialized literature abounds in definitions of and approaches to the organizational culture expression, such as: a set of symbols, ceremonies, and myths that convey the core beliefs and values of the organization to its members (Ouchi, 1981). Peters and Waterman (Peters et al, 1982) define culture as a coherent and predominant set of shared values, transmitted through symbolic means, such as myths, legends, slogans, anecdotes, stories. Culture represents the set of artificial products, core values and concepts, ways of thinking and behavior generally accepted in an organization as a common basis of action (Zorlentan et al, 1998). Nicolescu and Verboncu (Nicolescu et al, 2008) define culture as the set of values, beliefs, aspirations, behaviors outlined over time in each organization, which is predominant, and which directly and indirectly conditions its purpose and performance.

Values and norms are the main components of organizational culture. They determine how involved and productive employees are in achieving the company's objectives. The existence of a coherent and known system of values and norms is the basis of an organizational culture in which people are trying to achieve their personal goals at the same time with the interests of the group and of the community, in general.

3. Research methodology

In this paper, we have aimed to analyze the organizational culture of a state operated healthcare facility in Constanța County, by identifying the dominant values and norms in the organization with the help of a questionnaire (Kuckzmarski et al, 1995).

The questionnaire was filled in by 100 respondents employed in various management or operating positions, doctors, nurses, caregivers, orderlies, and technical-administrative staff.

The employees filled in the questionnaires anonymously, in order for us to obtain the most sincere answers, the respondents expressing their true opinion about the organization and their colleagues' behavior. For each of the 50 statements the respondent had to choose from the A, B, C or D options.

Grouping the 50 questions according to the questionnaire, we have, in the end, outlined the profile of the dominant norms within the healthcare facility, a profile described by the following elements:

- Pride of belonging to the organization;
- Concern for excellence;
- Team spirit;
- Trust in hierarchy;
- Concern for good management;
- Concern for colleagues;
- Concern for patients;
- Innovation;
- Interest in training;
- Atmosphere of trust within the organization.

4. Findings

The 50 questions, divided into groups of ten according to the questionnaire, define the 10 dominant norms which outline the organizational culture in the healthcare facility.

Following the answers received, we have used the interpretation grid of the questionnaire, and we have obtained for the 10 dominant norms and values within the organization, the following scores:

Table no. 1 *Pride of belonging to the organization*

Table no. 2 *Concern for excellence*

	A		B		C		D		Total
1	-8	-2	-20	-1	37	1	62	2	72
11	30	2	52	1	-21	-1	-8	-2	53
21	-10	-2	-25	-1	37	1	48	2	50
31	24	2	58	2	-16	-1	-10	-2	56
43	12	2	40	1	-35	1	-20	-2	-3
Result 227x 10:100 = 22,7%									

	A		B		C		D		Total
2	26	2	48	1	-27	-1	-8	-2	39
12	-4	-2	-28	-1	31	1	58	2	57
22	-12	-2	-28	-1	39	1	36	2	35
32	26	2	42	1	-23	-1	-10	-2	35
40	14	2	30	1	-41	-1	-18	-2	-15
Result 151x 10:100 = 15,1%									

Source: processing according to the results of the questionnaire.

Table no. 3 Team spirit

	A		B		C		D		Total
3	60	2	46	1	-14	-4	-4	-2	88
13	30	2	44	1	-26	-1	-14	-2	34
23	-4	-2	-20	-1	38	1	62	2	76
33	72	2	30	1	-22	-1	-4	-2	76
41	-6	-2	-14	-1	53	1	42	2	75
Result 349x 10:100 = 34,9%									

Table no. 4 Trust in hierarchy

	A		B		C		D		Total
4	42	2	38	1	-30	-1	-2	-2	48
14	28	2	38	1	-25	-1	-12	-2	23
24	32	2	45	1	-25	-1	-12	-2	40
34	34	2	51	1	-22	-1	-4	-2	59
42	-16	-2	-23	-1	36	1	48	2	45
Result 215x 10:100 = 21,5%									

Source: processing according to the results of the questionnaire.

Table no. 5 Concern for good management

	A		B		C		D		Total
5	26	2	41	1	-34	-1	-3	-2	25
15	-4	-2	-22	-2	37	1	54	2	65
25	-10	-2	-24	-1	42	1	40	2	48
35	20	2	42	1	-31	-1	-16	-2	15
44	40	2	45	1	-18	-1	-16	-2	51
Result 204x 10:100 = 20,4%									

Table no. 6 Concern for colleagues

	A		B		C		D		Total
6	-6	-2	-18	-1	20	1	92	2	88
16	52	2	43	1	-25	-1	-6	-2	69
26	42	2	42	1	-23	-1	-6	-2	55
45	-8	-2	-19	-1	28	1	80	2	81
46	46	2	44	1	-20	-1	-8	-2	62
Result 355x 10:100 = 35,5%									

Source: processing according to the results of the questionnaire.

Table no. 7 Concern for patients

	A		B		C		D		Total
7	0	-2	-28	-1	25	1	78	2	75
17	66	2	39	1	-15	-1	-8	-2	82
27	-2	-2	-21	-1	29	1	80	2	86
36	70	2	39	1	-13	-1	-4	-2	92
47	-8	-2	-31	-1	3	1	40	2	37
Result 372x 10:100 = 37,2%									

Table no. 8 Innovation

	A		B		C		D		Total
8	34	2	51	1	-15	-1	-6	-2	64
18	60	2	41	1	-18	-1	-4	-2	79
28	-4	-2	-22	-1	42	1	50	2	66
37	34	2	46	1	-24	-1	0	-2	56
48	-6	-2	-27	-1	39	1	44	2	50
Result 315x 10:100 = 31,5%									

Source: processing according to the results of the questionnaire.

Table no. 9 Interest in training

	A		B		C		D		Total
9	68	2	42	1	-14	-1	-4	-2	92
19	64	2	41	1	-13	-1	-10	-2	82
29	38	2	43	1	-29	-1	-2	-2	50
38	46	2	42	1	-24	-1	-2	-2	62
49	60	2	40	1	-18	-1	-8	-2	74
Result 360x 10:100 = 36%									

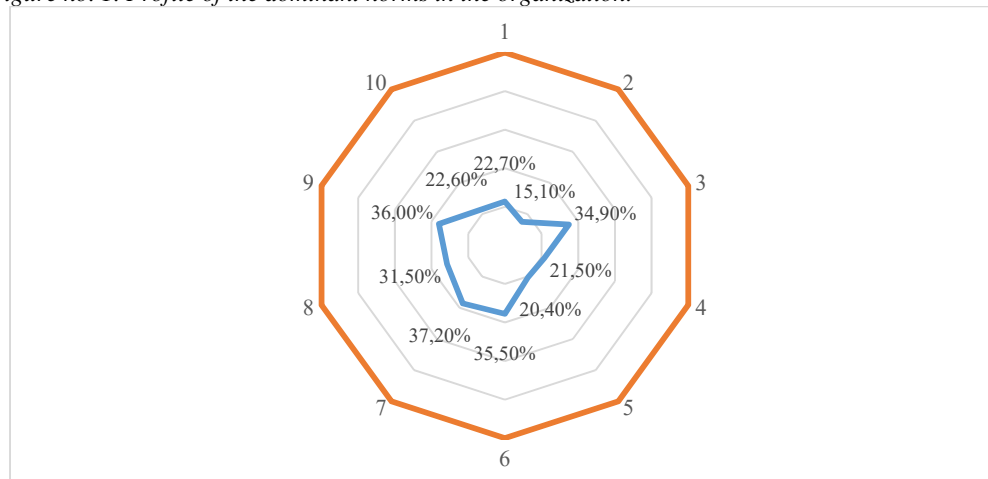
Table no. 10 Atmosphere of trust within the organization

	A		B		C		D		Total
10	40	2	44	1	-21	-1	-14	-2	53
20	28	2	47	1	-21	-1	-2	-2	34
30	28	2	47	1	-23	-1	-10	-2	42
39	-2	-2	-25	-1	39	1	46	2	58
50	-4	-2	-23	-1	22	1	44	2	39
Result 226x 10:100 = 22,6%									

Source: processing according to the results of the questionnaire.

Based on the above tables, the obtained results are presented in the following graph:

Figure no. 1. Profile of the dominant norms in the organization.



Source: processing according to the questionnaire interpretation grids.

By processing the data from this questionnaire, the shortcomings and the qualities of the staff emerged, but also their perception towards the organization. At the same time, the difficult situation we are in, a complicated and difficult to define period and far from the standard activity of the hospital have led to seeing the entire medical and non-medical staff in a new light, revealing the good, the less good or even bad things.

Given the evolution of the epidemiological situation caused by the spread of the new coronavirus, it was necessary to take specific measures to counteract and limit the spread of the virus and to protect the health of the citizens, putting a lot of pressure on all the medical and technical-administrative staff. The transformation, in a very short time, of the hospitals into Covid units, the arrangement of new circuits according to the norms, the establishment of the intensive care on call service, the change of the protective equipment at the entrance into the red zone also left their mark on the mental and emotional state of all the employees: doctors, nurses and auxiliary staff.

All these have led to a change in the perception of the organization, the behavior of employees towards each other and even towards patients, with some people becoming more and more involved in the activities of the hospital, while others had breakdowns.

5. Conclusions

Given the results obtained from the interpretation of the questionnaire, it can be said that there is a need for organizational change. The results of the study reflect the worrying situation which exists in many organizations in Romania in terms of the organizational climate and feelings of belonging and responsibility of the individual towards the work he/she puts in. The effort of the doctors, all of our efforts, would gain another synergy if we realized that at the base of the societies which survived are principles such as: quality, responsibility, altruism, trust, intangible elements that are difficult to obtain, but essential for the success of the organizations and for the overall good.

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Big Pharma, Big Business

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Abstract

Since their birth, human beings have tried to preserve their health in a good condition for as long as it is possible during their life, especially in modern times. The result was not only the appearance and development of the healthcare systems all over the world but also of many international healthcare organizations, non-governmental organizations and pharmaceutical companies. The development of new technologies, the growing elderly population, and the increasing need for complex healthcare products and services have been some of the factors that led to the expansion of Big Pharma at a global level. The aims of the paper are to present and briefly analyze the evolution of Big Pharma by their revenues in the last years. The paper shows the growing importance of the pharmaceutical sector. Also, it illustrates that Big Pharma are powerful companies and make businesses worldwide. Johnson & Johnson was by far the largest global pharmaceutical company by revenue in the period 2016-2020.

Key words: Big Pharma, pharmaceutical sector, healthcare, revenue, business

J.E.L. classification: F23, I00, L69

1. Introduction

Since their birth, human beings have tried to preserve their health in a good condition for as long as it is possible during their life, especially in modern times. The logical result was not only the appearance and development of the healthcare systems all over the world but also of many international healthcare organizations (e.g., the World Health Organization), non-governmental organizations and pharmaceutical companies. Since the beginning of 2020, the emergence and worldwide diffusion of the COVID-19 pandemic have profoundly challenged the healthcare systems worldwide (Allen, 2021).

In numerous developed countries, the healthcare sector accounts for 8 to 15 % or more of the gross domestic product (GDP), making it one of the largest in their economies (Walshe *et al*, 2011) and a key element in ensuring the well-being of their population (Dumit, 2012). It is said that the "provision of high quality and affordable health care is one of the greatest challenges facing the nations of the world" (Hall, 2012, p.v). At the national level, the government is responsible for the financing, provision and regulation of healthcare (Wendt *et al*, 2009).

The rise of the personalised medicine, the growing elderly population and the increasing need for complex healthcare products and services have been only three of the factors that led to the expansion of the big pharmaceutical companies- the so-called "Big Pharma"- at a global level. Today's age of uncertainty (Toma *et al*, 2015) and the development of new and disruptive technologies fueled by the Fourth Industrial Revolution (Ćwiklicki *et al*, 2020) require Big Pharma to continuously innovate and adapt their business models (Tohănean *et al*, 2018; Toma *et al*, 2018) to achieve business excellence (Toma *et al*, 2017). Their strategic options of a country or a geographic region in a highly competitive business environment (Toma *et al*, 2013) are influenced by various factors, such as competition, pandemic conditions or geopolitical instability.

The aims of the paper are to present and briefly analyze the evolution of Big Pharma by their revenues in the last years. The paper is structured as follows. The next section deals with the literature review. The research methodology is displayed in the third section of the paper. It is followed by the findings of the paper. The last section exhibits the conclusions.

2. Literature review

There is a plethora of studies related to the healthcare sector, in general, and the pharmaceutical sector, in particular. As one of the largest and complex economic sector, the healthcare sector consists of „all businesses involved in the provision and coordination of medical and related goods and services” (Investopedia, 2021, p.1). The following main types of companies are operating within the healthcare sector:

- drug manufacturers (e.g., biotechnology companies, pharmaceutical companies);
- medical equipment makers;
- managed healthcare firms;
- healthcare facilities companies (Investopedia, 2021).

On its turn, the pharmaceutical sector has proved to be essential in our society both in health and economic terms (Gascón *et al*, 2017). Pharmaceuticals are considered as “complex chemical structures but they can also be simple aromatic molecules like the anaesthetic, propofol (2,6-diisopropylphenol), simple aliphatic molecules like the vasodilator, nitroglycerine (1,2,3-trinitroxypropane), or more complex but still relatively low molecular weight molecules like the statin, atorvastatin (MW 558.6) ((3R,5R)-7-[2-(4-fluorophenyl)-3-phenyl-4-(phenylcarbamoyl)-5-propan-2-ylpyrrol-1-yl]-3,5-dihydroxyheptanoic acid)” (Taylor, 2016, p.4). The pharmaceutical sector has some specific features. First, it has made and continues to make an important contribution to human wellbeing. Second, the pharmaceutical sector encompasses a relatively small number of Big Pharma. Third, it represents one of the largest sector in most economies.

Big Pharma is a nickname given to the world’s largest pharmaceutical companies that represent some of the most powerful business organizations at the global level. In other words, Big Pharma constitutes “a term for the world’s largest publicly traded pharmaceutical companies” (Compton, 2021, p.1). It is said that “the current big pharma model is transitioning to that of a lean, focused company with a research footprint within key innovation bioclusters and a growing revenue stream from specialty products and biologics and emerging markets” (Gautam *et al*, 2016, p.379). Big Pharma are characterized by the following elements:

- They are risky business.
- Most of them own subsidiaries worldwide.
- They provide many jobs all over the world.
- They contribute to human wellbeing.
- They heavily invest in research and development but also in marketing.
- They highly contribute to the GDP of the host countries.
- They are often criticised for their manipulative tactics to influence public opinion and increase sales.
- They have been involved in many corporate scandals and paid numerous fines for fraud.

Nowadays, Big Pharma are representing important players in the global economy. Their profits for prescription drugs are expected to reach \$610 billion this year (Compton, 2021).

3. Research methodology

In order to achieve the aims of the paper, the authors used a quantitative research method based on a desk-research analysis. First, they identified and collected various secondary data by carrying on a comprehensive literature review. Second, the authors revised numerous articles, reports and books found in Romanian libraries and electronic databases. Third, they classified, analyzed, and synthesized the data. Fourth, they designed and elaborated the paper.

4. Findings

The American colossus Johnson & Johnson dominated the top of Big Pharma by their revenues in the period 2016-2018 (Table no. 1, 2 and 3). The headquarters of the first 15 largest pharmaceutical companies retailers were located in the following countries:

- USA- eight companies;
- Switzerland- two companies;
- United Kingdom- two companies;
- Germany- one company in 2016, two companies in 2017 and 2018;
- France- one company;
- Israel- one company in 2016 and 2017.

Table no. 1. Top 15 global pharma companies by 2016 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	71.89
2	Pfizer	USA	52.82
3	Roche	Switzerland	50.07
4	Novartis	Switzerland	49.44
5	Merck & Co.	USA	39.80
6	Sanofi	France	38.52
7	GlaxoSmithKline	United Kingdom	37.93
8	Gilead Sciences	USA	30.39
9	Bayer	Germany	27.78
10	AbbVie	USA	25.63
11	AstraZeneca	United Kingdom	23.00
12	Amgen	USA	22.99
13	Teva Pharmaceutical Industries	Israel	21.90
14	Ely Lilly	USA	21.22
15	Bristol-Myers Squibb	USA	19.43

Source: (Sagonowsky, 2018)

Table no. 2. Top 15 global pharma companies by 2017 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	76.45
2	Roche	Switzerland	54.12
3	Pfizer	USA	52.55
4	Novartis	Switzerland	50.14
5	Sanofi	France	40.91
6	Merck & Co.	USA	40.12
7	GlaxoSmithKline	United Kingdom	39.24
8	Bayer	Germany	28.74
9	AbbVie	USA	28.22
10	Gilead Sciences	USA	26.11
11	Ely Lilly	USA	22.87
12	Amgen	USA	22.85
13	AstraZeneca	United Kingdom	22.50
14	Teva Pharmaceutical Industries	Israel	22.38
15	Bristol-Myers Squibb	USA	20.77

Source: (Sagonowsky, 2018)

Table no. 3. Top 15 global pharma companies by 2018 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	81.60
2	Roche	Switzerland	58.76
3	Pfizer	USA	53.64
4	Novartis	Switzerland	44.75
5	Merck & Co.	USA	42.29
6	GlaxoSmithKline	United Kingdom	40.96
7	Sanofi	France	38.59
8	AbbVie	USA	32.75
9	Bayer	Germany	28.39
10	Amgen	USA	23.75
11	Bristol-Myers Squibb	USA	22.56
12	Gilead Sciences	USA	22.13
13	Ely Lilly	USA	21.50
14	AstraZeneca	United Kingdom	21.05
15	Boehringer Ingelheim	Germany	20.67

Source: (Sagonowsky, 2020)

In the period 2019-2020, Johnson & Johnson remained the leader of the top of Big Pharma by their revenues (Table no. 4 and 5). The headquarters of the first 15 largest pharmaceutical companies retailers were located in the following countries:

- USA- eight companies;
- Switzerland- two companies;
- United Kingdom (UK)- two companies;
- Germany- one company;
- France- one company;
- Japan- one company.

Table no. 4. Top 15 global pharma companies by 2019 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	82.10
2	Roche	Switzerland	65.40
3	Pfizer	USA	51.75
4	Novartis	Switzerland	47.45
5	Merck & Co.	USA	46.84
6	GlaxoSmithKline	United Kingdom	43.32
7	Sanofi	France	40.46
8	AbbVie	USA	33.27
9	Takeda	Japan	30.27
10	Bayer	Germany	26.59
11	Bristol-Myers Squibb	USA	26.15
12	AstraZeneca	United Kingdom	24.38
13	Amgen	USA	23.36
14	Gilead Sciences	USA	22.45
15	Ely Lilly	USA	22.32

Source: (Sagonowsky, 2021)

Table no. 5. Top 15 global pharma companies by 2020 revenue

Ranking	Company	Home country	Revenue (\$ billions)
1	Johnson & Johnson	USA	82.60
2	Roche	Switzerland	62.05
3	Pfizer	USA	41.90
4	Novartis	Switzerland	48.66
5	Merck & Co.	USA	48.00
6	GlaxoSmithKline	United Kingdom	43.77
7	Sanofi	France	41.08
8	AbbVie	USA	45.80
9	Takeda	Japan	29.25
10	Bayer	Germany	25.71
11	Bristol-Myers Squibb	USA	42.52
12	AstraZeneca	United Kingdom	26.62
13	Amgen	USA	25.42
14	Gilead Sciences	USA	24.69
15	Ely Lilly	USA	24.54

Source: (Sagonowsky, 2021)

The sales forecast for 2021 indicates almost the same leading Big Pharma in the top as in the previous period but the leader will be the Swiss-based company Roche (Table no. 6).

Table no. 6. Sales forecast of the leading pharmaceutical companies worldwide for 2021

Ranking	Company	Home country	Sales (\$ billions)
1	Roche	Switzerland	51.30
2	Novartis	Switzerland	51.00
3	AbbVie	USA	50.50
4	Johnson & Johnson	USA	46.90
5	Bristol-Myers Squibb	USA	46.00
6	Pfizer	USA	45.60
7	Merck & Co.	USA	44.80
8	Sanofi	France	44.00
9	GlaxoSmithKline	United Kingdom	39.00
10	Takeda	Japan	30.50

Source: (Mikulic, 2021)

The total revenues of the 15 global Big Pharma increased in the period 2016-2020. Starting from the above statistics several issues can be outlined as follows:

- The global pharmaceutical industry has been and is still dominated by powerful multi- and transnational corporations.
- More than 50% were US-based companies.
- North America and Europe were the main locations of the leading 15 Big Pharma.
- Johnson & Johnson dominated the top of the global pharmaceutical companies.
- The top remained pretty the same in the period 2016-2020.
- The vast majority of the leading 15 Big Pharma achieved better results from one year to another.

5. Conclusions

The global pharmaceutical sector has become a topic of interest for many researchers and practitioners all over the world, especially in the past decades. As a consequence of the rapid diffusion of the globalization process, the leading Big Pharma are doing business worldwide.

The paper shows the growing importance of the pharmaceutical sector both in health and economic terms. It analyses the evolution of the leading 15 Big Pharma in recent years, mostly located in North America and Europe. They are huge and powerful companies and make businesses at a global level. Johnson & Johnson was by far the largest global pharmaceutical company by

revenue in the period 2016-2020.

Further researches may broaden this study by taking into account the analysis of other economic indicators, such as the number of employees, price/earnings ratio, or profit.

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Section V

Finance and Accounting

Artificial Intelligence Models for Financial Time Series

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Abstract

Modeling and predicting the evolution of financial series has become an essential research domain for scientists and practitioners in the field of economics or finance. In this context, the purpose of this article is to determine two artificial intelligence alternative models for NYSE monthly series recorded for 53 years and to compare their performances.

Key words: Time series, GEP, SVR, MSE, MAE, MAPE.

J.E.L. classification: C32, C58

1. Introduction

Modeling the financial market is closely linked to the assumption of Adaptive Market Hypotheses (Lo, 2004) that represent a harmonization of economic theories constructed on the Efficient Market Hypothesis with behavioral economics. Given the highly nonlinear dynamics of the stock market and the stochastic behavior of some elements, modeling such series by classical methods is inappropriate. Therefore, alternative methods have been proposed for solving such problems, most of them being recently based on artificial intelligence methods.

In this context, this article proposes a Gene Expression Modeling and a Support Vector Regression models for the New York Stock Exchange (NYSE) weekly close data series recorded during the period 27/12/1965-4/12/2018 (2764 values) and to compare the results.

2. Theoretical background

Using techniques of artificial intelligence, researchers conducted forecasting studies in various financial areas, such as money exchange markets (Álvarez-Díaz, 2010; Sermpinis *et al.*, 2012; Vasilakis *et al.*, 2013), macro-economic time series (Thakur *et al.*, 2008; Postolache and Arton, 2013), financial time series (Bărbulescu, 2018; Bărbulescu and Băutu 2012; Karatahansopoulos *et al.*, 2014; Simian *et al.*, 2020; Dragomir, 2017; Tache, 2009, Tache *et al.*, 2010), forecasting of mutual funds (Tsai *et al.*, 2011; Chen *et al.*, 2014). Most studies show that the objectives of time series analysis are the interpretation of past series fluctuations and the determination of a behavioral pattern, followed by the prediction of future behavior based on the found pattern (Barbulescu and Postolache, 2021; Martinez Alvares, 2010). Many scientists investigated the variations in structure and behavior of the complex adaptive systems, one typical example being the stock markets. The evolution of the stock indices is a clear and complete image of the global equity market and the real economy. The stock indices that are subject to modeling present similarities: are price-weighted indexes and their components are periodically revised.

John Holland's (1992) theory demonstrated how the evolutionary process can be assigned to artificial systems. It was shown that any adaptation issue can be defined in genetic terms and can often be explained by what the scientific literature calls the "genetic algorithm". These algorithms are search methods built on the natural selection mechanics on which the fittest individual survives.

Koza defined the Genetic Programming paradigm as a generalization of Holland’s Genetic Algorithms (Langdon and Poli, 2002). Some advantages of genetic algorithms are presented by (Arifovic and Gençay, 2000).

The applications of genetic algorithms to economic modeling consist primarily of an investigation of the systems’ behavior by computer simulations. Several alternatives of Genetic Programming have been subsequently developed and the different models used to encode the solutions prompt the distinctions among them. In this article, the Gene Expression Programming algorithm (GEP) (Ferreira, 2001) is utilized.

3. Research methodology

3.1. GEP

GEP is an automatic programming algorithm that relies on the natural selection principle. The idea is to represent the solutions of the study problem as individuals whose evolution is assured utilizing genetic operators. The GEP individuals are composed of genes with the same length, which code expressions that are generally nonlinear. A gene has two parts - a head and a tail. The number of genes should be set by the user. The methods used in GEP for selecting the individuals are the proportionate roulette-wheel scheme and simple elitism. A measure of performance is utilized for evaluating the individuals in each generation, the result being a number of fitness values equal to the number of individuals. The individuals with the best fitness are selected and participate in the replication process. The mutation, transposition, and crossover are operations utilized for performing the evolution.

The goal of time series modeling by GEP is finding a model that approximates well the recorded values, $\{x_1, \dots, x_n\}$. This can be done in the following stages:

- Define the fitness function;
- Select the sets of terminals and functions to create chromosomes. The most used set of functions is formed by addition, multiplication, subtraction, and division;
- Select the structure of the chromosome and the number of genes;
- Select the linking function;
- Select the operators that participate in the algorithm and the corresponding rates.

Choosing the window size, m , is essential in GEP in the estimation of x_t which is given by:

$$x_t = f(x_{t-m}, x_{t-m+1}, \dots, x_{t-1}) + \varepsilon_t, m+1 \leq t \leq n. \quad (1)$$

The fitness we are working with is defined by:

$$MSE = \frac{1}{n-1} \sum_{t=1}^n (x_t - \hat{x}_t)^2 \quad (2)$$

where x_t and \hat{x}_t are the given and computed values, respectively, n is the sample volume.

The experiments performed used the DTREG software, setting the maximum number of genes in a chromosome to 6, the gene head size = 5 symbols, the population size = 1000, the maximum number of generations = 200. The default values of the GEP operator rates have been employed. The set of functions utilized were the four basic arithmetic operations, together with sine and cosine. the selection scheme, the fitness proportionate selection, enhanced with elitist survival of the best 10% of the individuals in each generation onto the next. We performed 50 runs for each window size in the interval [1,12] and we report the best models found.

2.2. Support Vector Regression (SVR)

SVR is a supervised learning technique based on the errors’ minimization principle (Sapankevych and Sankar, 2009). SVR uses a set of training data instances (x_i, y_i) for building a function f , utilized for estimating the y_i -s where only x_j -s are known. The model is firstly trained on a dataset, then evaluated on another set, completely different from the first one, called a test set. The model’s accuracy is assessed by different indicators, presented in tables in the next section.

ε – SVR (Vapnik, 1995) utilizes an ε -insensitive loss function to minimize the generalized error (Basak *et al*, 2007; Smola and Scholkopf, 2004). The imposed constraints transform the problem at hand into a convex optimization one.

An equivalent form of the problem to be solved is: find the minimum of the function

$$\left\{ \frac{1}{2} \|w\|^2 + C \sum_{i=1}^m (\xi_i + \xi_i^*) \right\} \quad (3)$$

under the constraints:

$$\begin{cases} y_i - \langle w, x_i \rangle - b \leq \varepsilon + \xi_i \\ \langle w, x_i \rangle + b - y_i \leq \varepsilon + \xi_i^* \\ \xi_i, \xi_i^* \geq 0 \end{cases} \quad (4)$$

Utilizing the dual problem, the objective function f becomes:

$$f(x) = \sum_{i=1}^m (\alpha_i - \alpha_i^*) \langle x_i, x \rangle + b, \quad (5)$$

with

$$\sum_{i=1}^m (\alpha_i - \alpha_i^*) = 0, \alpha_i, \alpha_i^* \in [0, C]. \quad (6)$$

The optimization constant C and the parameter ε have to be estimated.

For finding the solution to a non-linear problem, the input data is projected on a Hilbert space. This operation transforms the problem to be solved in a new problem involving the use of a kernel function (Smola and Scholkopf, 2004; Specht, 1992). For performing the forecast, the choice of kernel parameters should be provided. This selection is many times realized by hand, and then the parameters are adjusted based on the experimental results.

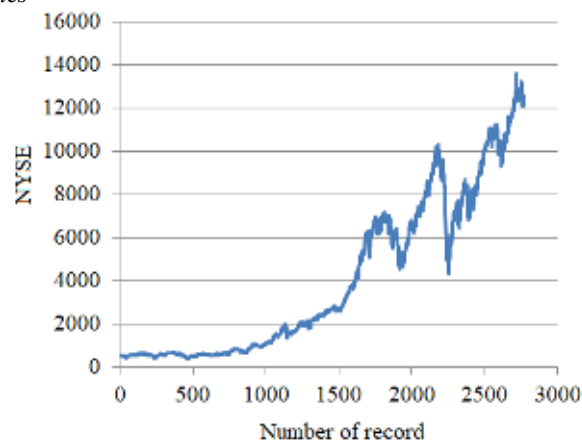
Different software can be used to perform the modeling, among which R and DTREG.

The algorithms have been run for the data obtained by taking logarithms, and the predictor variables form lag 1 to lag 5, using DTREG. The best result is reported. The search criterion was the minimization of the total error and the kernel used was RBF.

3.2. Data series

Data used for this modeling are weekly close data of the New York Stock Exchange (NYSE) recorded during the period 27/12/1965-4/12/2018. Data series is presented in Figure 1.

Figure no.1. Data series



Source: Chart built by the authors using the data from <https://www.nyse.com/market-data/historical>

For the study purpose, the logarithm has been applied to the series values. The new series is called lnNYSE in the following.

4. Findings

The series has been divided into two parts, in a ratio 95:5, the first one for training and the second one for test.

Running GEP algorithm with different lag variables as regressors, the best results, in terms of errors have been obtained when using GEP with lag 1 regressor. The generated expression is

$$\ln\text{NYSE} = \ln\text{NYSE_Lag1} + (0.0003905/\ln\text{NYSE_Lag1}) + 0.0010894. \quad (7)$$

The goodness of fit indicators are presented Table 1 for both, training and validation datasets. On both sets, the MSE, MAE, and MAPE have low values, while the correlation actual - predicted values has a value close to unity, showing high performances of the algorithm.

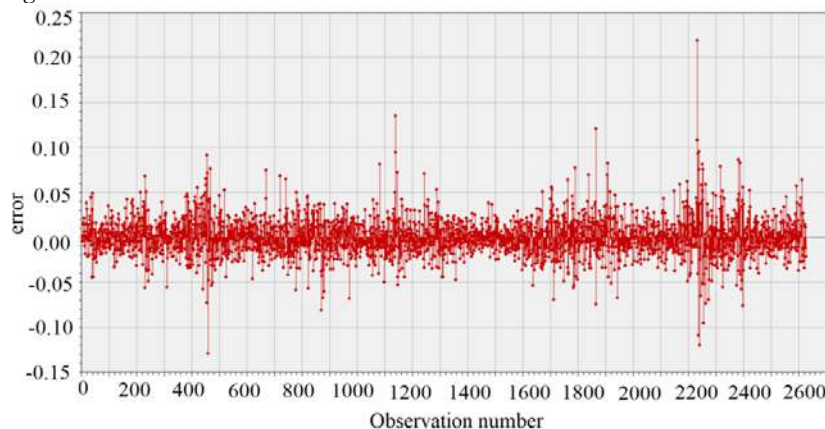
Figure 2 presents the errors in the GEP model. All but six of them are between -0.10 and 0.10, with a very low variance (row 1, in Table 1)

Table no. 1 Goodness of fit indicators in the GEP algorithm

Indicator	Training	Test
Residual (unexplained) variance after model fit	0.0013651	0.0042944
Coefficient of variation (CV)	0.0048230	0.0069890
Correlation between actual and predicted	0.9994450	0.9155540
MSE (Mean Squared Error)	0.0013651	0.0042944
MAE (Mean Absolute Error)	0.0166131	0.0551799
MAPE (Mean Absolute Percentage Error)	0.2227928	0.5859089

Source: Output of the modeling using the DTREG software

Figure no. 2. Errors in the GEP model



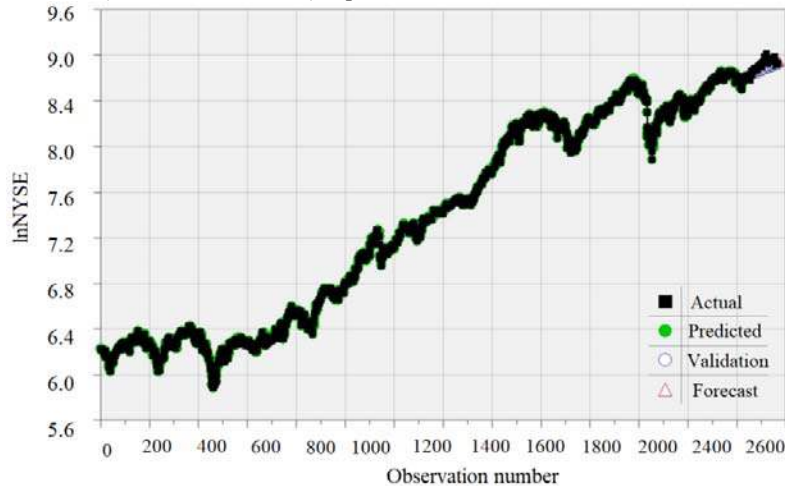
Source: Output of the modeling using the DTREG software

Based on the determined model (trained on 95% of data and tested on 5% of data), the forecast for the next 12 months after the end of the study period is also done and the values are represented in Figure 3 together with the actual values (recorded) and predicted values (estimated by the model). There is a good concordance between the recorded and predicted values. The model's performance is emphasized by the absolute values of the difference between the recorded and predicted values as well. They are lower than 2% for most data on the test set (and much lower on the training one) showing that the algorithm learns well the data and applies what it learned on the new (test) data.

The analysis or the autocorrelation and partial autocorrelation functions of the residual show the autocorrelation absence, which means that the errors will not propagate in the model.

The same study has been performed using the SVR algorithm. We report here the best result, for which the computed minimum error was 0.000487, for the parameters $\epsilon = 0.001$, $C = 2928.66286$, when using the five regressors (lag1 - lag5 variables). Table 2 contains the goodness of fit indicators. On the training set, the performances of GEP and SVR are comparable. On the test set, in terms of all indicators from Table no. 1, but the correlation actual - predicted values, GEP is better. MAPE is much higher for SVR, showing a higher ratio of error over the actual values. Since MAPE is not dimensional, it is a better indicator for comparing the modeling results when many algorithms are utilized. Base on it, GEP is recommended for modeling the study series.

Figure no. 3. Graphical representation of actual values (black squares), predicted values (green- there are the values estimated by the algorithm), and the forecast (red triangles) for the next 12 weeks. The blue dots (called “Validation”) represent the estimated values on the test set



Source: Output of the modeling using the DTREG software

Table no. 2 Goodness of fit indicators in the SVR algorithm with 5 regressors

Indicator	Training	Test
Residual (unexplained) variance after model fit	0.0015121	0.0181238
Coefficient of variation (CV)	0.0050760	0.0143580
Correlation between actual and predicted	0.9993870	0.9325220
MSE (Mean Squared Error)	0.0015121	0.0181238
MAE (Mean Absolute Error)	0.0168513	0.1170115
MAPE (Mean Absolute Percentage Error)	0.2270184	1.2422628

Source: Output of the modeling using the DTREG software

5. Conclusions

Two artificial intelligence approaches for modeling NYSE weekly series for 53 years have been presented in this article. The study series was long, nonstationary in trend, with high variability. This is why the logarithm on the series values has been taken before modeling. Even if the best results have been obtained by GEP, the second algorithm was a good competitor. What recommends the first approach is MAPE, which was more than twice lower for GEP compared to the value obtained by using SVR. Another more important aspect, not mentioned yet, is the run time, which was few minutes for each GEP run, compared with few hours for SVR. As a future work direction, hybrid methods should be tested for increasing the obtained results quality.

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Estimating Volatility and Investment Risk: An Empirical Case Study for NIFTY MIDCAP 50 Index of National Stock Exchange (NSE) in India

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Abstract

This study evaluates performance of Indian index considering NIFTY MIDCAP 50 index daily series returns. Autoregressive model EGARCH forecasts the volatility predictability and empirically analyze volatility pattern considering daily returns from NIFTY 50 index. The study tests presence of asymmetry in volatility transmitting patterns, Movement of higher positive and negative magnitude of shocks and fitness of the model. For this purpose data series considered from October 2007 to April 2021 consisting 3321 daily observations. This empirical study also attempts to capture the opportunity for investment returns and involvement of risk. Findings provide financial series movement, volatility sketches, summary of statistics and property of EGARCH model and fitness of series returns in EGARCH model.

Key words: emerging stock market, returns, volatility pattern, investment risk

J.E.L. classification: G10, G11, G15

1. Introduction

The approach of an investor to execute the trade practice creates larger difference in impact on movement of price. Intra-day operators create stronger impact on price change. Financial markets are one of the parameter of any economy. This paper focuses to test presence of asymmetry in series return of NIFTY MIDCAP 50 index which consist of 50 top selected stocks with weighted average and changes of volume and trade makes changes in index. NIFTY MIDCAP 50 index captures impact of global financial crisis and also COVID-19 pandemic during selected time period. The index movement provides information about short and long memories created from several small and large magnitudes of shocks. Several researchers attempted to forecast, predict and modeling the behaviour of NIFTY50 cash market, future and option market. For instance, Bendob and Bentouir (2019) worked on option pricing, abstracting investment behaviour and various techniques and choices that evolve in option market. The study covers details from launch of option trading since 1973. The main finding of paper indicates high level of volatility in the money category.

2. Literature review

In the existing literature, there is a large amount of information that can be abstracted from historical financial series returns, for instance to check presence of leverage effect, i.e. if that series movement follows long memory for news impact. Different investors follow investing to specific sector or market based on different reasons. For instance, higher volatility, prospects for greater or faster returns. In India, FIIs been increasing their inflow. The study conducted by Sathyanarayana and Garghesha (2019) provides useful insights about change in investment by FIIs in Sensex and NIFTY50 index. Moreover, this study provides information about policy set off by the regulatory, SEBI. Further, Kumar et al. (2020) assessed commonality in liquidity considering the NIFTY50 stocks from the Indian emerging stock, by using high frequency data from across variety of liquidity measures. A very important aspect of the empirical framework was to examine the movements in stock liquidity. Choudhary et al. (2019) explored the relationship between FIIs herding and returns considering empirical evidence from NIFTY50 market of India for the sample period from January 1999 to May 2017. On the other hand, the authors also concluded that foreign institutional investors also known as FIIs represent an essential pillar in the case of financial markets, but trading volume did not revealed any connection with herding.

Spulbar et al. (2020) argued that international portfolio diversification is very important for long-term investment strategies. Trivedi et al. (2021) investigated volatility spillovers, cross-market correlation, and comovements for a cluster of developed and emerging stock markets from European Union. The empirical findings based on EGARCH model highlighted the existence of leverage effects in the cluster of selected European stock markets thus suggesting that negative shocks strongly influence the behavior of sample markets. Sucarrat (2013) demonstrated usage of variety of GARCH family models including EGARCH with various indices including National Stock Exchange index. Finding indicates that model allows heavy tails and skewness in the conditional return. Zulfiqar et al. (2020) conducted a complex empirical study and concluded that stock markets which function in the context of an efficient governance and institutional environments are able to achieve superior performance on stock returns and a lower level of risk. Ejaz et al. (2020) suggested that emerging stock markets are characterized by more tempting portfolio diversification opportunities compared to developed stock markets.

3. Research methodology

We consider NIFTY50 volatility estimation, testing of presence of leverage effect using Exponential GARCH (EGARCH) model considering a number of 3331 daily observations for the sample period from October 2007 to April 2021. We run EGARCH model designed by Nelson (1991). The details of methodology are the following:

Log conversion:

$$r_t = \ln\left(\frac{p_t}{p_{t-1}}\right) = \ln(p_t) - \ln(p_{t-1})$$

ADF process:

$$(1 - L)y_t = \beta_0 + (\alpha - 1)y_t - 1 + \varepsilon_t$$

EGARCH model:

$$\log(\sigma_t^2) = \omega + \sum_{j=1}^p \beta_j \log(\sigma_{t-j}^2) + \sum_{j=1}^q \alpha_j \left(\frac{\varepsilon_{t-j}}{\sigma_{t-j}} \left| \frac{-\sqrt{2}}{n} \right| - y_{t-j} \frac{\varepsilon_{t-j}}{\sigma_{t-j}} \right)$$

Exponential GARCH, or popularly known as EGARCH, the model developed by Nelson (1991) which captures asymmetric responses of time-vary variances to volatility shocks and also ensures that variance is always positive.

4. Empirical results

The property of summary of statistics provides merely zero mean with 0.014 degree of standard deviation. The negative skewness and excess of kurtosis increases risk factor in the NIFTY50 returns. The abnormal pattern of kurtosis indicates presence of leptokurtik impact on the series returns.

Table no.1. Summary Statistics

Mean	Median	Minimum	Maximum
0.00032939	0.00062348	-0.13904	0.16334
Std. Dev.	C.V.	Skewness	Ex. kurtosis
0.014322	43.480	-0.24375	13.593
5% Perc.	95% Perc.	IQ range	Missing obs.
-0.020863	0.020361	0.012833	1

Source: Author's computation

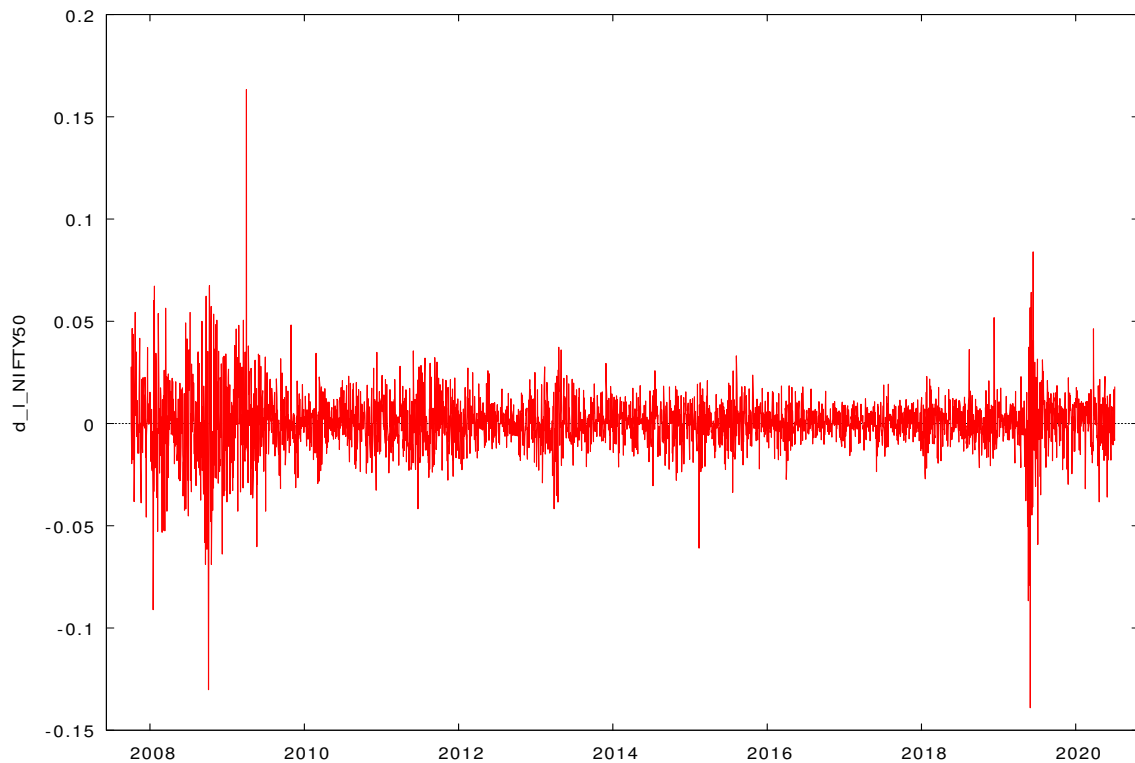
The study covers NIFTY 50 movement from index level less than 3000 to over 15000, making index trading over 5 times in duration of about 13 years. The series movement (See Fig1) indicates that only at time of global financial crisis, the index made its lowest trading points. However, the COVID-19, pandemic impact clearly visible on the series returns.

Figure no.1. NIFTY MIDCAP 50 index movement pattern



Source: Author's computation

Figure no. 2. Stationary Series movement pattern for NIFTY MIDCAP 50 index for the sample period from October 2007 to April 2021



Source: Author's computation

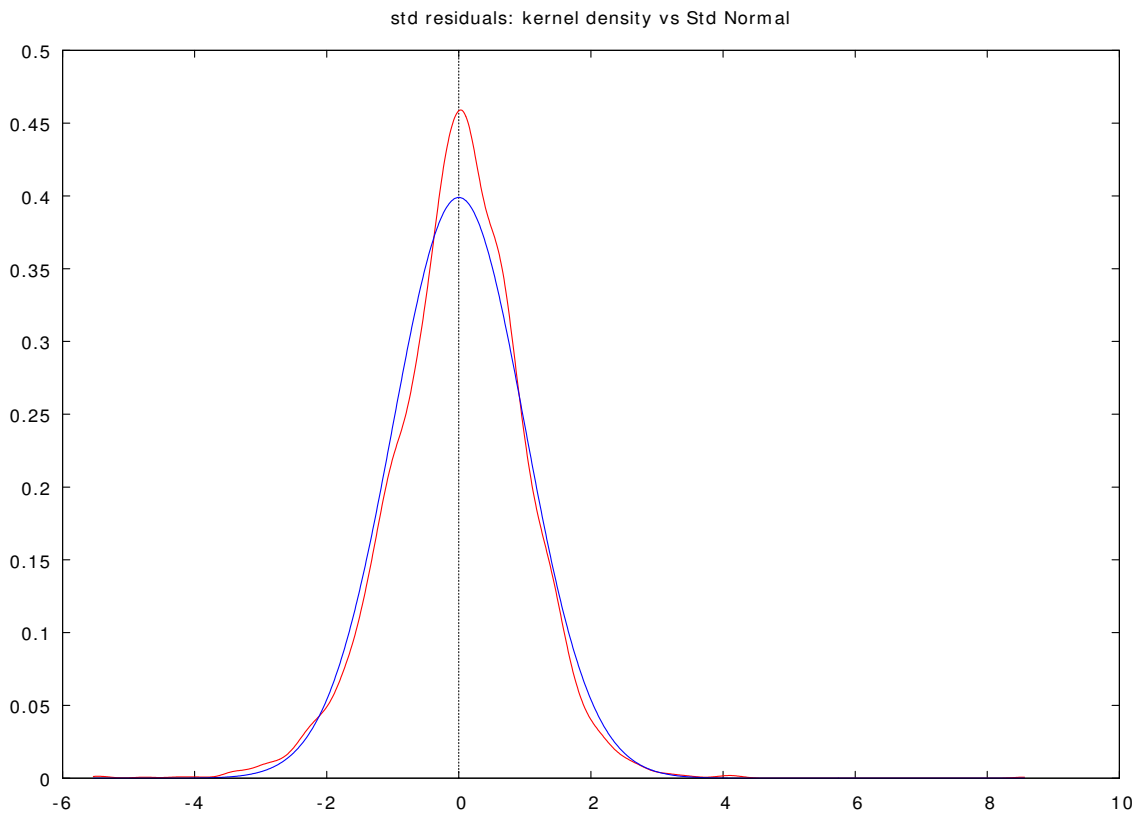
The property of Fig2 indicates (after conversion of log return and considering first log difference) stationary, also allows to observe small and large volatility sketches from the selected period. To test the normality of returns (before employing EGARCH) we tested Augmented Dickey-Fuller test, testing down from 28 lags, criterion BIC method and considering sample size 3328, unit-root null hypothesis: $a = 1$. The test with constant including 0 lags $(1-L)y = b_0 + (a-1)*y(-1) + e$, estimated value of $(a - 1)$: -0.9576, test statistic: $\tau_c(1) = -55.2936$ and derived p-value 0.0001, the 1st-order autocorrelation coeff. for e: 0.001.

Table no.2. Statistical property of EGARCH model using NIFTY MIDCAP 50 index

Conditional mean equation					
	coefficient	std. error	z	p-value	
Const	0.000314567	0.000187292	1.680	0.0930 *	
Conditional variance equation					
omega	-0.260	0.039	-6.571	4.99e-011 ***	
alpha	0.164		0.022	7.424	1.14e-013 ***
gamma	-0.098	0.016	-5.777	7.60e-09 ***	
beta	0.985	0.004	232.3	0.0000 ***	
Llik:	10255.50844	AIC: -20501.01688			
BIC:	-20470.46474	HQC: -20490.08537			

Source: Author's computation

Figure no.3. EGARCH model density vs. Standard normal distribution



Source: Author's computation

5. Conclusions

The the previous empirical results provide a relevant comparative framework on standard density and EGARCH (Exponential GARCH) model plotted in the figure 3. This indicates a measurement of abnormality in volatility and density of high magnitude in case of return series. We considered the value of BIC in order to measure the fitness and significance of empirical results. The statistical property for conditional mean equation is significant at the significance degree of 10% whereas, variance equation fitted perfectly at degree of 1%, suggesting the highest significance. The value of BIC is considered at -20470 and highlighted the fact that EGARCH model can be used to estimate the volatility spillovers in case of NIFTY50 stock market index returns. Moreover, EGARCH model also provides significant results suggesting the presence of leverage effects (asymmetry) in selected financial series. It also indicates that negative shocks (volatility) will repeat the negative shocks for a longer period of time.

One of the main limitations of this research study is the selection of only one stock market, such as the Indian stock market. For future research studies, we will consider a comparative empirical analysis between the countries of the European Union and BRICS member states. Moreover, the research methodology will be diversified by including hybrid techniques and we will also extend the selected time interval.

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Underevaluation of the Taxable Base as a Result of Policies Aggressive Accountants Source Generator of Tax Fraud

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Abstract

All economists, regardless of doctrinal orientation, agree that information in general and accounting information in particular play a key role in economic action. The objectives of this paper were to present and clarify issues related to the underestimation of the tax base as a result of aggressive accounting policies generating tax fraud, concepts, evolution and trends in tax fraud in Romania. In order to identify the phenomena of fraud or tax evasion, based on the risk analysis, it was decided to use the econometric analysis. Accounting information is a topic frequently debated and analyzed in both academia and business, having a special relevance for its users, including for institutions authorized by the state that have the obligation to identify and combat the underground economy, especially evasion and of tax fraud.

Key words: accounting information, accounting policies, tax base, tax fraud, evasion

J.E.L. classification: M21, M41, E62, E63

1. Introduction

Both from the evaluations of national and international bodies, and from public sources available, it turns out that tax fraud and evasion has spread in Romania, in particular in recent years.

The constant expansion of markets, the diversity and versatility of trade, the development of rapid methods of communication, in accordance with national legislation and imperfect or non-harmonized international, have favored the proliferation of fraud and tax evasion, with its consequences on the national economy.

In the first forms of manifestation, cases of fraud and tax evasion were generated especially from the misunderstanding of the specific legislation and its functioning mechanism, on the merits stimulating exports and imports, improving financial discipline, etc. But later, the phenomena of fraud and tax evasion escalated precisely as a result a good understanding of the specific legislation and the mechanism of operation, context in which subjects prone to this phenomenon have speculated on legal opportunities and imperfections VAT operating mechanism.

After the introduction of VAT in the national legislation, there were several important moments that they have marked an increase in fraud or tax evasion, but the moment was important 01.01.2007 Romania's accession to the European Union, moment from which the exchanges the country's trade prices have increased substantially, along with increasing population mobility.

But at the same time, the phenomenon of tax fraud and evasion has increased and expanded, amid diversification of possibilities to circumvent national and European tax legislation.

Looking back on the recent 30-year history of Romania's economy, we can say that the phenomenon of fraud and tax evasion manifested itself in both trivial forms (eg: double accounting

records, non-declaration of taxes / fees, forgery of documents supporting documents, etc.) as well as in complex forms (eg non-declaration of taxable activities, decapitalization of state-owned companies, simulation of export operations, etc.).

2. Literature review

Groșanu A. (2013) concludes that -creative accounting- is the result the flexibility that exists between accounting regulations, and if they are applied correctly, allow/provide a accurate and complete picture of the financial position and performance of the entities economic.

A. Laffer (2004) on the relationship between the level of tax evasion and the rate taxation enunciated the theory that bears his name, according to which the increase of tax levies incites a little work (discourages certain activities) or, determines the masking of a part of the submitted activity and its transfer to the unofficial sphere.

Panayi (2007) highlights the high costs of running different businesses and implicitly a reducing the scope of profits associated with cross-border transactions.

Pestieau P. (1993), concludes that the volume of receipts should be higher, a higher mass of taxable income, even during the reduction of the tax rate.

Rust (2011) suggests that existing double taxation conventions at at the moment they cannot solve all the legal problems of international double taxation.

3. Research methodology

In order to identify the phenomena of fraud or tax evasion, based on the risk analysis, it was decided to use the econometric analysis.

To carry out this study, the accounting information suggested as relevant according to the following scientific research models was selected:

- Modelul Beneish M-Score (scorul M);
- Modelul Piotroski F-Score (scorul F);
- Modelul Dechow-Dichev – Accumulation quality;
- Modelul Lev-Thiagarajan – the theory of the 12 signals.

We consider these analysis models to be feasible compared to the accounting information reported in the Financial Statements by Romanian taxpayers, so that starting from the accounting information and indicators suggested by these models we can identify anomalies in the periodic accounting reports.

4. Materials and methods

4.1. Methods for determining tax fraud

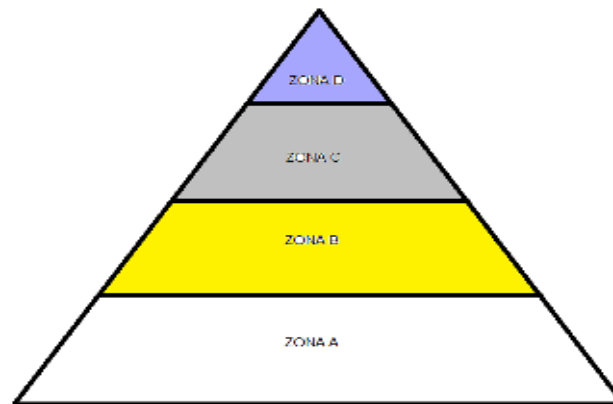
The most used methods of determination are:

- approximate methods, using economic and sociological tools through which wants to estimate the underground economy;
- the statistical methods that are elaborated starting from the statistics of the institutions empowered in combating the phenomenon of tax fraud or in the form of private investigations among certain professions.

But in choosing and selecting entities that may present a fiscal risk, it is important their fiscal history, as well as their behavior towards this phenomenon.

Thus, starting from the psychological behavior of the persons subject to taxation, to the fiscal risks of total or partial non-declaration of the fiscal activity/obligations or non-payment, in the following graph we can identify the following relevant areas:

Figure no. 1. Areas of action of fiscal risk depending on the behavior the taxable subject



Source: author processing

Starting from the hypothesis of an economic system that is not affected by economic crisis situations, according to the graphic presentation above, the psychological behavior of the people who do the object of taxation may be detailed as follows:

■ **area A:** where the majority of taxable persons are located, which determines and declares honestly the taxes and duties due to a state budget, and pays them with regularity at due dates. It is the area in which you want to locate any subject of taxation, and the associated tax risks - usually - are reduced:

■ **area B:** where taxable persons - usually - determine and declare honestly taxes and fees due to a state budget, but there are delays in payment within the due dates.

It is the area where you want to have an honest fiscal behavior from all points of view and - in my opinion - its support is needed to overcome the difficult moment (s), so as to be maintained on the market. Usually the associated tax risks - usually - are small or reduced;

■ **area C:** where the persons subject to taxation either determine and declare taxes and taxes due more or less undervalued, or often deliberately delay to pay them.

It is the area where the subject of taxation does not want a correct fiscal behavior and in my opinion, it is necessary to -correct- or -correct- his attitude.

They usually create turbulence and distortion in the market, exemplifying with its fiscal behavior. In this area, subjects with associated fiscal risks are identified medium or large;

■ **area D:** where the persons subject to taxation do not determine, declare or pay taxes and fees due.

It is the area where the subject of taxation, intentionally, has an unfair tax behavior and in my opinion, it is necessary either to -correct- or -correct- his attitude, or to eliminate them from the economic system.

They create turbulence and distortions in the market, exemplifying with its behavior fiscal.

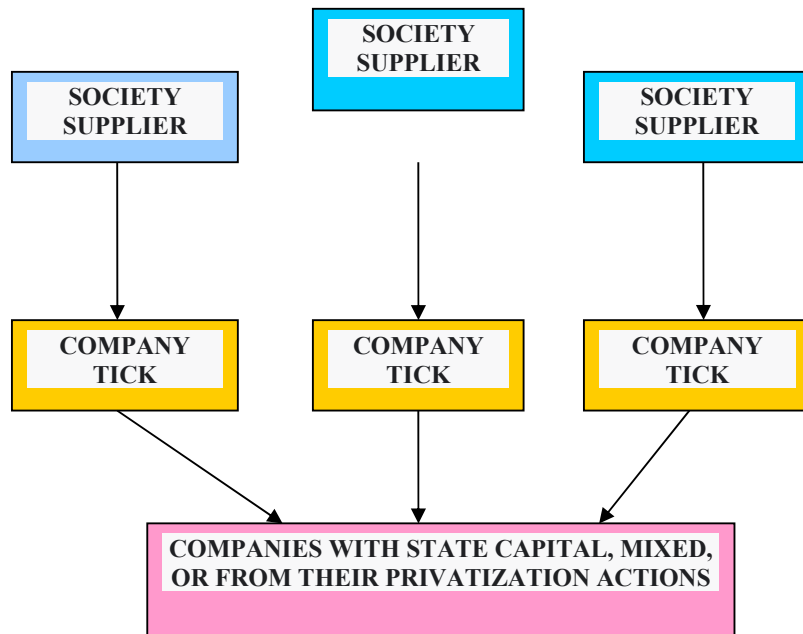
In this area, subjects with high associated fiscal risks are identified, who -activate- with security in the underground economy, generating cases of fraud and tax evasion.

Are subjects that significantly disrupt both the economic and the social system.

The main circumvention schemes involved intercalation in established economic circuits, traditional, of some companies with a dubious fiscal behavior, more precisely of some companies of type - phantom- or tick companies that have had or have the role of accumulating debts to the in return for the granting of unfair tax facilities to certain companies, usually beneficiaries of the goods or services that are the object of the transactions.

The insertion of some companies of type -phantom- or -tick- is presented schematically as follows:

Figure no. 2. The introduction of a tick company in the supply of a company



Source: author processing

Initially, the economic transactions were/are carried out directly on the supplier - beneficiary relationship, and the entities involved correctly and honestly reflect the transactions.

Then, out of a desire for immediate and untaxed gain, the people involved in these transactions have filed companies named in the literature as companies -phantom- or companies named -canteen.

4.2. Underestimation of the tax base as a result of aggressive source accounting policies generating tax fraud

The manifestation of fraud and tax evasion, by underestimating the tax base consists, in mainly, in the intentional alteration of the supporting documents or the concealment of the records, financial and accounting purposes, with the aim of either overestimating expenditure or underestimating it income, all this to reduce the taxable amount, implicitly the tax obligations to the state budget.

The main forms of manifestation of tax evasion by underestimating the tax base are:

- incorrect registration in the supporting documents and in the accounting of the operations economic;
- destruction of financial - accounting supporting documents;
- organization of double accounting records;
- preparation of accounting balances with altered data;
- partial or total non-declaration of commercial activities or sources of taxation;
- preparation or alteration of documents reflecting import-export operations, etc.

The techniques of fraud and tax evasion, by underestimating the tax base, are manifested in connection with all tax obligations.

Cases of underestimation of the tax base are frequently identified in repeated transactions between two or more companies, operations -usually- without economic substance, companies where goods or services move randomly between partners, operations that are not followed by their settlement.

Theoretically, the tax base consists of the difference between the price of its goods the services which are the subject of the transactions and all the expenses which may be allocated to them, to which is added a profit margin.

But repeated transactions between companies make it impossible to clearly identify revenue and exactly, or the expenses can not be identified or allocated judiciously, which leads to distortion of the taxable mass, implicitly to the distortion of the tax burden of the entities involved in these transactions.

Example:

1). on the underestimation of corporate income tax: transactions in the nature of service between two affiliated entities, namely Company A based in Romania and the Company B (parent company) based in Germany. The share capital of the first Company is held by the second. Both companies are taxpayers in their countries of residence. Company A produces large series devices according to the specifications of various customers. Into the selling price of the devices includes production and design, brand, costs indirect.

Company B (coordinating company) performs management, marketing, design, and owns the trademark of the group of companies.

Company B invoices to Company A management, marketing, design services, but also services called -royalties- with significant values.

Analyzing these last services, it results that they are not clear and determinable, and from from a fiscal point of view, they decrease the reported profit in Romania of company A, explicitly profit tax.

2). on the overestimation of the income tax of micro-enterprises: Company A is affiliated with company B. Company A is a profit tax payer, company B is the payer of the micro-enterprise income tax.

Company A produces unique devices for various customers, according to their specifications.

Into the selling price of the devices includes both the design and execution of the products, Company B deals exclusively with design.

As a result of the tax optimization policy of the group of companies, company B invoices company A design the devices at increased prices so that company A obtains a low or diminished profit from the sale of devices.

As a consequence, company A is a small tax base for calculation profit tax, while company B constitutes a higher taxable income, but a whose tax rate is much lower.

3). on undervaluation / undertaxing - value added tax: Company A is owned by company B, the two companies having tax residence in countries different.

Company B transfers sums of money to Company A on the basis of loan agreements.

Company A provides building design services for various beneficiaries, and with the money received from company B, it carries out the project of a building in country A (its country of residence), for future own use by the Parent Company, but does not charge for the services of design to company B.

Thus, in the case of affiliates, the ability to conceal the provision of services between affiliates increases, in this case the absence of billing of services between affiliates producing a VAT damage to State A.

5. Discussion

The cost efficiency of a multiple taxation can be severe, since the rates of nationally imposed taxes are sufficiently high or actually discourage the sea majority of international business, if applicable at the same time, for the same type of income.

By the presentation and the methods of avoidance by underestimating the taxable base, to which they appealed and appeals to people prone to these phenomena for non-payment of taxes or fees to the budget, or to justify the origin of goods from illicit sources, or from smuggling, or from clandestine domestic production, fraud has been highlighted.

The main schemes for evading the state budget involved interleaving in the circuits established, traditional economic conditions of some companies with a dubious fiscal behavior, May exactly of some companies of type -phantom- or companies -tick- that had or have the role of accumulating

debts to the state budget, in return for the granting of unfair fiscal facilities companies, usually beneficiaries of the goods or services that are the subject of transactions.

6. Conclusions

Summarizing what is described in this chapter, the main negative elements that favors tax fraud, are:

- unstable legislation, due to frequent changes, sometimes contradictory to the rules of work and even the basic principles that come to regulate a certain field of activity;
- the absence of specific regulations for certain activities or, on the contrary, the abundance regulations, having the same object;
- difficult procedures, with room for variable interpretations, at-handly -/- understanding- the operator or representatives of the authority;
- the existence of an arbitrary, exaggerated or, on the contrary, devoid of sanctioning system authority, etc.

Economic and psycho-social factors generating the phenomena of fraud and evasion fiscal are amplified, always by:

- confusing tax legislation, which creates imbalances between various areas of activity or which contains many legislative inaccuracies;
- excessive taxation, which always leads to the growth of the underground economy, implicitly to increasing the phenomenon of tax evasion and fraud;
- a burdensome and inefficient tax system, difficult for taxpayers to understand, leads by often to an indifferent attitude of the taxpayers, implicitly to the non-declaration by them a taxes or fees due, etc.

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Financial Audit Procedures Employed in Sustainability Assurance

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Abstract

Assurance on sustainability reports is a new concept in Romania and this paper aims to enlarge the vision upon the benefits which can be obtained through involving financial auditors in providing assurance services on non-financial reports issued by companies.

Current developments related to non-financial reporting in the European Union indicate that more and more EU-based companies will soon be confronted with more detailed requirements related to sustainability reporting and stricter audit requirements, such as the mandatory assurance of non-financial reports.

Our paper explains and illustrates from a practical perspective the audit procedures performed and the content of assurance reports issued by financial auditors upon auditing non-financial reports.

Key words: sustainability assurance, financial auditors, assurance reports, non-financial reporting
J.E.L. classification: M40, M41, M42

1. Introduction

Corporate social responsibility or sustainability assurance refers to assurance engagements where providers express a conclusion to intended users about the information provided in corporate social responsibility reports against chosen criteria. Having in view the growing need of stakeholders to receive credible sustainability information of companies, the importance of obtaining external assurance on sustainability reports is stressed at the global level because both reporters and report users understand that external assurance can contribute to improving sustainability disclosure.

Sustainability reports are published according to national reporting requirements and they are drafted based on guidance provided by international frameworks developed by global organisations. According to a study performed by KPMG in 2016, the international frameworks mostly used worldwide for reporting on corporate sustainability are the following: the Global Reporting Initiative (GRI), the United Nations Global Compact (UNGC), the OECD Guidelines for Multinational Enterprises, International Organization for Standardization (ISO), UN Guiding Principles on Business and Human Rights, Carbon Disclosure Project (CDP), Greenhouse Gas Protocol (GHG Protocol) (KPMG, 2016, p. 25-27).

The main professionals that can offer assurance services on sustainability reports are accountancy and audit firms, engineering firms and other professional services firms (KPMG, 2016, p. 28). The major assurance standards used globally by assurance providers for delivering sustainability assurance are presented below in table no. 1.

Table no. 1 - International assurance standards used for providing sustainability assurance services

Standard name	Standard issuing body	Standard description
International Standard on Assurance Engagements (ISAE) 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information	The International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC)	A standard used by accounting and audit firms to guide their assurance engagements on sustainability reports
AA1000 Assurance Standard (AA1000AS)	AccountAbility, UK-based consulting firm, a leading global sustainability framework developer and standards setter that works with businesses, investors, governments, and multi-lateral organizations	A standard developed through a multi-stakeholder process so that the reporting and assurance meet stakeholders' needs and expectations
ISO 14064-3 Specification	The International Organization for Standardization (ISO)	Specifies principles, requirements and provides guidance for those conducting or managing the validation and/or verification of greenhouse gas (GHG) statements

Source: Own processing from KPMG Study (2016)

In the European Union, starting with year 2018, the law requires large companies to publish non-financial information together with their annual financial statements in order to present corporate sustainability aspects. According to Directive 2014/95/EU known as the Non-Financial Reporting Directive (NFRD), public-interest companies employing workforce more than 500 persons have to publish information related to environmental and social matters, treatment of employees and information in respect of human rights, anti-corruption, bribery and diversity on company boards.

The Directive 2014/95/EU allows companies to use recognised international frameworks, European or national guidelines to prepare their non-financial reporting. The disclosure of non-financial information can be done either by including a non-financial statement within the management report published within the annual financial statements, or by publishing a separate non-financial or sustainability report on the company's website.

Currently, the audit of published non-financial information is not mandatory. Statutory auditors must only check that the non-financial statement or the separate report has been provided by the audited company. The requirement that the non-financial information be verified by an independent assurance services provider is left as an optional measure for Member States of the European Union to implement if they consider necessary.

In 2020 the European Commission engaged in the revision of the non-financial reporting directive (European Commission, 2021). In April 2021, a proposal for a Corporate Sustainability Reporting Directive (CSRD) was adopted for increasing the requirements related to non-financial reporting. This directive will be applicable to all large companies and all companies listed on regulated markets (except listed micro-enterprises).

One of the biggest changes is that the non-financial reporting will be prepared based on specific EU sustainability reporting standards, which will be mandatory for companies to use and are to be developed by the the European Financial Reporting Advisory Group (EFRAG). The first set of standards will be available by October 2022 and they will be linked to EU policies.

Another significant change is that the audit (assurance) of reported non-financial information is required to be performed as a compulsory measure.

As a result of these developments, upon the adoption of CSRD Directive, a great number of companies based in the EU will soon be subject to more detailed reporting requirements due to mandatory EU sustainability reporting standards and stricter audit requirements, such as the mandatory assurance of non-financial reports.

2. Theoretical background

Out of the international standards on auditing and assurance engagements issued by IAASB, the following can be used by financial auditors when providing assurance services on corporate sustainability reports: the International Standard on Assurance Engagements (ISAE) 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and the International Standard on Assurance Engagements (ISAE) 3410 *Assurance Engagements on Greenhouse Gas Statements*. The latter was issued in 2013 for addressing specifically the assurance engagements in which practitioners check and report on entities’ greenhouse gas statements (GGS).

According to the 2018 edition of IAASB *Handbook of international quality control, auditing, review, other assurance, and related services pronouncements* (IAASB, 2018, pp. 123-206), an assurance engagement is an engagement in which the practitioners undertake verification procedures designed to obtain evidence needed to support the presentation of a conclusion. The aim of the practitioner’s conclusion is to increase the level of confidence of the report users that are external to an entity about the published information that has been prepared by using certain reporting criteria.

Assurance engagements performed according to ISAE 3000 and ISAE 3410 can provide different levels of assurance to report beneficiaries, depending on the financial auditor’s level of work procedures. Reasonable assurance or limited assurance are the two levels of assurance that can be provided about whether “the subject matter information is prepared, in all material respects, in accordance with the applicable criteria”. In ISAE 3000 an example is given about the engagements on sustainability involving providing assurance on sustainability performance reports of entities, in which the information is prepared by the management of entities.

In an article written by Philip Wallage and published in 2000, assurance services provided on sustainability reports was discussed, from the perspective of a new service area for financial auditors, referring specifically to the financial audit procedures performed upon sustainability reports containing affirmations regarding corporate social responsibility issues. The different elements of the definition of an assurance engagement were explained with respect to sustainability auditing. Evidence gathering techniques include a combination of the traditional financial audit methods (Wallage, 2000, p. 61):

- Inquiry: seeking information from knowledgeable persons within or external to the entity;
- Observation: verifying how a process or a procedure is being executed by employees;
- Inspection: examining records, documents, or tangible assets;
- Re-computation and re-performance: checking the arithmetical accuracy of source documents and accounting records or performing independent calculations;
- Confirmation: obtaining response to an inquiry to corroborate information included in the accounting records; and
- Analytical procedures: the analysis of significant ratios and trends including the resulting investigation of fluctuations and relationships that are not consistent with other verified information or deviate from predictable amounts.

3. Research methodology

As previous research shows, by the year 2020, in Romania financial auditors have not yet been involved in providing assurance services on sustainability reports issued by local companies. The publishing of non-financial information either as a separate sustainability report, or as a non-financial declaration included in the administrators’ report has been verified by statutory auditors and the audit reports mention that there are no material inconsistencies between these information and the financial statements or the auditor’s knowledge obtained in the statutory audit (Buică *et al*, 2020, pp. 117).

Consequently, for the purposes of this paper we have selected 6 of the most recent assurance reports issued by financial auditors for some of the EU’s major groups of companies in the automotive, consumer goods, oil, energy and banking fields. The reports are available online on the companies’ websites and the description of the non-financial reports assured by financial auditors by providing assurance reports is presented below in table no. 2.

Table no. 2 – Assurance Reports selected for research

Selected company	Non-financial report description	Financial auditor	Assurance report issued	Assurance report date
ERSTE GROUP BANK AG	Consolidated Non-Financial Report 2020 prepared according to Austrian law and GRI Standards	Deloitte	Independent Assurance Report	10-Mar-21
OMV GROUP	Non-Financial Reporting 2020 prepared according to Austrian law and GRI Standards	EY	Report about the Independent Assurance of the non-financial Reporting 2020	25-Mar-21
RAIFFEISEN BANK INTERNATIONAL AG	Consolidated Non-Financial Report 2020 prepared according to Austrian law and GRI Standards	KMPG	Independent Assurance Report on the Non-financial Reporting	02-Mar-21
ENEL GROUP	Consolidated Non-Financial Statement 2020 prepared according to Italian regulations and GRI Standards	KMPG	Independent auditors' report on the consolidated non - financial statement	19-Apr-21
VOLKSWAGEN AG	Separate Non-Financial Report 2020 prepared according to German law and GRI Standards	EY	Independent Auditors Limited Assurance Report	26-Feb-21
UNILEVER PLC	Unilever Sustainable Living Plan (USLP) and Environmental and Occupational Safety (EOS) performance measures 2020	PWC	Independent Limited Assurance Report to the Directors of Unilever PLC	03-Mar-21

Source: Own selection and processing

We have analysed the selected reports in order to ascertain the verification procedures employed in practice by financial auditors for auditing non-financial information, the content of assurance reports issued and the design of the conclusions expressed by financial auditors.

4. Findings

All the reports under study stated that they provide a limited level of assurance upon the non-financial reporting and that the assurance engagements were performed in accordance with the reporting criteria chosen, specifically the GRI Standards and the reporting requirements as stipulated by the national legislation of the respective jurisdiction.

All the engagements were completed based on ISAE 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information*. In case of UNILEVER PLC, the assurance engagement was based both on ISAE 3000 and ISAE 3410 *Assurance Engagements on Greenhouse Gas Statements*, in respect of the company's greenhouse gas emissions.

The content of the audit reports follow the structure required by ISAE 3000 (IAASB, 2018, pp. 123-206), respectively the title mentioning that the report is an independent assurance report, the report's addressee, the specification of the level of assurance provided by the report, the description of the applicable criteria that were used, the nomination of the parties responsible for the report preparation and for the assurance services provided, the statement specifying the ISAE followed in performing the engagement, the statement that the services provider complies with professional requirements, independence and other ethical requirements, the presentation of a summary of the procedures performed, the practitioner's conclusion and signature, date of the assurance report and the location where the reports was signed.

From the assurance reports selected for research, we have analysed the specific procedures performed in practice by financial auditors in order to provide assurance on non-financial reports and classified them in several distinct areas of audit work, as follows:

1. Understanding the specific industry sector, business management and organisational model, governance processes and the sustainability strategy of the company – procedures employed:
 - Performed an analysis of the specific field in which the company operates and of the operational and organizational structure of the company;
 - Performed interviews of the company’s senior management for checking the internal control procedures applied over the preparation of the non-financial reporting;
 - Examined sustainability-related risk management and governance policies and procedures implemented by the company and performed the critical assessment of the disclosures presented in the non-financial reporting;
 - Performed interviews of the company’s employees regarding the sustainability strategy, the sustainability principles and the sustainability management operated by the company.
2. Risks identification and materiality analysis – procedures employed:
 - Inquiries of personnel at the group level, who are responsible for the materiality analysis, in order to gain an understanding of the processes for determining material sustainability topics and respective reporting thresholds of the company;
 - Performed an analysis for the identification of the likely risks of material misstatements in the non-financial report;
 - Performed a risk assessment, including a media analysis, on relevant information on the company’s sustainability performance in the reporting period.
3. Evaluation of the reporting processes, data capture and compilation methods of the non-financial information – procedures employed:
 - Interviewing employees to assess the methods of data generation, data recording, data collection, data processing and internal controls;
 - Inspection of the relevant documents describing the systems and procedures used for data gathering by extraction from the company’s records, selection of the relevant information, data verification and centralisation in the reporting period;
 - Reviewed on a sample basis the non-financial information and reporting processes employed by the company’s employees in order to assess whether the non-financial information have been obtained and consolidated correctly in the non-financial report. The auditors checked whether the non-financial data were aggregated and presented in an accurate and reliable way and that all the relevant information has been disclosed.
4. Analytical procedures and tests of detail performed for testing the non-financial information included in the reports, by applying the following procedures:
 - Performed the analysis and the evaluation of the reported data (computation of ratios, analysis of trends and comparison with reported financial information) and disclosures included in the non-financial report;
 - Reviewed the presentation of significant issues that occurred in the communication with the company’s stakeholders, in the media and in sustainability reports of similar companies;
 - Performed inquiries and examination of selected documents related to the aggregation and reporting of data;
 - Interviewed responsible persons in overseas subsidiaries to understand the key processes and controls for reporting performance data of other locations in order to obtain supporting information, for example on performance indicators;
 - Checked selected disclosures concerning subsidiaries in other locations for obtaining evidence on their completeness, reliability, accuracy and timeliness;
 - Performed the analysis and evaluation of non-financial data and disclosures included in the reports by comparing the statements presented in the non-financial reporting with the auditor’s previous knowledge of the company and with the GRI Standards principles;
 - Performed the matching the non-financial disclosures shown in the report with the calculation documents provided;

- The evaluation of selected internal and external documents, in order to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;
 - The evaluation of the overall presentation of the disclosures by critically reading the non-financial report;
 - Comparison of economic information presented in the non-financial report with those included in the company’s financial statements.
5. Compliance with the reporting criteria – procedures employed:
- Assessment whether the national reporting requirements have been complied with in an adequate manner;
 - Review whether the reporting standards were consistently applied;
 - Analytical evaluation of the data and trend of quantitative disclosures regarding the reporting standards.

The conclusions expressed by financial auditors specify that having in view the procedures performed and the evidence gathered, nothing came to their attention to make them consider that in all material respects the non-financial report has not been drawn by observing the legal requirements as stipulated by the national legislation and also the sustainability reporting guidelines used for the non-financial report preparation (GRI Standards).

5. Conclusions

Assurance reports on non-financial reporting issued by financial auditors are prepared in accordance with ISAE 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and, in case of greenhouse gas emissions, ISAE 3410 *Assurance Engagements on Greenhouse Gas Statements* and they provide limited level of assurance on the non-financial information published by companies.

The audit procedures performed for the verification of non-financial reports refer to understanding the specific industry sector, business management and organisational model, governance processes and the sustainability strategy of the company; review materiality analysis; evaluation of the reporting processes, data capture and compilation methods of non-financial information; analytical procedures and tests of detail performed for testing the non-financial information; verification of compliance with applicable reporting requirements as established by laws and reporting frameworks.

ISAE 3000 is applicable when providing external assurance for non-financial reports, but it is not specifically developed for sustainability assurance engagements and focuses on describing assurance procedures and technical requirements in a very general manner. This standard provides a general framework for accounting professionals and it establishes procedural requirements related to practitioners’ ethics, the conditions for the acceptance and the continuance of engagements, the quality control of engagements, the planning and performing of the assurance mission, the procedures necessary for reaching the auditor’s conclusion and for the assurance report drafting. The planning and the evidence collection and evaluation procedures are very similar to the ones used in the other categories of professional auditing and assurance engagements. Procedures performed are selected by financial auditors as considered necessary in order to obtain an adequate level and quality of evidence needed as a basis for expressing their conclusion.

In our opinion, a separate assurance standard should be issued and designed specifically for performing assurance engagements on non-financial reports.

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Microaccounting and Macroaccounting: Characteristics and Interferences

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Abstract

This paper’s endeavour is to emphasize the way in which national (macro) accounting is affiliated to the science of accounting, using procedures and methods, taken from economic sciences and other sciences, therefore having a strong interdisciplinary character.

An argument to support national accounting’s affiliation is macro-accounting’s object of study, that is the state and the movement of assets, similar to micro-accounting but at a much higher level of representation. Consequently, we presented other common similarities between national accounting and micro-accounting (enterprise accounting) by applying a series of common principles and common procedures particular to micro-accounting: account and balance sheet.

Key words: micro-accounting, macro-accounting, procedures, principles

J.E.L. classification: M41

1. Introduction

Accounting generally represents, an instrument used to quantify economic life from the organization’s level to a national level. The extension of the scope of applicability of accounting from the enterprise level to the macroeconomic level (branch, sector, national economy) is achieved by national accounting.

According to the Romanian National Statistics Commission, national accounting is: „a coherent and detailed set of accounts and tables that provide a comparable and complete picture of a country’s economic activity” (<https://insse.ro/cms/ro/>, 2020, p.205).

Similarly, Jean-Paul Piriou stated about national accounting that: „it is a general representation, a detailed and numerical report of the national economy in an accounting framework” (Piriou, 1990, p.3).

So, based on accounting rules, national accounting is a model used for presenting information that reflects all economic operations carried out by the resident economic entities.

Most economists consider national accounting to be an integrating part of the science of accounting for the following reasons:

- most of the input data from the national accounts comes from micro-accounting, more precisely from the data provided by the accounting documents prepared by the economic agents;
- the System of National Accounts records both transactions between various components of the national economy and those with foreign countries, similar to micro-accounting where the various operations between the economic agent and its external economic environment are recorded;
- national accounting uses the account, which is its own accounting procedure;
- the registration of transactions in accounts is done based on the principle of double entry which is also an accounting method.

Private firms routinely produce balance sheets. Nations should do the same (Dasgupta, 2015, p.447).

The aspects taken into consideration in supporting the arguments for a macro-accounting belonging to the science of accounting target the object of study, the general principles of financial reporting, as well as two of the most representative specific accounting procedures, namely balance sheet and account.

2. Literature review

The use of the accounting principles and the procedures for a scientific approach seems trivial, somewhat obsolete in the context of a world in a continuous transformation due to multiple factors: economic internationalization, increasing competition in technology, increasing competitiveness, labor market flexibility, the Covid 19 pandemic and its impact particularly with regard to telework and e-commerce, the economic cohesion at the European level by bridging the gap between countries, etc. But, on the other hand, the extrapolation of the accounting principles and procedures operable at a microeconomic level and a macroeconomic level has not been the subject of analysis by the specialized literature, at least at a national level.

Among the interest of the international literature for macro-accounting we mention:

- there is an accounting framework corresponding to every complete macro-economic model (Pyatt, 1991, p.181) which develops an accounting oriented towards general equilibrium, a model that represents the macro statistical systems by aggregating the journal entries of micro accounting (Nshi, 2017), integration of macro and micro sustainability issues: the need for engineering accounting (Tingey-Holyoak *et al*, 2013, p.500);
- the contribution of national accounting aggregates for a measure difference in welfare, both over time and across different economies, and to indicate whether development is sustainable (Asheim, 2003, p.113);
- the problems concerning the definition, classification, and measurement of the national accounts, also the argument that the elementary units which must be classified in national accounting are economic objects (real and financial), rather than transactions (Aukrust, 1966, reprinted 2008, p.703);
- review – and to an extent a further development – a methodology of national accounting that responds to the needs of governments when they engage in sustainability and policy analyses (Dasgupta, 2015, p.447)
- how / the way in which the evaluation of ecosystem services and ecosystem assets can be undertaken in an integrated national accounting setting (Obst *et al*, 2015, p.1), a method for assessing the reliability of national accounts statistics (Bos, 2009, p.930), sustainability and green national accounting (Asheim, 2003, Ionescu *et al*, 2020, Clarke *et al*, 2006);
- the uses of the System of National Accounts (SNA), for macroeconomic analysis, inter-temporal comparisons, international comparisons (Ouanes *et al*, 1997);
- possibilities to improve national accounts (Hansson, 2006, pp 45-64) etc.

Last but not least Peter van de Ven sustains the need for a transparent design of economic statistics from business registers to national accounts. This is meant to create a better understanding of the connections between the different sets of data which lead to increased possibilities for users to connect micro-data to macro-data (Peter van de Ven, 2017).

The macro-accounting belonging to the science of accounting and the comparative approach of the two accounting segments are not new ideas in the international literature, being exploited from 1966 by Yu (Yu, 1966).

National accounts are a macro-economic accounting system that is compiled on the basis of a globally harmonized accounting standard (Keuning, 2004, p.167)

E. Lande analyzes the relationship between macro-accounting and micro-accounting in France and considers that national accounting is a macro-accounting process, whereas its component parts are micro-accounting processes because they are concerned with a set of transactions limited by the legal boundaries of the entity in discussion, the local government authorities, companies, households, etc (Lande, 2000, p.151).

Through this action we aim at bringing an argument for the belonging of national accounting to the science of accounting, as well as identifying the common and specific elements of the two forms of accounting, derived from reporting to accounting principles and methods.

3. Research methodology

The identification of some characteristics and the interference between micro-accounting and macro-accounting involved the use of the specialized literature that addresses the issue of accounting at the level of entities, as well as that which targets the national accounts, microeconomic and macroeconomic economic aspects.

By approaching the subject which targets some characteristics and interferences between micro-accounting and macro-accounting we framed an incursion on a less travelled road from the wide field of accounting, respectively the field of macro-accounting, of science, philosophy and the reasoning of data interpretation from accounts at a national level. Our research is a qualitative one and it is desired to create premises in order to enterprise thorough studies on the segment of the technical support that indicates the present situation at the level of the national economy, but also the development perspectives of a nation.

4. Findings

4.1. The objectives of national accounting and micro-accounting

The System of National Accounts (SNA) was developed as an accounting framework within which macroeconomic data can be compiled and presented for economic analysis. It provides an internationally recognized system for organizing a continuous flow of information that is indispensable to the analysis, evaluation, and monitoring of a country's economic performance (Ouanes, 1997).

National accounting, as well as accounting, has an objective and a research method. The national accounting method uses a group of general procedures common to all sciences (observation, reasoning, comparison, grouping, classification, analysis, synthesis, aggregation, consolidation) but also specific micro-accounting procedures for analyzing the state of the national economic heritage and economic transactions.

The national accounting method constitutes the rational way to achieve the objectives, while the procedures used by macro-accounting represent the means to achieve these objectives.

The object of study for micro-accounting is on the one hand the state of the patrimony reflected by the stocks or balances of the patrimonial elements, and on the other hand by the movement of the patrimony manifested in the volume and structure of economic goods, rights and obligations. Similarly, the national accounting has as object of study the state of the national economic patrimony, but at a much higher level of representation than that of enterprise accounting kept at the level of economic agents, as well as the study of economic flows between national economy components, including their flows abroad.

When the object of study of national accounting is the economic relation quantified in standard values which are characterized by a temporal dimension, we are dealing with a flow accounting.

Therefore, the flow accounting records the movements of values, which correspond to the economic-financial operations carried out over a period of time, a fact also found in micro-accounting through the income statement of economic agencies related to the film of their activities over a period of time.

National accounting is seen in terms of the flow of values, characterized by the term, economic circuit consisting of real flows (goods, services) and cash flows (income and expenditure flows). On the one hand, due to the non-existence of a unitary physical standard for flows of goods and services but only of a usable monetary standard and flows of income and expenditure, and on the other hand the fact that a financial flow does not always correspond to a real flow, national accounting neglects real flows and reflects only the flow of financial flows.

In the situation when the object of study of the national accounting is represented by the national economic patrimony, presenting its instantaneous situation valid for a certain moment (the end of the financial exercise), we have a stock accounting. Inventory accounting should not be seen as a substitute for flow accounting but as an extension of it (Ionaşcu, 1995, p.77). The stock or patrimony accounts give information on the structure and size of the patrimony of the national economy valued in monetary standard. Wealth accounts are presented in the form of a balance

sheet that measures the country’s wealth and its creditworthiness or debt situation to the rest of the world.

Thus, the object of national accounting is the reporting of activities (activities that generate economic relations and changes in assets), of some sectors, regions, branches and the whole national economy, involving the aggregation of accounting data and other information systems to develop macroeconomic indicators (Tabără *et al*, 2012).

4.2. Common principals of national accounting and of micro-accounting

Both national accounting and micro-accounting use common principles to achieve the objective of the research.

The main purpose in developing accounting principles is to obtain a true and fair view of the economic condition and development of an enterprise as reflected in the financial statements.

However, many authors consider the accounting principles too rigid and conservative, implying an underestimation of the assets of the economic entities, inducing in the national accounts the negative effects of presenting the economic reality. Thus in this context Lauzon L.P. considers that the accounting principles have the following features (Ionescu, 2004, p.153):

- they do not represent uncontrollable or perfectly objective laws;
- they are not based on natural or abstract laws;
- they are not immutable;
- they do not have an immutable scope of coverage;
- they are not all necessarily true;
- they are more or less organized;
- they are accepted without being demonstrated;
- they do not result from unanimous acceptance, but are the result of a consensus and often a compromise.

The accounting principles that are taken from micro-accounting are mainly due to the origin of most data sources, which come from the financial statements of the economic agents, but also from the accounting practice.

We further present the accounting principles applied in national accounting and micro-accounting.

The principle of the entity: in micro-accounting and macro-accounting, this principle requires the delimitation of the economic entity’s patrimony from other natural or legal entities, respectively the patrimonies of the components of the national economy (branches, sectors) including the national economic patrimony as a whole from the rest of the world. The principle requires the registration of those transactions that create legal property relationships over the assets included in the patrimony, from the point of view of the entity holding the patrimony.

In national accounting, the rest of the world is assimilated with an institutional sector, not being in reality a sector itself, but a fictitious entity, realizing a grouping of all the transactions of the resident institutional units with the non-resident units. Because it is not important to analyze the economic behavior of non-resident units, all belonging to a single fictitious global entity, called the sector of the rest of the world, being presented in terms of its influence on the national economy.

The principle of monetary quantification: requires using both in micro-accounting and macro-accounting of the same monetary standard (leu). The use of a currency as a means of measurement “allows the summation of very different objects and therefore, it allows the homogenization of a heterogeneous whole, the enterprise, to reduce this whole to several numbers, respectively one, the result” (Colasse, 2009, p.80).

Accounting law 82 from 1991 states that the accounting should be kept using a national currency, and the accounting of economic operations performed in foreign currency is kept in both national currency and foreign currency (<https://static.anaf.ro/static/>).

In the fields of micro-accounting and macro-accounting, there are registered only flows and inventories that can be valued or measured in monetary terms.

The principle of continuity of the activity: for micro-accounting in Order no. 1802 / 2014 for the approval of the Accounting Regulations regarding the individual annual financial statements and the consolidated annual financial statements, art. 49 (1), *assumes that the entity will continue to*

operate normally, without entering into a state of liquidation or significant reduction in business (<https://static.anaf.ro/>).

This principle used in national accounting requires that the national economy cannot be liquidated, even in the face of a prolonged economic crisis regardless the generating factors.

In contrast to IAS 10 in micro-accounting, it requires to the management of financial reporting agents to assess the company’s ability to continue operating in the foreseeable future, without going into liquidation at the time of reporting. In the case of a negative scenario in which a company is forced to significantly reduce or even stop its operations, there is a risk of liquidation of assets in a short period of time at very low prices generating large differences between the net value of reported net asset and the real one.

Macro-accounting provides the evaluation of assets at current market prices, or in the absence of a market at a replacement value, and not allowing an evaluation at liquidation prices. The evaluation of the national economic patrimony does not have as an objective the measurement of its total value at a realization value of the component elements, but at a reconstitution value in the hypothesis of the continuity of the economic activity. So an enterprise has a liquidation value, but not a national economy (Ionaşcu, 1995, p.80).

The principle of intangibility of the opening balance sheet: it requires in the enterprise accounts that all the elements of the balance sheet reported at the end of a financial year have the same value as the similar elements in the balance sheet that open the next financial year.

This means that even if policies, procedures, accounting methods and the identification of errors are changed in a financial year, it is forbidden to change the items in the opening balance sheet of the year, requiring them to be intangible. The respective situation can be solved by opening the balance sheet for the next financial year, except the errors that will be corrected through the carried forward result.

In national accounting, the principle does not apply directly, being induced from the enterprise accounting, through imported and processed information of the closing balance sheets of the reporting economic entities, taken over in order to prepare the centralized balance sheet of the national economy.

Failure to comply with this principle at the macroeconomic level would lead to distortions and incomparability over time of the macro-economic indicators determined on the basis of this imported information.

The principle of independence of the exercises: it requires to impose in micro-accounting the recording of income and expenses, without taking into account the time of collection or payment, but the time of invoicing, during the financial exercise (usually the calendar year) at the end of which, taking into account all such income and expenses, financial statements are prepared and reported. Therefore, the principle of independence of financial exercises requires the use of accrual accounting of economic entities in the preparation of financial statements except for information related to cash flows.

The principle in national accounts applies on the one hand as a result of taking over in the national accounts and in the balance sheet accounts, grouped temporarily over financial years, simultaneous data regarding economic agents contained by the reported financial statements. On the other hand, in national accounting the principle is taken from the very way of recording income and expenditure in the accrual accounting of the economic agents.

The principle of non-compensation: the economic agents’ accounting requires the non-compensation of the assets components and the liabilities elements from the composition of the balance sheet or of the income and expenses from the profit and loss account. In the national accounting, the principle prohibits the compensation of assets and liabilities in the balance sheet, non-clearing of resources and uses in non-financial accounts and net flows of receivables and payables from the financial accounts for the institutional sectors.

In macro-accounting, a distinction must be made between compensation and consolidation. Consolidation is applied both in micro-accounting for business groups and also in national accounts. Institutional consolidation is carried out between the institutional units of the same institutional sector, by canceling from resources and uses the value of transactions between these units, as well as financial assets or mutual debts.

The transactions between institutional units from different sectors are not consolidated in order to give a full measure to the economic phenomena. Consolidation of accounts can be achieved not only at the level of the institutional sectors but also at the level of the national economy in order to highlight the transactions of the economy with non-resident institutional units.

The rest of the world account is consolidated by definition because it does not concern the economic behavior of non-resident entities.

Regarding the compensation, it can be stated that it is also a consolidation whose result is the compensation of one part of an account in relation to the other, but all at the level of a single institutional unit, the net value obtained in this manner is then aggregated to a higher level.

This is the case for product taxes compensated by product subsidies (net product tax), stock inflows compensated by stock outflows (change in inventories), purchases compensated by sales of financial instruments (net value of the financial instrument), etc.

The *principle of the historical cost* requires keeping in the accounting the assets or liabilities of the assets at the historical cost or at the cost of entry until the moment they are taken out of the patrimony (excepting revaluations), carried out at the same value. If, on the occasion of the inventory, possible reversible depreciations or definitive depreciations are found, it is necessary to compensate them with the value of provisions and amortizations from the amending accounts. The same rectifying structures are found in the balance sheet together with the patrimonial elements at the entry value.

There are derogations from this principle in the case of periodic revaluations at the current price. This is the case of the revaluations of foreign exchange transactions during the day, the traded titles and the financial instruments on term at the stock exchange quotation. In the national accounting, the assets and the liabilities from the patrimony accounts are taken over from the micro-accounting at the historical cost, being necessary a further processing in order to be registered at the current market price. So each asset will be valued as if it had been acquired or produced at the time of preparation of the equity account. Taking it out of stock from macro-accounting is also done at the current price, in contrast to the historical cost from micro-accounting. This price difference represents a loss or a gain from holding them in the national accounts.

The principle of prudence: in the accounting of economic agents, it implies at the time of the preparation of financial statements a prudent assessment, avoiding the overestimation of assets and income, but also the underestimation of liabilities and expenses, in order not to report increased profits or losses. However, the application of the principle must not lead to either an intentional undervaluation of assets and income or an overestimation of debt and expenditure, so as not to affect the neutrality and credibility of the financial statements. According to this principle, in the situation when the patrimonial elements are valued, at the end of the exercise in order to prepare the balance sheet, the inventory value is below their book value, provisions for depreciation are constituted and in the opposite case the obtained difference is not accounted for.

The principle of prudence in national accounting is applied indirectly through the data in the financial statements of the economic operators, which are taken over and processed at a national level in the national accounts and the centralized balance sheet of the national economy.

The principle of permanence of methods: in micro-accounting it implies the maintenance of the application from one period to another of the rules and norms regarding the evaluation, registration in accounting (especially since accounting entries are standardized by the Ministry of Public Finance) but also the presentation in the situations of the financial statements and the results in order to ensure the comparability of the reported information over time.

Changes in methods are, however, allowed when required by legal regulations or accounting standards, but also in the situation of obtaining better information from the users of accounting information.

In order to obtain comparable macroeconomic indicators in time and space, the principle is also applied in national accounting on the one hand by maintaining the same methods of assessment, calculation of macroeconomic indicators or aggregation methods used by macro-accounting, and on the other hand by the nature itself of the data influenced by the principle, taken from the financial statements of the economic agents.

The principle of the double entry: in micro-accounting, it involves the registration of an economic operation, obligatorily in two corresponding accounts, in the debit of one account and in the credit of the other account, of the same amount that affect the patrimonial elements and/or the same components of the result of the economic agent’s activities. The principle of the double entry is also applied in national accounting by a slightly different technical transposition through the principle of the “double double entry”, taken from the financial statements of the economic agents (Ionaşcu, 1995, p.24).

This means that any type of transaction with goods and services, of distribution or financial carried out between two institutional sectors generates four entries: two entries in the accounts of each sector which relate to the object of the operation (non-financial or “purely” financial) and two others recordings for each sector representing the financial counterpart of the operation or its cash flow.

4.3. Procedures used in macro-accounting specific to enterprise accounting

The national accounting uses, in addition to common principles, also procedures specific to micro-accounting:

The account: in micro-accounting it is drawn up for each patrimonial element, highlighting their movement, through the debit and the credit structure as parts of the account, but also the value level of the patrimonial element expressed by the balance of that account. In macro-accounting, the number of accounts opened depends on the number of institutional sectors (a complete sequence of flow accounts is opened for each institutional sector) and on the number of activities in the national economy (a production account and an operating account are opened for each branch).

From micro-accounting, the income statement has the greatest resemblance to these accounts, being also a flow account, its balance having the same meaning as the final balance of the sequence of accounts that constitutes the financing capacity or need of the sector or of the national economy.

In addition, the result statement records the income and expenses for a certain period of time for an economic operator, similar to the accounts of an institutional sector that records the cash flows generated by the economic flows, in fact constituting the income and expenditure flows corresponding to a time period related to the sector.

The balance sheet: it is a specific micro-accounting procedure that ensures the double representation of the patrimonial structures of an economic agent. Similarly, in the national accounts the balance sheet reflects the national economic patrimony, presenting on the left the value of non-financial assets and financial assets, respecting the classification in the financial account, and on the right the value of liabilities consisting of financial debts and net value of the patrimony.

The national economic patrimony contains only those elements that are subject to the following conditions: the element must be part of the patrimony of a single entity, to be able to have the quality of goods (so to be able to be valued), to be registered in the capital account or in the financial account (to contribute to the actual accumulation or financial accumulation) and if it is of a financial nature, the item must be recorded in the assets of one entity and in the liabilities of another.

In micro-accounting, the balance sheets are prepared by each economic agent at the end of the financial year, while in national accounting the balance sheets or patrimony accounts are prepared at the level of institutional sectors and for the whole national economy, being a tool of analysis and synthesis of their economic status at the end of the financial year. Balance sheets are in fact inventory accounts (except for the change in equity account), which finalizes the complete sequence of sector flow accounts, presenting the final result of production, distribution, consumption, accumulation of the institutional sector or the national economy.

The use of balance sheets in micro-accounting and macro-accounting provides the link between micro-economic indicators (the most relevant are: turnover, profit, loss and costs) and macroeconomic indicators specific to national accounts (production, intermediate consumption, gross value added, gross operating surplus etc.).

Thus, two levels of analysis are identified: on the one hand the analysis of individual and among individuals behavior in the micro-economy and on the other hand the analysis of the behaviors at a collective level of homogeneous groups of individuals (Ghizdeanu, 2007, p.6).

5. Conclusions

It can be said about the national accounting that it represents a model for presenting information, even if many are of a statistical nature, based on accounting rules, which reflect all the economic operations carried out by the resident economic entities during a year.

Even if, by the way of presenting and interpreting the essential mechanisms of the national economic life, using their own statistical techniques, generating contrary opinions regarding the affiliation of national accounting to science of accounting, nevertheless as a result of the use of its own accounting principles, procedures and techniques, most economists consider macro-accounting to be an integral part of accounting science.

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Economic Pictures, the Tools for a Macroeconomic Analysis

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Abstract

Positioning the national economy in comparison to the rest of the world is possible due to the overall economic picture, and through the input-output table it is possible to achieve, among other things, the analysis of the interdependence between the activity branches of the economy. This paper presents the typical elements of the overall economic picture, respectively of the input-output picture, the useful tools for a macroeconomic analysis, including the efficiency of the use of the production factors and their participation in obtaining the results of the economic activity.

Key words: economic picture, input-output table, macroeconomic analysis

J.E.L. classification: M41, O11

1. Introduction

The System of National Accounts contains, in addition to accounts, a series of pictures, which are the main databases used in economic analysis and in the elaboration of national macroeconomic policies.

The objective of this paper is to identify the possibilities through which the overall economic picture and the input-output picture can contribute to the macroeconomic analysis down at the level of the institutional sectors, respectively the branches of activity in the economy.

In order to achieve this general objective, we considered the opportunity of the following approach:

- presentation of the coordinates of the overall economic picture concerning aspects such as utility, structure, registered operations, restrictions for the data recorded in the table, the functions of the account of goods and services created within the table, the sequence of financial and non-financial accounts

- outlining a panoply image of the input-output table that performs the synthesis of operations with goods and services and contributes to the analysis of production processes, distribution and use of the final products, but also for macroeconomic forecasting. This image is constructed by presenting the contents of the five tables that make up the array of inputs - outputs, respectively: the table of intermediate inputs; the table of production and operating accounts of the branches; the transition table from actual production to distributed production; the table of resources by products; the end-use table.

2. Theoretical background

The overall economic picture and the input-output picture together with the macroeconomic accounts constitute a coherent whole, being the synthetic components of the National Accounts System. The two pictures are important tools for macroeconomic analysis and forecasting, the point of reference is a differentiation between the pictures. If the overall economic picture provides data from the national economy as a whole to the level of institutional sectors, the input-output picture is useful for a macroeconomic analysis up to the level of the industry as homogeneous components of the economy.

If the table of inflows and outflows reflects in detail the operations with goods and services and the operations of primary distribution of income, from production and operating accounts for the branches, the overall economic picture shows all economic operations carried out in the economy at the sector level, being essentially a review of the flow of all national accounts.

The input-output table and the overall economic picture through systematization and centralization of data, has an important role in developing national accounts at the level of branches of activity, at the level of the institutional sectors to the national economy, being the source of data for calculating the Gross Domestic Product. The pictures can also be drawn up at the prices of the previous year together with the final estimate of the national accounts.

The information in the two pictures presented on the one hand by the institutional sectors in the sector accounts and on the other hand by branches of activity can be linked and combined in a cross-classification picture „containing a series of common indicators: intermediate consumption, gross added value, employee remuneration, other taxes without subsidies on production, consumption of fixed capital, net operating surplus/net mixed income, production, the formation of the gross fixed capital, the stock of the fixed assets and the labor force indicators” (<https://www.infofisc.ro>).

3. Research methodology

The present scientific approach falls into the category of the descriptive theoretical research, which is the precursor for the use of the statistical-mathematical tools in performing macroeconomic analyses, designed to emphasize the importance of production factors in the economic growth reflected down to the branch level.

The specialized literature we used in this qualitative scientific approach targets strongly intertwined knowledge segments such as national accounting, statistics, macroeconomics, and the procedures used were the reasoning that required the chain of value judgments regarding the synthesis of the identified data in the literature or the specialized studies, in the regulations at a national, community and international level, the analysis of INSSE publications, their synthesis in order to expose the contribution of the economic picture to the macroeconomic analysis.

Among the four vital elements of a modern scientific research in economics (<https://amfiteatrueconomic.ro/>), we used concepts and variables that synthetically characterize the investigated economic reality - the national economy, respectively the overall economic picture, the input-output picture, which provides the necessary information supports for the analysis of the economic activity in terms of efficient use of production factors, the contribution of each segment of activity to the development of the national economy; the research being of a descriptive, exploratory narrative type, with critical-evaluative insertions.

4. Findings

4.1. The overall economic picture, the synthesis of the flows in the economy

With the help of the overall economic picture, it is possible to describe in a synthetic way, the achievement of the annual economic balance within the economy. The picture is drawn up at the level of the institutional sectors and the national economy.

The overall economic table is essentially a recapitulation of the flow accounts of the national accounts, constituting the synthesis of economic activities within one year.

The picture has a similar structure to the table of the double-entry financial transactions. The institutional sectors are highlighted on the columns and the operations carried out in the economy are recorded on the lines. So the picture presents two categories of columns, representing on the one hand, the uses (on the left of the picture) and on the other, the resources (on the right of the picture), which are part of an institutional sector, and the lines of the overall economic picture correspond to the accounting balance.

The operations recorded on the lines correspond to the order of the accounts in the complete sequence for each institutional sector composed of: operations in the accounts of production, operation, income, use of income, capital and financial accounts.

The picture induces from the the sector accounts, the related equilibrium relations, uses = resources, or net receivables flows = net debt flows (for financial accounts), so that each line remains balanced.

As each resource of an institutional sector is also a use for another institutional sector, distribution and financial operations are balanced line by line.

In terms of operations with goods and services, the overall balance between the amount of resources and that of uses is achieved.

The data recorded in the picture must comply with three important restrictions (Ramanauskas *et al*, 2018, p.8):

- a vertical restraint, which requires each sector to be in balance, which means that the part of the sector's expense that exceeds its income must be financed by reducing net financial assets.

- an horizontal restriction requiring the data from the sector to be added to the total economy (for example: the disposable national income is equal to the sum of disposable income in all institutional sectors).

- a restriction related to the coherence of the stock flow which implies that the opening and the closing of the balance sheets (balance sheet accounts) must be linked to the transactions recorded in the accumulation accounts.

In order to strike a balance on transactions with goods and services, a goods and services account was created within the picture, the structure of which was positioned separately on a use column and the other on a resource column. The goods and services account works as a "mirror" account with the following functions:

- To record intermediate consumption related to the production of banking services. The production of banking services is mainly related to the activity of financial intermediation being given by the financial income obtained, consisting mainly of interest and dividends, from which there is a deduction of the interest paid on deposits received and loans contracted. As it will be seen in the input-output picture, this type of production cannot be quantitatively affected by other institutional sectors (or other branches of activity in the input-output picture), which is why, by artifice, it is considered that this production is fully distributed to a fictitious sector (being an intermediate consumption for the fictitious sector). The production of the fictitious sector being considered zero, determines a negative added value equal in absolute value with the production of the banking services;

- To reflect taxes on production and imports. Purchases of goods and services of an institutional sector are recorded for uses in the form of final consumption (especially for the household sector) without being individualized, at the purchase price which also includes taxes on products (eg VAT, customs duties). Those taxes are recorded separately in the resources part of the picture for the institutional sector of public administration. So, through the "mirror" type account, the balance of operations with goods and services is thus achieved, by recording the same amounts both in terms of uses and resources of the picture;

- Identification of operations of goods and services dispersed in different accounts;

- The achievement in general of the balance afferent to each line, from the composition of the picture, being an imposed balance, for accounting reasons, or of symmetry (Ionascu, 1995, p.68). The balance through the account is also achieved globally in the economy, respecting the condition: Uses = Resources.

- The operation of the goods and services account as a "mirror" account means that any operation recorded in the uses of the account of an institutional sector is recorded with the same value in the resources section in the goods and services column of the picture. Conversely, if the operation is recorded as a resource on behalf of the institutional sector, we have the same value, on the same line on the uses side, in the column of goods and services.

- In the table, the balances, or macroeconomic indicators of results (gross value added, gross operating surplus, gross disposable income, gross economy), related to the sectors for each line are in balance, because the flow accounts of the sectors are built in cascade (for which the accounting balance recorded in the uses of one account is identical to the accounting balance recorded in the resources of the next account).

- The balance of the sequence of non-financial accounts, presented in the table, shows the financing capacity (with a plus), or the need for financing (with a minus) for each institutional sector as well as at the level of the national economy.

The financing capacity or the need for financing is conventionally recorded on the use side of the table, opposite to that of the rest of the world sector, recorded in resources.

The table also records the summary of operations, included in the financial account, which shows how to cover the financing capacity or the need for financing. In other words, economic actions carried out in the “real” sphere of the economy have consequences in the “financial” sphere (Fassler *et al*, 2012, p.6). The balance of the capital account and the balance of the financial account are balanced for all sectors and the rest of the world.

4.2. The inputs – outputs picture, synthesis of the operations with goods and services

The input-output table provides information on the structure of the domestic production during an accounting period, summarizing the operations with goods and services. Also, the data contained in the tables that form the architecture of the picture, allow in-depth analyses of the processes of production, distribution and use of final products, but also the performance of the macroeconomic forecast calculations. The analyses have an applicability both at the level of the national economy as a whole and at the level of its component elements.

The input-output picture is a synthesis component of the National Accounts System, which systematically describes the macroeconomic interdependencies (Anghelache *et al*, 2007, p.44). The interdependence is manifested by a cumulative approach to the relationships between branches of activity, which means that to achieve an additional unity of a product in one branch, it requires a higher cumulative production in all branches of the economy (Cornille *et al*, 2005, p.34).

The central element of the input-output picture is the branch of activity according to the CANE Rev 2 nomenclature of activities up to the two-digit level (divisions) and the classification of CPSA products at the three-digit level, the two classifications being absolutely consistent. The number of branches or their level of aggregation determines the size of the picture. The essential characteristic of the branches is the homogeneity, an aspect followed also in the case of the aggregation of the branches regardless of their level. Several aggregation criteria can be used:

- the criterion of equivalence of raw materials consumed;
- the criterion of equivalence of the technological processes used;
- the criterion of similarity of the products obtained;
- the criterion of the common destination of the manufactured products.

A homogeneous branch comprises a grouping of economic entities producing goods and services described in the same classification.

The input-output picture has the structure of a double-input picture, in the form of a matrix by industry and product, with rows and columns, highlighting the volume of inputs and outputs, corresponding to flows of material goods and services between the branches of the national economy. The columns show the elements of the production and operation accounts of the branches, thus providing information on the structure of the production costs and revenues obtained from the production process. The lines of the table highlight the balance between the resources and uses of each product, including the flows of goods and services abroad.

The input-output array consists of five tables articulated with each other:

- the table of intermediate inputs;
- the table of production and operating accounts of the branches;
- the transition table from actual production to the distributed production;
- the table of resources by products;
- the table of end-use.

The table of intermediate inputs reflects the activity of each branch viewed in two respects, both as a supplier’s and a consumer’s branch in relation to the other branches contained in the table. So the table has the ability to highlight the interdependence relationships between branches seen as producing entities (Anghelache *et al*, 2013, p.441).

Each column of the table refers to a specific branch of activity (according to CANE Rev 2) and contains the values of intermediate consumption or inputs for each product or service delivered (according to CPSA) by a specific branch of activity, including the product or service performed by that branch to which the column refers to.

This is the case of the production made and consumed within the branch, whose value is arranged on the diagonal of the table. So the index column indicates the combination of inputs required by each branch to achieve its production (Szabó, 2015, p.45). Intermediate consumption is the goods and services used in the production process of the various branches, being valued at the purchase price excluding VAT.

Each line of the table refers to a specific product or service and contains the output values provided to the other branches. It is also an intermediate consumption, but related to a product or service delivered in different

The interdependence of the activity branches is highlighted in the table by the dependence of the production value of one branch on the size of the production values of the other branches. This aspect is materialized by analyzing the correlations between the value of the output of a branch (table line) and the value of inputs in the branch of activity (column of the table, containing the value of products and services delivered by other branches of activity).

The table also includes the trade branch whose entry on the column is represented by the values of the intermediate consumption represented by the goods and services used in the trading activity. So the intermediate consumption of the trade branch does not include the value of the goods sold, but only the consumption generated by the sale of goods such as: expenses for packaging, transport of goods, rents for commercial space, water consumption, expenses for advertising services, etc. The outputs of the trade branch, represented by the services delivered to the other branches are zero, as a result the line corresponding to the trade service is empty. This is because the trade does not perform an identifiable service, creating only gross margins, equivalent to the difference between the selling price and the purchase cost of the goods.

The table contains a fictitious branch corresponding to the banking activity whose entry is given only by the intermediate consumption delivered by the financial services without the insurance services (financial intermediation services), no other transaction being registered. The branch of the fictitious unit appears in the table due to the fact that the production imported by the banking activity cannot be imputed to the users.

The table of production accounts and exploiting the branches reflects the structure of the production costs of each branch of activity, being in fact a continuation of the columns in the table of intermediate inputs, being articulated by it by taking over the intermediate consumption of each branch. The intermediate consumption of a branch is obtained by summing up all the inputs of goods and services, necessary for that branch to obtain the production of the exercise.

The table contains all the flows recorded in the production and exploiting accounts of the branches. The part of the table corresponding to the production flows, shows the transition from the intermediate consumption of goods and services to the actual production of the branches, through the gross added value.

The gross value added is recorded at a basic price due to the fact that the concept of value added at factor cost is not used in national accounts. The value added at basic price is given by the difference between production at basic price and intermediate consumption at purchase price excluding the VAT. The basic price of the production of goods and services considered as outputs is a price set by the producer from which any tax paid and the costs of transport are deducted (which are taken into consideration separately by the producer), to which grants are added.

On the column corresponding to the fictitious branch, related to the banking activity, the value of the actual production is zero, as a result, the gross added value is considered equal and of opposite sign with the intermediate consumption of the branch.

The part of the table corresponding to the values of the flows of the operating accounts of the branches reflects the distribution operations, the gross value added and the operating subsidies, between the direct participants in obtaining the production, composed of: the economic agent recovering the gross operating surplus and the mixed gross income, employees with wages and the state with taxes related to production and imports exclusively VAT.

The transition table from the actual production to the distributed production is drawn up based on the finding of the existence of a large number of economic entities, which in addition to the basic production, which includes them in the branch profile, produce two or more types of non-profit products. correspond to that branch.

In order for the interdependence relationships established between the branches to be really characterized, the aim is to obtain pure branches containing enterprises with homogeneous production. For this purpose, the extra-profile productions are removed, with a lower specific gravity than the basic production, and then they are transferred in the production of the branches that correspond to the profile (Anghelache *et al*, 2019, p.418).

The line in the table for each branch contains the value of the net transfers received from the other branches with the plus sign, and with minus the value of the net transfers submitted to the other branches. When discussing the economy in general the of transfers related to all branches is zero.

The table of resources by products contains on each line the resources of goods and services from the production distributed by origin, and on the column the breakdown of resources, distinguishing between domestic production and imports.

The end-use table shows for each line of goods and services, distinct in each column, their various uses (excluding outputs of intermediate consumption, broken down by the industry, which is part of the table of the intermediate inputs):

- The final consumption is a possible use only for the household sector and for the public and private administrations, valued at purchase prices including VAT. The purchase price for domestic products is composed of the production price, VAT and related trade margins, and for imported products the price is composed of the CIF (cost insurance and freight) price, customs duties, trade margins and VAT. The CIF price consists of the value of the goods at the exporter's frontier with the insurance and international transport costs, so that these goods pass from the exporter's border to the importer's border;

- the gross fixed capital formation, consists of investments made to obtain new fixed assets or to modernize existing ones, being valued at the purchase price excluding VAT or at the cost of production for those manufactured in-house. It should be noted that at the level of institutional sectors, gross fixed capital formation also includes the purchase or sale of existing fixed assets;

- change in inventories, valued at the acquisition cost, excluding VAT;

- exports, are valued under the condition of the FOB (free on board), excluding VAT. The FOB price represents the value of the goods at the national border plus the transport and the insurance costs up to the national border. The VAT that is levied on the exported goods is subsequently reimbursed to the exporters.

In order to be integrated into the end-use table all uses must be able to be broken down by product according to classification.

In order to ensure the coherence of the values entered in the input-output table, it is necessary to verify some fundamental equality. Thus at the level of the table of intermediate entries we have the equality:

$$\text{Sum of total inputs for each branch} = \text{Sum of total outputs for each product} \quad (1)$$

Both terms of the equation (1) are identical to intermediate consumption in the economy.

For the table of production and operating accounts of the branches we have the equalities:

$$\begin{aligned} & \text{Intermediate consumption of the branch} = \\ & = \text{Actual production per branch} - \text{Gross value added of the branch} \end{aligned} \quad (2)$$

and also for each branch:

$$\begin{aligned} & \text{Gross value added} = \text{Remuneration of employees} + \text{Other taxes on production} - \\ & - \text{Other subsidies on production} + \text{Gross operating surplus (Gross mixed income)} \end{aligned} \quad (3)$$

Other taxes on production are taxes that companies pay as producers regardless of the value or quantity of goods or services produced or sold.

Other subsidies on production are the funds that companies receive depending on their production activity.

At the level of the product the resources table and the end-use table, the equality of each product line must be respected:

$$\text{Resources} = \text{Uses} \quad (4)$$

or:

$$\text{Production (P)} + \text{Imports (I)} = \text{Intermediate consumption (IC)} + \text{Final consumption expenditure (CF)} + \text{Gross fixed capital formation (GFCF)} + \text{Change in stocks (LV)} + \text{Exports (E)} \quad (5)$$

$$\text{The sum of the total inputs for each branch} = \text{The sum of the total outputs for each product} \quad (1)$$

Both terms of the equation (1) are identical to the intermediate consumption of the economy.
For the table of the production and operating accounts of the branches we have the equalities:

$$\begin{aligned} &\text{Intermediate consumption of the branch} = \\ &= \text{Actual production per branch} - \text{Gross value added of the branch} \end{aligned} \quad (2)$$

And also for each branch:

$$\begin{aligned} &\text{Gross value added} = \text{Remuneration of the employees} + \text{the other taxes on production} - \\ &- \text{Other subsidies on production} + \text{Gross operating surplus (Gross mixed income)} \end{aligned} \quad (3)$$

The other taxes on production are the taxes that the companies pay as producers regardless of the value or quantity of goods or services produced or sold.

Other subsidies on production are the funds that companies receive depending on their production activity.

At the level of the product resources table and the end-use table, the equality of each product line must be respected:

or:

$$\begin{aligned} &\text{Production (P)} + \text{Imports (I)} = \text{Intermediate consumption (IC)} + \text{The expense for the final} \\ &\text{consumption (CF)} + \text{The gross formation of the fix capital (GFFC)} + \text{The variation of the stocks} \\ &(\text{VS}) + \text{Exports (E)} \end{aligned} \quad (5)$$

Imposing equality (4) makes it possible to identify gaps and inconsistencies which are affecting the basic data (Anghelache *et al*, 2010, p. 174).

Equality of resources and uses, for all goods and services, related to the branches of activity (according to the nomenclatures), must also be achieved globally for the national economy.

The above equality also implies equality between final demand and the cost of primary inputs (Baldwin *et al*, 2010, p.6). The final demand is obtained by subtracting intermediate inputs from the total use of goods, and (the cost of primary inputs by subtracting intermediate inputs from the total supply of goods).

Given that in the table resources - uses, resources are valued at the base price and uses at the purchase price, in order to achieve in terms of value the balance between resources and uses, one can either turn resources into purchase prices, or transform uses at basic prices.

As a result of these transformations two equalities are obtained:

- the resources at the purchase price = uses at purchase price;
- the resources at the basic price = uses at basic price.

In order to transfer resources to the market price, it is necessary to add columns in the product resource table to the product resource table for:

- adding taxes on products;
- eliminating subsidies on products;
- adding customs duties;
- reallocating commercial margins;
- reallocating transport margins;

Product taxes (PTs) are mandatory payments based on the quantity or value of goods or services produced or traded. (VAT and taxes on products excluding VAT)

Customs duties (CD), or the duties on imports, are the taxes levied by the state on the importation of goods according to the nomenclature of goods.

Subsidies on products (SP) are transfers that benefit the producers determined by the quantity or the value of the goods or services produced or imported and take the form of negative taxes deducted from other taxes.

The reallocation of trade and transport margins means their distribution on the products to which they relate. The total value of trade margins is composed of the value of the production of the trade branch and of the secondary trade margins of the other branches. This also applies to the transport margin. On the other hand, in the case of resources, the trade margin is applied to intermediate consumption, final consumption, gross capital formation and exports.

In order to avoid a double summation of the trade margin and to achieve the balance between resources and uses, in the table of resources by products, on the line corresponding to the trade branch at the intersection with the trade margin column, a value equal to the total trade margins reallocated with the algebraic sign minus. This artifice has the effect of eliminating from the table the production provided individually by the commercial services in the total resources, the commercial margins are already included by reallocation on the value of the resources of goods and services.

The table of resources by products reallocates those transport margins, which can be allocated to products and the transport costs are highlighted (explicitly invoiced) or paid separately for products purchased by the buyer (otherwise the cost of transport is included in the basic price of production), finally included in the value of the products at the purchase price. For the same reasons as for the trade margins, on the line corresponding to the transport branch next to the column of the transport margins, the amount of reallocations related to the other branches is deducted in order to avoid double summation.

In the economy as a whole, the amount of trade and transport margins is zero because they are offset by the production of trade and transport. Equality between resources and uses throughout the economy in this situation can be written:

$$P \text{ (Production)} + I \text{ (Imports)} + IP \text{ (Taxes on products)} - SP \text{ (Subsidies on products)} + CD \text{ (Custom duties)} = IC \text{ (Intermediate consumption)} + FC \text{ (Final consumption)} + GFFC \text{ (Gross formation of the fix capital)} + SV \text{ (Stocks variation)} + E \text{ (Exports)} \quad (6)$$

or:

$$P - IC + IP - SP + CD = FC + GFFC + SV + E - I \quad (7)$$

$$\text{But: } GAV = P - CI$$

Where, GAV is the gross added value on the national economy as a whole, then:

$$GAV + IP - SP + CD = FC + GFFC + SV + E - I = GDP \quad (8)$$

Where, GDP is, gross domestic product

The equation (8) shows that the input-output table is useful for determining the gross domestic product of the economy (at market price) based on the equality of resources and uses. The equation demonstrates the equivalence of the production-based method (left side of the equation) with the cost-based method (right side of the equation).

From the table of production and operating accounts of the branches, the gross domestic product can be determined by the income method at the level of the economy:

$$GDP \text{ (Gross domestic product)} = RS \text{ (Remuneration of employees)} + GOS/VMB \text{ (Gross operating surplus/Gross mixed income)} + OTP \text{ (Other taxes on production)} - OSP \text{ (Other subsidies on production)} + IP \text{ ((Taxes on products)} - SP \text{ (Subsidies on products)} + CD \text{ (Custom duties)} \quad (9)$$

Due to the fact that the gross operating surplus/gross mixed income is estimated residually from the data obtained by the first two methods and the income-based method does not directly ensure the balance of resources with uses, the most accurate estimate of GDP at market prices is based on the production-based method and the expenditure-based method.

In the table of product resources, the evaluation of imports is done at CIF price, with higher costs for transport and insurance services, leading to an overestimation of imports compared to imports from the accounts of institutional sectors valued in FOB prices.

In order to correlate the two evaluation methods and to ensure a balanced value between resources and uses, it is necessary to create two adjustment positions, one in the table of resources by product for imports and the other in the table of end uses for exports under the CIF - FOB corrections. The corrections are determined by the costs that are found in the CIF prices and that are not found in the FOB prices. The adjustment items shall contain values equivalent to the amount of transport and insurance provided by residents related to the distance from the exporter's border to the importer's border.

A separate activity is represented by the expenses of the household resident abroad for goods and services registered as import, as well as the goods and services consumed in the country by the non-resident household registered as an export. Those activities require additional adjustments to imports and exports of goods and services, under the name of territorial corrections, in order to balance resources with the uses on products.

5. Conclusions

The presentation of the information in the overall economic picture allows us to know the situation of the national economy in relation to the rest of the world, describing in a concise way the achievement of the annual balance within the economy. The balances of the overall economic picture are aggregates or synthetic indicators for all institutional resident sectors (most important: the gross domestic product, the national income, the capacity or the need to finance the economy) being the starting points for obtaining specific rates for some institutional sectors, but also for the economy as a whole.

An important advantage offered by the picture is on the one hand, that it immediately reflects which sectors have deficits, why they have them, from which sectors the excess expenditures are financed and through which financial instruments, and on the other hand by elaborating the chart that ensures the internal coherence of the macroeconomic analysis (Ramanauskas *et al*, 2018, p.9).

The input-output picture shows a detailed picture of how industries interact to provide inputs and use each other's output to produce the nation's GDP (Lawson *et al*, 2005, p.8). The information contained in the input-output picture underlies the analysis of the interdependence of relations between the branches of activity of the economy and allows a detailed and complete characterization of the structure of the national economy.

The input-output picture has the utility of obtaining macro economic models, providing them with a detailed mesoeconomic basis in terms of production, productivity, labor, capital formation structure, costs, final consumption, exports, imports, etc.

The input-output table provides important information that allows on the one hand the measurement and the economic analysis of the efficiency of using the economic potential, by calculating synthetic indicators that express the efficiency of the use of factors of production and on the other hand of quantifying the participation of these factors in the result of the economic activity.

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The Real Estate Market in Romania – A Post COVID Analysis

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Abstract

The aim of this article is to analyze the direct investment opportunities in real estate in Romania and the future trends and forecasts for the real-estate market, focusing on the residential segment. The Romanian residential market changed after the 2009 economic crisis when the prices dropped down dramatically. Nowadays, the properties became slightly overpriced and also the value of yields from the rentals are going up.

The paper presents an analysis of the value of the yield from rent fee in Romania and the methods for calculating the yield, the factors that have a direct influence over the yield and the main reasons why the yield from rent is fluctuating.

Taking into account the current situation, the commercial real estate market is analyzed before pandemic but also post - pandemic consequences are emphasized.

We conclude with the future modern trends are how the market can adapt to “new” by using the innovation in the real estate market for the economic growth.

Key words: real estate, yield, rent, properties

J.E.L. classification: R30

1. Introduction

There has been an intense debate over economic growth and variations from the original model by Robert Solow in 1950s, model recognizing the ‘technological change’ as the main growth attribute (87.5%) versus increased use of capital (12.5%), and the need to clarify the model in today’s terms. The modern growth theory places innovation as the center of economic growth and recognizes innovation as the mechanism pushing forward the autonomous growth factor (McDonald & McMillen, 2011).

Similar to the principles of above growth model, Romania has been placed as one of the global leaders with high growth potential according to 2021 Annual Report released by Colliers. Although, Romania has some inefficiencies “in terms of rule of law, transport infrastructure, healthcare, efficacy of public administration or stability in general, with regards to laws and policies, should any improvements take place on these fronts, the growth potential that would be unlocked would be significant”, Colliers consultants predict.

2. Theoretical background. The value of yield from rent fee

On market value, a very popular rule has the price/winnings ratio as a starting point, which measures how big the net incomes depending on the price on the stock market are. The same mechanism is applied also in real estate, price/annual rent ratio (yield) being a simple mathematical calculation which can be made by anyone that knows how to use a calculator (Căpraru et al., 201, p. 45).

In Romania, in approximate 99% of the cases the one that buys a real estate moves in that property, that's why the price/rent is irrelevant. Although, many reasons exist for which people should pay attention to this „assessment parameter”. In case the level of yield rent is high, that means the interests paid when buying a house are less than the cost of rental. In other words, potential customers will pay less if they opt for a loan from the bank to buy the property, rather than remaining a tenant. Also, entrepreneurs will find the idea to buy property for rent more attractive. Both factors make an upward tendency over real estate prices.

On the other hand, a price/rent ratio translates to a higher rent yield. In this case, the idea of living on a rent is not so bad, the costs of buying a house being much bigger with the rent alternative. Countries with high rent fees of the nominal interest and the ones with low mortgage market, like Romania, will have indices price/rent ratio relatively low (Anghel et al, 2013, p. 76).

The Romanian residential market moved from de list of countries with underestimated properties to the one with slightly overestimated prices, the value of yields from the rentals going from 3,3% to 5,5%. Although, for the market to reach a normal level considered by the international analysts, the value of the yields should reach a minimum of 7%. The index of the yield value from the rent is just one of the four base rules used worldwide to figure out the right price in real-estate. In order to correctly evaluate property, it is useful both the replacement price, index of accessibility and the comparison price (Anghel et al, 2013, p. 36).

Real estate in Romania is one of the most recommended investments. In the western countries, it is rated in the middle somewhere between the high investments risk and safe investments risk, being neither on the deposits and state titles area (security zone, minimum risk), neither stock zone, corporate bonds etc. (high risk zone, with big winnings).

Romania is a different country, in which real estate have a big share in the average wealth of every person. A recent study made by Credit Suisse, the famous Swiss bank, shows that the average non-financial assets in the average wealth of Romanian people are with 84% over the European average, a big share being made by real estate. Another indicator, Home Ownership Rate, show that 96% of the property are lived by the owners while the European average is 66%. This 96% brings the country to the first place in Europe on the percentage of property lived by the actual owners, and second place in the world.

They all lead to a simple conclusion. Romanians like real estate investments. They like them so much that the first investment in everybody's mind, after the classic „Put the money in the bank and live on the interest” is „Buy and apartment and rent it”. Not investing the money, keeping the cash or making deposits, are likely to devalue because of the inflation, which is growing higher.

The fact that real estate for renting is the first option for investing in the mind of Romanian people take them to the safe zone, low risk security, because the potential request for this kind of investments in very big. Moreover, the request for real estate is much bigger on a world-wide level, where there are studies that 90% from the billionaires from the planet in the last 200 years made or strengthened their fortune investing in real estate.

3. Research methodology

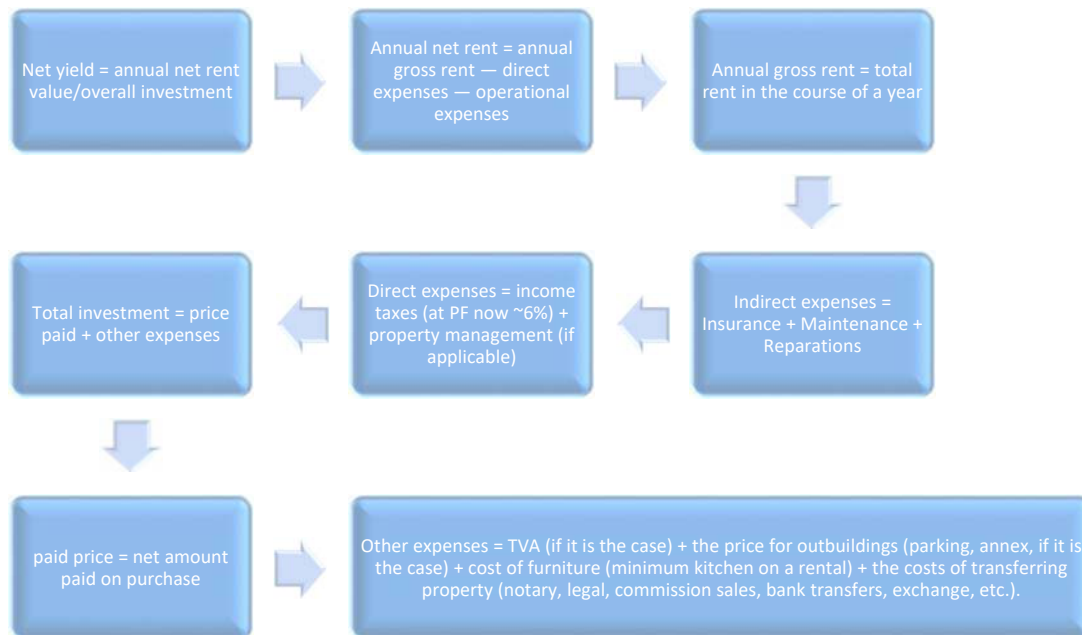
The study was conducted based on real estate literature review. The main sources for analysis are the reports for the residential market provided by the main research companies, national and international books and also the international data bases. We proposed a mathematical model for calculating the yield for real estate properties taking into account the rent values. The post - Covid analysis and consequences of the pandemic on the real estate market were resumed after reviewing and observing the last three years reports for the residential market in Romania and also the specialized literature regarding the phenomenon.

This paper concludes with an analysis of the factors that influence the real estate market tenancies' purchase decision, focusing on the residential segment study.

4. YIELD calculation methods

First of all, it has to be made a difference between gross yield and net yield. Gross yield is the one before the direct and operational costs, while net yield is the one that remains at the end of the year (figure no.1).

Figure no. 1: Yield Formula



Source: processed by the author

Regarding the rents yields requested by categories of apartments, Bucharest is naturally at the forefront big cities, with average values of 250 euros per month for studios, 400 euros per month for two rooms and 600 euros per month for three, respectively rooms. The country's capital city is closely followed by Cluj-Napoca, where the owners request 250 euros per month for a single-room home, 370 euros per month for one bedroom apartment and 450 euros per month, respectively for a two bedrooms apartment. Interestingly, Timisoara continues to occupy the last place in the ranking of rents in big cities, with 200 euros a month for a studio, 300 euros per month for two rooms and 350, respectively euros per month for three rooms (Table no.1)

Table no. 1 Value of rents for the main cities in Romania

City	Studio	One bedroom	Two bedrooms
București	250	400	600
Cluj-Napoca	250	370	450
Brașov	250	350	420
Constanța	200	320	450
Iași	230	310	380
Timișoara	200	300	350

Source: imobiliare.ro, processed data by Analize imobiliare, 2021

5. Commercial real estate market, before the epidemic

Before de COVID-19 pandemic, commercial real estate had a better position, in comparison with the economic growth in 2008. Even though the prices for the residential real estate since 2011 are, on average, by 7.3% below the long-run average, in 2015 the prices surpass the average sustainable rate of economic growth, as the real estate market began to recover (Ionașcu, 2021, p. 100). The specialist that participated at a global study made by Deloitte in the summer of 2019 were expecting an investment growth in real estate for 2020. But, from the second week of March, when the epidemic of COVID-19 was declared pandemic, financial markets dropped, and the commercial real estate was immediately affected, especially as a decision of the authorities to close numerous activities.

The same thing happened in the Romanian real estate, where closing the large commercial centers put pressure on the liquidities of the owners of the buildings and on the income of the tenants, and the measures that followed, such as postponing the payments of the rent, brought extra modifications in the commercial equilibrium between the two parts.

An estimation regarding the return to normal and in what it consists of is impossible to make, but it can be analyzed, based on the existing data, the challenges and perspectives in this area, directly affected by the restrictions, from the sudden change in the way the entire population manages activities and their life-style.

Every crisis assumes three stages: first is the period of reaction of response, in which it is tried to understand de implications and limitations of the immediate effects, then follows the period of recovery, in this period new business strategies develop and then comes the last period, the period of growth, in which, starting from the new strategies created, development opportunities appear. In the response phase from the beginning of the pandemic, the companies from the area of the commercial real estate focused on treating the liquidities problems on the short term, protecting the owned properties but also on maintaining the connection with the tenants and respecting de governmental directives. Naturally, follows the recovery phase, in which companies will evaluate their options for reopening spaces, will redesign price policies as well as the way they use resources efficiently.

6. Post - pandemic consequences

Generally speaking, a really good investment in real estate should start from an annual yield of minimum 6-7%, which would equate with an amortization period of 14-16 years. With the yield being higher and the recuperation period being smaller, it is much better, obviously- overly positive estimates should rise questions regarding risks in that investment.

The atypical crises from the COVID-19 affects in different ways the economic sectors, regarding the events that caused in the past, recession. Real estate field reacted, traditionally, with a delay of almost six months to the rest of the economy, but at this moment reacted a lot faster because of the extension, depth and lack of predictability for this crisis (Ionașcu, 2013, p.103).

Among the last century, external shocks, such as an epidemic or pandemic, followed by an economical slow down, have had an immediate impact or short term over the prices of the commercial real estate, but with a minimal influence over transactional activities, shows a Deloitte analysis that takes in regard the evolution of this area during major events from the past. Commercial real estate has recovered the loss caused by these events in different rhythms. After the punctual events a shorter recovery took place, but long-term events, such as 2008 recession have led to a slower recovery, of much more trimesters.

In the first place, players from the area need an efficient and structured plan to bring people in physical spaces after the elimination of the restrictions, such as offices, commercial spaces and hotels. It is clear that returning to the physical spaces does not mean return to normal. Therefore, companies need to keep in mind the new methods of human interaction and to adapt their spaces accordingly.

The usage of technology is important in every area in this period, and the real estate area is no exception. Therefore, a focus area is technology, for the employer (the required necessities for work from home, applications for the rotation of the employees etc.), as well as improving their activity and their customer's activity (for example: automatic solutions for the warehouses for online commerce). The technology comes with risks which determine companies to consolidate security measures and data confidentiality.

Property portfolio reevaluation to lower the risks on the long term and prudent manage of capital flux are meant to help players in the industry to pass much easier this crisis. For developers that have a wide ranged portfolio, it will much easier to navigate through this period. For example, owning logistic commercial spaces was a natural instrument in managing commercial risk. Other investors will try the diversification of their property portfolio.

To head more rapidly to the growth phase, the companies and people must understand the new normality: what elements will the new tenants cherish when they will choose their spaces in the future? Maybe contract flexibility, maybe more online facilities, maybe less owned spaces etc. Which will be the biggest challenge of the real estate market? Maybe the modified demand, maybe the increase in costs as a need to upgrade or maybe the aversion to risk of the investors, which will prefer more liquid investments.

Prices for apartments and houses will increase with 15% in the next period, real estate experts estimate. It is the effect of the growth of price for construction materials with approximately 20% since the beginning of 2021. The news concerns the buyers, which noticed an increase in prices even in 2020.

Regarding the real estate transactional activity, the year 2021 started in a positive note, despite the difficulties created by the COVID-19 pandemic. Therefore, the data published by the National Agency of Cadastral and Real estate publicity (ANCPI) and archived by Real Estate Analysis show that in the first trimester of the current year were sold almost 162000 properties national, an increase of 11,9% from the same period of the last year. To note is the fact that in individual unit segments took place an advance much more significant, almost 42,7% to a total of 40000 properties. „An important weight on transactions in residential real estate market is financed through credit. The index regarding access on mortgage real estate market emphasizes the fact that a typical household owns, according to the data from December 2020, approximate 71% from the necessary income for acquiring a location with 2 rooms. In Bucharest, from 2013, the accessibility index increased, that means the income of one family increased enough to afford to buy a home. Without financial aid from a bank, the necessary time to acquire a property with 2 rooms at a national level is of about 8,5 years (price to income), and regarding a property with 3 rooms it is of about 11 years (data from December 2020).” Simona Iftimie, Economist, Department of financial stability – National Bank of Romania.

In line with the overall tendency of the market, all eleven cities (with over 200000 people) constantly monitored by Real estate Analysis, registered, in the first trimester of 2021, had an increase in the medium price for an apartment. In contrast to the previous three months, when the growth ratio where all, with one exception, below the 2%, at the beginning of 2021 more regional centers succeeded in overcoming that percentage.

Despite maintaining the restrictive measures in times of COVID-19, local residential market maintained, in the first trimester from 2021, on an ascending path regarding prices of the properties. So, the most recent report realized by Real Estate Analysis, the platform launched and maintained by Imobiliare.ro, show that, in January-March, listing prices of residential Romanian property (apartments, and also houses) noticed a trimestral advance according to normal conditions in the market. „According to Real Estate Analysis, the medium price solicited by the salesman of apartments and houses increased with 2,2 % in the first trimester in 2021 to the previous trimester. The annual rate of the growth in prices slowed down because of the decrease in the demand and the increase of the current offer; this indicator was, in the indicated period, at 3% compared to 3,5% from the end of the last year. The annual average growth of 3% reflected differently on the two segments of the market: existent real estate price (old) registered a slight decrease, of 0,5%, meanwhile the new property prices increased with 6,8%”. Dorel Niță, Head of Data & Research, Imobiliare.ro

7. Conclusions

After the 2008 economic crisis ended, everybody was waiting for the prices to drop down. The prices, though, are not dropping. The market is increasing, if we are taking a look at the numbers. Official statistics show that there is an increase and that it will continue to exist, everything, automatically, if it will be sustained by the economy. Therefore, the Covid-19 pandemic, did not have a major negative impact over the real estate market so far.

The Covid-19 changed the behavior of the people and companies and the reconsidered the options regarding the real estate sector. One of the general tendencies produced by the necessity to spend more time in their own houses is the amplified need to enjoy the outdoors, once in a while. This is the reason for which the properties located in the more nature like, close to nature or that offer the possibility for a pleasant walk are, today, more appreciated. For the population of the bigger cities – like Bucharest, Cluj, Iasi, Timisoara, Constanta, Brasov, and not only, this trend means an increased interest for residential projects with low density, located, usually, in the quieter areas from the edge of the big cities.

In the present situation of the coronavirus epidemic, one of the predilections that can be identified on the real estate market in 2021 is represented by the need to feature the property with all the necessary things for working from home – starting with a good quality connection to the internet and a special featured space and continuing with all the equipment and technological solutions necessary in order to assure optimum working conditions. It is very likely that in the future, working from home and working from the office will be combined, these investments will continue, and with this trend, developers will provide spaces in which people that live in residential places to work and even have business meetings.

Regarding the rental market, the studies show that most of the tenancies want a series of facilities – parks, tendencies and playgrounds count today almost as much as the proximity of public transportation. Additional, if the proximity of a supermarket was always an important request, in the present moment almost half of the tenants consider the even the proximity of a pharmacy is in top of the preferences.

This research aimed to study the residential and commercial market in Romania before and after the Covid-19 pandemic started, considering the new behavior trends of properties demand and supply. Depending on the duration of the epidemic, this topic will remain open, as the real estate market will continue to suffer changes and further analyses can be made during the present situation, but also after the pandemic stops.

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Agricultural Holdings from Concept to Economic Performance

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Abstract

Romania's agriculture is a basic element in the national economy, due to its potential and existing natural and human resources.

Performance is a hotly debated topic in all areas of activity, but in agriculture it needs a distinct approach, as an important role in influencing performance dynamics is played by natural factors, which are the consequence of climate change and increased pollution. Performance is not just about achieving short-term results, but also about implementing strategic policies for the sustainable development of farms. This article has been written in order to support people interested in information on economic performance in agriculture.

Key words: performance, agricultural holding, accounting

J.E.L. classification: J43, O13, Q10

1. Introduction

In the case of agricultural holdings, performance must be addressed at the same time as risk, which is best illustrated in agricultural activity by natural factors that produce changes both in the structure and financial balance and in the price of agricultural products.

The natural resources owned by our country propel agriculture to the point where it can revive the national economy with the growth and development of the agricultural sector. The impact of agriculture on the national economy as well as the need to identify the causes that hinder the growth of the performance of the agricultural sector, is the motivation to start this research study.

2. Literature review

In the literature, agricultural holdings are presented to us as those complex forms of organization, which have the role of highlighting the land, animals and all means of production, which they interconnect in a unitary system, in order to execute works and provide services for obtaining agricultural products (GEO no. 108/2001, art.1).

In other words, we can say that the agricultural holding is a unit of production, which uses land, plants and animals as the main means of production to obtain agricultural products, but this form of organization must be seen not only as an economic entity but also as a primary element in the social, demographic and ethnological structure.

In current practice but also in specialized studies, in addition to the notion of agricultural holding, the notion of agricultural unit or agricultural enterprise is also used, both with a substitutable and complementary meaning. From the definition of the three concepts by the specialized literature, we can subtract the following characteristics:

Table no.1 The table of activities specific to the three types of form of organization

Types of activities specific to agriculture	Agricultural holding	Agricultural enterprise	Agricultural unit
Production of the vegetable type	yes	yes	yes
Animal production	yes	yes	yes
Provision of agricultural services	no	yes	yes
Primary processing of production and its capitalization	no	yes	yes
Specialized, technical, scientific assistance	no	no	yes
Promoting and defending agricultural interests	no	no	yes

Source: author's projection

The legislative framework and the literature group the agricultural exploitations according to several criteria such as: size, profile, economic doctrine, land ownership, human resource, destination of production and other legal-economic criteria (Alecui et al, 2011, p.32). In Romania, the most used criterion for classifying agricultural holdings is represented by the property criterion, which results in the following types of holdings:

- family-type agricultural holdings, which are the most common forms of organization in our country, are considered the basic unit of agriculture, in which the family is the main source of labor, based on private ownership of land or its lease, and their support by public administrations aims to maintain a socio-political and socio-economic balance;

- individual family-type agricultural holdings, are represented by those agricultural holdings that appeared in our country with the application of the Land Fund Law and the privatization of agricultural companies by abolishing the former I.A.S.;

- agricultural holdings of the type of companies, are set up in accordance with the legislation in force and can take the form of the following categories: general partnerships, limited partnerships, joint stock companies, limited partnerships and limited liability companies (Companies Law no. 31/1990, art.1.) ;

- public agricultural holdings, are those units that are under the administration of public institutions and that carry out agricultural activities of national interest such as research stations and teaching stations;

- associative agricultural holdings or agricultural cooperatives, as they are also called, may be set up as simple associations or agricultural societies, on the basis of the free consent expressed by the component parties for the purpose of promoting the interests of the cooperating members (Law on agricultural cooperation no. 566/2004, art.2).

We can say that in Romania, the most widespread form of organization is represented by family farms that represent the basic cell of agriculture in terms of ethnology, social and property, capitalizing on both land and human resources, and if we look at this type from an economic point of view we will realize that it is not the most profitable, because most of the products obtained are used for own consumption, this being valid for farms that have an area of less than two hectares. The largest number of individual farms in Romania have a land area between 2 and 5 hectares, from this area the small farmer obtains agricultural products that exceed their own level of consumption being forced to sell some of them, obtaining an income.

3. Research methodology

The author Constantin Enachescu relates in his work "Treatise on the theory of scientific research" that ideas do not appear by chance and can not arise from anything, having something that is at their origin, coming from a source and being intelligibly related to it (Enachescu, 2005, p.2). Starting from this teaching and analyzing the management system of methods, procedures and techniques used to develop this scientific paper, we went through the following steps: studying the literature with applicability in the field, setting research objectives, collecting and processing data, formulating personal conclusions and opinions.

The main objective of the research is to analyze the performance of agricultural holdings and identify the factors that influence performance in agriculture at the microeconomic level, followed by specific objectives such as:

- identification of the types of agricultural holdings in Romania;
- positioning agriculture in the Romanian economy;
- identification and application of the main methods of performance analysis at microeconomic level;

The paper includes elements that describe the economic performance from a theoretical and practical point of view, and from a methodological point of view it combines, in a logical form, the quantitative research with the qualitative one. The combination of quantitative and qualitative methods in this research leads to the formation of the triangulation process that reduces the specific inconveniences of research methods, helping to obtain the desired information in several ways and providing a true picture of the phenomenon studied.

In order to achieve the proposed objectives we used for the elaboration of the paper the descriptive method useful in reviewing the literature, document analysis to capture the interactions between the studied phenomena, such as production fluctuation, average selling price, comparative analysis between economic phenomena studied in order to highlights the evolution or involution of economic and financial indicators, as well as the generating factors, the results obtained as well as the case study that has the role of concretizing the theoretical aspects generating a series of conclusions, opinions and interpretations.

4. Findings

Agricultural activity is an economic activity that aims to produce food for the population and to capitalize on agricultural products obtained from cultivating land or raising animals. In order to determine the place of agriculture in the Romanian economy we must start from the analysis of agricultural functions, and one of its most important functions is to supply agri-food products for consumption by the population on the domestic market, the analysis of this function shows the need to support and develop the agricultural system in order to maintain a socio-economic balance that smooths the trajectory of a people with healthy development and permanent stability in obtaining food (Achim et. al, 2014, p.60). The social character of agriculture is closely related to the labor force needed to carry out agricultural activities, but also to the supply side of raw materials for the manufacturing industry, generating new technological flows that absorb labor from the local market. The economic side of agriculture is best highlighted by its participation in the formation of the Gross Domestic Product, but it is also a source of currency for the national economy by capitalizing on production for export. Another function of agriculture is the one of strategic importance, through which it contributes to the formation of state reserves for unforeseen situations and to the management of the biological processes of growth and development of living organisms.

If we analyze the statistical data processed by the profile institutions we will notice that in Romania for the reference year 2019 agricultural products worth 7196 million euros were exported and agricultural products worth 8379 million euro were imported, from where we can draw the conclusion that a large part of agricultural products go for export, especially in the first phase of harvesting when due to the lack of storage spaces, in optimal conditions, of agricultural products they are sold at quite low prices, and after a period after decreasing stocks in the agricultural market and increasing demand is resorted to the import of raw materials or products, but at much higher prices.

According to data provided by Eurostat, Romania's agriculture has a significant influence on GDP, as follows:

Table no. 2 The evolution of GDP from 2016 to 2021

Indicators	2016	2017	2018	2019	2020	2021 (estimated dates)
GDP - from agriculture, in millions of euros at current prices	170393	187 773	204 640	223 335	211 352	225 277
GDP growth at constant prices	4.8%	7.1%	4.4%	4.1%	-6.0%	4.2%

Source: Eurostat (<https://ec.europa.eu/eurostat>)

If we analyze the data in the table above, regarding Romania's GDP in recent years, we will see that the highest value of GDP from the agricultural sector was in 2019, when a record was set for our country in production of cereals compared to the number of hectares cultivated, with a slight decreasing trend in 2020 due to unfavorable climatic conditions, especially lack of rainfall, since the beginning of the agricultural season, but there is a positive trend in the value of this indicator in 2021 which will increase if the foundations of a sustainable agricultural policy are laid. The low performance of the agricultural sector in 2020 is due to the lack of competitiveness which reflected a low productivity as well as a regression of economic growth generating a deficit of agri-food balances, due to the fact that the agricultural industry fails to keep pace with growing demand for products. internal and external market.

We can say that the development of agricultural holdings and the entire agricultural sector requires the practice of sustainable agriculture, even if it is a complex and difficult process, which can be an alternative to intensive agriculture based on industrialization and chemicalization. The sustainable and sustainable development of Romanian agriculture can be achieved by developing competitiveness based on the real resources of this sector and by promoting technologies that protect the environment (Burja et. al, 2008, p.12). This system of farming aims to develop the rural economy, to ensure alternative incomes and a high standard of living for farmers, but also to ensure the continuity of the practice of this activity by future generations.

5. Conclusions

Starting from the idea that the agricultural holding is an economic unit that uses as means of production land, plants and animals to obtain agricultural products, we can say that it is also the place where some of the country's population live and work, managing a much of the territory and actively participating in maintaining and improving the ecological balance. Thus, the role of the agricultural exploitation goes beyond the framework of a simple branch of production combining with the demographic and social component of the contemporary society.

The performance of agricultural holdings certainly depends on the development of society as a whole, on the land, agricultural resources and the population that manages it, being influenced by the political and social events that take place in civil society.

Following the study, we can say that agriculture in Romania has a significant potential for natural resources and human resources, but for its development and capitalization is needed economic-financial and technological capacity and a sustainable development strategy.

The process of developing farms requires a transition from subsistence farms to competitive farms, the integration of small producers in domestic markets through associations, the development of infrastructure projects in rural areas to attract investors to build production lines and processing of agricultural products and merging of lands to benefit from structural funds for large crops.

As an alternative for the development of Romanian agriculture, some niche activities must be approached, such as: the development of ecological agriculture, the attestation of the products of geographical origin, the promotion of the traditional product concept and the creation of free market structures.

The notion of economic performance of agricultural holdings is a complex one and must be seen in a global context because it is influenced by a number of factors such as: farm size, degree of technology, soil quality, climatic conditions, pedo-geographical location, etc.

At the entity level, the method that gives us the expected results of the economic performance analysis is profitability, in all its dimensions, because it illustrates the holding's ability to make a profit based on the resources held (Branka et. al, 2016, p.1363).

The performance of the agricultural holding is also closely related to the way of coordinating the activity by the managers, to the way they procure their resources and the way of spending them in order to obtain profit. Performance is not just about reducing spending and maximizing revenue to make a profit, because there are cases where rising spending highlights a viable society that is booming, investing heavily in loans, generating a much larger volume of spending.

In the view of some entrepreneurs, performance is understood by the simple fact that income covers expenses, not taking into account productivity and efficiency or are concerned with "beautifying" the results by influencing profitability that affects the productivity of labor and economic efficiency.

We can say that the performance of agricultural holdings depends on the competence of the people in the administration department, as well as on chance, due to the multitude of climatic factors that man cannot control.

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Increasing Public Administrative Responsibility by Modernizing the IT System for Reporting the Financial Statements of Public Institutions

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Abstract

Under the significant impact of globalization, recent developments in public sector accounting present the greatest challenges for modernizing specific financial reporting regulations in public institutions in order to adapt to current economic requirements. The Romanian public sector has undergone a process of transformation to change the order of organization and management of accounting of public institutions, the program of accounts and instructions for implementing an electronic system of financing reporting, financial statements, automatic verification within services if they are paid or not are within the budget, providing information about the realization of the entries and pages made. This paper mainly uses a documentary approach and may propose to pursue one of the essential premises oriented, in the public sector towards the concept of public responsibility, highlighting the characteristics of implementation and the effects of the national financial reporting system on budgetary transparency.

Key words: accountability of public administration, modernization, public institutions, reporting of financial statements, transparency

J.E.L. classification: M41

1. Introduction

The economic-financial analysis of the results reveals the factors and causes that generated a certain state of affairs, as well as the solutions required to optimize the operation of the entity. In order for a regulatory system, such as the economic-financial system, to function efficiently, it is necessary to resort to a rational information system that ensures quality, operative and timely information for managers, executors and beneficiaries.

Improving the public reporting system appears to be a necessity, supported by reasoning such as the speed of obtaining quality financial and statistical information indispensable for the transmission of data to international bodies (EUROSTAT at COFOG III) on not only budgetary and legal commitments but also budget execution (for revenue - classification by chapters, subchapters, paragraphs and expenditure - classification by chapters, subchapters, paragraphs, titles, articles, articles).

Therefore, information systems have been implemented which, based on management systems, have come to manage and process large volumes of data, especially in public institutions. In public institutions in Romania, the reporting system entitled ForExeBug (Operational Program for the Development of Administrative Capacity, financed by the European Social Fund) was put into practice in 2014 for the responsibility by modernizing information systems, for generating reports on financial statements.

The financial statements are mandatory, present, as a rule, present financial results for further development. The reporting system, ForExeBug, allows the transmission of financial-accounting data by each public institution in electronic, standardized, monthly format, which ensures the increase of data reliability by cross-checking the data from the treasury, and also their use for several criteria. analysis and time series by the Ministry of Finance.

Processing large volumes of data in public institutions with modern tools, standardized reporting of financial statements, with strict budget classification, presentation of details on the use of public funds in conditions of administrative transparency were some of the objectives for which the FOREXEBUG reporting system was created. Cross-checking by auditors in real time of data collected in the system, by cross-validation with system data and providing accurate information for use by the Ministry of Finance and other users and the need for security in computer systems are some of the main objectives which were considered after this system was implemented. The facilities proposed for both the operator and the auditor are based on the modeling of management in budgetary activity, which involves a calculation system, composed of mathematical models, systems of linear algebraic equations with thousands of equations.

2. Literature review

Recent developments in public sector accounting in Romania lead us to anticipate important innovations in financial reporting in public institutions. Moreover, the normative "revolution" with an impact on public accounting manifested in our country, starting with 2014, launches the biggest challenges for the public sector, the legislator showing intense concerns for modernizing specific rules to adapt to the requirements of today's economy, under the significant impact of globalization.

In this context, A. Tudor Tiron (2013), captures the need to increase the responsibility of public administration by modernizing the reporting system. But the accounting reform of the public sector, under the aegis of digitalization cannot be achieved without the professional training of civil servants, the improvement of the system, (Ștefanescu, 2013) the credibility of the information provided through reports, the need for information transparency. In turn, Alecu (2013) extensively develops the public accounting reform and debates the need to change the reporting system, conducting extensive theoretical research. Financial communication is an extremely remarkable tool that is based on both transparency and credibility, and that allows administrative-territorial units to manage their external relations by providing the financial and accounting information requested by stakeholders, thus managing to create an interconnection with the external environment: advisers and citizens, so it is not surprising that finding effective means of communication with stakeholders is one of the priorities of public administration.

Credibility plays a very important role in the light of the information that the entity provides to stakeholders, information that must fall within the field of fairness, reality, relevance and coherence, so that they are perceived as credible by stakeholders (Curagău, Cușmăunsă, 2019).

Pollitt (2006) pointed out that politicians use and manage information provided by the public. According to Melkers and Willoughby (2005), in accounting information plays a role in public management, accounting information usually refers to budget issues related to debts, credits and expected costs of certain services or problems based on accumulation (van Helden, 2015).

To provide a better level of understanding of the boundaries of responsibility, Patton (1992) turned to a study focusing on the link between the concept of accountability and financial reporting at the government level, which should provide information to help users to make economic, social and political decisions. Burrit's (2012) study on responsibility connected to environmental performance includes informational presentations for most of an entity's capital. Raga and Taylor, in 2005, propose an accreditation system for public service managers. We appreciate that, through their use, the accounting information improves and increases the responsibility for making efficient managerial decisions.

The literature shows that researchers have observed the use of accounting information in the management process (Kroll, 2014; Liguori et al., 2012) and only a few exceptions have deepened the use of accounting information reported in official documents (Askim, 2007; Giacomini et al. , 2016; Guarini, 2016; Ter Bogt, 2003, 2004), information barely considered by politicians (Ezzamel, Robson, Stapleton and McLean, 2007; Ter Bogt, 2004, Ter Bogt, H., & van Helden, G., 2011).

The managers of a public entity, their respective administrators, local councils, county councils, prefectures, ministries, etc. are the beneficiaries and users of the information generated by the public sector that they can use, judiciously and rationally, for the elaboration and substantiation of the decisions. According to the regulations in force, public information is obtained in financial or general accounting.

As an essential component of the treatment and capitalization of information, the financial-accounting mechanism reflects an administrative function, of accomplishing the informational-decisional processes. The operations regarding the chronological and systematic registration of the existence and movement of the patrimony on its structure, as well as of the financial results are done through accounting, resulting in financial-accounting information highlighted in Journal Registers and in accounting accounts (analytical and synthetic) with the help of the inventory, the checking balances, the income and expenditure budget, the balance sheet.

3. Research methodology

In our study we develop a brief review of the relevant literature and analyze what the pioneers in this field of research have achieved. In this sense, we point out that our work is mainly documentary and the main research methods used are the argumentative structures, content analysis and qualitative method to synthesize the most relevant studies so as to highlight the valences of the concept of increasing public responsibility and administration. of resources. Assuming public responsibility is an inherent feature of civil servants. Research and discussions in this direction lead to the implementation of national reporting in the public sector. Therefore, we frame our motivation to consider the national reporting system, an instrument of responsibility assumed in the context of the need for efficient communication.

4. Findings

The implementation of the information system in each public institution is carried out through the enrollees (head of the institution, accountants) based on the qualified digital certificate with access to the application, and also the Public entity to have an individual budget registered and validated by Forexebug system. By accessing the functionalities of the national reporting system - Forexebug on registration, electronic modification of data, electronic transmission of documents, electronic documents generated by the system and by interested users can be obtained without authentication by electronic signature or being enrolled in the computer application. The interested public by accessing the same e-mail address can view the data on the use of budget appropriations of any authorizing officer (execution account), the budget forecasts of each public institution (individual budget), as can be seen in Figure no. 1, and if it has the necessary knowledge can make individual assessments of how public money is spent, which demonstrates compliance with a budgetary principle (the budgetary system is open and transparent) and the requirements of transparency in the substantiation of the budget, as well as in the use of budget appropriations, respectively , of the execution account.

In other words, we can say about the taxpayer that he can become an external auditor, issuing judgments on how public money is spent by accessing from his own computer the execution account of any administrative entity, focusing on information. The computer, as a result of information technology, is a space for data management and communication. The first stage of data registration, in the computer application, regarding the budget execution, is the completion in the budget form, a pdf file. with an attached XML, generated from the accounting program, through which a public institution records the initial budgetary legal commitments and subsequent budgetary changes. Following the transmission of the information by a public entity, the budget form is verified by the system and validated or not, the next day, and in case of discrepancies, information is provided that can be corrected and retransmitted. The budget form includes fields with predefined lists that help to easily identify the information that needs to be filled in, as in figure no. 2. The budget loaded in the IT application includes the annual values and broken down by quarters, of budget revenues and expenditures and provides support for the distribution of expenditures on the structure of the

classification of indicators on public finances: chapter, title of expenditure, subchapter, article, paragraph.

Figure no.1. Budgetary transparency

The screenshot displays the 'SISTEMUL NAȚIONAL DE RAPORTARE' interface. At the top, there are navigation tabs: 'Informatii utile', 'Rapoarte Entitati Publice', 'Alte rapoarte', and 'Rapoarte intreprinderi Publice'. Below these are search filters:

- Tip Raport:** Bugetul individual al entitatilor
- Sector Bugetar:** 02 - Bugetul local (administrat)
- CIF Ordonator Principal:** 4546952
- CIF Entitate Publica:** 4546952
- Perioada Raportare:** August 2020
- Judet:** Cluj
- Denumire Entitate Publica Ordonator Principal:** "COMUNA IARA"
- Denumire Entitate Publica:** "COMUNA IARA"

Buttons for 'Cauta' and 'Reseteaza' are visible at the bottom right. A watermark 'ene5q' is present in the center.

Source: Adapted from: <https://forexpublic.mfinante.gov.ro/>

Figure no. 2. CAB application - legal budgetary commitments

The screenshot shows the 'CAB' application interface with a table of legal budgetary commitments. The table has the following columns: Nr. crt., Cod, Descriere, Stare, Angajament legal, Credit bugetar rezervat definitiv in anul curent, Receptii, and Plati.

Nr. crt.	Cod	Descriere	Stare	Angajament legal	Credit bugetar rezervat definitiv in anul curent	Receptii	Plati
11.	AAA7CM3P55	calamitati 2020	In desfasurare	7.445.250,00	516.648,97	7.445.250,00	6.928.601,03
12.	AAA7CM2CNGT	asistenta sociala 2020	In desfasurare	1.007.000,00	170.978,95	1.007.000,00	836.021,05
13.	AAA7CKXEXC5	investitii buget local 2020	In desfasurare	28.261.800,00	20.344.042,70	28.261.800,00	7.917.757,30
14.	AAA7CKSPRK8	reparatii curente 2020	In desfasurare	893.302,00	263.279,85	893.302,00	630.022,15
15.	AAA7CKS2GR	obiecte de inventar 2020	In desfasurare	26.000,00	4.483,01	26.000,00	21.516,99
16.	AAA7CKHF87N	bunuri si servicii 2020	In desfasurare	1.695.600,00	424.666,60	1.476.600,00	1.270.933,40
17.	AAA7CKH4BXB	deplasari	In desfasurare	6.400,00	0,00	6.400,00	6.400,00
18.	AAA7CKF48CG	investitii FEN2020	In desfasurare	8.593.800,00	7.530.278,59	8.593.800,00	1.063.521,41
19.	AAA7CKD2R6F	tichete de vacanta 2020	In desfasurare	49.750,00	16.763,00	49.750,00	32.987,00
20.	AAA7CK8D7RD	salarii 2020	In desfasurare	2.941.467,00	461.191,00	2.941.467,00	2.480.276,00

Navigation controls at the bottom left include '<< 1 2 3 4 >>'. An 'Export Excel' button is located at the bottom right.

Source: Adapted from: <https://forexpublic.mfinante.gov.ro/>

The second step in recording economic information is the introduction of legal budget commitments through the application of FOREXEBUG's budget commitment control (CAB). The CAB application presents a list of menus for recording and displaying budget commitments and commitment data. A budget commitment is an administrative act that reserves a budget appropriation to remove the obligation to pay, on account of public funds, resulting from the execution of a legal commitment. The next step is to introduce budget-related receipts, within the CAB budget commitment control application, in order to make payments from public funds according to ALOP operations (commitments, liquidations, ordering, payments), there is only one operation - the reception. The reception, as highlighted in figure no. 3, is made within the related budget appropriations approved in the budget for each fiscal year, according to the payment obligations arising from the execution of a legal commitment.

Figure no. 3. CAB application – Reception

The screenshot displays the 'Adaugă recepție' (Add receipt) screen in the CAB application. On the left is a navigation menu with options like 'Angajament nou', 'Listă angajamente', and 'Raportare'. The main area contains the following information:

- Număr angajament:** AAA7CM35P55
- Data angajament:** 06/01/2020 | **Data început derulare:** 06/01/2020
- Ultima modificare a stării:** 06/01/2020 12:07:31
- Tip:** Final
- Data:** 17.11.2020
- Descriere:** RECEPTIE

At the bottom, a table summarizes the budget data:

Cod	Program	Proiect	Obiectiv	Sector - Sursa - Indicator	Credit bugetar rezervat definitiv	Valoare nereceptionată	Valoare
AAB	0000000000				7.445.250,00	0,00	0
Total					7.445.250,00	0,00	0,00

Buttons for 'Salvează' (Save) and 'Renunță' (Cancel) are located at the bottom left.

Source: Adapted from: <https://forexpublic.mfinante.gov.ro/>

The last step in order to complete a budget execution and the reporting of the financial statements, in the system can be sent payments with multiple electronic payment orders OPME, functional operation after the establishment of the state of emergency in our country. In figure no. 4 an electronic multiple payment order with a single payment is presented.

Multiple electronic payment orders are completed, validated and electronically signed in the accounting program of each public entity and transmitted electronically in the national reporting computer system. The IT platform allows users enrolled in the IT system to obtain reports on budget execution, financial statements, notifications, general reports, account statements and operations such as sending financial statements, electronic payment orders, financial statements, operations in the CAB application, viewing public pages. Unregistered users can view the budget execution and individual budget reports of any public entity.

Therefore, we can appreciate that the usefulness of this information system is manifested not only in the execution phase of public budgets, but also in the planning stages of its development phase. This demonstrates that the data in the accounts of the collection of revenue and expenditure recorded on the basis of budgetary appropriations, the responsibility of authorizing officers, are not secret and can be accessed by any taxpayer. The IT system, through its implementation, by the Ministry of Public Finance monitors the process of collecting and conducting payment transactions, in operational treasuries, by reporting entities, on detailed budgets to manage budget commitments, thus improving the auditor's work by simply accessing program. The system allows the auditor to evaluate the real-time transactions that occur and are recorded saves valuable time in formulating the best recommendations, so that the audit function can remedy various situations. In conclusion, we can say that the national reporting system is a system designed on a clearly defined mathematical

basis is subordinated to the audit function, which gives credit officers reasonable assurance that the operations performed, the decisions taken are the best and thus ensure growth management performance.

Figure no. 4. Electronic multiple payment order

ORDIN DE PLATA MULTIPLU ELECTRONIC (OPME)

Tip Entitate: Entitate Publica Alte Entitati

Suma control:

Numar document: Data document: Nr.inregistrari:

Total Document: LEI LEI ADICA

Denumire Plator: CF plator: Adresa plator:

PLATTOR						BENEFICIAR						
NR. OP.	Cod IBAN plator	Denumire Trezorerie	Cod Program	Cod Angajament	Indicator Angaj.	Denumire Beneficiar	Cif/CNP Beneficiar	Cod IBAN beneficiar	Denumire Banca / Trezorerie	Suma	Numar de evidenta a plati	Reprezentand
100	RO42TREZ24AS10103200103X	Trezoreria Municipiul Turda	0000000000	AAACHAHEH6	AAX	ELECTRICA FURNIZARE AGENTIA	28090028	RO04TREZ7005066000006495	Trezoreria Municipiul Bucuresti	13.990,67		CY fact 9549643147 ENERGIE ELECTRICA SecFunctionare

NUMAR OP:

IBAN PLATTOR:

DENUMIRE TREZORERIE:

COD PROGRAM:

COD ANGAJAMENT:

INDICATOR ANGAJAMENT:

CIF/CNP BENEFICIAR:

DENUMIRE BENEFICIAR:

IBAN BENEFICIAR:

DEN BANCA/TREZORERIE:

SUMA:

NREVIDENTA PLATI:

REPREZENTAND:

Adauga OP

VALIDARE SI GENERARE XML

Semnatura 1:

Semnatura 2:

Source: Adapted from: SCM Accounting

5. Advantages and disadvantages of implementing FOREXEBUG

The implementation of FOREXEBUG aims at administrative transparency, the uniqueness of financial reporting related to the public domain, reducing the time to prepare financial reports, standardization and centralization of data, information and situations, creation of a common database, accuracy of data and information, easy access to third parties and other specialized institutions. , and the synchronization of revenues and expenditures of public institutions with the information found in the system, achieved objectives that increase the efficiency of the central, county and local administrative system and the detailed publication of information on the use of public funds, according to budgetary classification. As a result of the transmission of data based on the electronic signature, the volume of data to be reported by each authorizing officer is reduced and at the same time the working time is reduced, due to the significant decrease of the data to be centralized and reported.

Following the centralization of data in the system, the budgets are collected at the territorial Treasuries, the payment operations through the Treasuries are automatically validated, the budget execution is reported by the operative Treasury and not hierarchically by the main authorizing officer as in the past.

However, a number of negative issues were raised, related to the delay in the implementation of the information system by about 1 year (from June 2015 to June 2016), followed by the lack of specialized training of professional accountants, operators in the IT application in institutions amplified by the lack of practical experience of the trainers of the Ministry of Public Finance. Due to the conditions imposed by the existence of a digital certificate, there were obstacles to accessing the system, although there is an obligation to submit the 2011 tax return online.

The computer system does not allow updating data immediately, but only the next day, even if they have been validated. Thus, if changes are made by the user in the budgets section, commitments and payments cannot be made on the same day, and these changes will be made the next day because the system, even if it transmits that the data has been validated without errors, by presentation interface, they are processed overnight. It is also difficult to process error correction. For example, if an authorizing officer enters erroneous data in the individual budget, the system crashes and the error is reported to both the authorizing officer who entered the individual budget incorrectly and the chief authorizing officer and the operating treasury to which he belongs, the other authorizing officers may no longer enter data until the system has been unlocked.

The activity of authorizing officers is hampered by the increase in workload due to the fact that financial reporting is also done on paper, as in the past and in the national computer system of reporting, which involves performing additional operations, it is necessary to validate and access to the situations regarding the budget execution by the main authorizing officer, both for his own activity and for the activity of the secondary or tertiary authorizing officers subordinated to him, in real time or at least monthly.

In addition to the budget execution in FOREXEBUG, the last operation, namely, sending checks for cash withdrawal to the Operational Treasury is not yet operational, which makes the efficiency of the system significantly reduced.

Although the national computer reporting system Forexebug has various shortcomings, we appreciate that the financial-accounting information transmitted and resulting from this system (for example: general reports) have an important value, as the resulting information is obtained quickly, is accurate, fair, faithful, fair, complete, relevant and reliable and safe not only for entity managers, but also for specialists and other third parties who evaluate the entity and formulate decisions, thus contributing to the performance of the public entity and thus to the progress of society. The effectiveness of the resulting information-decision-action cycles depends on the quality of the resulting financial-accounting information.

With the help of the national computerized Forexebug reporting system, the annual financial statements, which represent a tool for assessing the quality of financial accounting information, provide accurate, clear, correct data comparable to those of European public entities, in order to achieve uniform rules and regulations for presenting statements. so that each user of financial accounting information makes similar economic decisions.

6. Conclusions

The Romanian public administration must accept and implement the administrative values that define the European space: transparency, predictability, accountability, adaptability and efficiency, values that must be found in institutions and administrative processes at all levels.

In recent years, the national financial reporting system through modernization has made progress towards strengthening it as an effective communication tool, making an active contribution to financial stability and the sustainability of the economic environment.

Since the public sector has a wider range of stakeholders, many of them need an effective information presentation in which users can understand from a intelligible, concise and comprehensive communication as many aspects as possible regarding the use of resources and the impact of the activity of the public entity.

Improving the public reporting system, increasing the efficiency of central and local public administration and administrative transparency by providing public institutions with modern, standardized tools for reporting financial statements appears as a necessity, being supported by reasoning such as speed of obtaining financial and statistical information indispensable for the transmission of data to international bodies and the publication of detailed information on the use of public funds, in accordance with the budgetary classification.

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Considerations About the Application of Accrual Accounting on the Public Sector in Romania

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Abstract

The scientific approach pinpointed in this paper aims at outlining the serious changes that have occurred in Romania regarding the accounting system operating in the Public Sector. These evolutions have been triggered by the demand to adjust the whole entire system to the latest circumstances dominating the socio-economic, political and legal landscapes. I have undertaken a normative research steered at the investigation of the implementation process of the “International Public Sector Accounting Standards” (IPSAS) on Romanian grounds (which was underlined by the recent evolutions occurring in accounting laws and regulations).

Key words: accrual accounting, “International Public Sector Accounting Standards”, accounting reform, principles, accounting profession

J.E.L. classification: M41, M48

1. Introduction

Public accounting ought to outline a clear and eloquent image of the status characterizing the execution of the general consolidated budget and its components, the data demanded for the fulfilment of certain specific necessities of public bodies and the data it furnished to the bodies with relevant prerogatives.

The accounting information must be credible and relevant to the users’ decision-making needs; more specifically, it should provide an accurate landscape of the current economic outcome and a concrete outline of the financial status of the public institution, it must be neutral, prudent and complete in all the significant respects.

In Romania the legal framework at national level has been enriched over time through the gradual assimilation of the elements specific to accrual accounting.

A number of normative acts, designed to regulate the financial statements of public institutions, have been constantly updated in order to respond to the specific prerequisites of the Romanian economy and, at the same time, the evolutions in the international landscape, notably those triggered by the enforcement of IPSAS.

2. Research methodology

Recently, the Romanian accounting system has been modified dramatically, undergoing a large and thorough reform process, vital to the adjustment to the late economic, political, legal and social circumstances. Among its many other purposes, this reform process targeted at the enforcement of international accounting standards in public bodies. Can the achievement degree of this purpose be quantified? Is it possible to identify the modifications of the Romanian laws and regulations in the field that have been performed in order to attain this objective? What were the advantages, and also the disadvantages of such an approach? This is what we intend to achieve throughout this study. In order to provide answers to the above questions, we have resorted to a normative type of research through which we have performed an investigation of the implementation mode of the “International

Public Sector Accounting Standards” (IPSAS), on Romanian grounds, also in connection to the latest adjustments of accounting laws and regulations.

3. Theoretical background. International Public Sector Accounting Standards – IPSAS

For a quite long time, public bodies have not been required to furnish clear, pertinent and reputable data, (double-checked and) ascertained by external auditors. Nonetheless, one of the major roles of public accounting is to safeguard the comparability of data, and the clarity and pertinence of financial information and genuine accountability. To address this demand for information in the public system and the requisite regarding the provision of comparable, clear and pertinent pieces of information, IPSAS standards have emerged and developed.

Since 1996, the “International Public Sector Accounting Standards Board” (IPSASB) has been formulating international accounting standards destined to public bodies; in its turn, during the drafting process, this international Board took into account the “International Financial Reporting Standards” (IFRS). However, it has also designed and expanded upon ‘an original doctrine’ that pinpointed and dealt with a vast array of issues emblematic of the public ‘arena’, with the aim of developing financial reporting standards based on accrual accounting to be used by the public institutions around the world.

However, given that in most countries public accounting is based on cash-basis accounting, IPSASB also developed a standard based on this type of accounting, as it wanted to make the move towards accrual accounting easier.

IPSAS standards establish the criteria for recognizing, assessing, describing, and presenting information about transactions and events in financial statements with a general purpose.

These accounting standards are reliable, established independently, being upheld and reinforced by decision-making bodies, such as governments, or by influential ones (often involved in the decision-making process) i.e., professional accounting organizations and various international organizations.

Currently, 41 IPSAS standards have been adopted; the first 21 (i.e., IPSAS 1 - IPSAS 21) are based especially on the IFRS standards. Furthermore, other distinct standards have been designed for the public sector (for instance, IPSAS 22, 23, 24), and, meanwhile, a standard has been created according to the cash method of accounting (cash-basis accounting) in order to introduce the accrual accounting method.

Furthermore, in 2007 11 IPSAS standards were revised (IPSAS 1, 3, 4, 6, 7, 8, 12, 13, 14, 16, 17) in order to take into account the changes which occurred in the IFRS standards during the 1996-2006 period.

Comparing the first 21 IPSAS standards with the IFRS standards they were inspired from, we can list the following differences: in the IPSAS standards there are additional comments compared to IFRS standards, which have the role of clarifying the applicability of the standards in public institution accounting, some terms used in the IPSAS standards have different definitions from the IFRS standards and, in some situations, the jargon employed in the IPSAS differs from the one from the IFRS standards.

We can also list some of the most significant changes imposed by the IPSAS standards:

- the employment of the asset principle, demanding the registration of noncurrent assets and their yearly amortization;
- the employment of the precautionary principle, which demands the confirmations of provisions, including those regarding pensions;
- the submission of a collection of financial statements, including the following documents: income statements/profit and loss account, cash flow statements, statements of changes in net assets/equity, statements of financial position/ balance sheets, annexes to financial statements;
- the changeover from cash-basis accounting to accrual accounting.

4. Findings. Public accounting reform in Romania

In the context of Romania's accession to the European Union, in order to fulfill its commitments of convergence and implementation of the *acquis communautaire*, the Romanian accounting normalizers introduced measures aimed at supplementing the cash-basis accounting with the accrual accounting. If we perform an analysis of the public accounting reform in Romania, we can say that through the gradual assimilation of the elements specific to accrual accounting, the legal framework at national level has been enriched over time.

Aimed at adjusting public accounting in conjunction with the IPSAS standards and with the accounting directives established at the EU level, the first regulation was represented by “Order no. 1461/2004 on the Methodological norms on the organization and management of the accounting of public institutions, the Plan of accounts for public institutions and the instructions of application thereof”, which was implemented for a year, as an experiment, by several public institutions, beginning with January 1, 2005. The conclusions of this implementation experiment and the recommendations forwarded by other public institutions triggered the design of several amendments and completions to the aforementioned Order and, consequently, all the Romanian public institutions were required to enforce the provisions of Order no. 1917/2005, beginning with January 1, 2006.

As already mentioned, this Order was focused on the adjustment of the Romanian public accounting, based upon the accounting directives at the EU level; additionally, it was designed to safeguard the observance and employment of the IPSAS standards within the Romanian public accounting system. Order no. 1917/2005 complies with the prerequisites of the accounting directives at the EU level, which highlights the necessity to furnish a pertinent and genuine image of the assets, net assets, liabilities, income statement and economic outturn account.

Moreover, in consonance with this Order, the collection of financial statements that ought to be furnished and strengthened by Romanian public bodies closely meet the demands forwarded by the IPSAS. Consequently, the quarterly and annual financial statements designed by public bodies comprise documents such as: the balance sheet, the cash flow statement, the economic outturn account, the statement of changes in net assets/ equity, the annexes to the financial statements which encompass accounting policies and explanatory notes, budgetary execution accounts (see Order no. 1917/2005).

The financial documents were the basis for the convergence of the public accounting in Romania with the IPSAS standards, creating the interface between the internal and the external, the national and international users.

We can say that this order has been a reference point in the evolution of public accounting. Subsequently, the order was amended during several successive stages, the last amendment being made by “Order of the Minister of Public Finance no. 1176, of January 26, 2018, for amending and supplementing the Methodological norms on the organization and management of the accounting of public institutions, the Plan of accounts for public institutions and the instructions of application thereof”.

In terms of drawing up and submitting the financial statements of public institutions, over time, a number of normative acts have been issued, designed to regulate and update this area. These provisions have been constantly updated in order to meet the specific requirements of the Romanian economy and, at the same time, the evolutions featuring in the international landscape, in particular those triggered by the application of IPSAS. This entailed the issue by the Minister of Public Finance (on April 28, 2017) of “Order no. 640/2017 approving the Methodological Norms on the elaboration and submission of quarterly financial statements of public institutions, as well as certain monthly financial reports in the year 2017, amending and supplementing the Methodological norms on the organization and management of the accounting of public institutions, the Plan of accounts for public institutions and the instructions of application thereof approved by the Order of the Minister of Public Finance no. 1917/2005, as well as amending and supplementing other methodological norms in the field of public accounting”.

Another vital landmark in the transformation and upgrade of public accounting was marked by the set of changes operated in 2019 in the accounting and the budgetary system of public institutions related to the FOREXEBUG system, a change recorded in the “Order of the Minister of Public Finance no. 128/2019 on amending and supplementing the Order of the Minister of Public Finance

no. 517/2016 for the approval of procedures related to some modules" which are part of the operating procedure of the FOREXEBUG national reporting system. According to this order and from 2019, the public institutions that use the national reporting system, regulated by GEO no. 88/2013, submit their individual budgets to the FOREXEBUG national reporting system, while submitting to the territorial units of the State Treasury their budgets, on paper, disseminated and authorized under the law, by the hierarchically superior authorizing officer or by the local council, as appropriate, which formed the basis for the provision of the individual budget in electronic format.

5. Accounting principles - particularities

In order to ensure a truthful image regarding the situation of the general consolidated budget's components execution, the information required for the specific needs of the public institutions and the information it provides to the bodies with relevant prerogatives, public accounting must comply with the unitary rules and regulations, which are generally valid, of general accounting, as well as its principles.

We will analyze hereafter the particularities of applying the general accounting principles to the activities that produce public goods and services and, in this context, the specificity of applying the accounting principles in order to recognize the respective operations in the financial-accounting flows related to the public financial system.

The Principle of Prudence enforced in public accounting does not make room to the underestimation of revenues and overestimation of expenditures in the budget preparation process and especially in the budget execution process. This principle must manifest itself particularly with respect to the appropriate evaluation and registration of the budgetary entitlements of public bodies and the elements belonging to the general consolidated budget. Under the Order no. 1917/2005 issued by the Minister of Public Finance, the Principle of Prudence assumes that the assessment must take into account all the commitments arising during the current or the previous fiscal year, even if they become evident only between the balance sheet's date and the date of its submission, and must take into account all the depreciations.

The Principle of the Permanence of Methods requires the continuity of the rules and norms regarding the method of assessment of the revenues and the criteria for establishing the budgetary credits, ensuring the comparability in time of the information regarding the structure of the budgets, especially from one fiscal year to another.

The principle of accrual-based accounting determines the outset of the budget execution process at an established date, its completion at another definite date; ergo, during this period, it declines the registration of revenue and expenditure originating from other fiscal years. This principle is underlined by the autonomy of the fiscal year and specialists also call it the principle of the adaptability of the accounting information to the system of budget execution used, i.e., "management" or "fiscal year". By applying this principle, public entities have adopted a system according to which there is an annual record of budgetary credits, cash payments and collection to the state budget, the state social insurance budget, local and special funds budgets. This system requires the validity of the budgetary credits opened and allocated only within the respective fiscal year. Furthermore, cash payments can be made only within the limit and the validity period of the approved and allocated budgetary credits. In terms of revenue, only those payments collected during the year are valid, while those collected after December 31 are highlighted during the following fiscal year.

The Principle of Non-Compensation is applied in public accounting, as follows: no payments can be made directly from collections, all revenues are recorded in the budget and for any expenditure there is the obligation of approval. There are some exceptions to this rule, especially when it come to extrabudgetary and special funds; nevertheless, these do not impair the enforcement of the general principle.

The Principle of Intangibility of the Opening Balance Sheet covers only a part of the issues faced by public accounting, having in view that, for instance, as far as public funds are concerned, the revenues due in the current year, but collected during the following year are recorded as revenues in the year in which they are collected. Furthermore, the funds approved in the annual budgets and not used within that year lose their validity at the end of the year. Only in special situations, such as the

budgets based on extrabudgetary and special funds, which are allowed to carry forward the execution balance from the previous year, could we talk about a certain intangibility of the opening balance sheet.

The Principle of the Prevalence of the Economic over the Juridical requires the same rules as in general accounting, i.e., the accounting information presented in the financial statements must be credible and must respect the economic reality of the events or transactions, not just their juridical form.

Deviations from the general principles set out above may be made in exceptional cases, provided that they are presented in the explanatory notes, as well as the rationales supporting them, and an estimation of their outcome on the value of the assets, liabilities, financial position and economic outturn.

The basic principles of accrual accounting must be followed when drawing up public accounting policies. Accounting policies must be drawn up in order to warrant that the financial statements furnish eloquent data, which is credible and relevant to the users' decision-making needs, in the sense that it must furnish an accurate and pertinent outline of the economic outturn and of the financial status of the public institution, it must be neutral, prudent and complete in all the significant respects.

6. The Role of the Professional Accountants and Auditors in Public Accounting

Accountants' role has evolved along with the evolution of accounting, from a technique used in recording the trade deals, to means of control, documentary evidence and social stakes. Over time, the delegation of the responsibilities related to the production of information provided by accounting has set the premises for the emergence of an independent accounting profession, with an increasing importance and the aim of legitimizing the information released by entities.

Having in view that the accounting profession is organized based mostly on the accounting system it refers to (being wholly connected to it), which is often a national one, the elements and the historical perspectives that influenced the structure and aspect of the present national accounting systems have also decisively modelled the design and evolution of the accounting profession.

The accounting profession covers an extensive area, with professionals working in industry and commerce, as freelancers, or in the public sector. In this area, they assume various roles, among which financial manager, member of the team which configures the system of financial information production, internal auditor, external auditor, or accounting expert.

The Body of Expert and Licensed Accountants of Romania (CECCAR) represents the Romanian accounting profession. Nonetheless, the accountants employed in Romanian public institutions are not required to be licensed accountants. In addition, an economist employed in a Romanian public institution also qualified as an expert accountant is not entitled to visa and seal, i.e., s/he cannot practise the liberal profession s/he should be entitled to, from CECCAR's perspective. Only those who hold the position of accountant-general or financial manager of the public institution are required to hold a higher education degree in economics.

Over time, CECCAR has intended to organize training/ refresher courses and has published professional guides for the accounting activities performed in public bodies. Sadly, these actions did not enjoy the expected success, their failure being presumably entailed by the fact that the hiring process of accountants (and not only) in public bodies is effectuated under the regulations drawn up by the Ministry of Public Finance, whereas CECCAR has no involvement in this process.

We consider it important to involve professional, expert and licensed accountants in the accounting system of the Romanian public sector and we adhere to Hepworth's vision, which professes that “The accountancy profession must have the capacity and be prepared to be interested in and involved with the public sector, because not only is the accountancy profession the expert in accounting standards but it has traditionally trained financial managers for the private sector” (Hepworth, 2003).

A successful implementation of accrual accounting in the public sector requires “co-operation by the accountancy profession in the development of accounting standards for the public sector and to become involved in the application of those standards and the monitoring of their implementation” (Hepworth, 2003)

In the Romanian economic landscape, the members of the accounting profession cannot take part in the drawing up process of (and expansion upon) the accounting laws and regulations destined to public bodies. Unfortunately, this ‘privilege’ is enjoyed exclusively by the Romanian Ministry of Public Finance. In its turn, CECCAR is left aside when it comes to the performance of activities focused on the operation and monitoring of the enforcement of accrual accounting; hence, the members of the accounting profession were not offered the opportunity to critically and thoroughly examine and even evaluate the process (and progress) centered upon the employment of accrual accounting in Romania’s public bodies.

This drawback is also signaled by Hepworth’s ideas (to which we adhere entirely) pinpointing that:

“Successful implementation of accrual accounting depends heavily upon the understanding of, and willingness to support, the system by the external auditor of central government. (...) the external auditor should be involved in the process from the outset. That may require that the organization, career structure and training of auditors should be significantly changed as well as the audit approach and mandate. (...) That may require the appointment of qualified accountants to the staff of the central government auditor, rather than relying upon the more traditional training of auditors” (Hepworth, 2003).

The internal audit, through the activities it carries out, has become an essential component in the structure of any modern organization, adding value to the organizations in which it operates. Its purpose is to ensure greater efficiency through a more appropriate use of human and material resources, as well as better collaboration between the various departments of an entity.

In Romania, internal audit missions are in charge with the drafting and provision of the financial documents (statements) required for examination by the Court of Accounts (responsible for the performance of external audits). Although external audits do not occur annually, but every two or three years, the discharge is performed by the management of the respective institution every year. These missions focus mainly on verifying the legality of expenditures and the observance of legal procedures; they also analyze – however, to a lesser extent – the reasoning employed in asset assessments or estimations, diligence, vigilance, materiality, etc. Notwithstanding that the external auditors carrying out activities at the Court of Accounts are not required to hold CECCAR or CAFR membership, they are required to participate in refresher courses, in order to fulfil the advanced prerequisites for the specificities of accrual accounting in public entities, which simplifies the correct and eloquent employment of new concepts.

7. Conclusions

The employment and pursuit of accrual accounting in Romanian public bodies has involved a lengthy process, taking into account that this evolution has entailed much more than a mere change in accounting techniques.

The literature is quite scant as far as the accounting system in Romanian public bodies is concerned, and the research that has been carried out so far does not tackle thoroughly the shortcomings entailed by the enforcement of accrual accounting in public entities, given the distinct socio-economic or political traits of our country.

Overall, the employment of accrual accounting in public entities has followed the correct path of enforcement in Romania, and in the future, its objectives will be fully met.

In our opinion, the specialists in the field have been and still are permanently interested in updating the legislative framework regarding public institutions’ accounting. We consider that the changes in this area have been well-founded, being determined by the need for improvements in order to optimize this process, obtain positive effects and, especially, standardize specific activities, due to the international status of our country.

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Fiscal and Accounting Aspects Regarding the Gambling

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Abstract

The purpose of the paper is to analyse the main fiscal and accounting aspects of gambling. The main objectives considered were the presentation from a theoretical point of view of the concept of gambling, the classification of gambling, the presentation of fees for the issuance of organization licenses and authorizations for the operation of gambling. It then continues with the presentation from a fiscal point of view of the aspects regarding the taxation and the declaration of the tax resulting from the development of these activities. Accounting for gambling operations is the next issue.

Key words: gambling, accounting, fiscality

J.E.L. classification: M41, Q40, Q56

1. Introduction

The topic deals with the issue of gambling in terms of accounting and taxation. From an accounting point of view, we highlighted the main accounting monographs on the registration of these operations in the accounting of economic operators. The fiscal treatment highlights the aspects related to the taxation of gambling according to the regulations of the Fiscal Code.

The main purpose of this article is to highlight accounting and fiscal aspects in terms of gambling activity in Romania.

The objectives of the paper are:

- presentation of the concept of gambling
- gambling classification
- the tax rates imposed by the Romanian Fiscal Code regarding the winnings obtained by a natural person from gambling
- the annual declaration of gambling winnings by drawing up the Declaration 205
- presentation of the accounting registration of the operations resulting from the participation in a game of chance.

Both the accounting and fiscal aspects presented are based on the national legislation in the field.

2. Theoretical background

What does mean gambling? We find the answer in Ordinance no. 77/2009 article 3 the licensed gambling operator, traditional games of chance, remote gambling or online gambling etc.

Gambling means that activity that cumulatively meets the conditions: material winnings are awarded, in cash of a potential win and acceptance by the participant, with the collection of a direct participation fee or disguised, the winnings being attributed based on the game regulations approved by the National Gambling Office.

According to the Government Emergency Ordinance no. 77/2009, in Romania organization and operation of the gambling activity is considered monopoly by the National Office for Gambling and is subordinated to the Romanian Government (<http://onjn.gov.ro/>).

According to Government Emergency Ordinance no. 20/2013, the Office aims to comply with the following principles (GEO no. 20/2013, art .2 par. 2): unitary, correct and non-discriminatory application of the legal provisions in force in the field of gambling, taking into account the principles of legality, impartiality, active role and availability; the protection of minors or other vulnerable groups, from a social and economic point of view, in order to avoid their dependence on gambling; the protection of the participants so that the games of chance are organized in an honest; ensuring the observance of the incident legal provisions in the field and the prevention of possible interferences in the sports results in order to protect the sports movement.

The Office fulfils the following main attributions ((GEO no. 20/2013 art.3):

a) coordinates the unitary, correct and non-discriminatory application of the legal provisions in force in the field of gambling;

b) analyses and solves the requests submitted by the operators who wish to carry out gambling activities according to the legal provisions in force;

c) supervises the activities in the field of gambling directly or together with other state institutions, in accordance with the law;

d) exercises technical control of computer systems, monitoring and surveillance for traditional and remote gambling;

e) controls the application of the specific legislation, ensuring its unitary application, ascertains contravention facts and applies the sanctions provided by law or notifies the competent bodies, as the case may be;

f) analyses the received notifications, verifies the signalled aspects and solves or notifies the competent bodies, as the case may be;

g) solves the previous complaints formulated by the operators on the measures ordered in the exercise of the attributions, according to the competences and the legal provisions in force;

h) analyses and solves the requests formulated by other authorities, operators and other interested parties, according to the competences and legal provisions in force that regulate the field of gambling;

i) issues the administrative acts related to the activity carried out and administers the evidence of the documents necessary for granting the right of organization and functioning and of the issued decisions;

j) ensures the management of the database related to the activity and ensures the publication of the information on its own website;

k) performs the risk analysis for performing verification and control actions in the field of gambling for each license and authorization holder, establishing the risk associated with each one;

l) ensures the archiving of the documentation related to the activity according to the legal provisions in force; m) participates in the activities of specialized international bodies and may be a member thereof, based on the mandate received from the Government of Romania;

n) ensures collaboration, exchange of information and representation in the field of gambling. In the exercise of its powers, the Office may conclude protocols for cooperation and collaboration with similar institutions, profile associations or with other authorities and institutions;

o) concludes under the law, contracts in order to monitor gambling;

p) at the request of other specialized institutions of the state, may participate, as a specialized body, in carrying out checks in the field of gambling, together with them.

According to the Government Emergency Ordinance no. 77/2009 gambling are (GEO no.77/2009, art. 10): lotto games - traditional game, bets, gambling characteristic of casinos, games of chance characteristic of poker clubs - traditional game, slot-machine games; bingo games played in game rooms - traditional game, bingo games organized through television networks - traditional game, lotto games – remote, fixed odds betting – remote, mutual bets – distance, bets on the counterparty – remote, bingo and keno games, raffle is the activity of extracting numbers.

3. Research methodology

The scientific approach is based on information from the national literature, as well as from the practical documentation made through the case study presented. In the elaboration of the paper, we chose to combine quantitative research with qualitative research in order to obtain the expected results. Following the research undertaken, the research tools belong to the two categories of methods, namely: review of the literature, comparison, descriptive analysis, case study method, data interpretation.

In carrying out the case study, we presented the way of recording in accounting the different types of games of chance. The treatment of the topic from the fiscal point of view was approached by presenting the approach that a natural person who obtains income from gambling must do, namely by completing a Fiscal Declaration, namely the 205 Declaration.

4. Findings

4.1. Tax issues regarding gambling

In Romania, the taxation of gambling is regulated by the Law of the Fiscal Code no. 227/2015.

The tax calculated for gambling is a tax withheld at source, meaning that the obligation to calculate, withhold and pay the tax falls on the organizers or payers of income (Fiscal Code Law 227/2015, art. 110)

It is determined on each payment on the gross income received by the participant, from an organizer or payer of gambling income, as follows:

Tabel no. 1 Taxes Gambling

Gross income tranches - RON -	Tax - RON -
Up to 66.750, including	1%
over 66.750 - 445.000, including	667,5 + 16% for what exceeds the amount 66.750
over 445.000	61.187,5 + 25% for what exceeds the amount 445.000

Source: Law 227/2015 regarding Fiscal Code, article 110

Under current law, individuals who participate in remote or online gambling, and earn income, the tax is determined and withheld at source on each transfer from the account on the gaming platform to the bank account or similar.

The winnings or prizes obtained from a game of chance represent the amounts of money, goods or services provided by the organizer to the participant in the game declared the winner by the organizer of the game of chance.

The incomes obtained as a result of participating in gambling in casinos, poker clubs, slot machines and lotteries, whose value is below 66,750 lei inclusive, are non-taxable incomes.


The calculated and withheld tax is paid to the state budget until the 25th of the month through the Declaration 100.

Annually, the payers of such income who have to calculate and transfer the tax on income with withholding tax submit the Declaration 205 Informative declaration on withholding tax, gambling income and investment gains / losses, on income beneficiaries.

Both declarations are submitted by electronic means of remote transmission, by using the online declaration submission service, existing on the e-guvernare.ro portal.

The company GAME SRL, having as object of activity the games of chance, calculates and withholds in December 2020 a tax on the incomes from the games of chance in the amount of 7,000 Ron. In December, it declares and pays the tax due to the state budget.

GAME SRL declares the tax on gambling income calculated, withheld and paid for 2020. One of the participants in gambling was Popescu Mihai, CNP 1800525019034, who obtained a taxable income of 65,000 Ron.



ANAF
Agenția Națională de Administrare Fiscală

**DECLARAȚIE PRIVIND OBLIGAȚIILE DE PLATĂ
LA BUGETUL DE STAT**
(vers. valabilă din 12/2020)

100

Declarație depusă după anularea rezervei verificării ulterioare ?

Temeiul legal pentru depunerea declarației

Cota de impozitare pe veniturile microintreprinderilor (daca este cazul) ?

Declarație depusă potrivit art.90 alin.(4) din Legea nr.207/2015 privind Codul de Procedură fiscală

Cod de identificare fiscală a succesorului

PJ care se dizolvă cu/ fără lichidare

Se bifează în cazul declarării plăților anticipate aferente trimestrului IV, pentru impozitul pe profit (poz.103 și 105).

Perioada de raportare:

Anul Luna

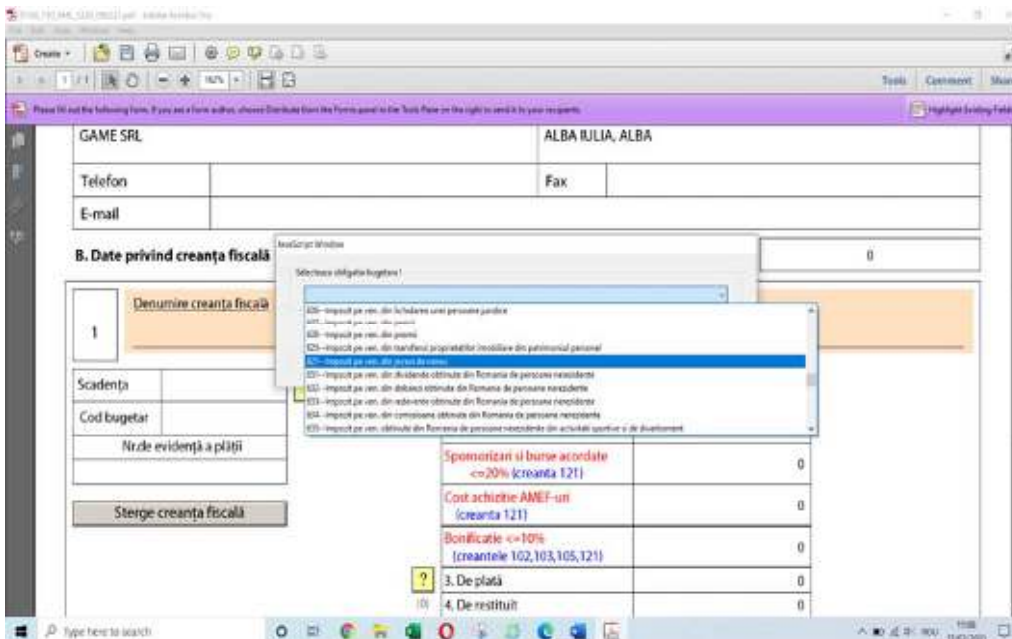
2020 12

D100 D710

A. Date de identificare ale contribuabilului/ plătitorului

Cod de identificare fiscală	RO	2	6	5	9	9	7	3	7										
Denumire	ALBA IULIA, ALBA																		
Adresa (județ, localit., str., bl., scara, ap., cod poștal, sector)	ALBA IULIA, ALBA																		

Atenție ! Obligațiile care au scadența 25.12 se vor declara și plăti până la 21.12.




The screenshot shows the ANAF online declaration system. The main form contains the taxpayer's name 'GAME SRL' and address 'ALBA IULIA, ALBA'. A dropdown menu for 'Denumire creanța fiscală' is open, showing a list of tax categories. A table at the bottom of the form shows the following entries:

Spornizari si burse acordate <=20% (creanta 121)	0
Cost achiziție ANEF-uri (creanta 121)	0
Bonificatie <=10% (creantele 102,103,105,121)	0
3. De plată	0
4. De restituit	0

B. Date privind creanța fiscală Sumă de control: 14000

1	Denumire creanța fiscală		Alege creanța fiscală	
	621--Impozit pe ven. din jocuri de noroc			
Scadenta	25.01.2021	?	Suma	Suma (lei)
Cod bugetar	5503XXXXXX		1. Datorată	7.000
Nr.de evidență a plății	10621011220250121000027		2. Deductibilă/ Datorată anterior	0
Sterge creanța fiscală			Sponsorizări și burse acordate <=20% (creanța 121)	0
			Cost achiziție AMEF-uri (creanța 121)	0
			Bonificație <=10% (creanțele 102,103,105,121)	0
			3. De plată	7.000
			4. De restituit	0
Adaugă creanța fiscală				
I. Impozite și taxe care se plătesc în contul unic (5503) - TOTAL de plată				7.000
II. Impozite, taxe și alte obligații care nu se plătesc în contul unic - TOTAL de plată				0
III. Impozite, taxe și alte obligații scutite de la plată - TOTAL sumă				0



DECLARAȚIE INFORMATIVA
privind impozitul reținut la sursă și câștigurile/
pierderile din investiții, pe beneficiari de venit

205

Declarație rectificativă ?
Se completează cu X în cazul declarațiilor rectificative

Anul 2 0 2 0

Termen depunere declarație:
31.01 inclusiv a anului curent pentru anul expirat

Declarație depusă potrivit art.90 alin.(4) din Legea nr.207/2015 privind Codul de Procedură fiscală

Cod de identificare fiscală a succesorului

I. DATE DE IDENTIFICARE A PLATITORULUI DE VENIT

COD DE IDENTIFICARE FISCALA RO 2 6 5 9 9 7 3 7

DENUMIRE / NUME SI PRENUME

GAME SRL

II. DATE RECAPITULATIVE - lei -

Nr. cr.	Tip de venit	Nr. beneficiari de venit	Total castig	Total pierdere	Total baza de calcul al impozitului	Total impozit reținut
	1	2	3	4	5	6
1	18	1	0	0	65.000	650
TOTAL		1	0	0	65.000	650

Suma de control 65651

Sub sancțiunile aplicate faptei de fals în declarații, declar că datele înscrise în acest formular sunt corecte și complete.

Nume POPA

Prenume MARIA

Funcția DIRECTOR ECONOMIC

Semnătura

III. DATE PRIVIND NATURA VENITURILOR - Tip de venit ?

1. Venituri cu regim de retenere la sursa a impozitului, potrivit tit. IV din L.227/ 2015 privind Codul fiscal

1.a) 08. Venituri din dividende 5% 1.e) 12. Venituri din premii 10%

1.b) 09. Venituri din dobânzi 10% 1.f) 18. Venituri din jocuri de noroc

1.c) 11. Venituri din lichidarea persoanei juridice 10% 1.g) 16. Venituri din alte surse 10%

1.d) 13. Venituri din pensii 10%

2. 22. Câștiguri/pierderi din transferul titlurilor de valoare, și orice alte operațiuni cu instrumente financiare, inclusiv instrumente financiare derivate, precum și din transferul aurului financiar, definit potrivit legii, cu excepția veniturilor neimpozabile

*) Se va completa "Neimpozabil" în col.6 din secțiunea IV, numai în cazul persoanelor fizice nerezidente care obțin venituri din transferul titlurilor de valoare pentru care, în convenția de evitare a dublei impuneri încheiată între România și statul de rezidență al persoanei fizice nerezidente, nu este menționat dreptul de impunere pentru România și respectiv persoana prezintă intermediarul certificatului de rezidență fiscală.

? **Calcul automat impozit (fără zecimale)** - lei -

IV. DATE INFORMATIVE PRIVIND IMPOZITUL REȚINUT LA SURSĂ ȘI CÂȘTIGURILE/PIERDERILE DIN INVESTIȚII, PE BENEFICIARI DE VENIT (altele decât cele de la cap.V)

V. DATE INFORMATIVE PRIVIND IMPOZITUL PE VENITURILE DIN DIVIDENDE

18. Venituri din jocuri de noroc					
Nr.crt.	1. Nume și prenume beneficiar de venit			2. Rezident/ Nerezident	6. Regimul fiscal:
(ID înregistrare)	3. Statul de rezidență (pt. nerezident)	4. CNP/ NIF din România	5. CIF din străinătate pt. nerezident (emis de autorit. fiscală din statul al cărui rezident este PF nerezident)		0- Nu se completează (cat.2) 2- Impozit final (cat. 1.a-g) / 3- Neimpozabil potrivit conv. dublei imp. (cat. 2)
	7. Câștig/ Divid. distribuite	8. Pierdere/ Divid. plătite	9. Baza de calcul al impozitului	10. Impozit reținut	
1	1. Nume și prenume POPESCU MIAHI			2. Rezident/ Nerezident 1. Rezident	6. Regimul fiscal 2. Impozit final
(1)	3. Statul de rezidență Alege statul	4. CNP/ NIF din România 1800525019034	5. CIF din străinătate		
Sterge	7. Câștig	8. Pierdere	9. Baza de calcul a impozitului 65.000	10. Impozit reținut 650	Adauga beneficiar

4.2. Accounting aspects regarding gambling accounting

Regarding the accounting treatments applied to the operations resulting from the conduct of gambling, they are subject to the Accounting Regulations approved by Order no. 1802/2014, with subsequent amendments and completions.

According to Law no. 227/2015 on the Fiscal Code, gambling revenues are not subject to VAT.

The income of the gambling organizer is the income, which is recorded in the accounting, based on supporting documents, represented by the commission collected and/or the difference between the income fee from and the prizes constituted / granted from it, including the fund. reserve, where applicable. Therefore, the income of gambling organizers may come from a fixed commission, collected directly from the participant, and / or a variable commission, as a result on difference between the game stake collected and the prizes awarded to players (Zăgrea Anchiș, 2015).

4.3. Accounting treatments for the accounting of transactions for a slot machine operator

The company Game SRL, is a Romanian legal entity that holds a license on the operation of slot-machine gambling. The access ticket to the game device is 15 Ron/ individual. In January 2021, the company collects income in the amount of 150,000 Ron and pays the tax in the amount of 70,000 Ron.

- Recording of receipts from individuals

5311 „House in Lions”	=	704.1 „Revenue from services rendered. slot machine”	150.000 Ron
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- *Recording expenses with winnings made by players*

6588.1 „ Other operating expenses. slot machine”	=	462 „Various creditors”	70.000 Ron
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Calculation of the tax due

$$\begin{aligned} \text{Tax} &= 667,5 + 16\% \text{ for what exceeds the amount } 66.750 \\ &= 667,5 + 16 \% (70.000 - 66.750) \\ &= 1.187,5 \text{ Ron} \end{aligned}$$

- Recording the payment to the players after withholding the tax

462 „Various creditors”	=	5311 „House in Lions”	68.812,5 Ron
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- *Registration of the gambling tax*

462 „Various creditors ”	=	446.1 „Other taxes and fees. slot machine”	1.187,5 Ron
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- Payment of gambling tax to the state budget

446.1 „Other taxes and fees. slot machine”	=	5121 „Bank accounts in Lions”	1.187,5 Ron
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4.4. Accounting treatments for the accounting of transactions for a bookmaker

Bets SRL is a commercial company that operates in the field of gambling, respectively sports betting. In January 2021, the company collects income from sports bets amounting to 90,000 Ron and pays winnings to players after withholding the tax amounting to 65,000 Ron.

- *Recording of receipts from individuals*

5311 „ House in Lions”	=	704.2 „Revenue from services rendered. Sport bets”	90.000 Ron
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- Recording expenses with winnings made by players

6588.2 „ Other operating expenses. Sport bets”	=	462 „Various creditors”	65.000 Ron
---	---	--------------------------------	------------

Calculation of the tax due

$$\text{Tax} = 1\% \times 65.000 = 650 \text{ lei}$$

- *Recording the payment to the players after withholding the tax*

462 „Various creditors”	=	5311 „House in Lions”	64.350 Ron
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- *Registration of the gambling tax*

462 „Various creditors”	=	446.1 „ Other taxes and fees. Sport bets”	650 Ron
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- *Payment of gambling tax to the state budget*

446.1 „Other taxes and fees. Sport bets”	=	5121 „Bank accounts in Lions”	650 Ron
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4.4. Accounting treatments on joint ventures for gambling

The company Alfa SRL concludes a joint venture contract for gambling with the company Game SRL, which holds a license to organize games of chance. The participation fee is 50% for each company. The company Alfa SRL provides the location for the placement of gambling by the company Game SRL. Monthly, Game SRL sends the statement to Alfa SRL, and will pay 50% of the profit obtained.

The company Alfa SRL will register in its own accounting the following operations, for the value of 500,000 Ron:

458 „ Settlements from participation operations”	=	708 „Income from various activities”	500.000 Ron
5121 „Bank accounts in Lions”	=	458 „ Settlements from participation operations”	500.000 Ron

5. Conclusions

According to the legislation in force, the gambling in Romania is a monopoly. The gambling license is granted to the economic operator if he meets certain conditions and is valid for 10 years. The granting of the organization license to operate gambling is granted with the collection of certain fees.

The organizers of gambling have the obligation to prepare and submit to the National Office for Gambling, a monthly statement, approved by order of the President of the Office.

Gambling income not include VAT.

Gambling companies pays: fee for gambling licenses and access fee, in the form of a ticket valid for 24 hours, paid by each person, a minimum level of the share capital subscribed and paid by the economic operators organizing games of chance.

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Aspects Regarding the Registration in Accounting of Some Active Support Measures for Employees and Employers in Romania During 2020

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Abstract

To slow down and reduce the spread of coronavirus, countries have taken several measures, such as closing borders, banning travel and therefore tourism, increasing social distance and imposing a quarantine period. At the same time, companies have suffered. First, they had to pay for their labor, having no income; second, customers have refocused on product purchases, focusing only on products that ensure daily living. All countries have adopted important measures such as increasing the guarantee ceiling, greater flexibility between funds, private investment, public investment, etc. All the measures taken during this period aimed at rebuilding national economies, and not just relaunching them. Romania has also adopted support measures for employees and employers during Covid-19 pandemic period. The purpose of this study was to detail the accounting records of employee and employer assistance measures in the context of the pandemic situation.

Key words: support measures, employers, microgrants, Covid-19

J.E.L. classification: M41

1. Introduction

The declaration of the Pandemic by the World Health Organization took place on 11.03.2020, causing a substantial negative effect on the growth of the global economy. Thus, the population and governments have also faced some challenges/problems related to food, transport, health and social activities (Ahmad *et al*, 2020), due to blockage, isolation and quarantine. Tempering the lasting economic effects of such a shock is answered in a complex set of measures. Measures to control the spread of the virus must be accompanied by fiscal, monetary, social, industrial and commercial development measures (Baldwin *et al*, 2020; ILO, 2020). In the range of concrete interventions, loans were granted for various economic sectors, including the medical one, fiscal facilities for companies, flexibility of labor relations to comply with the imposed conditions, extension of access to paid leave and health services, as well as increasing the role of social dialogue in identifying solutions. Relaxation of EU restrictions on Member States' debt and budget deficits, formulation of the general framework for temporary State aid measures to support national economies and financial allocation for this purpose, announced in the second half of March 2020 by the European Commission, are consonant with such a complex intervention. The focus was on areas directly affected, with the risk of temporary suspension of activity, respectively small and medium enterprises (Ilie, 2020).

In Romania, the crisis started in March 2020 and the SME sector was affected by. Most office companies implement work from home for the first time in general. SMEs are facing the biggest challenge of the last three decades (Antonescu, 2020). At the level of Romania, the following sources of support for the SME sector were identified during the Covid-19 crisis, grouped as follows: 1. Sources from European Funds; 2. Non-reimbursable aid from the state budget; 3. Bank loans on advantageous terms; 4. Investment funds.

2. Literature review

In order to slow down and reduce the spread of coronavirus, the governments have taken several measures, such as closing borders, banning travel and therefore tourism, increasing social distance and imposing a quarantine period. These drastic measures have certainly prevented a significant increase in cases but also a reduction in the activity of companies (Kettani, 2021). Weder di Mauro (Weder di Mauro, 2020) notes that total or partial blockade, as in China, is one of the most extreme measures and can bring production and consumption almost to a standstill.

The economic impact of the COVID-19 crisis on employment, earnings and the evolution of companies are studied by many authors. For example, Adams-Prassl *et al*, (Adams-Prassl *et al*, 2020); Bachas *et al*, (Bachas *et al*, 2020), argue that the hospitality and arts sectors as well as the manufacturing industry have been hardest hit by the blockade. In these hard-hit sectors, wages are lower and workers usually live in lower-income families, higher poverty and have fewer financial reserves to cover periods of declining incomes (Cantillon, B. *et al*, 2021).

Small companies were most affected during the Covid-19 crisis, both in Romania and globally. To avoid their bankruptcy, governments have taken urgent steps to keep them alive. In Romania, three out of ten companies recorded higher expenses than revenues and fall into the area of risk of bankruptcy (Antonescu, 2020).

Some states have provided aid to companies at 10% of GDP; in Romania, the percentage is 2% of GDP. The supports promoted by the Romanian government for companies that have suspended employee contracts cover only part of salaries. Other measures taken by Romania are: guaranteeing loans for investments and for ensuring the working capital for SMEs, with state subsidized interest.

3. Research methodology

Romania has adopted support measures for employees and employers during the spread of the coronavirus. These include: *Government Emergency Ordinance no. 30/2020*, *Government Emergency Ordinance no. 92/2020* and *Government Emergency Ordinance no. 130/2020*.

The research method used by the authors in the analysis undertaken in the paper consisted of detailing the accounting records of support measures aimed at employees and employers in the context of the pandemic situation. Tables 1,2 and 3 show concrete accounting records that economic agents operate when they benefit from the measures offered by the three ordinances listed above.

4. Findings

4.1. Government Emergency Ordinance no. 30/2020

Since March 21, 2020, the Romanian government has enacted a number of measures to assist companies in the aftermath of the Covid-19 epidemic, including employee indemnification in technical unemployment. Technical unemployment involves the temporary suspension of the individual employment contract, at the initiative of the employer, pursuant to art. 52 (1) c) of the Labor Code, without terminating the employment relationships in case of interruption of activity or temporary reduction of company activity.

According to the Labor Code, employees will benefit:

- Employees receive an allowance that represent 75% of the salary corresponding to the job held.
- If the employer has opted for a temporary reduction of activity and has reduced the working hours from 5 days to 4 days per week, the employee will receive his salary, but with an appropriate reduction until the situation that caused the reduction of the program is remedied.

Employees of SME who reduced or temporarily interrupted their activities entirely or partially as a result of the effects of the SARS-CoV-2 coronavirus pandemic during the declared state of emergency received technical unemployment benefits.

The allowance (75% of the base wage) is subject to taxation and payment of compulsory social security contributions. The insurance contribution for work is not due for the indemnity. The calculation, withholding and payment of income tax, state social insurance contribution and social health insurance contribution is performed by the employer from the benefits received from the unemployment insurance budget.

Table no. 1 Accounting records related to technical unemployment

Accounting records related to technical unemployment	
calculation of indemnity request AJOFM:	
4382 = 423	20.000
collection of indemnity:	
5121= 4382	20.000
CAS:	
423 = 4315	5.000
CASS:	
423 = 4316	2.000
income tax:	
423 = 444	1.300
payment of technical unemployment:	
423 = 5311	11.700

Source: authors' processing

4.2. Government Emergency Ordinance no. 92/2020

For a period of three months, employers benefit from the settlement of a portion of the salary borne from the unemployment insurance budget, equal to 41.5 percent of the gross basic salary corresponding to the place of employment, but not more than 41.5 percent of the average gross earnings provided in Law no. 6/2020, according to GEO. no. 92/2020.

The major assistance measure adopted by GEO 92/2020, which has an impact on employees and businesses in the context of the COVID-19 scenario, is the settlement of a portion of each employee's pay who was technically jobless. Employers whose employees have received technical unemployment benefits under a state of emergency and/or alert are the beneficiaries.

Settlement mechanism:

- Initially, employers will fully bear the value of salaries of employees;
- After that, between 1 and 25 months after the reporting period, employers must submit a signed application, together with a statement of his own responsibility and a list of those who would benefit from the pay settlement.
- The settlement of the amounts is carried out within maximum 10 days.

Among the most important aspects regulated by GEO 92/2020 are the following:

1. Employers may receive payment of a portion of the salary of employees whose employment contracts have been temporarily stopped during the state of emergency and/or alert for three months.
2. Employers may get a monthly payment equal to 50% of the employee's wage (but not more than 2,500 lei) for each person hired or rehired.

Table no. 2 Accounting records related to the settlement of a part of the salary (41.5% of the gross basic salary)

Accounting records	
The amount approved and granted 5121 = 7414	11.000
Closing the income account 7414 = 121	11.000

Source: authors' processing

4.3. Government Emergency Ordinance no. 130/2020

It aims to support micro-enterprises affected by Covid-19. The aid scheme for SMEs includes 3 categories of non-reimbursable funds:

1. Microgrants, in a fixed value of 2,000 euros;
2. Grants for working capital, between 2,000 and 150,000 euros;
3. Investment grants, between 50,000 and 200,000 euros.

In this article we will detail the conditions for granting microgrants in the amount of 2000 euros. The allocated funds for the granting of microgrants within the 2014-2020 POC are in the total amount of 100,000,000 euros, of which 85,000,000 euros are allocated from the 2014-2020 POC budget and 15,000,000 euros from the co-financing from the state budget. The amount of the grant is 2,000 euros granted in the form of a lump sum to the beneficiaries of state aid considered vulnerable to the risk of spreading the SARS-CoV-2 virus and is granted only once.

Small and medium-sized businesses that can demonstrate through financial documents that they do not have employees with individual employment contracts on December 31, 2019 are eligible for this type of award. Beneficiaries must satisfy a few requirements in order to qualify for these funds.

Spending on raw materials, materials, commodities, and other kinds of inventories required for beneficiaries' current/operational activity; current and outstanding commitments to current suppliers, including utility providers under contracts completed; and so on are examples of acceptable spending.

The subsidy is connected with a non-reimbursable micro-grant of 2000 euros, which is recorded in the accounting according to points 392 - 404 of OMFP no. 1802/2014.

Table no. 3 Accounting records related to a microgrant, in a fixed amount of 2,000 euros and incurred expenses

Microgrant (9679 lei equivalent to 2000 euros)	
Collection	
- the right to receive the subsidy (microgrant) at the time of signing the contract with the amount that was approved (application approval):	
<i>Government subsidies = Revenues recorded in advance</i> 4451 = 472	9.679
- income of the subsidy as expenses are incurred:	
<i>Revenue recorded in advance = Revenue from operating subsidies</i> 472 = 741	
- since the invoices issued prior to the signing of the contract will be eligible for the settlement of debts, which will be paid from the microgrant granted, after the date of signing the contract, if the expenses have already been made, the right to receive the subsidy (grant) is registered:	
<i>Government subsidies = Operating subsidy revenues</i>	

4451 = 741	
- collection in the bank of the approved amount:	
<i>Bank accounts in lei = Government subsidies</i>	
5121 = 4451	9.679
Recording expenses	
I.	
purchasing goods	
371 = 401	4.000
supplier payment	
401 = 5121	4.000
the registered of income	
472 = 7413	4.000
II.	
services	
628 = 401	5.000
supplier payment	
401 = 5121	5.000
the registered of income	
472 = 7413	5.000
III. refund of unused amounts	
472 = 4551	679
4551 = 5151	679

Source: authors' processing

The value of the micro-grant does not represent taxable income when calculating the income tax of micro-enterprises.

5. Conclusions

Most companies that were affected by the waves generated by the coronavirus were micro and small enterprises, with a maximum of 20 employees in areas such as HoReCa, services to the population (events, beauty salons, game rooms, neighborhood stores, etc.), which closed down due to administrative decisions and, in many cases, as a result of the dramatic decline in revenue from lack of customers. Customers have refocused their priorities and given up certain buying behaviors, focusing only on the products necessary for existence.

During this period, some Romanian companies have terminated employment contracts, increasing the unemployment rate.

Despite the fiscal and monetary measures that have been taken, there will be no continuous protection measures. The costs caused by the C19 crisis are very high and the current crisis is considered worse than the crisis of 2009. This pandemic has generated both negative and some positive aspects, which have turned into real opportunities for companies. Companies are considered very important in the economy of each country/region. Some opportunities have been identified since the beginning of the crisis. For example, the destabilization of import chains has led to an increase in sales of local products.

All countries have adopted important measures such as increasing the guarantee ceiling, greater flexibility between funds, private investment, public investment, etc. All the measures taken during this period aimed at rebuilding national economies, and not just relaunching them.

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Study on Ethics and Integrity in the Use of Big Data in Analysis and Research

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Abstract

In a society where information is the basis of business decision-makers and its quality directly influences economic actions and activity, databases are a subject as common as it is difficult to analyze, regulate and subject to ethical norms. The present study carries out an analysis of the needs imposed by the technological evolution of recent years, in the light of the fundamental rules governing the ethics and professional integrity of the research activity. Thus, the paper seeks a common denominator between the basic principles of morality that defines the database analyst and the ethical dilemmas that arise in the stages of data processing. Through an objective analysis of the theoretical aspects, but also of the practical reality, the research seeks solutions in shaping the principles of ethics and integrity, in order to update them to the current socio-economic and academic environment.

Key words: big data, research ethics, integrity, database analyse

J.E.L. classification: C10, C40, C80

1. Introduction

In a society where information underpins decision-makers and its quality directly influences actions and socio-economic activity, databases are a subject as common as it is difficult to analyze, regulate and subject to ethical norms.

In recent years, big data analyses have become increasingly present among corporate, macroeconomists and academic analyses, with such studies significantly superior in terms of the accuracy of analyses on limited samples.

The big data concept has emerged in the IT industry and in the statistical field as a term that encompasses the use of a large amount of information or data. This opportunity was generated by technological development. We can say that the need to analyze an increasing volume of information has led to a technological leap in IT development, but on the other hand, the exponential pace at which IT resources have evolved in recent years have encouraged the use of big data, providing opportunities for unimaginable research and analysis decades ago.

Technology is changing the business world rapidly, and databases are becoming more and more part of many companies' competitive strategy. The combination of data big and high-performance analysis has the potential to provide significant organisational value, as well as support for the macroeconomic strategies of states and analyses carried out by the scientific environment. As a result, there can be no denying the need for big data in the statistical analyses of the present and the future, but for optimal results their use involves rules, a good-performing human resource, good practices and objectivity.

Big data can be considered a method of approaching research that addresses a complex analysis, systematic minating of information or handling data series that are too bulky, heterogeneous, too complex to be analyzed by manual processing or using classical software. The purpose of using big data is primarily to generate greater statistical power, for broad conclusions, it exposes new complex and relevant statistical approaches or results that go beyond the analytical capabilities of the human brain.

In this context, the principles of ethics and integrity governing statistical research, both for business and for the scientific environment, are the subject of this work, with the aim of harmonising the fundamental principles of morality with the rapid evolution of technology.

2. Theoretical background

The concept of big data entered the literature in the 90s, broadly defining the concept in a similar way. The literature includes a number of definitions, depending on the source of citation and the scope of the literature in question, but they are fundamentally similar. Gartner IT Glossary defines big data as " high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation." A similar definition is set out by the TechAmerica Foundation in 2012: "Big data is a term that describes a large volume of high-speed, complex and variable data that requires advanced techniques and technologies to enable the capture, storage, distribution, management and analysis of information."

The term big data refers to the extraction, management and analysis of data sets that are too large to be treated in a regular way. As a result, research and analysis involving big data can only be carried out using special software and, in many cases, especially dedicated hardware. Kaplan and Haenlein (2019) define big data as "data sets characterized by huge amounts (volume) of frequently updated data (speed) in various formats, such as numeric, textual or images/videos (variety)". Another defining description is issued by De Mauro, Greco and Grimaldi in 2016, describing big data as " the information asset characterized by a high volume, speed and variety, which requires specific technology and analytical methods for its transformation into value". Mihet and Philippon (2019) argue that the big data and artificial intelligence technologies that their processing involves can be viewed from three perspectives: as an intangible asset, as a search and match technology and as a forecasting method.

If three decades ago it was a mathematical concept, a pioneer in academic circles and an aspiration of researchers in the field of statistics, today the big data and the complex processes it involves is a constant concern of the authorities from a legislative point of view. Given the complexity, and in particular the implications of the use of large-scale data, the authorities are transposing big data into a topic of interest, constantly updated by the legislative for a. With the aim of regulating, avoiding abuses and respecting the fundamental rights of the person (whether physical or legal), specific legislation has arisen at local and international level, which delimits and defines the acceptance of data processing and, in particular, the use of the results arising from such analytical studies. At European Union level there is no mandatory definition but, according to Opinion 3/2013 of the European Data Protection Working Group, "Big data is a term that refers to the enormous increase in access and automatic use of information: it refers to the huge amounts of digital data controlled by companies, authorities and other large organisations, which are subject to extensive analysis based on the use of algorithms. Big data can be used to identify general trends and correlations, but can also be used to directly affect people."

The use of a large amount of data is applicable in three directions:

- Integrating information by concatenation from several dispersed sources and transposing it into a common format through processing into a unitary form.
- Manage and store data on an electronic media, either on-premises or cloud, while meeting the requirements of fairness and confidentiality.
- Analyse the data to obtain a clear view of the varied data and explore them for new conclusions.

Big data is in a permanent change, applicable in all industries. Finance is becoming one of the most promising areas of management and governance that finds applicability to data analysis. Big data significantly changes business models in financial companies. Many researchers argue that big data fuels the transformation of finance and business in general in ways and perspectives that we cannot yet fully assess (Sun, Zshi and Zhang, 2019).

In the financial field, big data represents large sets of complex information that, following an analysis, can lead to an increase in business intelligence by identifying trends and determining forecasts based on statistical methods, improving business operations and decision-making

processes, determining economic and financial developments and the list of applicability can continue. Once introduced into statistical practices and scientific research, the term big data gives rise to a number of academic concerns regarding the content of the data, its relevance, data extraction, storage, data analysis, search method, classification and archiving, transfer of information, its presentation, querying, updating, sources of information and, last but not least, the demarcations of professional ethics and integrity that the use of big data implies.

With regard to the defining features of big data, the literature presents common opinions, noting over time a detail of the definition of "V" characteristics. Chen and Zang define this subject in 2014 in a simplified form, finding three defining features: volume, speed and variety. In 2016, Abbasi developed this concept, mentioning four characteristics, adding to those mentioned, the veracity. A more complex approach is the one supported by Seddon and Currie (2017), which issues the theory of the seven "V"s: volume, speed, variety, veracity, variability, value and visualization.

The view issued by Seddon and Currie is confirmed in the literature and by other authors, one example being Alexander and Coardos (2017), who, however, attribute more importance to four of them: volume, speed, variety and veracity. Starting from the intrinsic definition of big data, the fundamental characteristic is the volume of information. Based on the fundamental statistical theories, the approach of a research becomes all the more developing and generates results all the more representative the more voluminous the data series that represent the basis of calculation. On the other hand, however, too much data can lead to storage problems, as well as the logistical and technological capabilities available to the research entity. It is precisely for this reason that in research, government and business media there is the practice of extracting and storing a huge amount of operational, public, commercial or social data archived for "hibernation", anticipating future opportunities to increase the speed and processing capabilities of data, which will lead to new conclusions and estimates, currently inaccessible from a technological point of view.

A permanent challenge in the use of big data is the dilemma that scientific research has when deciding to extract and filter information, i.e., whether it is necessary to use complete data to draw certain conclusions about their properties or a sample is sufficient to generate similar results, minimising effort, simplifying resources and, by implication, reducing costs. The big data contains the axiomatic dimension-related trait. But statistical sampling allows the filtering of accurate data collection points from a wider set to estimate features of the entire set of elements. Big data can be filtered on different categories of data in the sample selection process using sampling algorithms specific to big data statistical research.

The speed at which information is extracted, classified, managed, transferred and analysed is another determining feature. This refers both to the speed with which the data are produced and to the speed at which the data must be processed to meet demand. This involves data streams, recording structuring, and the technical possibility of accessing and delivering the beneficiary. The speed of data operation is constantly developing, thanks to the continuous technological development, minimizing the physical volume of information storage and the advantage of optimal data distribution and classification, the continuous development of new methodologies and software, the digitization of the scientific environment and easy access to information beyond geographical barriers. The high speed of data processing must evolve, in the context where decision-making capacity is based on this information and receiving results in a short time may be essential for business.

The variety of information is also an important feature, giving the researcher the opportunity to process the data and express and materialize the results by easy methods to understand. The variety refers to the plurality of structured and unstructured data sources, which, inter alia, include different sources on graphics, audio, photo, video and text media (Constantiou and Kallinikos in 2015; George and others in 2016). In scientific research, it is not sufficient for databases to be bulky in order to generate relevant results. The variety of information is essential for data processing. The use of homogeneous data series exposes scientific analysis to the risk of irrelevant conclusions, and in the case of predictions, to results that are not applicable or not unanimously accepted. In order to avoid such inadequate analyses, it is still necessary to give increased attention to the quality of the sample used and to the filters to which the data are subjected in the pre-processing activity. Due to the degree of technology and globalization, this desire is now much more accessible, the variety of information sources including tabular data (databases), static images, metering data, financial data, graphic

developments, hierarchical data, documents, specialized software, electronic messages, press information, etc.

The veracity of the data refers to the degree of trust or distrust that the processed data inspires. Big data quality is less controllable because it comes from different sources, presentation form and complexity that is difficult to expose to end-users of this data. The ability to assess the compliance, accuracy and honesty of the data under analysis is essential for the research environment. Here the discussion is carried out around the responsibility of the initial data generator, the purpose for which the data is issued and the reactions of the receivers, when the latter may show mistrust caused by the inevitable opacity in the process of data extraction and processing.

3. Research methodology

In the above presented, through a bibliographical information and documentation were shown the theoretical-conceptual aspects of big data practice in the business and contemporary academic environment, in the light of the features that define the concept of processing with a large volume of data, but also in terms of ethical conduct and professional conduct. The use of a large amount of data involves rules and practices whose compliance is indispensable for achieving valid and credible results and conclusions.

For a detailed analysis of the benefits and challenges that the use of big data imposes on statistical activities and for drawing conclusions on the harmonisation of fundamental principles of ethics and integrity with the rapid development of technology.

The collection of this information, combining the analysis of the functionalities of the big data with their theoretical aspects, and in particular with the attributes presented in the form of the characteristics "V", results the main principles of ethics and integrity that big data imposes on scientific research, applicable in the existing technological perspectives and limits, but also certain challenges related to professional morality and whose definition evolves in parallel with the new methods and possibilities that technology makes available to statisticians.

4. Findings

The science is based on fundamental principles, valid at international level and applicable in all scientific fields. A first fundamental principle is honesty with oneself and those around you. Honesty is an ethical principle that underpins all the rules and adapts to a discipline function, as well as to the technological and scientific evolution of the sector they treat. The role of scientific research is to transmit information, to perpetuate knowledge of humanity, but first of all to assess and advance knowledge through the prism of fairness and good faith.

In the paper published in 2016 on the rules of conception, drafting and publication of scientific materials, Dinu, Săvoiu and Dabija consider that the issuance of truth in a coherent and validated form represents the main purpose of any scientific research process, and the achievement of this desire can only be achieved by following rules, a standardized procedure and rules unanimously accepted by academia.

Ethics in the field of big data, found in the literature and under the name "Data Ethics", consists of an interest in the systematization, defence and recommendation of concepts of behaviour and good practice in terms of data extraction, filtering and processing, as well as the exposure of results. The ethics of big data has an important component with regard to personal data, but this paper deepens the subject through the prism of big data ethics used in the case of scientific research in the field of finance. In this case, the confidentiality of personal data and the personal consent of the individual are less subject to the investigation and are considered irrelevant. As a result, big data ethics is thorough in terms of information used in business, financial and econometric studies.

The ethics and integrity of data extraction and processing involve several principles underlying the research and without which the results of the analyses would have no credibility:

- the principle of ownership, refers to the owner of the information and respect for his rights;
- transparency in the data processing process, the owner having the right to inform on how to collect and process the data, its use and the supporting platforms for the reproduction of the results;

- confidentiality, where the data involved are not of a public nature;
- accessibility to processing methods.

Big data ethics in the financial and statistical fields raise the academic field with a number of issues that conclude rules of good practice that support scientific research in a context of fairness and objectivity. The most important aspects of the ethics and integrity of big data use are: consent, transparency, ownership, digital equality, trust.

Consent is a basic principle with an impact in the first phase of statistical research. It should be noted that in the area of macroeconomic and financial research, statistical information is often transparent, its publication being an obligation on the part of the processor. Here we illustrate with the financial data that are required to make public a public listed company or with the macroeconomic indicators of the European Union states, which are the source of analysis for the statistical journals of the European Commission. The ethical question that the principle of consent raises is that of long-term agreement and of ensuring the possibility of withdrawing information from the public environment if, after acceptance, the owner of the data decides its confidentiality.

The transparency of statistical information refers to the data owner's right to track how the information he provides is processed, analysed and published.

Another issue that the ethics of data processing raise is that of their ownership. Fundamentally, the concept of ownership implies exclusive ownership and, by implication, the impossibility of owning another entity without the prior consent of the owner. The rules on ownership of financial information are constantly changing, representing a current concern of the authorities, who find legal solutions to solve the ethical dilemma.

Digital inequality is regarded by researchers as one of the problems that the use of big data raises. This refers to the lack of fairness arising from the fact that few entities have access to the infrastructure and logistics necessary to access a large volume of data, so statistical analysis is only available to certain processors and thus generates the dilemma of fairness and subjectivity with which the final results are interpreted.

Confidence in analytics using massive data series may also be questionable, if the complex algorithms they involve in the analysis are difficult for users to understand. This ethical issue is resolved in the use of data from credible sources only, official and by mentioning the used sources.

In the process of conducting scientific research, it is necessary to respect the ethical and integrity principles in all phases of manipulation of the big data. Thus, in the first phase, that of accessing the data, it is necessary to fulfil the conditions of acceptance, in accordance with the principle of consent which the owner of the data provides. Access to data is subject to the regulations of professional ethics from the very beginning of their reading. Note that by simply accessing the database, the researcher needs the consent of the information, even if this information will not be used or replicated. Therefore, before accessing, it is important to analyse the source and provenance of the information in order to avoid a breach of confidentiality, but also to ensure the veracity of the information.

In the second phase of data operation, that of data collection, it is particularly important to format the data, obtaining it in standardised models and comparable formats, especially in the case of comparative research. Note that depending on the particularities of scientific research, the information collected should comply with certain specific standards or reference systems. Due to technological advances, data collection methods are not constrained by technological constraints, but rather by the researcher's capabilities in terms of their use. This is where the latter's ability to give the study an out of the box perspective comes in. Modern technologies also allow data collection by less common methods, such as perception sensors, web traffic monitoring or automatic extraction of information from online platforms. These collection methods have developed in recent years with a particular scale, so that academia and legislatures are having difficulties and are hardly keeping up with them, the definition of ethical principles being constantly updated. On the basis of these principles themselves, lawsuits have been filed against companies engaged in web data mining activities (Vaughan, 2013), misused in commercial actions or for the purpose of manipulation. In case of doubt as to the legality of collecting data from a website for academic use, it is best for the author to contact the information provider directly to obtain explicit consent. This is where a new challenge arises that the researcher may face, namely that the platform he is accessing for data collection is an intermediary of information, which is why its acceptance may be insufficient to

comply with security and ethics protocols; in this case, it is mandatory for the collector to ensure that the original source of the information and the rightful owner of the data are entitled.

In terms of storing and archiving data, often the storage capacity required exceeds that found in personal computers. The way data is stored raises on the one hand the question of logistics and technological resources, and on the other hand the question of data security. How data is stored depends on its volume. For relatively simple datasets, no dedicated storage solutions are required, with software such as Excel, SAS, or SPSS able to handle variable information content. For example, Excel may contain 1,048,576 rows and 16,384 columns (Microsoft, 2016). However, there is a situation where these programmes are not sufficient to store the big data needed for research, and a more complex approach is needed. A structured database, such as SQL, can be considered. Solutions with parallel tubulars, open-source relational databases such as MySQL and PostgreSQL are also available. In such situations, the controller must have specific knowledge in order to be able to store and subsequently process the data. Another storage option is in the form of a cloud, with the advantage of personalized costs over user needs, with the storage fee depending on the amount of data held. The structured and distributed storage solution is also to be mentioned, exemplified by the Apache Hadoop solution, which allows data allocation on multiple computers. It should be noted that this solution requires knowledge of it and DBA infrastructure (data base administration), the access of which can significantly supplement storage costs. From the point of view of data storage ethics, greater attention is needed to monitor persons who have access to big data series and to comply with the confidentiality conditions concerning specialists who have access to them for the purpose of IT maintenance (where appropriate requiring the signing of confidentiality clauses and the provision of security, monitoring and access protocols). Cases known as 'information leak' are not few, and in many cases, this may jeopardise the final findings of the study, the prohibition of the use of information or academic compromise of the authors of the research.

In the next phase, i.e. data processing, an important action is to filter the big data, with the aim of obtaining structured and representative information. This representativeness of the information is a challenge for the author of a scientific study, and any errors that arise during this information processing phase may jeopardise the relevance of the data analysed. In order to retain the principle of integrity, the database operator should impose clear, rational and neutral rules on data filtering. It should be recognized that researchers can often be emotionally involved in the study they undertake and may irrationally decide to process data subjectively. In such cases, professional ethics requires recognition of this situation on the part of the author and we propose in this respect the involvement of a third party, which proves neutrality and objectivity. This may include a collaborative researcher or the use of consulting services (but do not forget in this case that such academic affiliation must comply with the principles of confidentiality and integrity of all study participants).

Data analysis is the most important phase of the process of using big data, and also the one that imposes professional ethical rigours. Unfortunately, the more detailed and specific these rules and standards are, the greater the likelihood of becoming contradictory and inconsistent (M. Popa, 2016). Data analysis is a process of inspection, filtering, processing and data transformation to issue new discoveries, for academic purposes or for the purpose of being used by a beneficiary. Data analysis has several approaches, including various data discovery techniques and methods, descriptive analysis, reports, tables and graphic views, predictive analysis through statistical models to better understand future behaviour, and prescriptive analyses that clearly suggest solutions.

From the perspective of professional ethics, data analysis must be primarily a quality one. Even if we are talking about big data, so quantity, a large volume of processing, when the researcher reaches the data analysis phase, the volume of information is transposed into quality. In the view of Ciora and Buligiu (2013), data quality analysis involves five steps:

- Setting the objectives of data quality analysis and the structure of the information collected: is carried out before the evaluation of the information in order to structure and filter the data in the database subject to the analysis;
- Verification of preliminary data: validation of the form of quality assessment reports, completion of basic statistical calculations and preparation of tables and graphs.
- Selection of the statistical test: the optimal methodology for the calculation and analysis of the data will be selected, based on the previous stages of the research. At this stage, the researcher identifies the key parameters needed to validate statistical procedures;

- Verification of forecasts: assessment of key parameters or preliminary data, if they are characterised by acceptable values;
- Issuing of the results: the calculations necessary for the statistical test and the documentation from which the inferences of these calculations are derived.

The ethics of big data analysis is a constant concern of academia. However, ethical dilemmas are often viewed superficially. Analytical work involves respecting the research and validation methodologies for the accuracy of the resulting data, in order to always give due attention to ethical issues.

The ethics of big data analysis involve not only the need for the accuracy of the research methodology, but also the accessibility to information of those concerned, as well as the manipulation of information through the prism of good will. The accuracy of the processes refers to the observance of the research phases, the choice of the appropriate methods of analysis, and the clear definition of the purpose and destination of the final results. In order to be effective and correctly applied, it is necessary that the methodology used in the analysis of data be able to achieve the objectives of scientific research, be effective, highlight the essential points of research and answer the questions set out in the hypothesis. By respecting these ethical principles concerning the methodology of the research study, one can also avoid the cognitive predisposition of the researcher for the involvement of stereotypes or personal and subjective patterns on the ongoing analysis. By analysing data without objectivity and integrity, research can be compromised by inadequate conclusions, ignoring results or issuing preconceived opinions.

It should be noted that the analyst is prone to human error, and the principles of ethics and integrity are intended to avoid these human errors as much as possible. Thus, it should be noted that professional ethics and integrity can be violated by the researcher by premature opinions, by inappropriate analogies, by lack of empathy or, on the contrary, by the abusive involvement of emotions in the professional act, the denial of reasoning, the intentional disregard of certain information, the exaggerated confidence in pessimistic or optimistic prejudices, ignorance in the sense of insufficient knowledge of the context of analysis.

The last phase of the big data study is the reporting and visualization of the results. This step is intended to facilitate interpretation by the auditor concerned or by future users of the results of the scientific study. A first challenge for the data analyst is to represent the conclusions in accordance with the ethical principles of transparency, in a way accessible to the non-scientific environment, especially in the case of those analyses using big data and complex methodologies, which are often not tangible to the general public. In this respect, professional ethics requires the scientific researcher to present the conclusions of the study by mentioning the source of the information, the methodologies used and representing the conclusions as clearly and concisely as possible.

Rosnow and Rosenthal define in 2011 ethics and integrity criteria that reporting research data must meet, concluding a number of information characteristics. This must be:

- transparent – the results are presented openly, respecting honesty and through an appropriate platform and technical language, within the auditor's reach.
- informative – contain enough information so that the auditor correctly perceives what the researcher wants to convey;
- accurate – reported results with the accuracy required by the situation under consideration;
- correct – avoiding and correcting errors in measuring, calculating and reporting numbers, but also adopting a neutral tone, free of exaggerations and subjectivity in issuing conclusions;
- substantiated – the research methodology should be chosen correctly; the statistical calculation methods should be appropriate to the data and the assumptions issued should be verified before being entered in the study conclusions.

Another issue that professional integrity in academia raises is conflict of interest. In order to preserve ethical and professional principles, the analyst who operates big data for the purpose of research has a moral and legal obligation not to distort the analysis process due to personal interests. A manifestly emotional involvement or interested in a purpose other than that specific to the research undertaken leads unequivocally to the compromise of the entire study. The ethical principle of trust in the objectivity and professionalism of the researcher who draws conclusions is fundamental for academia. The same register also includes the incompatibility of carrying out a statistical analysis

using data which contradicts the position, function or interests of the scientific researcher. And in this case, the study conducted is jeopardised and the results of the analysis are irrelevant.

Ethics in academia and, in particular, ethics in the digital environment impose rules on dignity. "Human dignity is inviolable. It must be respected and protected. "Technology should not dictate values and rights, but neither should the relationship between them be reduced to a false dichotomy," says the Charter of Fundamental Rights of the European Union. The importance of big data use, cloud storage technologies, high speed of information propagation, Internet opportunities – all of these are recognised, and the benefits they bring to economic development, international cooperation and the business and academia are self-evident. However, the ethical side of this development, which cannot be limited to the legal framework, but must be understood from a human, moral and philosophical point of view, must not be ignored. At European Union level, the European Data Protection Supervisor (EDPA) is launching the concept of a 'large data protection ecosystem', identifying four methods to respond to the challenges that the exponential development of digitalisation manifests:

- the implementation of a forward-looking legislative framework that contributes considerably to the ethical principles of data processing;
- professional and responsible data controllers who determine the processing of information including personal data;
- the creation of data processing products and services that take into account privacy;
- more rights for natural persons.

Avoiding plagiarism remains one of the topics of interest in recognizing the work of a researcher in academia. Analysis of high-volume data and information is not immune from this error that an analyst, willful or by mistake, can make. Applying on the big data field the methods mentioned by Stephen (2018) to avoid plagiarism, we can consider that it is absolutely necessary for the researcher to carry out his work on the basis of honesty, recognizing the paternity of the ideas presented, knowing the ways of quoting sources of inspiration and always mentioning in his works the source of the data processed and used in the research methodology, in order to draw conclusions.

Without developing the obviously negative effects of plagiarism, it is worth mentioning that technology and the very collection of a large volume of specialized information, software and platforms are tools by which the scientific researcher to avoid plagiarism. It should also be said that plagiarism can occur in a statistical study from the data collection stage, which is why mentioning the sources of export of big data is imperative. It is also necessary that the analysis of information, the issuing of conclusions and the visuality of reporting be subject to creativity, personal input and innovation.

Globalisation is another factor that interposes in the ethical-scientific research relationship and is all the more visible in the field of big data, due to the specific internationalisation of this field. In this way, we see a trend of common global interest in ethical issues in science, internationalisation which at European level has resulted in the emergence of consensual recommendations, the issuance of the European Researcher's Book and the Code of Conduct for the Recruitment of Researchers, but also through cooperation at institutional level, namely the establishment of National Councils and Ethics Committees. The European Group on Ethics in Science and New Technologies (EGE) was also established as a neutral, independent, pluralistic and multidisciplinary body, which has the explicit role of engaging in the regulation of the technological field and advising the European Commission on the ethical aspects of science and new technologies and underpinning the preparation and preparation of European legislation and policies.

Finally, we are in agreement with Emilia Şercan, who mentions in her paper "Academic Deontology – Practical Guide" (2017) that the lack of academic integrity has negative, long-term effects on society. Applying on the field of big data, we can say that the lack of professional ethics and integrity in research can lead to the impairment of the quality of the education and specialization process in the field of statistics, the invalidation of academia by public opinion, the underappreciation of teachers and courses, the stigmatization of scientific research and the devaluation of high-level studies. To all this, we add long-term consequences for the quality and volume of the research process and, by implication, theoretical and practical innovation.

5. Conclusions

Big data analysis in scientific studies is subject to the rules and regulations of ethics and academic integrity, but having specific peculiarities in the statistical field. The exponential development that the big data field has been experiencing in recent years makes academic and legislative environments have to support and continuously improve ethical principles and rules. Through an analysis of the particularities of this field and observation of strengths and weaknesses, as well as future opportunities and challenges, it was possible to identify professional ethics and integrity issues that are required of scientific researchers who use a large amount of information in their studies.

An analysis of the literature, as well as the legislative framework implemented at European Union level, notes that the ethics of big data analysis have common points with the ethical principles governing the statistical field, but also have traits whose definition and regulation are necessary to be improved with technological evolution.

With the emergence of new research methods, new sources of information and data processing methodologies, the principles of integrity and ethics feel the need for evolution. International organisations, as well as academic institutions, are designed to foster dialogue between academia, authorities and the general public, to provide advice on ethical and integrity issues, to instil principles of scientific ethics in both future generations of researchers and public opinion, to ensure an intellectual environment with the aim of changing ideas and issuing recommendations.

We can say that morality is changing, updating to society, technology and economical changes, but the fundamental principles of fairness, integrity, objectivity and professionalism that define human civilization remain the same. It is only a model of the principles of ethics, an update of them to cover new needs arising in the field of research, but all for the purpose of extrapolation and refining, not to modify the concept of "what is right".

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Economic Theories that Explain the Emergence of Tax Evasion

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Abstract

Tax evasion refers to the illegal activities deliberately undertaken by a taxpayer in order to release himself from the tax burden. Tax avoidance, on the other hand, usually denotes a situation in which the taxpayer has arranged his business in a perfectly legal way, resulting in either a reduced taxable income or an income for which to pay tax. The taxpayer is not obliged to pay an amount higher than the legal tax due, in accordance with the tax law. It is also not excluded that a taxpayer enters into a bona fide transaction which, when carried out, has the effect of avoiding or reducing the obligation to pay tax, provided that there is no provision in the law which prevents the avoidance or tax reduction. The purpose of this paper is to identify in the literature specialty which are identified determining factors regarding the taxpayer's behavior towards taxation in terms of compliance or non-compliance.

Key words: tax evasion, tax, taxpayer, tax avoidance

J.E.L. classification: M41

1. Introduction

The reasons for tax evasion have been explored by specialists in the field, researchers and psychologists.

According to Webley et. al. (1991), if in a survey we ask a person, any person, why some people do not want to pay taxes, the vast majority would say that the reason is greed. The hypothesis is based on the assumption that people will commit a crime almost any crime, if doing so maximizes their profit.

Becker (1968, pp. 207) argues that, some people are more prone to evasion than others, not because of different reasons but because of the income they might get that way. Applied to the tax situation, people are treated as rational and immoral decision makers whose purpose in this regard as in all other areas is simply to achieve an increase in profits.

Allingham and Sandmo (1972, pp. 338) find as determining factors of tax evasion in the behavior of a taxpayer, *the percentage of tax, the chance of being caught evading and the sanctions* that apply to fact. The authors also present that those taking into consideration tax evasion can calculate their chance of being discovered. And if the probability of being caught is low and the fines are approximately small, taxpayers who are greedy would decide to report lower income or not report at all from the income obtained. This model shows that the size of tax evasion is influenced by the percentage of fines and the probability of being discovered. Thus, a higher probability of detection and a higher percentage of fines will cause taxpayers to declare their income and comply with the law.

2. Literature review

Some authors continued the model studied by Allingham and Sandmo and made a development of the classical model. Benjamini and Maital (1985, pp.245-264) made an interactive model, game. And other authors such as Jackson and Milliron (1986, pp. 125-165) or Kahneman and Tversky (1979, pp. 263-291) added the component of limited rationality.

Interactive models refer to the fact that a taxpayer does not make a decision alone when it comes to evasion and that there are other participants in this game. The behavior of these participants has an important role in the evasion process because in a community where the vast majority of people respect the law, the reputation of those who do not respect it will suffer if is caught. But there is also the situation where if the vast majority of people avoid taxes then the reputation of those who evade may not suffer (Webley, 1991 ,pp.10).

In another interactive-game model, Corchon (described by Cowell, 1990, pp.122) presents the fiscal situation as a game between two people, respectively the authorities and the taxpayer in which both players have two options. Once, the state that can verify the taxpayer or not and the taxpayer that can comply or not. But this model does not present a balance because if the taxpayer complies with the law, then it will no longer be necessary for the state to spend money on controls. And in the situation where the taxpayer knows that he will not be verified, he may not respect the law. The balance of this model consist in the use of a mixed strategy on both sides. Situation in which the probability of tax evasion increases with the marginal cost of controls and decreases with the size of the fines.

An extension of the Corchon model is made by Benjamini and Maital (1985, pp.245-264) by adding other determinants of tax evasion such as the behavior of other taxpayers and some social and psychological variables like as stigma, reputation and social norms. These somewhat technical details present a balance in their model. The authors conclude that in a homogeneous population, either everyone conforms or everyone evades. And in a population heterogeneous, members of certain groups will avoid while members of other groups will comply. In one of his works, Vogel (1974, pp. 499-513) identifies the importance of support from other people in forming attitudes towards tax evasion. Cowell (1990, pp.113) also finds that in the face of the decision on tax evasion, a taxpayer first decides whether to be honest or not, after which he makes calculations to see how much he can evade.

The treatment of decisions as a two-stage process is also found in studies that have as subject the limitations of rationality. Kahneman and Tversky (1979, pp.263-291, 1984, pp.341-350) present one of these approaches known as the theory of perspectives in which people make choices in two stages. They also notice that, there are people who use the fact that the tax rate is lower than the reference tax rate. In the first stage, the taxpayer makes an analysis of the situation to see what the options are and then chooses the simplest variant. This analysis involves reviewing all the probabilities and outcomes that could be obtained and then isolating the most risky option. The most important part of this stage is the framing of the results, respectively of the prospects as income or losses through a reporting to a certain reference point. The second stage refers to the evaluation of perspectives. The taxpayer evaluates each of the identified options and chooses the option from which he obtains the highest profit. In this phase it will use a utility function that is steep for losses and increasing for gains. This shows that when the gain is seen as certain, the taxpayer will tend to avoid the risks, but at the same time he will take risks to prevent losses that are seen as safe. Such decisions can be influenced by the way issues are assessed.

Another study on the theory of perspectives is found in an interview also conducted by Tversky and Kahneman in 1981 (pp. 453-458). In this example, the interviewed subjects are presented with a situation in which the United States is facing an unusual disease that will kill 600 people. There are two possibilities for action. The first situation shows a clear result, namely that 200 people will live and 400 will die. And in the second situation there is a risky result, namely the fact that there is one in three chances that 600 people will live (no one will die) and two in three chances that none will live (ie 600 people will die). The conclusions, were that the vast majority of people made a choice based on how the problem was presented. If the situation was presented as a gain, namely the fact that 200 people will be saved compared to one in three chances that 600 people will be saved, the vast majority chose the safe option. And when the situation was presented as a loss,

namely the fact that 400 people will die, in the vast majority of cases they chose the more risky option, respectively the second option.

The importance of this study has been noted by several researchers such as Jackson and Milliron, Schadewald and has been studied in depth by Kinsey and Smith. Several determining factors have been identified when choosing a tax decision. An example would be in the case of the tax to be paid compared to the tax that is already withheld. The one who has to be paid has a greater utility than the one who is already retained. In a study conducted in the United States found that the vast majority of taxpayers prefer to withhold their tax, even more, than to pay it later. The explanation for this withholding tax process is that the risks associated with evasion can be avoided, and for taxpayers waiting for a refund, they perceive this as a gain. But for those who have to pay a larger tax difference, they may perceive this as a loss and may be more inclined to make a risky choice not to pay the tax.

3. Research methodology

Quantitative research has the role of quantifying and identifying aspects encountered in qualitative analysis, by testing and validating hypotheses by specific methods. In order to carry out this approach, an analysis of the specialized literature and a delimitation of the sample of articles were performed. This was done with the help the databases from the Central University Library "King Ferdinand I" accessed within the Doctoral School of Economics and Business Administration in Iasi. All databases were analyzed and two databases containing the most relevant information in the targeted field were selected. These were: "Science Direct" and "Cambridge Journals". After selecting the search criteria specific to each database, a number of 253 articles and 14 books were obtained, which were analyzed according to the research field, the research topic and the research methodology. Following the selection of these criteria and the qualitative analysis, a number of 31 articles and books remained that were used in this study.

4. Findings

There are two types of theories in the literature of specialty wich explain why people evade paying taxes. The first type is an integrated model of the tax payment process. These are sometimes called theories, and are seen as some frameworks (sometimes are called so by their authors) in which data on taxpayers and tax evasion can be organized. Some examples of this refer to the models of Lewis (1982), Kinsey and Smith (1987) and Van Veldhoven (1983). Models that present a description of the variables considered to be the most important in the process of tax evasion and a how they could be correlated and recall the patterns of information processing and consumer behavior found in marketing texts. The second type is a fairly simple application of a psychological, social theory of tax evasion (Kaplan, et. Al., 1986, pp. 461-476).

Lewis (The Psychology of Taxation, 1983), following a study on the fusion of psychology and economics, analyzed the entire area of tax evasion from the perspective of several disciplines. The author identified two models of tax evasion. The first model focuses on the concerns of the authorities and the concerns of the individual. And the second model presents the relationship between fiscal attitudes and fiscal behavior. Webley et. al. (1991) studies Lewis's two models and summarizes them as follows: the first model perceives it as a conceptual map in which the authorities are analyzed in terms of three important factors: fiscal policy of government, application policy of taxes and the assumptions of political decision makers regarding taxpayers.

In this model, the tax application structure partially shows the size of the tax evasion that influences the tax decision makers. Three factors are presented individually:

- fiscal attitudes and perceptions. They describe support for fiscal policies, perceptions of the tax system and the tax burden, feelings of alienation and inequity;
- perceptions regarding the sanctioning of taxpayers and their opportunity;
- characteristics of taxpayers, which refer to demographics and personality traits.

All this interacts in influencing the decision on whether or not to avoid taxation.

The two parties, the state and the individual, influence each other in relation to each other. Fiscal policy is what influences fiscal perceptions and attitudes, and the structure of fiscal policy is what influences the opportunities that may arise for tax evasion. Taxpayers' perceptions and attitudes are in turn influenced by fiscal policy and the implementation of fiscal policy. Thus, the application of taxes will be associated with people's perception of the likelihood of evading taxation. Vogel (1974, pp.501) identifies the fact that taxpayers' attitudes are closely related to their perception of the amount of fines codified in the tax system.

In Lewis's second model we find the presentation of the relationship between fiscal attitudes and fiscal behavior. Here are detailed the ways in which the decisions of the taxpayer and the state are made. The focus is on variables such as demographics, behavioral attitude towards the state and tax inspectors, but also on personality traits that show a person's attitude towards tax behavior. But, testing this model presents a difficulty in that it refers to private and illegal behavior.

According to the literature, it has been shown that some groups in society have different tax attitudes and perceptions regarding the application of taxes. There is also a flow in the opposite direction (payment with compliance) on individual differences in the front of risk, compliance costs and perceived economic well-being, which are also influenced by perceptions on tax authorities and attitudes towards taxes. Although this second approach to tax compliance implies that individual attitudes, perceptions and differences between taxpayers are antecedents of tax evasion, this does not always have to be so, hence the identified result on tax compliance. Sanctioning and opportunity can be partly consequences of the practice of tax evasion. Similarly, tax attitudes can be their own rationalizations (rationalization defined as the act by which one tries to explain or justify a behavior or attitude with logical reasons, even if they are not appropriate. Most people are prone to self-deceptive rationalization) of taxpayers' behavior depending on the event.

Van Veldhoven and Greenland (1983, pp.17) following a study developed a provisional model in which they brought together ad-hoc approaches and attitude and behavior characteristics. The authors identified that the particular differences and the characteristics of the situations that appear and depend on different conjunctures, through their interaction influence the taxpayer's attitude towards the fiscal system. And the tax system through its policy of applying taxes and duties directly influences the taxpayer's behavior by the way he will evade or not. Three types of characteristics are presented depending on the situation:

- opportunity;
- socio-economic factors;
- the fiscal system.

All these factors were studied and identified as having the potential to determine tax evasion. We can observe the importance of the construction of the fiscal apparatus by the fact that depending on this and on the application of the fiscal laws, opportunities can be created for certain persons or groups regarding the tax evasion. Also, the construction of the fiscal system will influence the taxpayers' attitudes towards it.

Smith and Kinsey (1987, pp.642) conducted a study to identify which factors determine tax evasion or taxpayer compliance. In their approach, the authors meet a number of factors that are conclusive in this regard. After several analyzes, they identified that the vast majority of studies focus on the preferences and intentions of taxpayers and less on the social context. These studies highlighted the fact that taxpayers did not comply with the law knowingly and intentionally, of their own free will. The authors' model shows that non-compliance with the legislation can be the result of inertia and that it is probably not a single evasion decision but is performed through a series of actions. This can be done by keeping of double records in order to make an estimate of the expenses, that will determine whether they will comply or not and if so, to what extent.

Naidoo (2005, pp.13) notes that most taxpayers want to do the right thing and pay their fair share of taxes. However, they do not want to pay more than necessary. The author argues that those who diligently pay their taxes and comply as best they can with tax laws want to be treated with respect by the tax authorities. Unfortunately, this is not always like that. Taxpayers often believe that they are being treated as criminals and do not appreciate a threatening approach for non-compliance with tax law.

In a survey conducted by Webley et. al. (1991, pp.85), the authors showed that the percentage of total voluntarily reported tax obligations was considerably higher for employees (95%) than for individuals whose main source of income was related to a business (77%). Authors (1991, pp.102) also found strong support for the assertion that greater opportunity leads to greater tax evasion. After all the experimental studies performed on tax evasion, Webley et. al. (1991, pp.122) argue that for some participants the task of calculating their tax debt was too difficult. Some comments received from respondents who were part of the authors' study were: He didn't know very well what he was doing then, He did not have the necessary knowledge about the statements he had to fill in and in some sections, he only guessed and, In those moments they felt fear.

Lamont (1992) stated that, the state is the main actor among all the powers of a country that is most interested in the welfare of people in the private sector and the state for the benefits of taxation. The effect of taxation is that subjects are forced to give up hard-earned earnings or goods without receiving visible benefits in return.

Elffers and Hessing (1997, pp. 289-304) propose that there are probably three groups of taxpayers: those who always pay their taxes, those who only sometimes will try not to pay and those who regularly will try not to pay. From a legal (juridic) point of view, there is a distinction between tax evasion by arranging financial statements to minimize tax liability and tax evasion by non-payment in whole or in part of tax obligations.

This principle was clearly explained by the judgment of the United Kingdom in *Inland Revenue Commissioners & The Duke of Westminster (Upper Tribunal, Lands Chamber)*, in which Lord Tomlin stated that: "Every person has the right if he can, to arrange their business in such a way that, the tax levied on the basis of appropriate facts be lower than otherwise. If he manages to order them so as to ensure this result, then no matter how invaluable the income commissioner or his taxpayer colleagues may be, he cannot be forced to pay the increased tax. "

Given this ingenuity Lewis (1982, pp.123) points out that the dividing line between legal tax evasion and illegal tax evasion is blurred (as in the case of differentiation). Bird, Oldman (1990, pp.453) and Slemrod (1992) stated that "taxation and evasion are ubiquitous phenomena in all societies", and Webley (2010, pp.128) et. al. and Lewis (1982, pp.159) define tax evasion as a complex and hidden behavior that has important economic and social consequences.

According to existing studies it has been observed that over time taxation and evasion have been closely linked. In 1799 in Britain the issue of evasion occupied center scene. During a speech on the introduction of income tax William Pitt (quoted by Wembley et. al., 1991) stated that will set a general tax on important sources of incomes to avoid attempted evasion. Ironically, even though tax rates in Victorian England have been set at levels that now seem incredibly low (income tax has been set at 2.90%), there have been complaints about evasion from the start. In 1868, it was estimated that the average declared taxable income was less than half of what it should have been. In Exeter (area of the United Kingdom) there was a report in this regard in 1871 stating that: only 20% of taxpayers who paid the tax completed acceptable statements for Revenue Service (B.E.V. Sabine, 2013 , pp. 105-106). " Webley et. al. (1991, pp.23) states that tax evasion in itself is certainly not a modern problem, it is a pervasive phenomenon in which all citizens around the world have taken part and is represented by a behavior that can be found in a large variety of cultural and legal frameworks.

In one of the works, Smith and Kinsey (1987, pp.645) make a diagram of flow in which it presents the factors that influence the behavioral attitudes regarding the conscious decision-making and the way in which people form their intentions. The specific factors of this model are the tax reform, economic changes and wage changes that change tax rates. Following these changes, taxpayers will go through three stages:

- the diagnosis (in which the situation is defined);
- the action (represented by the construction of intentions);
- the implementation (in which they choose how to fulfill the intentions).

The authors (1987, pp. 652) point out that taxpayers consider four groups of factors in the formation of intentions. These are: the material consequences, normative expectations, socio-legal attitudes and significant factors. The formation of these intentions is done according to the theory of perspectives, through the choices that are made depending on the gain that can be obtained or the loss made, compared to an initial reference moment. Smith and Kinsey address two types of

situations in this study. A situation that includes objective opinions, which are influenced by taxes through expenditures made to the state. And a situation that refers to the tax system. The authors consider that a taxpayer's attitude towards a goal has a direct effect on his attitude towards the tax system. A significant factor is the mental cost that directly influences the formation of intentions regarding factors triggers.

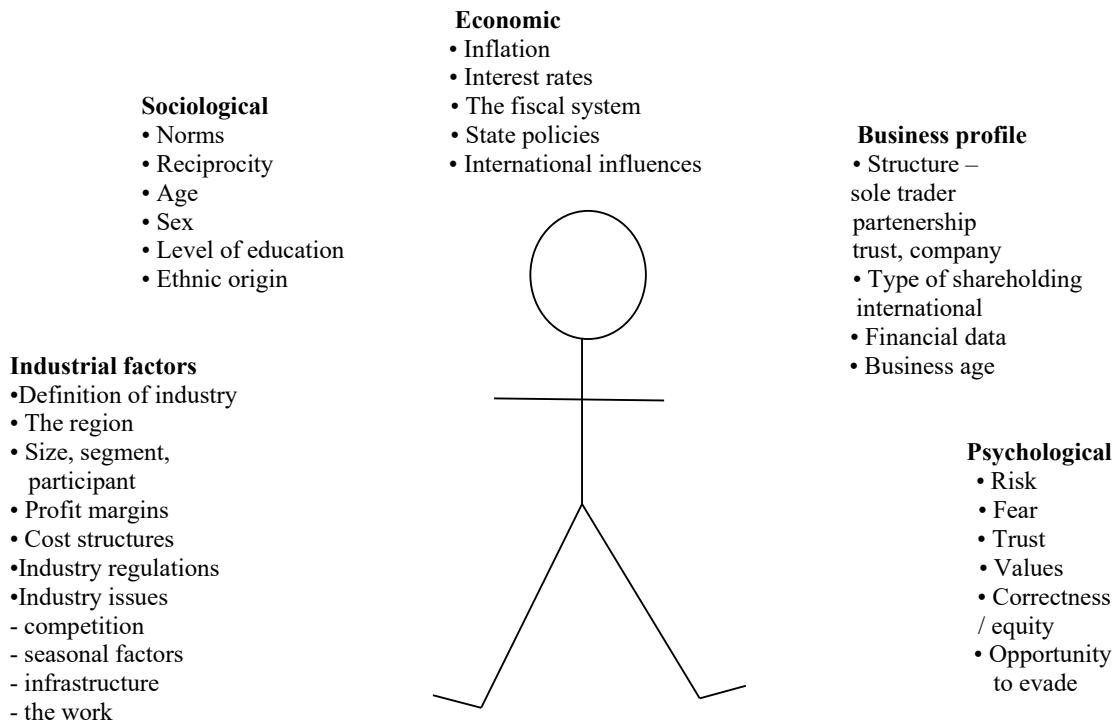
Coetzee (1993, pp.5-7) conducted a study in South Africa asking a number of taxpayers to express their views on the tax system. The results of this study showed that the two main reasons why people do not like to pay taxes come first of all from the fact that it is mandatory and secondly from the inability to immediately collect the benefits of such a tax.

A study approached from another perspective is conducted by Kaplan et. al. (1986, pp. 461-476). The authors base their research on the theory of attribution. This theory focuses on the fact that people make sense of civil society by attributing an intention to a cause.

The theory confirms its substantiation by showing that a person does something either because you have to, because of the environment, either because he wants to, because of the personal. Some of the principles underlying the attribution theory have been used in constructing assumptions about tax evasion. Such research has shown that some socio-psychological processes can influence people's perceptions of tax evasion and their tendency to engage in such behavior. Moreover, this model emphasizes the fact that when taxpayers have a high level of trust in the state, there is also a high fiscal morale and as a result the probability of non-compliance with the payment or non-compliance with the legislation is lower.

The Australian Cash Economy Task Force conducted a larger literature search on compliance and drafted a report to the Australian Tax Office. In this report, the results of the study show that taxpayers' decisions on compliance can be influenced by factors that are classified as psychological, sociological, economic, business and industrial. The schematic representation of these factors is represented in figure no. 1.

Figure no. 1 Factors influencing a taxpayer's compliance decision



A taxpayer influenced by a multitude of factors

Source: Australian Cash Economy Task Force, *Improving tax compliance in the cash economy* (1988)

Following this study, the Australian Cash Economy Working Group concludes that of all the factors identified in Figure no. 1, none of them is the only reason to justify a taxpayer's behavior regarding non-compliance, nor have they been able to find out what could be the combination of factors that can identify or determine evasionist behavior. Regarding this report, Fallan (1999, pp.173-184) considers that it is complicated and difficult to analyze a taxpayer's attitude towards taxation in terms of tax evasion.

5. Conclusions

The empirical research studied in the field of tax evasion has highlighted a number of specific findings on issues related to evasionist behavior. A survey by Friedland, Maital, and Rutenberg (1978, pp.107-116) found that women avoided taxation more than men. In contradiction, in three of the four studies conducted by Webley et. al. (1991, pp.110) the results showed that persons of sex male they withdrew more often than persons of sex female.

Van Veldhoven and Greenland (1983, pp.59) substantiates their theory that people who have internal control (those who have personal control over their own business) they will succeed to evade paying taxes more often than those with external control. The authors found that people with a higher level of education avoided taxation more than those with a lower level of education. Vogel (1974, pp.511) confirms this by stating that the Swedish tax system creates unequal opportunities to minimize taxes, as education is a prerequisite for the successful practice of reducing tax bases or tax evasion.

Webley et. al. (1991, pp.68-77) in their studies found that most people consider the injustice of the tax system as a justification for tax evasion. They also note that people who are not company-oriented, especially young people and/or employees, are most likely associated with tax evasion behavior.

In a Scottish study by Dean et. al. (1980, pp.39-40) the authors concluded, that tax evasion can increase if people believe they will not be detected. In the current circumstances, about 26% of respondents agreed that almost all taxpayers could easily steal small amounts without being detected. In addition, 66% agreed that almost all taxpayers would subtraction small amounts if they thought they would not be caught evading. Thus, the difference between 26% and 66% could be seen as the difference between the opportunity and the potential exploitation of the application of relaxed taxes. It's important to note that the number of those perceived as evaders decreased (even without fear of prosecution) as the amounts stolen increased. This implies that, even if the tax authorities were relatively powerless, the evasion of larger amounts would be considered unacceptable from an ethical point of view, while the evasion of small amounts would not.

Other possible reasons for the cause of tax evasion, as established by Dean et. al. (1980, pp.42) include: **greed and financial difficulties, government waste, reduced chances of detection and a desire not to respect the system.**

Song and Yarbrough (1978, pp.450) following a study in North Carolina they asked respondents to compare and classify each of the five frequently discussed income tax deficiencies. The results were: the tax rate was too high, the existence of too many legislative loopholes, the regulations were too complicated, due to evasion, the middle class bears the greatest burden, as a result the honest and law-abiding are penalized.

A study wich analized the political attitudes and democracy in five nations, by Almond and Verba (1963) found that some of the important factors in determining a citizen's orientation toward the state are: **education, authority, and beliefs, feelings, and evaluations of the system political and state**, as a whole.

Following this investigation by Almond and Verba in the USA, West Germany, the United Kingdom, Italy and Mexico in a survey of approximately 1.000 interviews on variables that depend on the level of education, the authors show that the levels of education achieved by citizens seem to have the most important demographic effect on political attitudes. Better educated citizens who are more aware of the impact that a state can have on the individual, pay more attention to political campaigns, possess more political information and on a larger scale, are more likely to engage in political discussions and they are also more likely to believe that they are capable of influencing governments and state policy. Moreover, citizens with higher levels of education show a greater

tendency to become active members of a certain type of organization or party. These also present, higher levels of confidence regarding dignity and help of other citizens.

Vogel (1974, pp.507), found important the occupation of a person to his tax preferences. He considered that those self-employed taxpayers are more likely to agree that tax revenues are too high and that tax rates are unfavorable.

Following an accredited study, by Oberholzer (2005, pp.249-275) that investigated the perceptions of South African taxpayers was found that although most of them disadvantaged South Africans pay taxes, they are unable to list the different types of taxes without help. In general, respondents in the study are positive about paying taxes if the government properly applies this money to and for the benefit of taxpayers. A substantial proportion of respondents indicated that they would not object if lower tax rates were introduced. A significant percentage of respondents also believe that the state should be transparent about the use of money from taxes and duties. Eventually, it became obvious that there is a need among disadvantaged South Africans for increased education about tax systems and their enforcement.

Sawyer (1998, pp.6) says that possible reasons for tax evasion may be due to mismanagement of funds by the government or the fact that taxpayers do not like to pay taxes due to the perception that the tax system is unfair, tax legislation is cumbersome, and people have a hard time understanding it.

Since those times there have been so many changes and additional fees that only dedicated tax specialists now understand the system best. The danger is that individuals and small businesses may not to respect involuntarily comply with tax laws because they do not have (and cannot always afford) the knowledge necessary to fulfill their obligations.

In order to have taxpayers who are willing to contribute and comply with the law and not look for all possible ways to avoid taxes, you need a give and a take from both sides. Naidoo is of the opinion that although there is a general perception only to take from the finances, fiscal morality will not improve. An essential concept to consider in this situation is fiscal ethics.

Fiscal ethics is defined by Vogel (1974, pp.500) through the behavior, attitude and responsibility of a taxpayer in completing the declaration regarding the incomes obtained in compliance with the fiscal legislation. In the study on Swedish taxpayers, conducted by Vogel, respondents were asked to choose appropriate sanctions for tax evasion from a set of alternative sanctions for various types of crimes. The penalties ranged from no penalty or no fine, up to prison sentences for various periods of time. It was found that the choice of the term of imprisonment was a good indicator of the perceived seriousness of tax evasion offenses. From the small selection of crimes presented, there was a tendency to indulgence in tax evasion. Even when the effect of crimes in terms of money it was the same (\$ 200 for tax evasion and also \$ 200 for breaking into a house), only 11,7% proposed a prison sentence for those who evade as opposed to 53,9% for those who break into a house. From these data the author's conclusion was that, at the level of attitude of Swedish taxpayers are relatively favorably inclined towards tax evasion.

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Considerations on the Application of Information Technology Tools in Building the Accounting of Entities

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Abstract

In this paper, in a simplified manner, we try to highlight some problems that have arisen in the context of the digitization of accounting as a booming process, similar to other industries. The reasons for the lower applicability can be found in the exceptionally high regulatory requirements regarding the validity and integrity of accounting data. The whole accounting system is built so that counterfeiting is impossible or at least very expensive. To achieve this, it relies on mechanisms of mutual control, checks and balances. Most of them are manual tasks, which require a lot of work and are far from automated. Blockchain technology can be the next step for accounting: instead of keeping separate records based on transactions, companies can record their transactions directly in a common register. Because all entries are distributed and cryptographically sealed, falsifying or destroying them to hide the activity is virtually impossible.

Key words: blockchain technology, accounting, trends

J.E.L. classification: M41, G32.

1. Introduction

Blockchain or Distributed Registry Technology (DLT) is fundamentally a technology related to the discipline of accounting. Blockchain technology has the potential to increase the speed of transaction processing in accounting, allowing the implementation of a spatially distributed accounting system (www.hyperledger.org). This technology has the potential to ensure certainty on the data describing the assets and liabilities of entities, which generates the confidence of the accounting profession to be able to implement a goal hitherto considered impossible to achieve: multidimensional or multi-item accounting

There are currently technological difficulties in the legal system that need to be resolved for blockchain technology to be included on a large scale in the accounting systems applicable in different legislations. We consider that the accounting profession has the necessary capacity and theoretical and practical skills to implement blockchain in practical solutions adapted to the needs of entities. Professional accountants have the level of cognitive skills in the field of accounting, auditing, taxation, skills needed to collaborate in issuing financial reporting standards that will drive the blockchain forward in practical implementation (www.hyperledger.org).

Blockchain is a fundamental change in the way accounting records are created, maintained and updated. Instead of having a single issuer of the accounting records, the accounting records under the conditions of using blockchain technology are transmitted to all interested users. The fundamental thesis underlying the blockchain approach in accounting is the use of a well-defined system for verifying accounting records. In this way, it is ensured that, in the absence of a central owner of the accounting information and with time lags between all users, a unique version of the economic reality transposed in the accounts to the set of all users is registered. This new approach to accounting concepts generates a universally distributed accounting system, in which input data is shared unchanged, permanently to all users of accounting data. (www.hyperledger.org)

Blockchain is a solution for remote, online processing of accounting data related to the instantaneous recording of assets, liabilities, equity, financial results and cash flows. Blockchain technology is a support platform for accounting and business that must be constantly developed.

2. Theoretical background for the use of blockchain in entities's accounting

There are three key terms that explain what makes blockchain technology different from today's more popular software technologies, applications that consist of data recorded and modified by a single information administrator. The basic aspects can be summarized as follows: Blockchain is a solution for remote, online processing of accounting data related to the instantaneous recording of assets, liabilities, equity, financial results and cash flows. Blockchain technology is a support platform for accounting and business that must be constantly developed (www.hyperledger.org):

1. Data transmission: There are multiple versions - copies of a blockchain register and no master or central register. All users can view the full version of the registry and all versions are identical as recorded data. There is no user in control. We must note that this aspect must be adapted to ensure the requirement derived from the concept of heritage.

2. Permanence: Each user has his own version of the accounting register, the reality of the accounting records is established by the score between users. Historical financial transactions cannot be changed without the permission of most users, which means that blockchain accounting records are permanent. Complete accounting records are stored by each participant and data verification is ensured.

3. Programmability: Some software blockchains allow the registration of the program source code together with the data of the registry entry - automatically generated entries are created in the software log, program sequences that are executed automatically when the source code is triggered. These are the so-called smart contracts.

Whether blockchain is applicable in a particular business or industry will depend on whether these qualities are desirable alternatives to current methods. Good blockchain applications are based on the cost and timing benefits of removing core parts from the system, as well as increased security and safety from a consensus system. (www.hyperledger.org)

We appreciate that blockchain is not just another technology, it is actually a protocol - a new way to highlight transaction logging. Blockchain is a revolutionary conceptual framework due to its unique features that make it a desirable computer product for users. For example, in a set where multiple users interact, blockchain technology may eliminate the need to reconcile accounting data from other users. Distribution among all users eliminates computer processing disruptions and eliminates the cost of paying for an external audit of accounting accuracy (www.hyperledger.org).

The first two of the three key features - propagation and permanence - are basic features of the blockchain. Any software application written in the blockchain protocol must have these key qualities. Permanent records of accounting data make certain data sets unsuitable for blockchain software solutions, such as program applications that cause the storage of unencrypted personal data (www.hyperledger.org).

We consider that the implementation of blockchain solutions in the financial accounting of entities must take into account the restrictions arising from the need to ensure the confidentiality of accounting data. The involvement in this process of professional accountants, of Accountants with a solid theoretical training, with a baggage of updated notions, is, in our opinion, an engine of the development of blockchain systems in the accounting of different types of entities(www.hyperledger.org).

3. Research methodology - evolution of entities's accounting systems - empirical aspects of research

Blockchain is also known as Distributed Registry Technology (DLT) - which is probably a simple definition of blockchain technology. In the currently known and applicable accounting model, accounting records are stored in the registers, servers or cloud applications of the issuer of the annual financial statements, in the form of a set of spreadsheet files or the database of an accounting software application. The accounting officer shall enter the entry data, record it in the register files and carry

out the necessary processing to meet the information needs of the issuer. Where regulators or other users need information about accounting records, the accounting officer shall take the necessary data and provide it to the requesting Party. In general, only the accounting officer and the auditors have direct access to the entity's accounting records (www.hyperledger.org).

In the blockchain, on the other hand, records are entered and stored in a distributed or shared registry, which is generally made available to all stakeholders. In this case, the accounting officer, regulators, auditors and entities would each have an identical copy of the register at all times. Of course, each entity would have access only to the part of the register that contains its own records. Public and private keys are used to authenticate users (www.hyperledger.org).

In addition, each record entered in the blockchain is encrypted, and each entry is automatically marked by date and time. A collection of these records forms a source block, called the blockchain. A unique hash string that represents the contents of all records is updated with each new record, and the updated hash is stored in the new data block. The hash forms a unique digital signature that can be used to verify that no records have changed once entered (www.hyperledger.org).

Users of accounting information who need to ensure compliance of data with the reality of transactions and security of real-time data processing, will focus on IT solutions that include blockchain approaches and smart contracts (www.hyperledger.org).

Reducing the need to reconcile and manage disputes arising from disputes between the parties, combined with increased certainty of the correctness of the accounting of rights and obligations, will allow a greater focus on the use of accounting information in the decision-making process. An extensive range of IT processes in today's financial and management accounting can be optimized through blockchain and technologies such as data analysis or machine learning. This technology will increase the efficiency and value of accounting, data processed in accounting.

As a result of the above, the spectrum of skills represented in accounting will change. Some activities such as reconciliation and data source verification will be reduced or eliminated, while other areas such as technology, consulting and other value-added activities will be expanded.

The fundamental aspect for which accountants should move towards blockchain technology is that it offers two advantages that are crucial for the accounting profession: transparency and immutability. It is very beneficial for the integrity of an accounting firm that its records are easily accessible to authorized persons. Of course, there must be rules that govern how authorized entities can access financial records, and the blockchain uses smart contracts to comply with those rules.

Blockchain computerized accounting is considered to be the next step for the accounting industry for good reasons, blockchain has important implications for the accounting industry, which should affect all professional accountants. Efficiency and data security are important elements in the implementation of blockchain technology in present and future accounting.

4. Findings - Survey of the specific evolutions regarding the application of information technologies in the accounting of transactions in Romania

Each participant in a Distributed Registry Technology software system keeps a instance, a variant of the amount of registered transactions - history - that were stored in the registry, and by comparing the copies of other users is stored synchronously through a process of user agreement. Unlike a classical system of accounting records, there is no user with special rights to edit or delete economic and financial transactions - in fact, there is no central register at all, which is a major difference from the classical system of accounting. double entry accounting. (www.hyperledger.org)

The idea of having a database / registry that addresses all its users has been around for some time, but there have been some serious difficulties that needed to be overcome. The most important obstacle of these was the establishment of a transaction control point and the emergence of the multiplication of necessary expenses. In a large network, transactions are constantly transmitted from different points in the network, and the transmission of transaction data will take different periods of time to reach the spatially distributed points of the network. Therefore, it is difficult to have a final order of transactions, especially if two transactions try to credit the same resource, which leads to double spending and two users who do not agree with who is entitled to a given asset.

A blockchain is an "accounting register", a decentralized electronic register, distributed in copies on several computers and consisting of a list of chained blocks.

Blockchain distributed registry software is used to account for transactions, and these, once added, cannot be changed retroactively without changing subsequent blocks of information. Amplifying in a linear progression, each new block connects to the previous one like a chain (www.hyperledger.org).

In other words, distributed blockchain registry software is a specific type of database. It differs from a typical database in the way it stores information. In this sense, the distributed blockchain registry software stores data in blocks which are then chained. As more data is added, it is entered into a new block. When the block is filled with data it is linked to the previous block, which causes the data to be stored in chronological order.

The result is a robust transaction system, a growing public register of blocks (blocks) that contain information, to which data can only be added and read, but cannot be deleted or modified (www.hyperledger.org).

The use of distributed blockchain registry software eliminates the possibility of copying or cloning digital assets. Blockchain distributed registry software ensures that each unit of value is transferred only once, with no risk of double spending.

Distributed blockchain registry software is described as a set of value exchange protocols. These blockchain value exchanges can be completed faster, more securely and cheaper than traditional systems (www.hyperledger.org).

Likewise, blockchain distributed registry software looks, according to various opinions, as a reliable, transparent, intermediary-free relationship system consisting of a chain of transactions that are recorded one after the other indefinitely, in which the latter are always find out (www.hyperledger.org).

A distributed blockchain registry database is managed autonomously, using a user-to-user network and a distributed time stamp application server. These servers are managed by mass collaboration, driven by collective interests, and the security and transparency of this system lies precisely in the large number of users.

At a simplified level, the following code made in Java, is the equivalent of a more complex mining process (www.hyperledger.org). A difficulty level is set that aims to generate a number of 0s at the beginning of the hash key. This generation requires a long processing time. Different levels of difficulty can be used for testing:

```
public int getChainSizeNew() {
    return blockList.sizeNew();
}
public Block getLatestBlockNew() {
    return blockListNew.get(blockList.size() - 1);
}
public void addBlockNew(C data) throws NoSuchAlgorithmException {
    Block previousBlockNew = getLatestBlockNew();
    Block BlockNew = new Block<>(previous Block.getIndex() + 1, data,
getLatestBlock().getHash(), chainDifficulty);
    if (isValidBlock(previousBlock, block)) {
        blockList.add(block);
    }
}
public boolean isValid BlockNew (Block lastBlock, Block newBlock) throws
NoSuchAlgorithmException {
    if (lastBlock.getIndex() != newBlock.getIndex() - 1) {
        return false;
    }
    if (!lastBlock.getHash().equals(newBlock.getPreviousHash())) {
        return false;
    }
    if (!newBlock.getHash().equals(newBlock.calculateHash())) {
```

```
    return false;  
  }  
  return true;  
}
```

Distributed Registry Technology - Blockchain, applied so far in various branches of the financial industry, will be applied as a novelty in the food industry in Romania, providing consumers with information obtained directly from the source - from farms, on producers in the food industry and on the quality of food offered for consumption. (www.ziare.ro)

Applied in the food industry sector, blockchain technology paves the way for every company in the food production - distribution chain: farmers, processors, food stores, to transmit information at their own risk for each batch of products on the shelves of the Carrefour commercial chain. In Romania, the Blockchain Distributed Registry Technology is applied for the first time to the eggs from the Carrefour Quality Chain from the Rojiște Farm in Dolj County, according to the press release of the Carrefour Romania commercial chain. (www.ziare.ro)

Specifically, Distributed Registry Technology - Blockchain finds its applicability by using customers by scanning the QR code on the egg package and thus reaches the dedicated page, enter the batch number that is also visible on the package, finding information about: location and name the farm or the name of the farmer, veterinary information on the hens from which the eggs came, products used to feed the birds, how the birds were raised on the egg farm, the date of packaging of the eggs and other data that complete the traceability of the product. Thus, whether they are shopping in the store or receiving food by home delivery, customers can discover the #dincoloderaft story of the eggs and the farmer in the back. (www.ziare.ro)

The Carrefour Quality Chain (FCC) is a project through which the company conducts long-term joint ventures directly with national and international manufacturing companies in order to offer consumers quality products at affordable prices. In the production process, each stage of the production process is constantly supervised by experts who carefully monitor the entire production chain of growth and cultivation, until the products reach Carrefour stores (www.ziare.ro).

CryptoData is also an example in Romania. The company's goal is to provide a secure operating system, devices and communication applications. Key and blockchain component. At the software level, they developed the Voice Over Blockchain Protocol (VOBP) for security, and for storage the InterPlanetary File System (IPFS) standard is used, still in its development and adoption phases, but augmented with blockchain. Even if IPFS technology is still in its infancy, the potential is there to provide secure, decentralized storage, ie exactly what principles blockchain is based on: decentralization and transparency of operations. (www.ziare.ro)

Specific to blockchain technology is that, once the data has been entered into the system, it cannot be deleted or modified without altering the entire structure and thus the consent of the majority of participants in that blockchain. From monitoring the route of a new one to keeping records and eliminating bureaucracy is not such a big step. But it takes time, and the reasons are quite predictable. (www.ziare.ro)

In a certain form, the Special Telecommunications Service (STS) also applied blockchain in Romania in the voting process. This state-of-the-art complementary solution guarantees the integrity and strengthens the transparency and traceability of the electoral process, STS said in November 2020. (www.ziare.ro)

STS specialists have developed and implemented the modern blockchain technological solution that does not allow the modification or alteration of the data recorded during the electoral process, not even by their administrators, ensuring their integrity and transparency. Both the data from SIMPV and the data from SICPV will be able to be verified on the dedicated website, where the registered information and their details will be presented in real time. (www.ziare.ro)

Blockchain technology, used in countless industries, consists in calculating unique and unrepeatable fingerprints, which are updated every 5 seconds. A possible change in the information generates a new imprint, making the change visible. In short, blockchain technology forms a chain of trust in the flow of information in which any change is visible. (www.ziare.ro)

5. A case study of records of transactions in the accounting

On January 1, 2020, an entity purchases a building whose acquisition cost is 2,400,000 m.u. (monetary units). The building has a useful life of 30 years and will be used for rent to third parties, thus being classified in the category of real estate investments. (Nicolae, 2010).

In accordance with its accounting policies, at the end of each reporting period the entity performs tests to determine whether there are any indications of impairment of the building. As of December 31, 2020, the entity finds that an impairment has occurred and the value of the impairment adjustment is 200,000 m.u.

As of December 31, 2021, the entity notes a reduction in the adjustment for impairment by 100,000 m.u.

On December 31, 2021, the entity decides to sell the building at the price of 2,800,000 m.u.

The recording accounts used (as proposed in the IFRS accounting plan) for the exemplification of these accounting records were selected based on the formulated assumptions (Nicolae, 2010).

Accounting data

(Making entries by the author)

1. Recognition of purchase:

Debit *Real estate investments recorded at cost* 2,400,000
Credit *Suppliers of fixed assets - real estate investments* 2,400,000

2. As of December 31, 2020, the entity registers the depreciation related to the period January 1 - December 31, 2020 = 2,000,000 m.u. / 30 years = 80,000 m.u.

Debit *Operating expenses related to depreciation of fixed assets, real estate investments and biological assets valued at cost* 80,000
Credit *Depreciation of real estate investments valued at cost* 80,000

3. Recognition of Depreciation of the building on December 31, 2020:

Debit *Operating expenses on adjustments for impairment of fixed assets, real estate investments and biological assets valued at cost* 200,000
Credit *Adjustments for depreciation of constructions* 200,000

4. Recognition of the amortization of the real estate investment related to the period January 1 - December 31, 2020

Annual depreciation = 2,400,000 - 80,000 - 200,000 = 2,120,000 m.u. / 29 years = 73,103 m.u.

Debit *Operating expenses related to depreciation of fixed assets, real estate investments and biological assets valued at cost* 73,103
Credit *Depreciation of real estate investments valued at cost* 73,103

5. Recording the partial resumption of the previously recognized impairment adjustment on December 31, 2021 :

Debit *Adjustments for depreciation of constructions* 100,000
Credit *Income from adjustments for impairment of fixed assets, real estate investments and biological assets valued at cost* 100,000

6. Recognition of the amortization of the real estate investment related to the period January 1 - December 31, 2021:

Annual depreciation = $2,120,000 - 73,103 + 100,000 = 2,146,897$ m.u. / 28 years = 76,675 m.u

Debit *Operating expenses related to depreciation of fixed assets, real estate investments and biological assets valued at cost* 76,675

Credit *Depreciation of real estate investments valued at cost* 76,675

7. Registration of the sale operation:

Debit *Various debtors* 2,800,000

Credit *Income from the sale of real estate investments* 2,800,000

8. Recognition of asset disposal:

Debit *Depreciation of real estate investments valued at cost* 149,778

Debit *Adjustments for depreciation of constructions* 100,000

Debit *Expenses with the sale of real estate investments* 1,750,222

Credit *Real estate investments recorded at cost* 2,000,000

9. The financial result generated by the sale of the real estate investment :

Profit = $2,800,000 - 1,750,222 = 1,049,778$ m.u

When implemented in practice, entities may also consider other accounting records alternatives as long as there is a fair presentation of the results in profit or loss and in the statement of financial position.

6. Conclusions

In my opinion, the use of information technology (IT) information capabilities through new, innovative methods provides the necessary framework for multidimensional processing of accounting information.

In this way, a permanent updated flow of accounting data is ensured to the various actors, users of the summary accounting documents. This creates the framework for a real-time interaction between the need for accounting data in the decision-making process of entities and spatially delocalized data sources.

An aspect of major importance is to ensure increased security of accounting data, in the conditions of an external environment with multiple challenges and threats from actors, competing entities or parastatals.

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Current Issues Regarding the Recording in Accounting of the Financial Instruments for Financing the Activity of the Entities

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Abstract

The use of financial instruments is a relatively small phenomenon in the context of the current Romanian economy. However, we can see an increase in the use of financial instruments to finance the current and future activities of entities in the national economy. The problems raised by a relatively difficult access of economic entities to financing resources - bank lending, in the set of restrictions generated by the epidemiological context, are a stimulating factor for increasing the use of financial instruments. In this paper, in a simplified manner, we try to highlight some problems that have arisen in the context of the implementation of financial instruments in the accounting of Romanian entities. The applicability of financial instruments to the needs of companies is a segment in which the legislature must intervene with appropriate regulations, necessary for efficient operation. Providing technical support, software applications is an underdeveloped segment today.

Key words: financial instruments, accounting, trends

J.E.L. classification: M41, G32

1. Introduction

The total lending for the population and companies reached in January 2021 a balance of 283.5 billion lei. Loans in lei advanced by 8.8% compared to January 2020, while foreign currency loans decreased in January by 2.3% year / year. Total deposits made an annual jump of 15.8% in January, over 422 billion lei. (www.insse.ro)

Total private credit started 2021 with an annual increase of 5.1% compared to January 2020, the pace slowing down compared to the first months of last year, and the balance of loans to households and companies reached 283.5 billion lei (www.insse.ro).

In comparison, in January 2020 private credit increased by 6.9% compared to January 2019. Over the whole year 2020, the balance of private credit registered an average increase of about 5.1% compared to January - December 2019, decreasing compared to of the average advance of 7.6% from 2019, in the conditions of the unfavorable effects brought by the coronavirus crisis. (www.insse.ro)

The year 2020 was an extraordinary year and full of many challenges. In addition to the fact that we have faced an unprecedented economic shock, generated by the pandemic, we have suddenly had to, like all European citizens, isolate ourselves at home and contact our colleagues only through virtual means. Many of us have had a relative, friend, or colleague who has contracted the coronavirus. Unfortunately, I lost some of my colleagues during this pandemic.

Banks have entered the pandemic crisis in much better shape than at the beginning of the previous crisis. As the crisis became more widespread, some banks were overwhelmed by very high levels of credit applications, especially after the introduction of state aid programs for state-guaranteed loans and moratoriums on repayments. But these banks have managed to adapt quickly and have helped ensure a syncope-free lending flow of businesses and households. Loans to businesses and households continued to grow in 2020, although they slowed in the third quarter. Compared to what happened during the great financial crisis, banks reported a much more moderate tightening of lending standards after the first wave of the pandemic. (www.insse.ro)

2. Theoretical background for accounting of financial instruments used for financing activities

Financial instruments are generally the legal obligations of a party to transfer an asset / value (usually cash) to another party at a future date and under certain conditions. (Nicolae, 2010)

Financial instruments are, in fact, assets that can be traded. These assets can be cash, contractual rights to deliver or receive money or another type of financial instrument or proof of ownership over an economic entity. (Nicolae, 2010)

They can also be in the form of capital packages that can be traded. Most types of financial instruments provide an efficient flow of capital transfer into the world of investors.

Examples of financial instruments (Nicolae, 2010):

- Bank deposit. It is the simplest, most common and used investment financial instrument. If you deposit a sum of money in a savings account at the bank you will receive an interest in return;

- Actions. Suppose you want to buy 100 shares in a company like Microsoft, Apple, Google or Banca Transilvania. These are financial instruments;

- Obligations. You have certainly heard of treasury securities, government bonds, ie, for example, bonds issued by the Romanian Ministry of Finance. And these are a kind of financial instrument;

- CFDs (contracts for exchange rate differences). Maybe you have a trading account opened with a forex broker. You can trade EUR / USD and GBP / USD via a trading platform. All currency pairs are financial instruments.

The characteristics of financial instruments are as follows: (Nicolae, 2010)

- They are complex contracts, often standardized;

- The obligation to execute the related contract is important;

- Financial instruments oblige a party (person, company or government entity) to transfer an asset / cash to the other party;

- The financial instruments expressly specify that the payment is to be made at a certain date in the future;

- The financial instruments specify certain conditions regarding how the payment will be made.

The functions of the financial instruments can be summarized as follows:

- Financial instruments act as means of payment (just like money). For example, employees may receive actions in the form of payment for work performed;

- Financial instruments act as value deposits (in the same way as money);

- Financial instruments generate higher returns and therefore higher increases in wealth than hoarding cash;

- Financial instruments can be used as a means of transferring purchasing power in the future;

- Financial instruments allow the transfer of risks (which money does not allow);

- Futures and insurance contracts allow the transfer of risks from one entity to another.

3. Research methodology - Evolution of financial instruments used for financing activities - empirical aspects of research

An equity instrument is any contract that certifies the existence of a residual interest in an entity's assets after deducting all of its liabilities (IASB , 2018).

Fair value is the amount for which an asset may be traded or a liability may be settled, between interested parties and knowingly, in the event of a transaction being made under objective conditions (IASB , 2018).

A derivative instrument is a financial instrument or other contract within the scope that meets all three of the following characteristics (Nicolae, 2010):

- 1) its value changes in response to changes in certain interest rates, the price of a financial instrument, the price of commodities, exchange rates, price or rate indices, the credit rating or credit index, or in other variables, provided that, in the case of a non-financial variable, it is not specific to a contracting party (sometimes referred to as a "support");

- 2) does not require any net initial investment or a net initial investment that is lower than would be required for other types of contracts that are expected to have similar reactions to changes in market factors;

- 3) is settled at a future date.

There are a multitude of financial instruments, but the best known are (Nicolae, 2010) :

- Forex Spot;
- Actions;
- Futures;
- Options;
- ETFs (exchange traded funds);
- Mutual funds;
- Bonds;
- Contracts for difference (derivatives on specific underlying financial instruments);
- Bank deposits, bank loans, mortgages;
- Cash and cash equivalents.

These are the most popular, but there are many other financial instruments such as:

- Preference rights of shares;
- Rights of allotment of shares;
- Share allocation rights;
- Stock certificates of deposit;
- Warrants;
- Swaps;
- Forward Contract;
- Money market instruments.

The term financial assets is commonly used and refers to documents that confirm the money rights of the holder, both on the asset itself and on the income it generates (eg dividends, interest).

Financial assets are the cash equivalent of real assets. For example, a share is the cash equivalent of a fraction of a company's real capital.

Financial assets fall into two categories:

- banking assets - are associated with operations performed by banks and other financial institutions;
- non-banking assets - are associated with investments and are more precisely the securities that are traded. Non-bank assets can be of two types: monetary assets and capital assets.

Non-banking assets are materialized in financial securities. Financial securities are electronic or paper documents that confirm the existence of a contractual relationship between the holder and the issuer and guarantee the rights of the holder.

Financial securities are securities or credit securities. The securities are:

- Commercial securities - used in commodity markets;
- Non-commercial securities:
 - o Securities related to short-term operations - monetary instruments;
 - o Securities related to long-term operations - equity instruments (shares and bonds are those that fall into this category).

Financial securities are characterized by value.

- The intrinsic value of the security is calculated based on the results of the investment and the forecasted future income;
- The market value is given by the market, depending on the demand and supply of that thread and the expectations of those who participate in that market;

Financial securities can also be classified into:

- securities issued for equity mobilization - equity instruments (equity instruments), in this category we include shares;
- securities issued to attract capital through loans - debt instruments (debt instruments) - this category includes bonds.

The main feature of financial securities is that they provide long-term capital requirements for entrepreneurs and give holders pecuniary rights over the issuer's income. More specifically, the investor becomes a direct partner of the entrepreneur in terms of profit and risk.

4. Findings - Survey of the specific developments about financial instruments used in accounting in Romania

Shares are financial securities issued by an economic entity for equity operations, ie growth, restructuring or even incorporation. They are variable-income securities, as they are remunerated according to the results generated by the financial year and the issuer's profit-sharing policy (Nicolae, 2010) .

The total number of shares issued by an economic entity constitutes the share capital. At issue, the share capital is divided by the number of shares and the nominal value of the share results.

Characteristics of the actions (Nicolae, 2010):

- They are tradable instruments;
- There are equal fractions of the share capital characterized by nominal value;
- They are indivisible.

Depending on the rights conferred by the actions are:

- Joint actions (ordinary);
- Preferential shares.

The common shares are the most used and give the owner:

- The right to vote at the general meeting of shareholders;
- The right to dividends, if the economic entity distributes the profit, the holder has a part of it.

The issue of common shares is the simplest method of attracting capital because it does not imply a future due date.

Depending on how you identify it:

- Bearer shares;
- Registered shares.

Registered shares specify the name of the holder, may be in material form (paper) or may be dematerialized (in the form of account documents).

The bearer shares do not expressly indicate the name of the holder, they only have the physical form and can be transmitted without formalities. The person presenting the document is considered a shareholder (IASB , 2018).

The general meeting of shareholders may decide whether bearer shares may be converted into registered shares and vice versa.

Investors in common shares have the opportunity to obtain the following types of income:

- Din dividends;
- Capitalization gains - depends on the company's potential;
- Potential gains from speculation.

The preferred shares guarantee a minimum return based on a priority dividend, which is paid before the dividends for the common shares and also confers ownership. Holders of preferred shares do not have the right to vote at the general meeting of shareholders (IASB , 2018).

Actions can also be classified according to the stage of self-financing:

- authorized actions;
- unissued shares;
- shares put up for sale;
- shares available in the market;
- hoarded shares;

When the acquisition of shares is pursued, they are evaluated on the basis of financial indicators / multiples. Among the most common are (IASB , 2018):

- Earnings per share;
- Dividend per share;
- Yield of an action;
- Dividend distribution rate;
- The value of future dividends.

Stock certificates of deposit are used in situations where a foreign company wishes to list shares previously admitted to trading on a foreign regulated market. In order to be admitted to trading on a given market, the issuer must meet the criteria required by that market.

Certificates of deposit can be traded on the capital market and can also be issued through an initial public offering.

Stock certificates of deposit are a financial instrument used by foreign companies listed on developed capital markets to gain access to foreign markets and foreign investors, without meeting the requirements for admission to trading in those markets, which can sometimes be difficult to meet. fulfilled.

The investor in certificates of deposit has the same rights as the holder of common shares, the right to dividends and the right to vote in the meeting of shareholders. The rights of these investors are listed in the prospectuses of the certificates of deposit.

Warrants are securities similar to preference rights and are issued for longer periods of time. They usually appear on the market in association with a stock or bond and may be issued in series.

Warants have both conversion and trading value, their price changes in proportion to the price of the security with which they are associated (Nicolae, 2010).

In the market, the value of a warant is composed of intrinsic and prime value.

Intrinsic value refers to the difference between the current market price of the action and the fixed price at which the warrant for the action in question was issued.

The first refers to the difference between the market value of the guarantor (assuming it is traded on the secondary market) and its intrinsic value.

Bonds are financial instruments with a fixed income, securities that give the holder a right of claim over the issuer. The issuer of bonds can be the state, another public entity or a company.

With the help of the bonds, the issuer mobilizes capital through the loan, and the holder receives the right to collect interest for the loan period until maturity, when the issuer undertakes to redeem them.

Bonds are fixed income securities and are interest-bearing. The interest can be both fixed and variable.

Types of bonds (Nicolae, 2010):

- mortgage: the debt is secured by mortgage on the assets of the issuing entity;
- general: it is a receivable on the total assets of the issuing entity;
- insured: bonds secured by third-party securities, deposited with a guarantor and held by the issuer;
- convertibles: the holder has the possibility to convert them into shares of the issuing entity;
- retractable: the bonds are repurchased at maturity by the issuer;
- with redemption fund: the issuer creates a fund that it constantly feeds in order to redeem the bonds at maturity.

Depending on the issuer, the bonds may be:

- Corporate bonds;
- Government bonds.

Shares and bonds together with special products based on the rights associated with the shares (allocation, allotment, preference, warrants and certificates of deposit on shares) are considered the primary products of the capital markets.

5. The observation of the accounting issues associated with financial instruments used in accounting

Derivatives allow companies to manage or adjust the specific risks to which they are exposed in order to stabilize their cash flows. Thus, companies reduce their trading costs and invest when it is the right time, not when they happen to have cash. Firms can protect themselves against some of these risks through "natural" methods. For example, they can hedge against currency risk by setting up factories in the countries where they want to sell. But such methods of controlling financial risks are often difficult to apply in practice; derivatives offer a much more effective way to hedge specific risks (Nicolae, 2010).

A forward contract is a firm agreement in which one party agrees to buy and the other party agrees to sell an asset (a commodity, a currency, a security) in a specified quantity and quality. , at a specified future date and a certain price. They must be accounted for as derivative instruments. They meet the definition of a derivative instrument because the initial net investment is very small or does not exist,

there is a basic variable (interest rates) and they will be settled in the future.

Example of forward contract

It's the beginning of September and you decide you want to buy a new car. Choose the type of car you want and go to your local dealer. (Nicolae, 2010)

In the dealer's showroom, you decide on the exact specification of the car - color, engine, size, steering wheel shape, etc. - and, most importantly, set the price. The supplier will tell you that if you place your order today and make a deposit, you can pick up the car in three months. Even if within this three-month period, the supplier grants a 10% discount for all new cars, nor if the price of the model increases, it does not matter to you. The price you pay on delivery has been agreed and fixed between you and the supplier. . You have just entered into a forward contract - you have the right and obligation to buy the car in three months at the agreed price.

Forward (forward) contracts are not traded on the stock exchange and do not present standardized, transparent conditions. A forward contract involves a credit risk for both parties, similar to the spot market. In such conditions, the contracting parties may request a guarantee (collateral), in the sense that the other party will honor the contract (Nicolae, 2010).

Normally, forward contracts are not negotiable, it is a private negotiation and when the contract is initiated, it has no value. No payment is involved, as the contract is a simple agreement to buy or sell at a future date (Nicolae, 2010).

The advantage of users of forward contracts consists in knowing the costs and revenues in advance compared to the actual deliveries of goods. The certainty of the price is accompanied by that of the quantity and quality of the goods engaged in the contract.

Mainly, the forward price is determined by taking the spot (cash) or cash (cash) price at the time of the transaction and adding to it the "cost of carry".

Depending on the underlying asset or reference commodity of the contract, the running cost takes into account payments and receipts for items such as storage, insurance, transportation costs, interest payments, dividend receipts, etc. (Nicolae, 2010)

The characteristics of forward contracts are the following:

- agreement between two parties to deliver / pay at a predetermined date an asset (commodity, currency, financial asset), at a predetermined price,
- is concluded outside the stock exchange, through direct negotiation between the parties,
- is a non-standard contract,
- has a fixed value, and the potential result is given at maturity by the difference between the established price of the contract (forward price) and the current price (spot) of the asset,
- the forward contract is liquidated at maturity, in kind (delivery of the asset / payment of the equivalent value, at the contract price).

Example of applying the standards in accounting for forward purchase contracts for the entity's own shares that will be settled:

- a) net in cash,
- b) net in shares or
- c) by delivering cash in exchange for shares.

To simplify, it is assumed that no dividends are paid for the basic shares (ie the carried forward profit is zero), so that the present value of the forward price is equal to the spot price (at sight) when the fair value of the forward contract is zero. The fair value of the forward contract was calculated as the difference between the market price for the shares and the present value of the fixed forward price.

Example

Cash against cash ("net cash settlement")

(Making entries by the author)

The forward purchase contract for the entity's own shares will be settled net in cash, ie the entity's own shares will not be received and delivered upon settlement of the forward contract.

On February 1, 2022, Astrix entered into a contract with Beldix to receive the fair value of 1,000 of the outstanding common shares of Entity A by January 31, 2023 in exchange for payment of 104,000 m.u. (monetary unit) in cash (ie 104 m.u. per share) on January 31, 2023. The contract will be settled net in cash. (Nicolae, 2010)

On February 1, 2022

The price per share when the contract is concluded on February 1, 2022 is 100 m.u. . The initial fair value for the forward contract on February 1, 2022 is zero.

No registration is required because the fair value of the derivative is zero and no cash receipts or payments are made.

On December 31, 2022

The price per share increases to 110 m.u. and, as a result, the fair value of the forward contract increases to 6,300 m.u.

Registration of the increase of the fair value of the forward contract:

Debit *Asset Forward* 6,300

Credit *Profit and loss* 6,300

On January 31, 2023

The market price per share decreased to 106 m.u. The fair value of the forward contract is 2,000 m.u. = (106 u.m. x 1,000) - 104,000 m.u.

On the same day, the contract is settled in cash. The Astrix entity has the obligation to deliver 104,000 m.u. to the Beldix entity, and the Beldix entity has the obligation to deliver 106,000 m.u. to the Astrix entity, so the Beldix entity pays the net amount of 2,000 m.u. to the Astrix entity.

Recording the decrease of the fair value of the forward contract (ie 4,300 u.m. = 6,300 u.m. - 2,000 m.u.):

Debit *Profit and loss* 4,300

Credit *Asset Forward* 4,300

Registration of the forward contract settlement:

Debit *Bank accounts* 2,000

Credit *Asset Forward* 2,000

6. A case study of the accounting records for financial instruments

On Jan 1, 2021, the entity grants 100 shares to 50 employees in the management sector at the price of 10,000 m.u. (monetary unit) per share. (Nicolae, 2010).

The granting of equity instruments is spread over a period of 4 years.

The recording accounts used (as proposed in the IFRS accounting plan) for the exemplification of these accounting records were selected based on the formulated assumptions (Nicolae, 2010).

Accounting data

(Making entries by the author)

Registration of granted capital instruments :

Total fair value of equity instruments granted = 150 employees x 100 shares x 10,000 m.u. =
= 150,000,000 m.u.

1. Recognition of expenses for year 2021 = 150,000,000 m.u. x 1/4 = 37,500,000 m.u.

Debit *Expenditure on remuneration in equity instruments* 37,500,000

Credit *Benefits granted to employees in the form of equity instruments - stock options*
37,500,000

The profit tax related to the non-deductible expenses is calculated for year 2021:

Income tax calculated = 37,500,000 m.u. x 16% = 6,000,000 m.u.

Debit *Current income tax expenses* 6,000,000

Credit *Current income tax* 6,000,000

2. Recognition of expenses for year 2022 = $150,000,000 \text{ m.u.} \times 1/4 = 37,500,000 \text{ m.u.}$

Debit *Expenditure on remuneration in equity instruments* 37,500,000
Credit *Benefits granted to employees in the form of equity instruments - stock options*
37,500,000

The profit tax related to the non-deductible expenses is calculated for year 2022:
Income tax calculated = $37,500,000 \text{ m.u.} \times 16\% = 6,000,000 \text{ m.u.}$

Debit *Current income tax expenses* 6,000,000
Credit *Current income tax* 6,000,000

3. Recognition of expenses for year 2023 = $150,000,000 \text{ m.u.} \times 1/4 = 37,500,000 \text{ m.u.}$

Debit *Expenditure on remuneration in equity instruments* 37,500,000
Credit *Benefits granted to employees in the form of equity instruments - stock options*
37,500,000

The profit tax related to the non-deductible expenses is calculated for year 2022:
Income tax calculated = $37,500,000 \text{ m.u.} \times 16\% = 6,000,000 \text{ m.u.}$

Debit *Current income tax expenses* 6,000,000
Credit *Current income tax* 6,000,000

4. Recognition of expenses for year 2024 = $150,000,000 \text{ m.u.} \times 1/4 = 37,500,000 \text{ m.u.}$

Debit *Expenditure on remuneration in equity instruments* 37,500,000
Credit *Benefits granted to employees in the form of equity instruments - stock options*
37,500,000

The profit tax related to the non-deductible expenses is calculated for year 2022:
Income tax calculated = $37,500,000 \text{ m.u.} \times 16\% = 6,000,000 \text{ m.u.}$

Debit *Current income tax expenses* 6,000,000
Credit *Current income tax* 6,000,000

5. Exercising options in 2024 :

The balance of the account "Benefits granted to employees in the form of equity instruments - stock options" is = 150,000,000 m.u

Debit *Benefits granted to employees in the form of equity instruments - stock options*
150,000,000
Credit *Paid subscribed capital* 150,000,000

When implemented in practice, entities may also consider other accounting records alternatives as long as there is a fair presentation of the results in profit or loss and in the statement of financial position.

7. Conclusions

In my opinion, there are multiple elements that need to be considered in order to be able to widely implement financial instruments in the day-to-day work of the entities.

We need to consider creating a complex and flexible legislative, fiscal framework that allows and stimulates at the same time the concrete applicability of the types of financial instruments for

financing the activity of entities. The legal norms must be issued in variants adapted to the legislative context at European level, simultaneously with the consideration of the specific features of Romania.

The pressure of the galloping technological evolution is another factor that must be taken into account with priority in the institutional effort of large-scale adoption of financial instruments in the current and future activities of Romanian companies. The widespread use of Information Technology (IT) tools, the applicability of new hardware and software solutions is an element with increasing impact on economic activity.

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The Impact of Tax Evasion on Fiscal Equity in Romania in the Period 2010-2020

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Abstract

The field of tax evasion has generally been the subject of repeated research at various levels. However, the reality fully demonstrates that tax fraud is now far from being perceived correctly and completely, so that the mechanisms designed to prevent and combat it are far from effective.

This information is also supported by the fact that officials with strict and high-level responsibilities in this field state in official positions that an accurate assessment of tax evasion cannot be made.

The purpose of this paper is to highlight the fact that in Romania the phenomenon of tax evasion began to be taken seriously since the 2000s, and the impact of tax evasion on tax equity is becoming more intense becoming an international phenomenon.

Key words: tax evasion, tax equity, indirect taxes, direct taxes

J.E.L. classification: H2, H20, H26

1. Introduction

A thorough analysis of any fiscal policies and measures often involves deepening the issues of equity, a concept with deeply subjective valences that is often the subject of controversial debates.

The relevant bodies of contemporary states are primarily concerned with economic efficiency, budgetary impact or political and electoral considerations when determining the manner in which taxes are levied, sometimes ignoring the basic principles of fiscal equity, long studied and analyzed by researchers. in the economic field.

The basis of research on fiscal policies in terms of equity is the theory of social equity formulated by Stacy J. Adams in 1965, who states that all people expect a comparable level of effort and benefits, being tempted to change their behavior if who perceive the existence of differences in treatment.

In the field of taxation, the economic literature identifies two types of fiscal equity, namely, vertical and horizontal fiscal equity.

Vertical fiscal equity refers to the establishment of a fiscal burden that reflects the contributory capacity of each payer, and the second is the horizontal one, which has a special social significance, being considered the most important principle in the theory of taxation.

The horizontal tax equity rule requires equal tax treatment for taxpayers who are in similar situations or circumstances.

Fiscal practice in most states often ignores the principle of horizontal tax equity, because all efforts are channeled on vertical fiscal equity, which is clear from the relevant legal provisions in Romania.

Basically, the contemporary fiscal systems from which our country was inspired also aim first of all at the economic efficiency and the impact that the collected taxes and fees have on the state budgets.

The principle of horizontal fiscal equity is not intended to define how taxes are levied, but requires government bodies to justify uneven fiscal policies. This ensures protection against arbitrary tax regulation, especially where public policies lack transparency.

The problem of fiscal equity arose in fiscal practice in connection with the elimination or reduction of privileges for some social classes or for some monetary obligations to the state.

2. Literature review

In this paper we will try to define as easily as possible the notion of tax evasion having the financial-fiscal and legal-criminal field in the matter of tax evasion. The legal framework that establishes the taxes and fees that constitute revenues to the state budget and local budgets, specifies the taxpayers who have to pay these taxes and fees, as well as the method of their calculation and payment is represented by the Fiscal Code.

Regarding tax evasion, Law no. 241/2005 for the prevention and combating of tax evasion, stipulates imperatively the activities that a taxpayer must carry out, as well as the fiscal obligations that he must fulfill in order to be fully legal.

Within the fiscal legal relationship, the state unilaterally establishes, in charge of natural and legal persons, the obligation to pay a certain amount of money within a term in the account of the state budget (Costea, 2011). The amount of money that the taxpayer has to pay represents an income to the state budget, and the obligation is a fiscal one.

The tax obligation is a legal obligation. It defines the content of a legal relationship that arises between the state and the persons determined by law, the execution being ensured through the coercion of the state (Florescu & Bucur, 2013). What differentiates the civil obligation from the fiscal one is the very legal nature of the fiscal legal relationship (Marinescu, 2010).

Tax evasion is the evasion of a greater or lesser part of the taxable matter. As a phenomenon, tax evasion is encountered nationally and internationally (Drăgoescu, 2006).

Tax evasion is presented as the evasion by any means from the imposition or payment of taxes, fees, contributions and other amounts due to the state budget, local budgets, state budget and social insurance of special funds budgets by individuals, personal, Romanian or foreign legal entities.

From the point of view of the manner in which it can be committed, of the relationship that exists between the phenomenon in question and the legislation in force, tax evasion has two forms of manifestation: Illicit or fraudulent tax evasion or tax fraud; Legitimate tax evasion by law (Mrejeru, Pantea and Martinescu, 2013). From a spatial point of view, two forms of tax evasion are identified, namely: Tax evasion at national level.

International tax evasion In essence, the difference between legal tax evasion and illegal tax evasion lies in the legality of the transaction. Every taxpayer has the right to try to avoid paying them, but there is a time when the evasion of payments changes depending on its form after the action taken by the taxpayer (Văcărel, 2002).

Thus, we can say that if legal tax evasion means crossing a border to enter a toll road without paying, illegal tax evasion consists in finding an alternative route, but still free of taxes (Șaguna & Tutunghiu, 1995).

The most common evasion cases that use the favorable removal of tax legislation are:

- Establishment of amortization or reserve funds in an amount higher than that which is economically justified, thus reducing taxable income;
- The practice of some companies to invest a part of the profit realized in machines and technical equipment for which the state grants reductions to the income tax;
- Family associations, as well as occult societies between the entrepreneur's wife and children, lead to their separate taxation, the distribution of income on each partner and the reduction of tax burdens;
- The total income of the family members can be divided equally, regardless of the contribution of each one, being obtained a decrease of the taxable amount due to the state;
- The establishment of deposits for the custody and administration by the guardian of funds for the minor child, leads to a lower payment tax compared to what would be due on the income thus redistributed;

- The use within certain limits and according to the legal provisions regarding philanthropic donations, regardless of their wear or not, leads to the theft of a part of the income from taxation;
- The taxpayer has the possibility to choose the income tax of individuals or legal entities. The choice of income taxation on the company leads to the evasion of the taxpayer from certain taxes and duties at a lower cost.

Protocol, advertising and publicity expenses, whether made or not, lead to a decrease in taxable income.

The favorable interpretation of these provisions granting tax exemptions for different periods from the establishment of the company, depending on the profile, has led to the establishment of a large number of companies for the purpose of tax evasion.

Accelerated depreciation, when permitted by law for certain categories of fixed assets, leads to a decrease in taxable profit in favor of setting up a depreciation fund higher than that imposed by the amount of physical and moral wear and tear recorded by those fixed assets during the period considered.

Tax evasion under the rule of law can be avoided by correcting, refining and improving the legislative framework that is already possible (Voicu and Boroi, 2006).

Unlike legal evasion, illicit tax evasion is committed in violation of the law. In this case, the taxpayer takes serious action, in order to evade the payment of taxes, fees and contributions due to the state.

Basically, there are many forms of illegal tax evasion and it is difficult to determine them on a separate basis. Instead, they are frequently found in various forms of fraudulent evasion, such as: Non-declaration of taxable matter; Declaring income lower than real; The existence of false and real copies; Intentional destruction of documents that help to find out the truth about the prices charged, the delivery of goods, the commissions collected or paid; Preparation of fictitious documents and statements; Unjustifiable change in supply or transport prices; Making false customs declarations on the import or export of goods; Recording of expenses not incurred in the respective company with the lower turnover statement; Sales granted without invoices, which hide the real operations subject to taxation; Counterfeiting the balance sheet.

3. Research methodology

The working method is the one of documentary research in archives, of qualitative and quantitative type. I used the documents archived within the National Bank of Romania and the National Institute of Statistics. The archive information was supplemented by reading several books and specialized articles, which deal with the topic of research. We also used scientific research papers and interviews with dignitaries involved in Romania's relations with the IMF and the WB in the current period. The statistical information identified in the archive documents was synthesized, analyzed and processed in the form of tables and graphs, which will be found during the research.

4. Findings. The dynamics of tax evasion in Romania in the period 2010-2020

We will follow the dynamics of tax evasion in Romania in the period 2010-2020 through the annual reports of the Fiscal Council.

The Fiscal Council is an independent authority established under the Law on Fiscal-Budgetary Responsibility, which aims to support the work of the Government and Parliament in the process of developing and carrying out fiscal-budgetary policies and to promote transparency and sustainability of public finances.

The initial budget provided for the reduction of the budget deficit to 4.4% of GDP according to the cash methodology and 5% according to ESA95. The budget execution recorded a budget deficit of 4.12% of GDP, the target set at the end of 2011 being achieved with a comfortable margin of about 0.3% of GDP. With regard to the general budget deficit consolidated according to ESA95, the clarification of the statistical treatment of the state's salary obligations towards certain

categories of employees in the budget sector following final court rulings involved exceeding the 5% of GDP ceiling by 0.2 percentage points.

By comparison with the degree of efficiency of VAT collection in 2019, related to groups, the value of 0.68 registered in Romania is significantly lower than those registered in other Member States of the European Union.

Thus, in 2019 Romania collected VAT revenues representing 6.2% of GDP, compared to 9.7% of GDP in Member States.

At the same time, the weighted average VAT rates in other countries were 20%, while Romania registered a weighted share of 14.2%.

The VAT receipts in cash standards net of the impact of the swap compensation schemes, registered in 2019 a level of 65.3 billion lei. It is 3.5 billion below the level set in the initial draft budget.

The projection of VAT revenues at the level of the initial budget, there is an increase of 3 billion lei from 2019 to 2020.

Compared to 2018, where VAT revenues of 59.4 billion lei were registered, 2017 ended with total VAT revenues of only 53.31 billion lei.

A significant increase took place in 2015 by 6 billion lei more than the previous year where VAT revenues were only 54.41 billion lei.

The significant share is 5% for the period 2015-2020.

It should also be mentioned that the non-fulfillment of the scheduled level of VAT revenues occurs in the context in which the Ministry of Finance estimated an advance of about 6 billion lei of these revenues due to the effect of measures to improve collection.

Revenues collected from excise duties amounted to 32.2 billion lei, representing almost 3% of GDP in 2020, this level being higher than the estimates taken into account when substantiating the draft budget by almost 0.4 billion lei.

Thus, the initial program provided for excise revenues amounting to 31.1 billion lei in 2019, given a forecast increase in the macroeconomic base of 6.4% due to the increase in the level of excise duty on tobacco products, as well as a positive effect expected by one billion lei due to the increase in the degree of excise collection.

The first budget rectification increased the initially estimated level by approximately 0.5 billion lei as a result of the project to introduce soft drinks with a high sugar content in the field of excisable products, as well as to advance by 4 months the increase of the total excise duty for cigarettes initially established for January 1, 2020.

Thus, in 2016 the excise revenues increased by one billion, and in 2017 they reached 26.6 billion lei, followed by the second increase in 2018 by 2 billion lei.

In 2020, a total income of excise duties of 32.2 billion lei was registered.

The revenues from the profit tax in cash standards net of the impact of the compensation schemes, were in the amount of 17.7 billion lei representing an increase of 2.1 billion lei compared to the previous year, with 13.4% more, but also a exceeding by about 0.5 billion lei the estimates from the budget approved for 2019.

Thus, the initial program provided for revenues from income tax amounting to 17.2 billion lei, in the context in which an unfavorable effect of almost 0.2 billion lei was anticipated due to the increase in own revenues, but also a positive effect estimated at 0.5 billion lei on account of a potential improvement of the collection.

The value initially forecast for this budget aggregate was supplemented by 1.1 billion lei at the first budget rectification due to the fact that the execution at 6 months indicated a higher growth rate of revenues than forecast in the draft budget.

However, in 2020, revenues from the profit tax of 18.5 billion lei were registered, with 0.8 billion more than the previous year.

In 2018, revenues from the profit tax in the amount of 15.6 billion lei were registered, in 2017 of 14.64 billion lei, and in 2016 15.38 billion lei were collected.

Revenues from income tax and salaries according to cash standards amounted to 24.5 billion lei, which represents a non-achievement by 0.6 billion lei of the budgeted level at the beginning of the year.

Thus, the initial program provided for revenues of 23.7 billion lei in 2019 due to an estimated increase in the average number of employees of 3.4%, respectively an advance of 14.7% of the average gross salary, while anticipating an effect of decreasing revenues by 0.8 billion lei as a result of facilities granted in the field of construction.

The level initially forecast for income and salary tax revenues was maintained at the first budget rectification, but the second rectification decreased by almost 0.6 billion lei due to the unfavorable evolution of labor market indicators compared to the initial estimates.

The actual execution confirmed the estimates on the occasion of the second rectification, accounting for a level of income and salary tax revenues, net of the impact of compensation schemes of about 23.1 billion lei.

This value of revenues represents an advance of only 2.3%, ie 0.5 billion lei, compared to revenues in 2018-2019.

The positive evolution of corporate tax revenues in the period 2010-2020 exceeded the dynamics of the relevant macroeconomic base, which advanced by 11.3% of GDP and by 13.4% of its value.

This could indicate at first sight a realization of the expected positive impact due to the increase in the degree of collection.

An analysis of the revenue structure related to this budget aggregate indicates a situation similar to that recorded in 2018.

The above-expected evolution of income tax revenues was mainly supported by the profit tax paid by commercial banks, which increased by over 70%, generating revenues of 0.7 billion lei compared to estimates based on the evolution of Gross Domestic Product.

The analysis of the structure of revenues from income tax and salaries on its main components, represents 78.4% of revenues related to the aggregate budget year. There was an increase of 1.3%, ie 0.2 billion lei in 2020 compared to 2019, and the growth rate is faster by 2.3% compared to 2018-2019.

The execution of expenditure on goods and services recorded a much higher level, both compared to that envisaged in the draft budget, by 4.2 billion lei more, and compared to the values projected on the occasion of the two budget corrections made in during the year 2020.

Initially projected at 48.6 billion lei, the final execution of this aggregate reached a level of 52.8 billion lei, being 4.6 billion lei higher than the revised value in the second budget rectification in 2019.

Expressed as a share in Gross Domestic Product, on the one hand, expenditures on goods and services increased by 0.3 percentage points compared to 2018 and reached 5% of Gross Domestic Product.

On the other hand, the share in GDP of 2019 was below the average of the period 2010-2018 by 0.5 percentage points.

Compared to the execution of 2018, the expenditures of goods and services amounted to 44.6 billion lei. This category of expenditures was projected in February 2019, where the net expenditures of the budget reached a higher level by approximately 1.9 billion lei.

When preparing the budget for 2019, the return on an upward trajectory of the aggregate of investment expenditures was considered after the modest result registered in 2018, of 3.6% of the Gross Domestic Product, based on a possible claim in the aggregation of European funds and of the continuation of Romania's commitment within NATO.

In the initial budget construction, investment expenditures were provided by over 11 billion lei over the 2018 program, which recorded 38.9 billion lei.

The increases are located mainly at the level of expenditures related to projects financed from European Union funds, with an increase of 6 billion lei.

In addition, 1.9 billion lei were allocated. Thus, through the construction of the budget for 2019, it was provided the allocation of a net share higher than financing from external sources in total investment expenditures, respectively reducing the share of internal sources, thus expected to release resources that would be used to build fiscal space or other purposes.

However, the initial plan to increase investment by replacing expenditure with non-reimbursable European funds was not implemented in 2019 either, with a significant deviation from the estimate of investment expenditure in the initial budget.

Based on the updated projections of the Fiscal Council for the period 2010-2020, as well as the estimates from the Ministry of Finance, regarding the evolution of interest expenditures related to public debt, a forecast of the share of public debt in Gross Domestic Product over the next two years was made. .

Thus, a stock-flow adjustment is considered that will be equal to 0 on the forecast horizon. The results indicate a major impact of the deterioration of the macroeconomic framework on Romania's public debt, which is projected to increase from 35.2% of Gross Domestic Product in 2019 to 45.9% in 2020.

The trajectory has shown an increase in public debt and is driven by the manifestation of an unfavorable differential between the real growth rate and the real interest rate on public debt, doubled by the impact of the budget deficit.

However, it should be borne in mind that the projection of government debt depends to a large extent on the forecasts used for the real interest rate and the real growth rate of real Gross Domestic Product.

5. Conclusions

However, the phenomenon of tax evasion in Romania requires research and analysis in order to reach a correct and complete perception of its dimensions. This statement is supported by a very important aspect.

Tax evasion is far from being exhausted as an object of investigation by the framework law which, as its name implies, should regulate the prevention and combating of tax evasion. In reality, it is only an instrument of control, prevention not being representative in its provisions.

The multitude of obligations that the tax law imposes on taxpayers and especially the burden of these obligations, have always led to stimulate the ingenuity of taxpayers in inventing various procedures to evade tax obligations.

Tax evasion has always been active and ingenious because the tax authorities hit the fortunes of individuals and touch them in the most sensitive interest, the money.

The causes of tax evasion are multiple, the legal provisions that favor tax evasion, the application of laws, which allows tax evasion, taxpayers who, with an unhealthy mentality, resort to various methods to hide taxable material, corruption of tax authorities, unfair distribution of tax rates by income groups and social categories.

The current tax system can even lead to a decrease in employment. People are not driven to work extra, because the income thus earned will be taxed, which encourages undeclared work and thus tax evasion.

The high degree of specialization of tax evasion offenses requires the concentrated effort of many state institutions to prevent and combat them, namely the General Directorate of Public Finance, the Economic Crime Investigation Directorate within the Police, as well as the General Anti-Tax Fraud Directorate or the departments. economic activities of the secret services.

The adoption and application of a modern and transparent legislative framework, together with the motivation of the staff of the institutions involved, are likely to reduce the harmful effects of this true economic scourge of the contemporary world, but also to create premises for better cooperation on obligations. Of the state.

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Central Banks Digital Currency - Opportunities and Innovation

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Abstract

The issuance of a Central Bank Digital Currency (CBDC) is a very important step towards a fully digital economic environment and the consequences of such a direction are under debate by many policymakers around the world.

There is a clear interest within the space as governments around the world are exploring the viability of a digital currency and according to the latest Bank for International Settlements (2021) report: 86% of the world's central banks have begun to conceptualize and research the potential of CBDC, 60% are developing Proof-of-Concepts (PoC) and 14% are implementing pilot projects.

This paper provides a comprehensive overview for finance and investment participants about the topic of Central Bank Digital Currencies. The recent international exploration into the future of Central Bank money is complex as it is interconnected with two equally dynamic entities: Digital Currencies and Blockchain/Distributed Ledger Technology.

Key words: Central Bank Digital Currency, financial stability, monetary policy

J.E.L. classification: F33, F42, F,01, E02

1. Introduction

Central banks have a mandate for financial and monetary stability in their jurisdictions with an important agenda to promote access to safe, efficient and secure payments.

CBDC is “a digital form of central bank money that is different from balances in traditional reserve or settlement accounts” (CPMI-MC, 2018, p.3). There is substantial interest in this new form of digital money and many central banks are conducting experiments with the underlying technology of crypto assets.

A CBDC is “a digital payment instrument, denominated in the national unit of account, that is a direct liability of the central bank” (BIS, 2020, p.14).

This is an important statement to clearly differentiate from a second approach and theory that is researched, which is the “synthetic CBDC”. Such concepts of stablecoins have been described in some papers as “synthetic CBDC” (Adrian T. and Griffoli M., 2019, p.4) and provide an alternative framework designed for the private sector participants to issue liabilities matched by funds held as collateral at the central bank.

All these providers of payment and financial services would act as intermediaries between the central bank and the users. These liabilities could share some of the characteristics of a CBDC, but a blueprint of such a regulatory framework is required in order to provide assurance that the liabilities are fully matched by available funds within the central bank accounts. However, this concept will not be treated as CBDC, as the end user cannot hold a claim on the central bank. A CBDC could be a significant instrument for central banks to continue to provide safer means of payment in accordance with the wider digitalization of people’s day-to-day lives. Public trust in central banks is paramount to monetary and financial stability and the provision of a common unit of account & a viable store of value.

2. Literature review

The main considerations and opinions for this paper were drawn from different studies on the features, effects and risks involving the issuing and implementation of a CBDC. Our main objective is to identify the most relevant theoretical concepts regarding Central Banks Digital Currency scenarios and their usability in a real economic environment. From a theoretical standpoint, the concept of a CBDC needs to address important issues that were raised by Gurley and Shaw (1960, pp. 568-569), with regards to the provision of public and private money, along with the transmission of monetary policies (Tobin, 1985, pp. 19-29) and impacts on the central bank's objectives.

According to the research provided by Andolfatto D. (2018, p.22), the focus is on the effects of introducing an interest-bearing feature for a Central Bank Digital Currency. Andolfatto's model predicts that the introduction of a new digital form of currency will not have negative impact on the bank's lending operations as disintermediation can be avoided and he concludes that a well-designed CBDC will not threaten the main objective of the central bank, which is financial stability.

Brunnermeier & Niepelt (2019, pp.39-40) are approaching the CBDC concept as an asset compared with the bank deposits, but from a liquidity perspective. Their study is focusing on the effectiveness of the deposit liabilities being replaced by the central bank loans to the ecosystem, especially towards the commercial banks. Within their results, the equilibrium allocation is not affected as there is no consequences and effects that involves wealth distribution across households.

Fernandez-Villaverde et al. (2020a, pp.26-27) paper is approaching the bank runs model in order to derive an equivalence result, as per the research conducted by Diamond and Dybvig (1983, pp. 401-419).

Within their research, the CBDC concept replaces banks' deposits entirely and their results show that allocations conducted under private banks deposits structures is similar to the cumulated amounts under a CBDC system. Furthermore, the authors present a scenario where bank runs can be diminished through a CBDC infrastructure as the central bank commits not to liquidate its long-term assets, leading most of the depositors to keep their CBDC holdings instead of traditional deposits in equilibrium.

Williamson S. (2019, p.18) is focusing its research on the welfare & policy implications and studies the concept of a digital currency as an interest-bearing asset that is a direct alternative to cash. In his study this type of asset is subjected to different theft threats and banks' commitments are analyzed in order to use the design of the CBDC as a mechanism for welfare.

Keister & Sanches (2019, p.29) characterize the agreement that implies the usage of a CBDC for increasing trade and reduced lending allocations. Their analysis is conducted through a model of a decentralized exchange that is focusing on mass adoption pattern of a CBDC. Within their results, the users are accumulating important amounts of the digital currency, in the same time, increasing transactions and trades that lead to higher quantities exchanged and consumption patterns.

3. Research methodology

In order to properly understand the design features and characteristics needed in a CBDC framework, a theoretical research methodology was applied. We have engaged a qualitative approach to assess the topic of digital currencies that can be evolved within a central bank environment, for a better understanding of the underlying effects and risks.

The qualitative thematic analysis is needed to validate concepts and scenarios for the components and the ecosystem of CBDCs, in the context where most of the financial policymakers in the world are conducting conceptual studies of innovative digital financial instruments.

4. Findings

4.1. Motivation, challenges and risks

Access - In jurisdictions where access to FIAT is declining, there is a risk that businesses and households will no longer have access to central bank money. The central banks treat this as an important responsibility to provide public access and confidence in a currency. Accessibility via a

CBDC will improve transparency and could act like a “digital banknote”, that addresses and can fulfill this responsibility.

Resilience - Cash is always considered as an alternative payment method to electronic systems, especially if those networks can malfunction or stop operating. However, if access to cash is marginalized, it will be less useful as a backup method. Operational resilience could be achieved via a CBDC system that acts as an additional payment method. Compared to cash, a CBDC framework may give superior methods to distribute and utilize funds in geographically hard to access locations, especially during crises or natural disasters.

Counterfeiting and cyber risk will always present a challenge. Even though large-scale issues rarely occur, cash still presents a high risk of counterfeiting. On the same note, cybersecurity issues, with regards to CBDC, represent a major threat, as the confidence in the wider system can be shaken with any new exploit that can produce a successful cyber-attack. A similar attack over a large bank or a payment service provider will not have the same impact, as the number of endpoints in a general purpose CBDC framework will be significantly larger.

Financial Inclusion - The main barriers around digital literacy, trust, data privacy and access to IT infrastructure can enlarge the digital gap and leave sections of society way behind, especially in this fast-evolving era where concepts of digitalization are increasing.

For central banks, in many emerging market economies, a key driver for researching CBDC is the opportunity to improve financial inclusion (Boar et al., 2020, p.4). However, the potential of a CBDC system that can increase financial inclusion must address the causes of financial exclusion. These causes are complex and vary from jurisdiction to jurisdiction.

Given the complexity of this issue and possible underlying obstacles to digital inclusion, any CBDC initiative would likely need to be embedded in a wider set of reforms (CPMI-World Bank, 2020, p.43).

Cross-border Payments - Cross-border payments involve complex mechanisms that extend through time zones, regulations, jurisdictions and usually engage numerous providers or financial institutions. As a result of these processes, most of these methods are usually slow and expensive. An interoperable CBDC system could improve all the roles within a cross-border payments infrastructure.

Public Privacy - One of the most important feature for transactions involving cash is that there is no centralized entity that records information of the holdings, parties or transactions that are conducted. Many have argued that a CBDC can improve benefits with regards to the anonymity levels for electronic transactions (Bech and Garratt, 2017, p.56).

Central banks are pursuing the requirements for anti-money laundering and combating the financing of terrorism (AML/CFT) for most of the design and implementation features of a CBDC. This is clearly not the main objective, nor the primary motivation when considering the issuance of such a project. Full anonymity is not a feature that is plausible as transactions data will exist and be recorded accordingly. The main questions for data privacy, will be about who will have access to this data and under which circumstances.

As data protection legislation continues to evolve, one important task for these institutions will be to identify the balance structure between public privacy and reducing illegal activities by all means available.

4.2. Monetary policy, financial stability and risks

Depending on factors like concept, design and adoption of a CBDC, all of these may trigger different market structure effects. There is a risk of disintermediating banks that may lead to destabilizing runs into central bank money.

All these risks will clearly undermine financial stability and may propagate other consequences. Our recent history with regards to public money runs, imposed the existence of deposit insurance and complex bank resolution frameworks in order to protect the retail depositors.

A major concern is that a widely available CBDC could make such events more frequent and severe, by enabling “digital runs” towards the central bank on an unprecedented scale and with greater speeds (CPMI-MC, 2018, pp.16-17). In such a scenario, if banks were to lose deposits to a widely adopted CBDC they may look for different alternatives for their funding needs and a solution

could arise from the wholesale funding. To a certain extent, this will possibly disrupt the credit supply in the economy with significant impacts on the economic growth.

There has been a great deal of academic research on the risks of disintermediation and runs into central bank money. However, feasible solutions have been presented through a more “cash-like” model which transcends the “deposit-like” CBDC. Innovative design features and system safeguards will differ for each individual jurisdiction and the same can be said with regards to the risks, which will require significant research by the central bank to assess. A central bank should have robust means to mitigate any risks for the financial stability before any CBDC concept is issued.

The risk presented by implementing stablecoins and foreign nationalities CBDCs comes from the adoption patterns of the users: if the users adopt such instruments in significant numbers, the usage and power of the domestic sovereign currency could diminish. An extreme scenario of such a concept is that we could see a national currency being substituted by another, with the central bank of that specific jurisdiction, losing control over the monetary matters (Brunnermeier et al, 2019, p.28).

This domination or take-over scenario of alternative units of account can be mitigated by offering an efficient and comprehensive CBDC by the central bank. An alternative would be a balance, provided by the central bank along with the payment providers, to ensure a fit-for-purpose payment system that gradually improves efficiency.

4.3. Foundational principles

The main public policy objectives of the central banks haven’t changed and these work towards providing a trusted money infrastructure with a mandate for monetary and financial stability. Based on geo-politic and analytical factors, the specifics of these policies may be different, from jurisdiction to jurisdiction. However, from a CBDC perspective, the common foundational principles, for the consideration of issuance of such an instrument, derive from the common objectives:

Uniformity – New digital variations of money developed and supplied by a central bank should continue promoting the fulfilment of the current public policy objectives and should not obstruct with the ability to carry out the principal mandate for financial and monetary stability. A CBDC should maintain the uniformity of a sovereign currency, allowing the users to use different forms of money mutually.

Coexistence – As the main mandate for central banks involves stability, any new venture in unchartered territories of innovations should be done with prudence and responsibility. It’s important that new and old forms of money coexist in support of the policy objectives. The framework should address a system where a new form of digital money should complement the existing one and support it for as long as there is sufficient demand for it.

Innovation and efficiency – The key drivers for efficiency in any payment system are innovation and competition. For a better optimization of the payment’s ecosystem, innovative implementations of novel technologies need to be introduced to the general public. The participants should be allowed to compete for market share in order to provide accessible and user-friendly products.

Find below the necessary features of a potential CBDC system to fulfil the foundational principles:

Table no. 1 Core Features of a CBDC

Convertible	To maintain singleness and uniformity of the currency a CBDC should exchange at par with cash and private money.
Convenient	All payments involving CBDC should be simple, efficient and convenient, as easy as using cash or other means of electronic payments like: taping a card or scanning a QR code with a mobile device. This will encourage accessibility and adoption.

Accepted and available	Acceptance of a CBDC should be promoted in the same way as cash, from point-of-sales to any peer-to-peer transactions. A requirement in this scope is for the digital currency to have the ability to make offline transactions and be available 24/7/365 .
Low cost	Low entry technological barriers should be provided with minimal equipment requirements. Payment involving CBDC should be very low or at no cost to end users.

Source: Bank of International Settlements, (2020). Available at <https://www.bis.org/>

Table no. 2 System features

Secure	Both the infrastructure and participants of a CBDC system should be safe from cyber-attacks and other threats. This should also include ensuring effective protection from counterfeiting.
Instant	Instant or near-instant final settlement should be available to the end users of the system.
Resilient	A CBDC system should be extremely resilient to operational failures , natural disasters, electrical outages and other unforeseen disruptions. There should be alternatives for end users to make offline payments if network connections are not available.
Available	End users of the system should be able to make payments 24/7/365 .
Throughput	The system should permit and be able to process a very high number of transactions .
Scalable	The system should be scalable in order to accommodate a potential expansion with greater future volumes of transactions and operations.
Interoperable	The system needs to assure the transition of funds between different environments. The flow of funds between public and private sector need to interact seamlessly across systems even with the traditional payment networks.
Flexible and adaptable	A CBDC system should be flexible and adaptable to changing conditions and policy objectives.

Source: Bank of International Settlements, (2020). Available at <https://www.bis.org/>

Table no. 3 Institutional features

Robust legal framework	A central bank should have clear authority over the issuance of a CBDC concept.
Standards	A CBDC system, along with all its participants, need to conform to a proper regulatory framework and standards . All entities offering custody, storage, transfer or other related services should comply with the standards in a similar manner as the current providers of financial services.

Source: Bank of International Settlements, (2020). Available at <https://www.bis.org/>

4.4. CBDC Concepts under Development

As more resources are deployed within the research of CBDC instruments and the underlying technology, many design concepts are evolving having similar architectures. All these design choices are openly addressed which is an essential step for an efficient and reliable functioning system implementation. The CBDC research is still in infant stages with limited pilot testing and large-scale implementation. The more data is collected from such concepts, the better results and understanding of the risks and impacts of the design options.

Architecture designs

The underlying technology used to deploy any CBDC system is extremely important as it will have a major impact for the fulfilling of the central banks’ objectives. Distributed Ledger (DLT) or Blockchain Technology are the front runner infrastructures of such concepts, but there is no inherent reason for such a system to be developed using conventional centralized systems. The association of CBDC and these innovative technologies is natural as the introduction of smart contracts can play an important role within the development of programmable money.

The elements of decentralization could introduce some potentially useful features like resilience and availability, especially for the design choices of the CBDC architecture, but they have to be carefully vetted and understood based on the risks, challenges and impacts.

The current available research shows that there were identified some fundamental and complementary design features for a CBDC architecture design that need to be implemented:

- Interest-bearing feature;
- A cap or limit on individual holdings.

Based on the Bank of International Settlements (2018) report, in a CBDC system, a payment is a transfer of a central bank liability, recorded on a ledger. In designing a CBDC ledger, there are five key factors: Structure, Payment authentication, Functionality, Access and Governance.

Each of the design factors mentioned above will have a connection on how a CBDC system meets the core features set out earlier.

The structure of a digital ledger can be formed using:

1. Centralized Infrastructure – where an intermediary is required to vet, manage and transfer the liabilities. This concept makes it easy to introduce anti-fraud and traditional cyber security features;
2. Decentralized Infrastructure – where Peer-to-Peer (P2P) transactions and offline payments are secured using the cryptographic consensus algorithms of the underlying technology;
3. Hybrid Model Infrastructure – This concept takes the advantages of both centralized and decentralized infrastructures. The downside of such a model will be the complexity of design that brings all the moving parts and risks associated with each individual infrastructure.

Proof of Concepts

Digital Euro – The main agenda for the Eurosystem (ECB, 2020, pp.9-15) is to find the best alternative in designing the digital euro, so that there are no undesirable implications with regards to the financial industry, participants and macroeconomics along with its mandate fulfilment. Any potential shocks that may come with the digital euro implementation or design could affect the funding costs and intermediation function of banks, especially within crises or market stress environments. A digital euro potential scenario could expand the size of the Eurosystem’s balance sheet and increase the exposure to shocks, furthermore impacting the larger capital flows, from and into the financial markets.

As digitalization is a very common topic from the start of the COVID-19 pandemic, a digital euro seems to be the best formula to provide access to a safe form of money in a fast-changing digital ecosystem.

A digital euro concept could be a viable option to be issued in order to:

1. support the digitalization of the European economy and the strategic financial stability of the European Union;
2. in response to a significant decline in the role and usage of cash as a means of payment;
3. as a new monetary policy transmission channel.

DCEP (Digital Yuan) – People's Bank of China (PBoC), which is the China's central bank, has been the front runner on the research, development and implementation of a Central Bank Digital Currency. The available reports show that a concept of a digital currency was started in 2014 and the development has been at the forefront of the financial industry.

Digital Currency Electronic Payment (DCEP) is China's CBDC project.

Discussions within the financial sphere have concluded with the long-term vision of DCEP as an internal system of settlements which has as main goal the replacement of the Society for Worldwide Interbank Financial Telecommunication (SWIFT) operations.

The PBoC explains that one of the short-term objectives of the DCEP is to meet the needs of retail payments for businesses and individuals. Another definition that circulates, identifies DCEP as a "retail CBDC".

As China is leading the race within the development of CBDC, it's expected to become the first economy to fully launch such a project. The program entitled Digital Currency Electronic Payment (DCEP), has launched in March 2020 one of the largest real-world pilot of a CBDC in several important cities around China (Orrick, Herrington & Sutcliffe, 2021).

4.5. CBDC's effects on commercial banks, monetary policy and financial stability

The main question that needs to be addressed when designing a CBDC is how will such a concept affect commercial banks, monetary policy and financial stability. Clearly, a CBDC programed to pay interest will have a direct approach towards the commercial bank deposit systems. A consequence reaction of such a potential substitute will come from the banking side with a change of the deposit rates that affects the bank's main funding cost. Fundamentally, the quantity of the bank deposits, along with the bank-intermediated lending may change. As a result, the introduction of a CBDC concept may replace the banks' main source of funding and cause disintermediation of commercial banks, which in turn may lead to a decrease in their lending structures.

Andolfatto D. (2018, p.22) studies in his paper, the effects of introducing an interest-bearing CBDC. The research is conducted on a monopolistic banking sector which raises the deposit rate, to be equal to the interest rate of the CBDC. In this scenario the bank makes positive profits in equilibrium.

The analysis suggests that the main benefit of a CBDC concept increases the number of depositors and the demand for deposits with favorable terms, with an important impact on financial inclusion and a consequence towards the diminishing usage of FIAT.

The implementation of a complex system as the one of a CBDC may deliver future unforeseen macroeconomic shocks that requires the design of such a concept to have safeguards in the circumstances that digital bank runs occur or as per the mass portfolio choices of the users.

Such scenario involves understanding the monetary tools involved and leveraging the CBDC design as a tool itself to protect the policy objectives of the central bank.

In the paper of Fernandez-Villaverde et al. (2020b, p.45) a digital bank run via a CBDC is presented. Their framework highlights that in such an event the bank can reduce the value of withdrawals by increasing the price levels, as their model present a CBDC that represents a deposit held at the central bank. The impact of such a raise in prices will be felt within other macroeconomic indicators or targets. The results of the study show that negative rates from a CBDC perspective can keep inflation in check, especially during crises or financial panics that lead to bank runs.

As per the report provided by the Bank of England and conducted by Barrdear and Kumhof (2016, pp. 65-67) an approach via a Dynamic Stochastic General Equilibrium (DSGE) model has been analyzed to study the cyclical effects and shocks of a CBDC for the macroeconomy. The model is using sticky prices, average and adjusted costs to study interest rates, taxes, debt and impacts on the GDP, under the assumption that the design of the digital currency can be exchanged at par with government debt. Their findings show that the introduction of such a model of digital currency can help in decreasing interest rates and distortionary taxes with a long-run consequence of GDP increase. The authors also study the impact of liquidity shocks over business cycles. The results presented show that welfare can be affected if liquidity issues with regards to supply and demand of CBDC are to be disturbed from different business shocks.

The study of Keister and Monnet (2020, pp.28-30) analyze the effects of policies in periods of financial distress with a clear focus on the property and the role a CBDC can play as means of payment. The observations made by the authors for the stressful periods of financial instability help in creating the right design choices for a digital currency prototype and also for the policies response to mitigate bank runs or other risky financial conditions. Their results show that by appropriately choosing the interest rate on the CBDC, allows a more efficient response in order to stabilize the financial system. This fast-revolving environment powered by implemented tools within the design of a CBDC allows any government to adopt the proper policies for improving overall welfare.

5. Conclusions

The payments landscape is in a vibrant stage as the speed of technological advancement is changing business models around the world, along with the central banks' ability to deliver feasible policies and financial stability. Governments around the world are deploying a lot of resources in order to understand the arguments, for and against the issuance of a CBDC, as there are many moving parts especially for the design, features, architecture and infrastructure options.

Clearly there will be no "one size fits all" model, as each jurisdiction will be required to create and adapt special design features that will provide efficiency and support based on the local financial and economic circumstances.

The decision of a central bank to engage in the issuance of a CBDC will require an assessment of the value it brings and the opportunities of such a system can create in order to pursue and achieve its main objectives. These decisions need to take in account various new risks that were not foreseen.

One important benefit that CBDC can bring for the transmission channels is to increase the speed to which changes in the bank's policy rate are passed on to households and businesses and could change the amount and cost of credit to the economy by the banking sector. For these reasons, a CBDC should be carefully designed to ensure that potential benefits for monetary and financial stability along with the wider benefits of introducing CBDC to the public, could be achieved without putting in danger the objectives of the bank and the sector's capacity to provide credit and other services to the economy in general.

There are many reasons for adopting a CBDC, such as promoting financial integration & inclusion by improving the efficiency & security of transactions, and lowering the cost of cross-border payments. In countries with underdeveloped financial infrastructure, the benefits of a CBDC will be more evident. For countries that are seriously affected by inflation or by international sanctions, issuing a CBDC is a potential and viable solution.

From our point of view, the use of a CBDC can help the central bank to keep track more accurately of the money supply, structure, speed, financial multipliers, time and space distribution, thus improving the accuracy of monetary policy operations. The use of CBDC for retail will capture all payments associated with most of the activities that are not currently reflected in reports, statistics and national accounts

The mentioned opinions regarding the challenges and risks, which come with any innovation from different technological, economic, systemic, ethical and legal aspects, are associated with the adoption of a CBDC and need to be thoroughly understood and assessed.

Issuing a CBDC can also have negative effects on the economy itself. If the public can get digital currency directly, without any form of limitation, the demand for deposits or reserves of the commercial banks can be reduced. Banks will face a lack of liquidity and can trigger "bank runs" in case of financial panic or other crises.

Traditional currencies of the current financial system are operating in a highly regulated environment by the authorities, thus a concept as a CBDC needs to be included in the scope of the legal regulation as a new form of digital currency. Therefore, there may be legal loopholes in the issuance, usage, circulation and supervision of such a concept. Difficult and complex security scenarios need to be vetted as we move into a digital era where it can become cumbersome to analyze swaps between digital financial assets or where new financial instruments can be constructed having the foundation of digital currencies.

As most of the research available, we also emphasize on the design choice of a CBDC, as there is a danger that we might end up creating central “honeypots” of data, collected from payments and other operations conducted via a CBDC. This statement is based on the similarity of most of the CBDC concepts that require to have control management over some parts of the system. Whether or not this sensitive data needs to be collected is still a question under scrutiny by most of the engaged research entities, but we can all agree that it needs to be protected.

Even though this is not a race, there is a clear competitiveness engaged with regards to which nation will provide the first real operating CBDC system. In our opinion, it is not really important who will be first or second, it's about understanding all the risks, effects and impacts that can influence our economic livelihoods and making sure that such an instrument is properly implemented.

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Do Non-Performing Loans Influence the Profitability of Banks? Evidence from a European Banking Group

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Abstract

Banking system in the time of the COVID-19 pandemic is likely to be particularly affected especially in terms of profitability. The crisis has revealed various economic and even psychological mechanisms which can contribute to the increase of Non-Performing Loans (NPL). This paper intends to find if there is any significant relationship between Return on allocated capital, as a marker for banking profitability and NPL coverage ratio. We include in the model developed on the basis OLS method (with robust standard errors, consistent with panel-specific autocorrelation and heteroskedasticity), a few other explanatory variables. Our research is based on the Erste Group database 2016-2021. The empirical results reveal that there is a negative and a significant relationship between Return on allocated capital and first two variables - NPL coverage ratio and Cost to income ratio - while GDP growth have a positive impact on Return on allocated capital.

Key words: banks, profitability, COVID-19, loans, capital
J.E.L. classification: C23, G21, F62

1. Introduction

The new COVID-19 pandemic that affected the entire world since March 2020 led to the worsening of macroeconomic variables and conditions – the economic decline, the increase in unemployment, the deficit increase, the exacerbation of public spending to improve the capacity of the health systems and provide assistance to severely affected people and sectors etc. These are just some of the manifestations of the mentioned crises, which has affected all branches of the economic and social life. The channels of contagion of the COVID-19 pandemic towards the economy are diverse and they are mainly based on the loss of an impressive number of jobs, restrictions on the mobility of the population, many physical businesses closed or the interruption of supply chains.

The crisis has only exacerbated and revealed existing vulnerabilities in the banking sector, whose individual consumers have adopted a more cautious behavior and whose institutional customers drastically reduced their business or even closed their activities. New risks and vulnerabilities showed so for the banking system, taking into account that many companies that have stopped working miss out on revenues, thus they are not be able to pay the loans, while employees who have lost their jobs have less income and also they can't pay current debts arising from loans. Another area that negatively affects the banks stems from the financial instruments held by the banks that were reduced in value, predominant on the basis of market volatility. All these conditions especially affect banking short and long-term profitability, which is influenced both by the decrease of the operational revenues, but also by possible non-performing loans.

The psychological components of the action of bank customers, whose risk appetite and interaction with the banks decreased considerably during the pandemic period, should not be neglected either, in this context the bank profitability is also dependent on the number of clients and the volume of operations.

Such a context necessitated a response both of the governments, supervision authorities, banks, central banks and other institutions in order to mitigate the effects of the COVID-19 crisis on banking systems and their customers. Among the measures taken by the supervisory banking authorities are the reducing certain capital buffers, the encouraging of the banks do not offer dividends and the establishing of the new lending rules, more permissive for customers and which have the potential to negatively affect bank profitability. The European Parliament has adopted in June 2020 new rules “to temporary ensure favorable conditions for banks in order to support credit flows to companies and households and absorb losses, mitigating the severe economic consequences of the COVID-19 pandemic and the enforced confinement” (European Parliament, 2020). The Capital Requirement Regulation (Regulation EU CRR, 2013/575) has been changed the application of the Leverage ratio buffer (a ratio between the capital of a bank and its exposures), which was postponed by one year to January 2023 in order to permit banks to increase the total loans. Also, the regulation allows banks to grant loans to employees, pensioners or SME under more favorable prudential conditions for borrowers. In addition to the international mentioned norms, some national governments have provided facilities for banking customers to defer due rates to banks, as is the case in Romania. Legislative support measures adopted in earlier 2020, through the Government Emergency Ordinances no. 37/2020 and 227/2020, provide some facilities for loans granted by credit institutions to debtors that can benefit of the suspension of the payment obligations – principal, interest and fees associated to the loan – until 15 March 2021.

In this way, banks are more exposed to the credit risk and if the borrowers do not pay back the loans, the premises for the increase of non-performing loans are created. We find at the level of the European Banking Authority some technical standards which explain the non-performing exposures (EBA, 2013), based on the sense of impairment and default according to International Financial Reporting Standards IFRS. We observe that the non-performing definition is larger than these two mentioned accounting notions and implies that the banks have to set the criteria regarding the common identification and discontinuation (90 days past-due).

Figure no. 1. Criteria for Non-Performing Loans

Performing	Non-performing
<p>Fully performing</p> <p>Loans and debt securities that are not past-due and without risk of non-repayment and performing off-balance sheet items</p>	<p>Generic criteria: past due more than 90 days and / or unlikely to pay</p> <p>All other non-defaulted and non-impaired loans and debt securities and off-balance sheet exposures meeting the generic criteria</p>
<p>Performing assets past due below 90 days</p> <p>Loans and debt securities between 1-30 days past due</p> <p>Loans and debt securities between 31-60 days past due</p> <p>Loans and debt securities between 61-90 days past due</p> <p>Performing assets that have been renegotiated</p> <p>Loans and debt securities which renegotiation or refinancing did not qualify as forbearance</p>	<p>Forbearance (Forborne loans and debt securities (and eligible off-balance sheet commitments))</p> <p>Defaulted (Fair value option)</p> <p>Impaired (Fair value through other comprehensive income)</p> <p>Other off-balance sheet items: Amortised cost, Loan commitments given, Financial guarantees given (except derivatives), Other commitments given</p> <p>Refinancing, Modifications of terms and conditions, Other</p>

Source: (EBA - European Banking Authority, 2013, 7)

Each bank has to prepare for the eventuality of losses related to the loans it grants. In order to offset this credit risk, a bank has to estimate the expected future credit loss and to establish an adequate provision, which represents the recognition in advance of a loss related to a loan. Bank’s capital is used to absorb the losses from loans and by setting up a provision, the bank records a loss

and therefore reduces its capital by the amount it will not be able to recover from the customer. Because the customers may still return a part or entire loan, bank should not make provisions for the full amount of a non-performing loan. Also a bank could recover part of the value of the loan by selling the assets or real estate that the customers have set up as collateral. Only the expected net loss should be covered and the part of non-performing loans that is covered by provisions is considered to be the coverage of non-performing loans. In our paper, attention was paid to Non-performing loan coverage ratio, as a variable that indicates the extent to which the bank has already recognized the expected losses on non-performing loans. We find at EU level a minimum coverage ratio that banks are required to maintain and if they have not set up a sufficient amount of provisions to cover new non-performing loans, then they have to remedy this shortcoming by deducting the amount missing from their capital (Regulation EU, 2019/630).

The following situation regarding the total loss provisions for loans (as percent of total doubtful and non-performing loans in Q2 2020 in comparison with Q2 2019 in European Union) denotes significant differences between Member States on the background of the decrease of the non-performing loans, whose volume has decelerated or has stopped, in the COVID-19 context.

Figure no. 2. Non-performing loans in the European Union, 2019Q2-2020Q2

	Gross NPLs and advances (% of total gross loans and advances)		Private sector NPLs (% of private-sector loans)		Total loss provisions (loans) (% of total doubtful and non-performing loans)	
	2020Q2	2019Q2	2020Q2	2019Q2	2020Q2	2019Q2
Austria	2.0	2.3	2.8	3.1	76.5	69.6
Belgium	2.1	2.0	2.8	2.7	58.4	53.7
Bulgaria	6.7	6.9	10.0	10.5	60.6	61.2
Croatia	5.3	6.9	8.3	10.3	86.7	74.2
Cyprus	14.5	19.5	23.3	33.5	55.4	53.2
Czech Republic	1.6	1.8	3.0	3.4	82.2	69.0
Denmark	2.0	1.9	2.4	2.2	45.4	42.1
Estonia	2.1	1.8	2.1	2.3	55.7	42.4
Finland	1.5	1.4	-	-	42.6	34.0
France	2.3	2.6	3.4	3.6	66.2	64.8
Germany	1.2	1.3	2.0	2.0	89.0	85.3
Greece	30.9	39.6	37.0	43.8	47.8	49.7
Hungary	4.0	5.0	5.6	6.5	-	84.1
Ireland	3.5	4.2	6.0	6.8	54.9	37.0
Italy	6.3	8.1	8.2	10.6	59.8	58.5
Latvia	5.3	5.4	5.6	7.5	41.0	38.8
Lithuania	2.7	2.2	2.8	3.0	47.3	36.4
Luxembourg	0.6	0.7	1.8	2.0	55.8	52.0
Malta	3.4	3.1	-	-	50.5	49.3
Netherlands	1.9	1.8	2.8	2.4	40.1	31.6
Poland	6.2	6.2	6.7	6.7	74.0	70.4
Portugal	5.5	8.3	6.6	9.2	66.4	59.2
Romania	4.4	4.8	5.9	6.5	93.0	83.6
Slovakia	2.9	3.1	3.2	3.4	92.9	89.0
Slovenia	3.2	4.5	4.5	5.9	80.1	74.6
Spain	2.9	3.4	4.0	4.4	69.4	63.8
Sweden	1.0	1.1	1.3	-	32.2	-
European Union	2.8	2.9	-	-	63.4	58.9

Source: (European Commission, 2020, 6)

Non-performing loans in the European Union have experienced some reversal due to the impact of the COVID-19 pandemic, after an improvement in recent years. Banks have to identify and set up provisions for potential-non-performing loans, the faster and easier non-performing loans resolution and disposal process will be, avoiding the harmful effects in the future and not repeating the mistakes of the 2007 crisis.

Numerous international institutions are concerned about the issue of non-banking loans. In subsidiary, these influence the banking profitability. The actual pandemic crisis suggests declining long-term profitability prospects for banks and from around 6% in February 2020, the average profitability of euro area banks was 2% in June 2020. The decrease in profitability is mainly due to higher provision for loan losses and weaker revenue generation capacity, linked to the continued compression of interest margins (De Guindos, 2020). A study issued by the International Monetary Fund approach the impact of the COVID-19 pandemic on the corporate and banking sectors in Latin America. It presents a significant increase in non-performing loans and a decline in banks'

profitability (International Monetary Fund, 2020).

The COVID-19 crisis has increased the risk of a future accumulation of non-performing loans resulted from a deterioration in the asset quality of banks' balance sheets. The high aggregate level of non-performing loans in the euro area had already been identified as a matter of supervisory concern going into 2020, so before the COVID-19 crisis, and there is now an added risk of severe cliff effects when public support measures start to expire (European Central Bank, 2020).

The paper is organized as follows. First, we present the empirical literature on banking profitability and the research methodology. Next sections present and discuss results and conclusions on the impact on the studied variables (Non-performing loans coverage ratio, Cost to income ratio and GDP growth) on the Return on allocated capital at the level of a European banking group – Erste Group - from second quarter of 2018 to first quarter of 2021.

2. Literature review

This paper relates closely to a quickly growing literature on the dynamics of banking profitability, non-performing loans, and economic growth. Important contributions belong to Thornton and Di Tommaso (Thornton and Di Tommaso C, 2020, pp. 1-18), which examine if the effect of non-performing loans depends on the level of bank capital and profitability. The authors developed a panel of up to 521 banks from 21 European countries for the period 2007-2017 and their findings suggest an important effect of non-performing loans on capital and profitability, based on the unbalanced panel regressions.

The quoted banks in the European Union were studied for 2007-2019 (Ercegovac et al., 2020, pp. 89-102) based on the relationship between bank's efficiency (measured by cost to income ratio and non-performing ratio) and profitability (ROA, ROE). The authors developed the models that show the strong significant negative influence of the non-performing assets on the analysed profitability indicators.

The global pandemic generated by COVID-19 emphasizes even more acutely the critical role of banks in the economy. The resilience of commercial banks that operate in Poland has been studied from the potential impact of the COVID-19 pandemic point of view (Korzeb Z., Niedziółka P, 2020, p. 205-234). Banks' diagnostic was developed through the application of a few features, among which one can mention profitability, share of exposures with recognized impairment and resilience of the bank's credit portfolio to the risk resulting from involvement in the sectors most threatened by the effects of the COVID-19 crisis. The results showed that the largest banks are most resilient. Year 2020 has been labeled as a year that turned any predictions upside down (Gabeshi, 2020, pp. 38-43). This author considered that in the pandemic period the Central and Eastern Europe countries have to limit their credit risk.

Various variables were used by empirical literature to explain the evolution of banking profitability ratio, especially return on equity and return on assets. The growth rate of non-performing loans, the growth rate of profit / loan, the growth rate of the Gross Domestic Product, the loan – deposit ratio, the cost to income ratio and the capital ratio represent the variables which explain ROE and ROE evolution for Bosnia and Herzegovina between 2017 and 2019 (Alihodzic, 2020, pp. 182-202). Based on the assumption that the profitability is the most appropriate indicator to assess the performance of a bank and that ROE and ROE measure the profitability, some authors contribute to the literature with a panel data regression model for Indonesia, 2011-2014 (Wulandari et al., 2016, pp. 109-119). Non-performing loans are considered to be an internal factor that influences the profitability of banks, while GDP growth is an external factor which contributes to the evolution of the profitability.

3. Research methodology

Our study presents an empirical analysis of the profitability at the level of a European banking group – Erste Group - presented by country, focusing on relationships between Return on allocated capital and Non-performing loans (NPL) coverage ratio, Cost to income ratio and GDP Growth.

We started with a sample which contains Key financial data & ratios for Erste Group presented for each country in which the banking group has subsidiaries (Austria, Croatia, Czech Republic, Hungary, Romania, Serbia, Slovakia) for the last three years shown quarterly from the second quarter of 2018 to the first quarter of 2021. The key financial data & ratios for Erste Group have been extracted from <https://www.erstegroup.com/en/investors/reports/financial-reports>. The obtained sample has been extended with a macroeconomic variable - GDP Growth by country, extracted from Eurostat <https://appsso.eurostat.ec.europa.eu/nui/show.do>.

The dependent variable Return on allocated capital was used. Return on allocated capital is defined as a net result of the period before minorities in relation to the allocated capital of the respective segment. This ratio gives a sense of how well a company is using its capital to generate profits. It is always calculated as a percentage and is usually expressed as an annualized or trailing 12-month value.

The regressors of the model, the explanatory variables used in our analysis are:

- Cost to income ratio (%) [estimated effect: -]. Cost to income ratio is an important financial metric in determining the profitability of banks. It is usually expressed as a percentage. This measure presents the operating expenses of a bank as to a bank’s operating income. Lower ratios mean that a bank is running more profitably while a higher cost to income ratio indicates that the banks operating expenses are too high. There is an indirect relationship between the cost to income ratio and the bank’s profitability

- Non-performing loans (NPL) coverage ratio (%) [estimated effect: -]. Non-performing loans (NPL) coverage ratio represents risk provisions for loans and advances to customers as a percentage of non-performing loans and advances to customers. The non-performing loan coverage ratio looks at a bank’s ability to absorb future losses. Banks understand not every loan that they lend will be paid in full, so by predicting the rate of non-performing loans, banks can be prepared to cover these future losses. It is also expressed as a percentage.

- GDP growth (%) [estimated effect: +]. It is a macroeconomic indicator which compares the most recent quarter of the country’s economic output to the previous quarter. The gross domestic product (GDP) growth rate measures how fast the economy is growing. GDP growth data is seasonally and calendar adjusted data.

Table no. 1 Descriptive statistics for Return on allocated Capital model Q2.2018-Q1.2021

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on capital	84	13.517	8.716	-19.433	28.407
Cost to income	84	55.091	9.838	43.98	86.731
ln NPL coverage	84	4.537	.292	4.081	5.354
GDP growth	84	.226	4.325	-14.9	11.8

Source: Authors’ calculations, based on data available at <https://www.erstegroup.com/en/investors/reports/financial-reports> and <https://appsso.eurostat.ec.europa.eu/nui/show.do>

Return on allocated capital model is

$$Return_on_capital = \beta_0 + \beta_1 \times Cost_to_income_{i,t} + \beta_2 \times ln_NPL_Coverage_{i,t} + \beta_3 \times GDP_Growth_{i,t} + \varepsilon_{i,t} \quad (1)$$

where, $Cost_to_income_{i,t}$ denotes Cost to income ratio (%), $ln_NPL_Coverage_{i,t}$ represents the natural logarithm of Non-performing loans (NPL) coverage ratio (%) and $GDP_growth_{i,t}$ is GDP growth (%) (for country i in quarter t), $\varepsilon_{ij,t}$ is an iid error term specific to country i in quarter t .

We have performed the regression based on sample of 7 countries and 12 quarters (Q2.2018-Q1.2021) included into the model and we have examined the results. In the result model, the sample is comprised of 84 observations which is a representative one, due include data for the same banking group – Erste Group - from 7 different countries and the data are current. The independent variables explains 37,5% of the variation of Return on allocated capital.

Table no. 2 Empirical results for Return on capital model Q2.2018-Q1.2021

Linear regression							
Return on capital	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Cost_to_income	-.301	.076	-3.95	0	-.452	-.149	***
ln_NPL_coverage	-9.361	2.25	-4.16	0	-13.84	-4.883	***
GDP_growth	.599	.145	4.13	0	.31	.888	***
Constant	72.409	10.038	7.21	0	52.432	92.386	***
Mean dependent var		13.517	SD dependent var			8.716	
R-squared		0.375	Number of obs			84.000	
F-test		21.659	Prob > F			0.000	
Akaike crit. (AIC)		569.683	Bayesian crit. (BIC)			579.407	

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

To confirm that obtained model is relevant, we decide to extend the sample period from Q2.2018-Q1.2021 to Q1.2016-Q1.2021. For extended periods of time the result model explaining only 28% of the variation of Return on allocated capital.

Table no. 3 Descriptive statistics for Return on allocated Capital model Q1.2016-Q1.2021

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on capital	147	16.647	11.91	-19.433	86.827
Cost to income	147	55.374	9.11	43.98	86.731
ln NPL coverage	147	4.428	.275	4.019	5.354
GDP growth	147	.578	3.34	-15.1	11.6

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

Table no. 4 Empirical results for Return on capital model Q1.2016-Q1.2021

Linear regression							
Return on capital	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Cost_to_income	-.438	.07	-6.28	0	-.576	-.3	***
ln_NPL_coverage	-13.055	3.204	-4.07	0	-19.388	-6.721	***
GDP_growth	.626	.176	3.57	0	.279	.973	***
Constant	98.35	14.823	6.64	0	69.05	127.65	***
Mean dependent var		16.647	SD dependent var			11.910	
R-squared		0.280	Number of obs			147.000	
F-test		23.872	Prob > F			0.000	
Akaike crit. (AIC)		1104.158	Bayesian crit. (BIC)			1116.120	

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

In the Tables no. 5 and 6 the correlation matrix for the variables is being presented. There are no correlations bigger than 0.5 between regressors and all used variables and this means that our independent variables are not correlated.

Table no. 5 Correlation matrix Return on capital model Q2.2018-Q1.2021

Variables	(1)	(2)	(3)	(4)
	Return_on_capital	Cost_to_income	ln_NPL_coverage	GDPgdp_growth
(1) Return_on_capital	1.000			
(2) Cost_to_income	-0.451	1.000		
(3) ln_NPL_coverage	-0.410	0.297	1.000	
(4) GDP_growth	0.314	-0.062	0.015	1.000

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

Table no. 6 Correlation matrix Return on capital model Q1.2016-Q1.2021

Variables	(1)	(2)	(3)	(4)
	Return_on_capital	Cost_to_income	ln_NPL_coverage	GDP_growth
(1) Return_on_capital	1.000			
(2) Cost_to_income	-0.404	1.000		
(3) ln_NPL_coverage	-0.369	0.202	1.000	
(4) GDP_growth	0.192	-0.048	0.001	1.000

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

One important step in the methodology of this study was to check the stationarity of the variables in the Panel Regression Model with Fisher Test. The estimates are run through OLS panel data method with robust standard errors, consistent with panel-specific autocorrelation and heteroskedasticity. All variables used in our analysis are stationary.

Table no. 7 Fisher-ADF unit root tests – Return on capital model Q2.2018-Q1.2021

Fisher-ADF				
	Inv. chi-squared	Inv.N	Inv.L	M.Inv chi-squared
Return on capital	63.3746 [0.0000]	-5.6836 [0.0000]	-6.5738 [0.0000]	9.3309 [0.0000]
Cost to income	66.1393 [0.0000]	-5.5829 [0.0000]	-6.8692 [0.0000]	9.8534 [0.0000]
ln NPL coverage	29.3342 [0.0094]	-2.4387 [0.0074]	-2.6200 [0.0062]	2.8979 [0.0019]
GDP growth	123.4607 [0.0000]	-8.5248 [0.0000]	-12.9943 [0.0000]	20.6861 [0.0000]

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

Table no. 8 Fisher-ADF unit root tests – Return on capital model Q1.2016-Q1.2021

Fisher-ADF				
	Inv. chi-squared	Inv.N	Inv.L	M.Inv chi-squared
Return on capital	122.6046 [0.0000]	-8.7706 [0.0000]	-12.9324 [0.0000]	20.5243 [0.0000]
Cost to income	94.0890 [0.0000]	-7.5148 [0.0000]	-9.8798 [0.0000]	15.1354 [0.0000]
ln NPL coverage	26.9308 [0.0197]	-2.5909 [0.0048]	-2.4983 [0.0084]	2.4437 [0.0073]
GDP growth	126.2195 [0.0000]	-9.1195 [0.0000]	-13.3091 [0.0000]	21.2075 [0.0000]

Source: Authors' calculations, based on data available at
<https://www.erstegroup.com/en/investors/reports/financial-reports> and

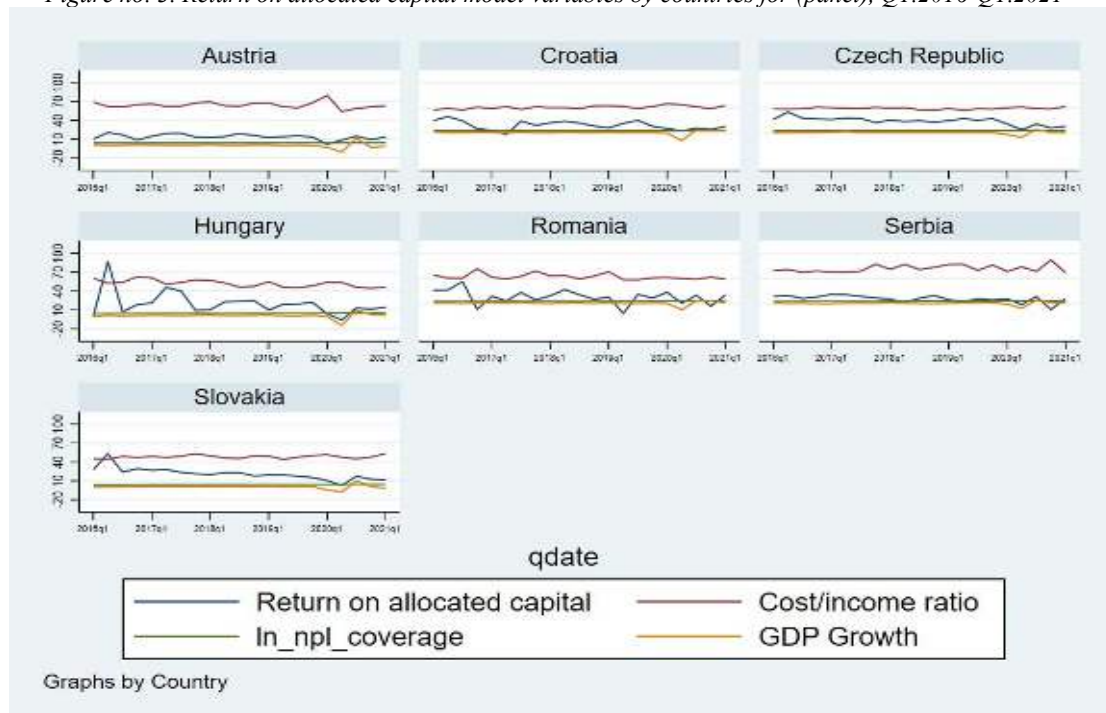
<https://appsso.eurostat.ec.europa.eu/nui/show.do>

Note: Fisher-ADF tests with drift, one lag and cross-sectional means removed. Its null hypothesis states that all panels contain unit roots, with the alternative that at least one panel is stationary. In the table no. 8 are reported the statistics and p-values for the following Fisher tests: inverse chi-squared, inverse normal, inverse logit and modified inverse chi-squared.

4. Findings

All dependent variables in our models that have a significant impact - p value is below 1%. There is a negative link between cost to income ratio and Return on allocated capital, this means that an increase of cost to income ratio with 1 unit leads to a decrease by -0,438 of Return on capital for Q1.2016-Q1.2021. The model also presents an inverse proportionality between NPL coverage ratio and Return on allocated capital. The only positive impact in our model is given by GDP growth; in a country with increasing GDP the bank profitability is positively impacted.

Figure no. 3. Return on allocated capital model variables by countries for (panel), Q1.2016-Q1.2021



Source: Authors’ processing, based on data available at <https://www.erstegroup.com/en/investors/reports/financial-reports> and <https://appsso.eurostat.ec.europa.eu/nui/show.do>

The estimation results suggest that Return on allocated capital is not solely influenced by our dependent variables which were analyzed in these models. There are also other variables that explain the variation of Return on allocated capital which are not showed in the presented model.

5. Conclusions

We have described in this paper that most studies confirmed the relationship between profitability of banks, measured by ROA, ROE or another capital ratios (return on allocated capital) and internal banking variables, as the non-performing loans coverage ratio or cost to income. Also, the empirical literature has proved that GDP growth influence the banking profitability.

Results of our research are in line with a number of studies that argue these types of influences (an inverse relationship between first two mentioned explanatory variables and a positive relationship for the last one, respectively GDP). Our sample consists in a panel data, based on the Erste Group’s subsidiaries from Austria, Croatia, Czech Republic, Hungary, Romania, Serbia and Slovakia for the last three years shown quarterly from the second quarter of 2018 to the first quarter of 2021. We use Ordinary Least Squares OLS method with robust standard errors, consistent with panel-specific autocorrelation and heteroskedasticity. The independent variables explain 37,5% of the variation of Return on allocated capital (Q2.2018-Q1.2021) or 28% of the variation of Return on allocated capital (Q1.2016-Q1.2021).

We consider that is too early to clarify the entire set of the mechanisms and the indicators that influence the banking system in the COVID-19 crisis, but is already clear that the actual pandemic will certainly put further pressure on the profitability of the banks, through directly and indirectly channels – such the decrease of the operational revenues, the possible non-performing loans, the psychological components of the action of bank customers, whose risk appetite and interaction with the banks decreased considerably during the pandemic period.

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