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**Section I**  
**International Affairs and European Integration**

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**Subsection 1**  
**International Affairs**

# Internal and External Human Capitals as Factors for Wealth: a World Model

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## Abstract

*We present in this work evidence about the relationships between human capital and wealth for seventy two countries in the world.*

*Human capital is estimated, in monetary per capita terms, from intellectual capital approach with two types of indicators: absolute, in monetary terms, and efficiency, in percentage of utility. Database is generated from World Bank Group.*

*Human capital is divided in two capitals. First, internal human capital: it is based in education investment, and external human capital: it is supported in remittances and people attracted from rest of the world due labour market conditions.*

*Both perspectives are analyzed as factor of wealth in a regression where these are significant, relevant and variables accord of level of GDP. Conclusions about implications for actual time of crisis are obtained.*

**Key words:** Human capital, wealth, international model.

**J.E.L. classification:** C21, O15, O50.

## 1. Introduction

Development involves a process of change that takes place in different ways in different countries and at all levels. Therefore, measures that inform how such development takes place in different countries are required. In this sense, the national intellectual capital term has become enormously important as a complement to explain such economic development.

Therefore, the nation's wealth cannot be estimated only in economic terms as it is necessary to consider other factors such as

the real abilities of citizens. In this sense, a couple of contributions aim to uncover the non-measurable elements of economic growth. In a neoclassical framework, the Solow residual [15] considers that long term growth depends exogenously on technological progress and population growth. Another strand of literature has focused entirely on investment in R&D, human capital, knowledge spillovers and their impact on growth. As a result, a debate has arisen regarding endogenist and exogenist growth, with different interpretations insofar as how to reach the stationary state. In this sense, Romer [14] and Lucas [13] determine that capital investment and the accumulation of knowledge or human capital are a source of endogenous growth, both indicating that growth diverges. However, Abramovitz [1] and Baumol [4] in response, among others, defend unconditional convergence using these studies as a basis, thus renovating the exogenous growth theory.

Taking into account these theories and using intellectual capital (IC) as a basis, we align our researches with the theory of endogenous growth, the management of said capital turning out to be a diverging factor for economic development. Several papers emphasize the importance of intellectual capital, or some of its components, in economic development. Capella and Nijkamp [5] used human and knowledge capitals, others [6] used mainly knowledge and the innovation [2]. As Stam and Andriessen [16] put it, “the main motivation for measuring the IC of nations is to get insight into the relative advantage of countries or regions”.

In this work, intellectual capital is used to analysis her relationship with Wealth (in GDP per capita terms) as generator of

development in human perspective. Currently, other studies in this area have considered the GDP to measure economic development or comparisons have been made taking into account factors such as human capital, industry, foreign trade [8] [9]. Moreover, there are approaches such as that made by Yeh-Yun Lin and Edvinsson [19] that begin to use and to quantify the intellectual capital of each country so as to facilitate analysis, policy development and anticipate future crises.

In this sense, this article determines factors having the greatest impact on economic development between seventy two countries. Using a mathematical model we have analyzed the relationship between GDP per capita and the various human intangibles that make up the intellectual capital. These results allow us to determine which components of human capital (internal or external) are more significant and that component is necessary to conduct further investment to avoid differences between countries. In this way, you may have another approach to explain the differences in the economic development of countries which will allow better strategic reorientation of their policies.

Working this idea as support, we have established the following hypothesis: knowledge acts as a divergent factor of wealth, that is, that rich countries are richer in knowledge and manage it more efficiently than poor countries. Thus, in a global economy, human capital circulates in the opposite direction to development, that is, from poor countries to rich countries. In summary, we want display that relationships between economic development and knowledge are stronger in richest countries.

## 2. Relationships between human capital and wealth: a model.

The model used to measure the human capital is based on models of firm intellectual capital management and competitiveness analysis, under the theoretical and conceptual view of national intangible capital as an ‘invisible or non material value’ of that geographical space [12]. We begin with the idea that National Intellectual Capital (NIC) is a generator of wealth in a country.

Following this approach, two large groups

of capital are identified as intangibles: human capital (HC) and structural or non human (SC) capitals. Structural capital, due its nature, will undergo the most changes in the case of nations.

$$NIC_n = HC_n + SC_n \quad (1)$$

Human capital encompasses knowledge, skills and personal development towards achieving objectives in a country (that is, internal conditions – IHC). It also includes cultural values, national labour market conditions as attraction of labor force and resource inflows from workers abroad (that is, external conditions – XHC).

The next stage is to establish the indicator scorecard in order to be able to determine the human intangibles considered in equation 1. Following the international intellectual capital model [11] two kinds of indicators are used: absolute indicators (AI), in monetary terms, and efficiency indicators (EI), on a percentage scale. In order to obtain the latter, when the variable does not have a percentage scale, variables have been rescaled assigning 100 to the highest value and 0 to the lowest. As a result, all the variables generated by the indicators have values ranging from 0 to 100 (minimum and maximum). That is, the maximum must coincide with the highest score obtained by the country with the highest value in the sample for the year in question, whereas the minimum will coincide with the countries that record the lowest scores.

Each intangible capital is obtained by the process presented for the first time for Skandia Navigator Model [7] and later modified in the method of Integrated Analysis developed by [10] and [3].

$$HC_n = \sum_{c=1}^m \left( AI \cdot \sum_{i=1}^k w_i PC_i \right) , \quad (2)$$

$$with \quad PC_i = \sum_{i=1}^k u_i x_i$$

Where human capitals (HC) are estimated by one or m absolute indicators (AI), filtered by k efficiency indicators synthesized into only one indicator, weighted in accordance with an objective weighting w. Thus, we propose an objective procedure to establish

the weights in the synthesis of the efficiency indicator. The procedure followed to allocate weights to efficiency indicators is based on the development of a principal component analysis (PCA) that makes it possible to assign weights to each indicator highly objectively. More specifically, bearing in mind that it is impossible to directly assign weights to each efficiency indicator, we proceeded to transform them into the same number of principal components (PC), where  $u_i$  are the characteristic vectors of each principal component and  $x_i$  the variables used to build the efficiency indicators.

Once these components have been obtained, we proceeded to build one indicator of efficiency by weighting each component in accordance with the percentage of variance retained by each ( $w$ ).

As a result, we can obtain efficiency indicators, to filter the absolute indicators, which are far from being as subjective as the person performing the analysis due to being based on a widely used technique in economics: principal component analysis.

Concretely, we have two different equations according available information (World Bank Group database) and model [17] [18] applied over  $n$  countries:

$$IHC_n = EE_n \cdot LI_n \quad (3)$$

$$XHC_n = RE_n \cdot \sum_{i=1}^2 (w_i u_i x_i)_n, \quad (4)$$

where  $x_1 = AR$ ,  $x_2 = AM$

IHC: Internal human capital.

XHC: External human capital.

EE: Education expenditure in constant prices, per capita terms. Source UNESCO.

LI: Literacy index (adjusted gross school enrolment). Source UNESCO.

RE: Non residential wage mass and remittances in constant prices, per capita terms. Source UN.

ER: Activity rate. Source UN.

AM: Adjusted migration. Source UN.

Finally, the international model of wealth, in per capita terms, proposed for  $n$  countries to analysis human capital as relevant factors, is the following:

$$GDP_n = \alpha + \beta \cdot ICH_n + \gamma \cdot IXH_n + \varepsilon_n \quad (5)$$

Where  $\alpha$  is a constant,  $\beta$  and  $\gamma$  are the structural parameters of internal and external human capitals, respectively and  $\varepsilon$  is a random variable uncorrelated, have mean zero, and a finite variance (white noise).

### 3. Results

We present in three next tables main results of applied model according equation 5. We estimate this relationship for all countries with data available (72 countries in table 1) in 2008. Also we study this relationship for countries richest (35 over 10.000 dollar per capita, table 2), and we compare this results with estimation of this equation with countries poorest (37 down 10.000 dollar per capita, table 3).

In all cases, the relationship is significant, but lost adjust is in regression 3, with poorest countries (see determination coefficient values or  $R^2$ ). All regressions have been tested successfully in relation with properties of random variable (specially, in homoscedasticity hypothesis due to cross section data).

In other hand, we estimate coefficients as elasticities considering mean values of variables. Then, we can compare effects in relationships.

Variables	Coefficient / (Elasticity)	T-stat
Constant	2417.866	3.326**
IHC	15.52433 (0.79888)	28.605**
XHC	17.88967 (1.16249)	8.818**
$R^2$	0.9409	

Source: own elaboration. Software: E-Views.  
Note: \*\* Significant at 99%.

In Regression 1 we show as external human factor is more relevant. Then, human factor is a intangible relevant to development of countries, and definitely labour market conditions and human flows (external human capital factor) are main factors in wealth.

In Regression 2 we present main results as of richest countries. Human capital is

significant as wealth factor. But, external human capital is more relevant. Then, we demonstrate our hypothesis: relationships between economic development and knowledge are stronger in richest countries (compare results of tables 2 and 3), and external factor is more important. Then these countries are receptors of human flows, it is favoring divergent growth.

Table 2. Regression 2: 35 richest

Variables	Coefficient / (Elasticity)	T-stat
Constant	7804.745	3.958**
IHC	13.23301 (0.69554)	13.078**
XHC	18.02334 (1.17921)	6.954**
R <sup>2</sup>	0.891	

Source: own elaboration. Software: E-Views.  
Note: \*\* Significant at 99%.

Lastly, Regression 3 confirms our results and hypothesis. Concretely, in countries poorest relationship between wealth and human capital is less important, and internal human capital is the only determining factor. External human capital is not relevant to wealth in poorest countries.

Table 3. Regression 3: 37 poorest

Variables	Coefficient / (Elasticity)	T-stat
Constant	612.214	2.631**
IHC	20.67752 (0.82082)	13.272**
XHC	-15.28057 (-0.89670)	-0.9304
R <sup>2</sup>	0.8386	

Source: own elaboration. Software: E-Views.  
Note: \*\* Significant at 99%.

#### 4. Conclusions

This work analysis the relationship between human components of intellectual capital and economic development, in terms of production, is a useful tool for planning the increase and flows of wealth.

Human components have been disaggregated in: a) external as market conditions, attraction of country and remittances and b) internal as qualifications of inhabitants and education investment.

The implementation of the model to 72 countries grouped in richest and poorest to conclude some common actions for development and other differentials. First, human capital and more specifically the skills of the inhabitants of the country is ensuring wealth in all cases. Thus, education is the first of the political safeguards of long-term growth. Hence seriously worry to national economic wealth a skilled emigration. Furthermore, one of the main differences between richest and poorest model applied is motivated from the labor market conditions. In the poorest case motivation factors remittances are saturated with negative sign, and therefore limit the wealth, while in the richest case is a factor that can contribute to reversing the long-term growth.

In conclusion, this model suggests a divergent international growth due to human factors. Countries more developed attract skilled workers from less developed countries. Then, human flows have inverse sense that expenditure in education. The rich one is richer with skilled human capital attracted from poor countries. These results are more relevant in crisis time, because the differences between incomes increase via public budget.

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# The Impact of the Economic Crisis on the Labour Law Reforms in Greece and Romania

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## Abstract

*This paper has a look at the latest developments in relation to the implementations of reforms in the labour laws of Greece and Romania. It concludes that that the tendency in the two countries has been to introduce amendments to their labour laws that leads to lower protection standards for workers and gives rise to questions in respect to their adherence to principles of democracy and fundamental social rights.*

**Key words:** Crisis-Labour law-Reforms-Greece-Romania

**Clasificare J.E.L.:** K31, J28, J50, J80

## 1. Introducere

Since the start of the economic crisis a clear tendency has been observed in the Member States of the European Union to introduce amendments to their national labour laws. The nature of these amendments varies in terms of their extent and their triggering mechanism. As far as the former is concerned, some Member States introduced fragmented reforms, whereas others opted for a drastic reformulation of the entirety of their labour law framework. When it comes to the impetus behind the changes, some Member States appear to have acted in order to render their economy more capable to adjust to the prevailing economic conditions. Other Member States, however, that had no option but to resort to external financial help to save their economies, have literally had reforms to their labour laws imposed on them. In

Greece, Portugal and Spain, the reforms were required as a consequence of the signing of Memoranda of Understanding between the respective governments of the Member States and the European Union, the International Monetary Fund and the European Central Bank, with the financial help becoming conditional, *inter alia*, on the achievement of specific targets, economic or otherwise. Similar conditions have been imposed on Romania, which has received financial assistance by the European Union and the International Monetary Fund. The Romanian government was requested, among others, to take the necessary measures to reduce its budget deficit and reform state-owned enterprises. To that end, significant amendments have been introduced to the labour laws of the country.

The aim of this short paper is to provide a snapshot of the latest developments as regards the implementation of reforms in the labour laws of Greece and Romania. It finds that that the tendency in the two countries has been to introduce amendments to their labour laws leading to lower protection standards for workers and gives rise to questions in respect to their adherence to principles of democracy and fundamental social rights.

## 2. Structural labour law reforms in Greece

The Greek Memorandum of Understanding of May 2010 on Specific Economic Policy Conditionality provides, amongst others, that:

“The government shall amend employment protection legislation to extend the probationary period for new jobs to one

year; reduce the overall level of severance payments and ensure that the same severance payment conditions apply to blue and white collar workers; raise the minimum threshold for activation of rules on collective dismissals especially for larger companies; and facilitate greater use of temporary contracts and part-time work”[13; p10].

As a consequence the Greek government has introduced numerous structural reforms in the labour laws of the country.

Various working allowances and benefits have been repealed and the minimum wage level in the private sector has been reduced by 22% for workers above 25 years old. For those workers over 25 that are unmarried and without any prior service and/or skills, the minimum base monthly and daily salaries are now €586.08 and €26.18 respectively. The minimum wage level for workers up to 25 years old has been reduced by 32%. Consequently, the minimum base monthly and daily salaries of that cohort that are unmarried and without any prior service and/or skills, are now €510.95 and €22.83 respectively. These reductions apply to both existing and newly hired employees. It should be noted that for existing employees, the reduction may be imposed unilaterally by the employer, with no requirement for the prior consent of the employee to be obtained. Additionally all wage increases awarded by law, collective agreements or arbitration decisions have been frozen until unemployment falls below the threshold of 10%. (Law 4046/2012)

Regulations in the private or public sector that provided for work tenure have been abolished, enabling as such the termination of these agreements by employers, as the latter are no longer required to rely on material grounds for the purposes of termination. (Law 4046/2012)

The maximum duration of successive fixed-term employment contracts has been extended from two to three years and the reference period during which the renewals can take place before the contract is automatically transformed into an infinite one, is extended as well, (Law 3986/2011). Furthermore, more flexible conditions for the regulation of working time in private undertakings have been put in place and agreements on working time flexibility have been facilitated.

The "principle of favourability" in collective bargaining no longer applies. As a consequence, company level agreements take precedence over any other more favourable national or sectoral agreements (Law 4024/2011). Collective bargaining agreements shall have a maximum duration of three years and a minimum duration of one year. Following their expiration, the terms of the collective bargaining agreements will continue to apply only for a period up to three months (reduced from to six months) and only for those terms which concern wage issues. If the three-month grace period expires and no new agreement is signed, all terms as regards allowances cease to apply, without the consent of the worker, except for those terms regarding base salary, maturity, child, education, and allowances for hazardous work. In this case newly hired workers will have to enter into individual arrangements with the employers. (Law 4046/2012)

Changes in the arbitration system have been introduced. Workers are no longer able to resort to arbitration unilaterally, but only following a mutual agreement with the employers to that effect and only concerning wage issues. (Law 4046/2012)

The entitlement to unemployment benefits is now subject to stricter conditions (Law 3986/2011). Additionally, the level of these benefits has been readjusted downwards, in accordance to the new minimum wage provisions of Law 4046/2012.

A potentially significant last minute development that should be reported, relates to the position that the European Committee of Social Rights, the main supervisory body to the Council of Europe Social Charters, has adopted in two decisions that were published on 18 October 2012. The Committee concluded that certain labour law reforms recently implemented in Greece under the Memorandum of Understanding signed with the European Union, the European Central Bank and International Monetary Fund, constituted a clear violation of workers' rights [Memorandum of Understanding of 2 May 2010 between Greece and the EU, the IMF and the ECB, p. 10].

The decisions came as a result of complaints to the Committee by two Greek public sector unions and concerned two measures adopted in 2010. The first, enacted



under Law 3899/2010, extended the trial period during which workers can be dismissed without notice to one year [Section 17 para. 5 of Law 3899/2010]. The complaint was registered on 21 February 2011 and the Committee found, that the measures relating to remuneration and working conditions contained in Law 3899/2010 of 17 December 2010 breached Article 4 (right to a fair remuneration) of the European Social Charter. The second measure, enacted under Law 3863/2010, cut the minimum salary for workers under 25 years of age to two-thirds of the national minimum wage, thus bringing young Greek workers below the poverty line of 580 euros a month [Section 74 para. 9 of Law 3863/2010]. The complaint was again registered on 21 February 2011, and the Committee concluded that Law 3863/2010 breached Articles 4 (right to a fair remuneration), 7 (the right of children and young persons to protection), 10 (right to vocational training), and 12 (right to social security) of the European Social Charter.

It should be noted that the decisions of the Committee are not enforceable. This, however, should not detract from the fact that they could still prove significant as the Committee could make recommendations to the Council of Ministers of the Council of Europe, which could then adopt a resolution calling on a member state to take corrective action. Additionally the decisions could be used by trade unions in Greece for the purpose of mounting a legal challenge.

### **3. Structural labour law reforms in Romania**

From 2008 until 2012 the Romanian Labour Code (R.L.C., Law nr. 53/2003, Published in the Romanian Official Monitor, Part I, number 72, February 5<sup>th</sup> 2003.) has been subjected to numerous “reforms”, but the most significant and the most complex was the reform that took place in 2011 (Law 40/2011). The first major modification of the R.L.C. is the extension of trial periods for new employees. Previously the trial period for executive positions was 30 days and for management 90 days. Law 40/2011 increased these trial periods from 30 days to 90 days (for executive positions) and from 90 days to 120 days (for management positions).

Article 31 previously stated that a contract could be terminated at the end of the trial period without any preliminary notice and without any reasons for the decision. Before the reform, university graduates were subjected to a trial period that could reach a maximum of 6 months. Following the reform, the first 6 months of employment are considered a trial period [article 31 paragraph (5) R.L.C.].

Article 33 of the previous Labour Code stated that a maximum of 3 employees at could be subjected to trial periods for the same position. The new regulation establishes a maximum period of 12 months within which the employer can sign trial contracts with more than one employee for the same position. The new Labour Code, then, does not set any limits as regards the number of trial employees for the same position. As a consequence, an employer could have 3, 4, even 10 trial employees for the same position.

Law 40/2011 (article I nr. 19) modified article 40 of the R.L.C. establishing the right for an employer to define individual performance objectives as well as the evaluation criteria without any limits. In article 52 R.L.C. a new paragraph was introduced allowing the employer to reduce the work program (from 5 days to 4 days) and the employee’s salary (proportionally) for economic, technological, structural or similar reasons [Paragraph (3), Law 40/2011 article I nr. 28].

A further change (Law 40/2011 article I number 30) relates to the automatic termination of the work contract when the retirement conditions are met. In the old Labour Code, when these conditions were met, the employee, should he/she wanted to terminate the contract, had to notify the employer of the relevant decision.

In the previous R.L.C., fixed-term contracts could not exceed a period of 24 months. The new law extends this period to 36 months [article 84 paragraph (1) R.L.C.]. The parties can sign 3 fixed-term contracts at most (this norm had the same form in the previous Labour Code). Also, the new Labour Code extends the situations when the employer can sign fixed-term contracts (modifications made by Law 40/2011, article I numbers 41, 42 and 43).

Article 88 R.L.C. establishes the temporary agent. This institution has been reformed in order for Romania to comply with EU Directive 2008/14/CE. In the previous Labour Code, the ‘assignment’ [‘Assignment’ means the period during which the temporary agency worker is placed at the user undertaking to work temporarily under its supervision and direction.] of a temporary agency worker could not exceed a period of 12 months. Such assignment could be extended but the total period could not exceed 18 months. Law 40/2011 increased the assignment period to 24 months and the total period to 36 months. The Labour Law Reform also extended the situations in which the employer can use a temporary agency worker. Also, the temporary contract can be terminated if the assignment is fulfilled or if the user undertaking chooses to dismiss the temporary agency worker. In the old R.L.C. the temporary contract could be terminated only when the assignment was fulfilled.

The previous Labour Code stated that the salary of the temporary agency worker could not be lower than the salary of the replaced employee. If the temporary agency worker did not replace any employee then the salary could not be lower than the salary of an employee who performed similar work. Now the temporary agency worker’s salary is subject to negotiation between the agent and the user [article 96 paragraph (2)]. The salary limits were revoked by the new regulation.

Before the reform, article 96 of the previous Labour Code established specific limits for trial periods. These limits have now been extended as a result of article 97 of the new R.L.C.

An interesting legal norm was article 98 paragraph (3). This norm stated that if the temporary contract reached its deadline and the temporary agency worker was still working for the firm, it would be presumed that the parties signed an undetermined-period contract. Law 40/2011 revoked this paragraph (article I number 55).

Former article 111 paragraphs (1) and (2) [now article 114 paragraphs (1) and (2)] stated that the maximum work time could not exceed 48 hours per week, including over-time. The work time could, in some cases, exceed that limit, on the condition that the average work time in 3 months would not exceed 48 hours per week. In the new R.L.C.

the weekly limit is the same, but the average is calculated over 4 months instead of 3 (Law 40/2011 article I number 60).

The R.L.C. “rewards” over-time with free hours in the next 60 days. Before the labour law reform, free hours were granted in the next 30 days after over-time. Also, former article 119 (now article 122) has a new paragraph [paragraph (3)] that states that during periods of reduced activity the employer has the possibility to grant free days to compensate future over-time in the next 12 months (Law 40/2011 article I number 62).

The previous R.L.C., in article 143 paragraph (5), guaranteed that in case of split holidays the employee must have at least 15 consecutive free days. The new Code [article 148 paragraph (5)] shortens this period to 10 consecutive free days (modified by Law 40/2011 article I number 69).

It should be noted that the Romanian Government enacted Law 40/2011 by means a special procedure, without any parliamentary debate, arguing that the new law simply transposed EU Directives 2003/88/CE and 2008/104/CE.

In the same year (2011), the Romanian Parliament adopted a new National Education Law (Law nr. 1/2011, Published in the Romanian Official Monitor, Part I, number 18, January 10<sup>th</sup> 2011). The Education Law contains a new legal norm with implications in the labour market.

Article 289 of Law 1/2011 states in paragraph (1) (in an approximate translation)that: “Teachers and research staff will retire at the age of 65”. Paragraph (2) establishes that retired teachers will not hold any management positions in the University. If a teacher reaches the age of 65 during his/her term in a management position then the term will automatically terminate. Also, a teacher who wishes to continue his/her activity may request an extension and sign a fixed-term contract (1 year) with the approval of the University’s Senate.

As it can be seen, to continue their activity teachers must sign fixed-term contracts (1 year long). But, these contracts are regulated by the Labour Code, which in art. 82 paragraph (4) establishes that the parties can sign a maximum of 3 fixed-term contracts. So, teachers can continue their

activity until they reach the age of 68 (signing 3 fixed-term contracts).

Previously, Law nr. 128/1997 (Published in the Romanian Official Monitor, Part I, number 158, July 16<sup>th</sup> 1997), provided that if a teacher reached the age of 65 he/she could request an extension, which, however, could not go over the age of 70.

The salaries are also different. In the old regulation, teachers that continued their activity after the age of 65 kept their previous salary and also benefited from a recalculation of their future pension. Now, if a teacher chooses to continue his/hers educational activity, he/she will be paid on an hourly basis, something that leads to reduced pay.

Obviously, under these conditions, teachers will choose to retire, rather than continue their educational activity. This could have negative effects, as valuable teachers will choose to leave the profession with all the negative consequences this could have for the educational system as a whole and, most importantly, the students.

Fortunately, in 2012 the (new) Government modified the National Education Law through an Emergency Regulation (OUG 21/2012, Published in the Romanian Official Monitor, Part I, number 372, May 31<sup>st</sup> 2012). This regulation introduces a new paragraph (6), at article 289 that states that notwithstanding the provisions of paragraphs (1), (2) and (4), if the University can not fill the positions with full-time teachers, it can decide to maintain the labour contract based on an annual academic performance evaluation.

#### 4. Conclusions

It can be observed that in both Greece and Romania significant changes in their labour law systems have been instigated as a result of the economic crisis. These changes impact on industrial relations and collective bargaining system, the rules governing individual and/or collective dismissal, the legislation in relation to working time and finally on fixed-time, part-time and temporary agency work with, *inter alia*, the introduction of novel types of contracts affecting in particular young workers.

What is also sadly observed is that, in both countries, the vast majority of reforms have had a negative impact on the rights of

workers and resulted to a deterioration of their protection, to the point that a valid argument could be put forward that some of the reforms are in violation of fundamental social rights. The almost inevitable outcome, then, of the reform process is the emergence of inequalities and insecurity, particularly as these reforms are implemented alongside other social security measures, such as pension and public sector reforms, reduction of job seekers allowances and salary cuts.

The most worrying aspect, however, of the discourse in relation to the reforms, is that that in both Greece and Romania, the introduction of the changes has taken place through procedures that do not respect their democratic traditions. It should be recalled that in Greece, the Memorandum of Understanding between the government and its lenders (the European Union, International Monetary Fund and European Central Bank), which is the document on the strength of which the labour law reforms were introduced in the country, was signed without the approval or even the consultation of the Greek National Parliament. Similarly, in Romania, the reform of the national labour code materialized through a law that was passed without any parliamentary debate, by invoking a special procedure. Only time will tell whether this blatant disregard of democratic procedures for the purpose of adopting measures that have such a profound impact on working relationships constitutes an exception to the rule or whether it eventually becomes the rule.

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## Challenges for the International Monetary System After the Financial Crisis

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### Abstract

*Financial crisis triggered in 2007 outlined once again the weaknesses and flaws of the current international financial system. In the mean time it created the opportunity for rethinking and redrawing its architecture in order to make it more flexible, more legitimate, more resistant to shocks and more effective in preventing and addressing financial crises. Based on these considerations our study aims, in its first part, to summarize the main flaws of the current monetary system. In its second part, the study will try to present the challenges launched to the system as a consequence of the crisis’ effects, describing possible actions and treatment options in order to address these challenges and flaws. In this way we intend to contribute to the ongoing debate on strengthening the international monetary system.*

**Keywords:** international monetary system, crisis, global reserve currency, seigniorage powers

**J.E.L. Classification:** F02, F33, F55

### 1. Introduction

The financial crisis highlighted once again the fact that the current international financial system has a number of flaws, which don’t allow it to be sufficient flexible and adaptable to the needs of its users. A systematic review of the specialized literature reveals many debates between the actors within the system, debates on how it functions. The basic truth is that nobody’s happy with the current international monetary system – which represents a set of rules, norms and institutions that govern the world currencies and capital flows across borders. The system must provide two main

public goods: an international currency (or currencies) and external stability. The set of conventions, rules and policy instruments comprises, among other things, the conventions and rules governing the supply of international liquidity and the adjustment of external imbalances; exchange rate and capital flow regimes; global, regional and bilateral surveillance arrangements; and crisis prevention and resolution instruments.

Due to the fact that these objectives are poorly achieved, there are three main general criticisms brought upon the system.

The first refers to the dominant position of the dollar as a reserve currency and its management by the United States. Most foreign exchange transactions and reserves are in dollars although the U.S. has only 24% of the global GDP (see chart no.1).

Chart no.1. Dollar share in total transactions



Source: The Economist

A disproportionate share of world trade is conducted in dollars. For many, dollar’s supremacy in commodity trade, in price fixing and in official reserves is sensitive and undesirable. Not only it fails to reflect the realities of the global economy, but make

others vulnerable to domestic U.S. monetary policy.

The second criticism is that the system favored the creation of vast foreign currency reserves, particularly by emerging economies. The world reserves rose from 1,300 billion (5% of global GDP) in 1995 to 8,400 billion dollars (14%) today [1]. Emerging economies hold two-thirds of the total. Most of them were accumulated in the past decade (see chart 2).

Chart no.2. Evolution of international foreign currency reserves



Source: The Economist

These huge reserves infringe economic logic, because they show that poor countries, which should have abundant investment opportunities in their own interest, they simply and convenient finance the richest countries, mainly United States. Such crediting has led to the precipitation of the financial crisis by reducing long-term American interest rates.

The third criticism is related to the size and volatility of capital flows. Financial crises have become more frequent over the past three decades [2]. Many politicians argue that a financial system in which emerging economies may suffer floods of foreign capital (like now), or sudden droughts (as in 1997-1998 and 2008) do not provide anymore a good framework and cannot be a good basis for a long-term growth.

Starting from this, our study aims that by covering specialized literature, to identify what was wrong within the international monetary system framework, to highlight the main flaws of its operation and identify what

are the challenges that lie ahead, in the near future. At the same time, we wish to point out ways and actions meant to improve future operation of the system.

## 2. What was wrong with the international monetary system?

The current international monetary system has taken shape in the years after the Asian crisis (1997-1998) and after the appearance of Euro in 1999. The debut its activity was marked by two major developments.

The first was the materialization of a U.S. dollar revitalization area, which includes the United States and a new key group of creditors that, unlike the previous phase of the system, became systemically important: namely, several emerging economies in East Asia - especially China and Gulf oil exporters. Dooley, Folkerts-Landau and Garber (2003) labeled this arrangement the "Bretton Woods II" [1].

The second development was the creation of a major monetary union with a currency, the euro, which despite some inherent weaknesses –“stateless currency”- quickly became a credible alternative to the U.S. dollar, but without threatening its central role in the IMS.

The current economic and financial crisis has strikingly shed light upon all the deficiencies of the international monetary system. There is a rich specialized literature that largely deals with these weaknesses. To summarize, the main failures of the international monetary system, which prevents him from providing the two main public goods, are:

### a) Systems' inability to provide a global currency that offers liquidity, stability and reliability;

The dollar maintained its status and remained the main reserve currency of the IMS (see chart 1) conserving "the exorbitant privilege" and leading to the manifestation in the system of the Triffin dilemma. Thus, a contemporary version of the Triffin dilemma is the statement that the issuer of the reserve has a tendency to create excess of liquidity in global markets, leading in this way the international currency to a long-term depreciation. This would undermine confidence in the dollar, which is the basis

for its active status of reserve currency. This may lead to future financial crises.

According to Kregel (2010), "the basic problem is not the particular national liability serves as the international currency that But rather the failure of year adjustment mechanism for efficient global imbalances" [2].

The role of the dollar as the main reserve currency, of trading and price fixing, is contested and therefore is stated that global economy cannot rely on the long run on any currency issued by a single country. Zhou Xiaochuan, the governor of China's central bank, caused a stir in March 2009 when he argued that the SDR should become a true global reserve asset to replace the dollar (Zhou, 2009)[3].

These criticisms are due to the discontent occurred among the countries that own reserves denominated in U.S. dollars, because of the earnings granted to the U.S. by the privilege of issuing and putting into circulation of the reserve currency.

It is estimated that from 1964 until now, U.S. won 916 billion dollars from the seigniorage fee (Feige), of which, 287 billions from foreign owners, and that in the last two decades U.S. won 6-7 billion dollars annually from this fee [4]. Another estimate is that from 2000, U.S. won annually 25 billion dollars from the seigniorage fee [5].

**b) The systems' inability to prevent massive international imbalances and to create preventive mechanisms to symmetrically adjust these imbalances;**

Before the crisis, within the system have manifested huge imbalances between the processes of saving and those of investing, which led to the so-called "savings glut" and "investment drought" (Bernanke, 2005 and IMF, 2005, respectively; Rajan, 2010).[6]

After the Asian crisis of 1997 -1998, a number of emerging countries led by China and, to a lesser extent, advanced economies, have accumulated an unprecedented volume of international reserves, either as a goal in itself (e.g. as a cushion against future uncertainties) or because of other internal and external policies (e.g. to limit exchange rate appreciation) (see chart 2).

Consequences of the crises of the 90's, have led to the decision of many Asian and Latin American countries to respond to them

through adopting policies to strengthen their external balances. Also, other emerging countries have deliberately an export based growth strategy that led to trade and currency surpluses which along with foreign currency surpluses recorded by the oil-exporting countries, as a result of the increase in oil prices, these were invested in financial assets denominated mainly in dollars and gave counterparty to increase in the U.S. deficit. This phenomenon has led to the manifestation of "Lucas paradox": the emerging markets have become net exporters of capital to advanced economies, which is contrary to their interest for long-term economic development. Emerging countries finance at low prices the deficits of the countries that issue reserve currencies and borrow from them at high interest rates affecting thus their future development.

**c) The limited capacity of the system to prevent and mitigate financial excesses and the destabilizing volatility of capital flows;**

Within the system occurred intense and huge capital inflows, most of them speculative, acting pro-cyclical, flooding the markets in the periods of boom and disappearing in times of crisis. IMS failed to build appropriate mechanisms and instruments enabling mitigation and reducing volatility of these flows of capital, which led to an inefficient allocation of financial resources with consequences for economic growth and workforce occupancy. The liberalization of financial and capital market has exposed countries to more and more risks, and, in this crisis, facilitated the rapid spread of the crisis around the world.

**d) Major deficiencies in regulation and supervision of financial and monetary markets;**

Crisis revealed both failures of the national, regional and global regulatory structures and of the regulations issued and enforced by them. In this crisis, the regulatory performance of many central banks was far from being pragmatic and effective. They failed to properly implement regulations at their disposal, and did not report to governments in due time, the need for additional regulations or the enforcement of governance when the existing authority was not adequate. The regulation is generally part of the political processes and therefore

failures in the public governance lead to failures within the regulation framework.

Regulatory deficiencies negatively impacted the supervision process, which failed to detect and operatively correct deviations from compliance or identify early alarm signals on the occurrence of some processes and phenomena that threaten system stability.

Crisis also showed significant failures in the process of coordination and collaboration in the field of regulation and supervision, both nationally and regionally but also globally.

**e) An inappropriate governance of the IMS according to the new positions held by the world states in the global economy;**

The manifestations of crisis have shown an inadequate response of the international financial institutions to crisis and their failure to take preventive and resolute measures in order to prevent and address the crisis. This was due to problems of governance of these institutions that affected their mandate, accountability, efficiency, credibility, transparency and legitimacy.

Most countries participating in IMS and especially the major emerging economies, demand acquiring new positions within the debate and decision-making bodies of the international financial institutions such as G20, the Financial Stability Board (FSB), Basel Committee, International Monetary Fund (IMF) and World Bank, positions that reflect the increased role and position of these countries in the global financial and economic activities. They denounce the insufficient representation, the lack of decision-making power and vote representation allocated to them within these global institutions and claim a stronger voice in the governing bodies. From these devolve the many failures in the activity of the international financial institutions. All this requires a firm and urgent rethinking, restructuring and reforming of the financial and economic governance in the IMS that will grow and strengthen the legitimacy, representativeness, responsibility, transparency and the action capacity and efficiency of the institutions. There are many other IMS vulnerabilities, but synthetically presented deficiencies in this section are the

main areas where action must be taken now and in the future.

In order to re-give to the international monetary system the ability to achieve its objectives it is necessary to ensure both a balanced and sustainable growth and also financial stability at national, regional and global levels.

**3. How to build a more stable and efficient international monetary system?**

IMS failures in the prevention and crisis management launch a series of challenges for restructuring and reforming it. The most important of these challenges include:

- Creating a coin of reserve and liquidity in order to remove the disadvantages and limitations of current reserve and liquidity currencies in terms of stability, acceptability and confidence;
- Reducing the volatility of exchange rates and their negative consequences on trade and financial flows;
- Identifying a mechanism for ordinate exit from strong global imbalances strongly affecting system stability;
- Finding a mechanism of a more symmetrical adjustment between countries with deficits and those with surpluses that won't negatively impact workforce occupancy and aggregate demand;
- Improving regulatory and supervisory framework of the system both individually and regionally as well as globally;
- Reforming economic and financial governance in the sense of making it more legitimate, more representative, more transparent, more responsible, more efficient and adaptive.

The solutions and options for actions in these challenges are highly sought after, both in academic debates and in the forums of the national and international bodies. The establishment of a new global reserve system is a possible option and proposals in this regard are numerous (Davidson 2002, 2006, Mundel 2005, Bonpasse 2007, Stiglitz and Greenwald 2008, Stiglitz 2009, UN Commission 2009, etc.)[7]. There are supported ideas such as:



- Creation of a global currency and a global central bank - disconnected from a single nation - to issue this currency and make it stable on a long-term;
- SDR transformation into a global currency with public and private use;
- Establishment of a multipolar monetary system based on the currencies of the main world economies without the primacy of a single one;
- Creation of regional monetary arrangements (the euro area, the Chiang Mai Initiative).

All these proposals have both supporters and critics. Putting them into practice depends on the political will of states and on the strong states willingness to give up their sovereignty and privilege given by the quality of issuer of a reserve currency. A monetary system that is based on a strong and stable currency, widely recognized and trusted, solves the problem of exchange rate volatility and determines a reduction in currency and trade imbalances.

Finding mechanisms and instruments enabling ordinate exit from global imbalances and ensure a more symmetrical adjustment between deficit and surplus countries is a difficult endeavor. These mechanisms can be implemented and can deliver results in the medium and long term. One possible option in this respect could be fiscal and budgetary consolidation in developed countries and especially in the U.S. and Europe, accompanied by a rotation of domestic demand in emerging economies, especially in China [1]; replacing exports as the main engine of growth with a focus on domestic consumption, together with an increased flexibility of the exchange rates. Furthermore, Europe and Japan should implement deep structural reforms, process which already started. These actions should be coordinated otherwise they will not have the expected result. Past experience suggests that coordination and collaboration between major economies is often deficient and difficult to be materialized. The crisis has shown that due to interconnectivity and globalization, the regulatory and supervisory errors are quickly transmitted globally. Thus, global problems must be addressed with global solutions that require collaboration

and coordination among national, regional and global regulators and supervisors. Global problems need global regulations and oversight internationally consolidated. Global regulations at economic level should be correlated and coordinated with those at financial and monetary level. Between global economic and financial governance should be provided closer ties in order to enable them to be legitimate, representative, transparent, accountable and effective.

Economic and financial governance can be reformed through openness towards as many participants as possible to the debate and decision-making processes within the international bodies and economic and financial institutions. Rethinking of the framework for allocation of participation quotas, of voting rights and decision-making in the IMF, Basel Committee, so they allow a wider participation and democratization of processes and relationships within these institutions.

Sustaining the measures and steps initiated by these organizations for enhancing stability of the international monetary system decisively depends on a more equitable representation of all countries, and not only of the large or traditional economies, within the international financial institutions. Within the global financial and economic governance, the shaping of the policies should be made by an incentive system meant to determine system actors to adopt those measures and actions that help the system to effectively and promptly respond to shocks; to allow automatic stabilizers to be put into actions when imbalances occur. These were, in summary, in our opinion, the main challenges that the IMS faced in front of the financial crises and the major options for responding to these challenges. Of course, there are many other challenges and ways to address them, but the space reserved for this study doesn't allow us to extend the analysis.

It is certain that together with the manifestations of the crisis and the pressures imposed by it upon all the economies, opportunity arose to rethink and restructure the international monetary and financial system, an operation that is very necessary and timely in order to ensure its better functioning in the future. The faults and errors recorded by the system affected

everyone, so everyone should work together and participate in restructuring and reforming the IMS.

#### 4. Conclusions

The global economic crisis of 2008-2010 triggered the most heated and intense debates on the current situation of the international monetary system. The present study is trying to summarize and present the main deficiencies of the system and identify the main challenges launched to the system by the current crisis. The study highlights five major system malfunctions and identifies six major challenges launched to the system. It also presents some solutions to address the challenges launched. It is noteworthy that the main problem of the monetary system is the inadequate functioning for the global foreign currency reserve system. Starting from this point, the main challenge of the system is represented by the restructuring of the global currency reserve system. Providing the system with a currency with superior qualities as a global reserve currency, disconnected from one state or another, would prove it with more predictability and stability, would avoid exchange rate fluctuations and contribute to reducing and adjusting the major currency and commercial imbalances.

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## The Development of International Trade in Services: the Case of Lithuania as Emerging Market

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### Abstract

*International trade in services more and more is recognized as a sector with a lot of opportunities to be expanded in the international level market. Lithuania as one of countries which is perceived already as an emerging one has a lot of challenges to think about ways and means how to expand economy of services, entering abroad, what services could be supplied in neighbouring countries, other EU countries or even overseas.*

*Emerging countries are specific one as they grow their economy in very fast rate and create a competitive environment not only between the same countries, but also for developed economies.*

*The specific of international trade shows that transport and travel usually compound the structure of export of service. However findings of the survey shows the Lithuanian challenges to be approved as one of the fastest growing services to be sold abroad economies.*

**Key words:** international trade in services, development of trade, emerging market, Lithuania

**J.E.L. classification:** O14, M16, F15.

### 1. Introduction

Emerging markets meet the large interest as they undergo the financial and economic structuring recently, takes the experience of developed economies and are able to enter to the same strong economic phase as developed countries [1]. The most difficult years of the global financial crisis showed the flexibility of international trade in services

comparing to trade of goods. Even in export of transport or travel suffered from decreased demand [2], international trade of business consultations, ICT (information and communication technologies), and other knowledge intensive business services were still very important for majority of business spheres at the international services market.

As deeper recession at the end of 2012 is expected for such emerging countries of Europeans Union, as Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia [3] its very urgent to analyse the possibilities to keep the balance of international trade in services, to prevent possible obstacles for one or other services export. Of course, here is no chance for international trade in services to reach the level of trade of goods, as former makes about one quarter of world trade of goods [4], but grow of international trade in services is rather optimistic. Researches on trade in services [5] have confirmed that infrastructural services (e. g. transportation, communications, and financial services), education, health, recreation, and other professional services represent approximately 38.8% of world's trade. Services make up a major portion of many national economies, ranging from 39% of gross domestic product (GDP) in a country such as Nigeria to 89% of GDP in economies such as Hong Kong (China).

The research problem is grounded on questions: what is a specific of emerging markets? What is composition of international trade in services in CEE by focusing in Lithuanian international trade in services as one of the emerging CEE countries?

The goal of the paper is to define the specifics of Lithuania as one of the emerging

markets trying to develop the international trade in services.

The methodology is scientific literature analysis, statistical descriptive analysis and generalizing.

The structure of paper is as follows. *Section No. 2* presents the specifics of emerging markets, its definitions, and characteristics. *Section 3* describes the international trade in services in a part of emerging countries which located in CEE. Main indicators of international trade in services are estimated on the basis of comparative analysis. International trade in services of six emerging CEE as Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia is analysed. For comparative analysis four rest CEE as Bulgaria, Germany, Romania and Slovenia on the ground of employment in services sector, balance of international trade in services, composition of international trade in services also are estimated. A specifics of international trade in services of Lithuania as one of the emerging countries of CEE and forecast for Lithuanian economics is discussed in the *Section No. 4*. Conclusions of the research and summarizing end the paper by *Section No. 5*.

## **2. Emerging markets specifics**

Recent ten years the attention to emerging markets both from the point of view researchers and practitioners is increasing. Emerging markets comprise 80% of the world's population and about 75% of their trade growth in the foreseeable future according to the U.S. Department of Commerce [6]. Emerging markets are the markets in a transitional phase between advanced and developing markets that develop very fast.

Development processes were influenced by transformations in geopolitical and economic terms, in the location, organization and distribution of production. The main factors, that distinguished emerging markets from other are country's growth rate in addition to the size and openness of its economy, the degree to which it is integrating within the global marketplace, strength of its political, legal and financial institutions, the average level of income per citizen as an indication of how far a country's standards of

living are improving and whether the middle class is growing [7]. Four characteristics discussed by Lasserre [8] are useful in describing emerging markets that exhibit: 1) a high economic growth; 2) an increasing development of a middle class; 3) a high degree of infrastructure investments; 4) opening of their market to international services and goods trade and investment. As the object of this article is international trade in services, it should be stress that the export of commercial services in both share of world trade and value has steadily increased every year between 2000 and 2008. Among the three broad commercial services categories (transportation, travel, and other commercial services) the commercial knowledge intensives business services is by far the largest and also the fastest growing category. In the 2000 – 2009 period, other commercial services categories, which include software services, expanded by 12%, while transportation and travel services were up by 8% and 7% respectively [5]. As overall international trade is still dominated by industrialised countries but the weight of emerging countries grows very fast.

In 2001 Goldman Sachs first identified four emerging giants and used the term “BRIC” to describe Brazil, Russia, India and China, which are seen as the next generation of economic superpowers [7]. Five countries, including South Africa, went through major institutional transitions and changes in their economic structure in the recent years. But different authors [8; 9] extended emerging countries list by including Central and Eastern European (CEE) countries, also called the transition economies. As number of researchers has focused on the BRICS countries, there are fragmented researches on emerging CEE international trade in services issue.

## **3. International trade in services in CEE emerging countries**

The EU is the world's largest trader in services. The EU accounted for 27.7 % of exports and 24.1 % of imports of services [10].

The global financial crisis hit the EU's external goods trade much more than its trade in services. Between 1999 and 2008, the volume of EU Member States' exports of

both goods and services increased on average by about 5.5 % per year. In the exceptional circumstances of the global economic turbulences trade in services was more resilient than trade in goods. This can be explained by the non-tangible nature of services which cannot be stored, lower intermediate consumption thus reducing dependence on the availability of financing, and a possible increase in the outsourcing of services after the onset of the crisis in some countries and sectors. As in previous years, the absolute growth rate of GDP was lower than that of international trade in services.

Almost 70% of employed persons in the EU27 worked in the service sector in 2011 compared with 62% in 2000 [11]. This argues that services sector still has a lot of opportunities for development. It could be one of the reasons for services economies grow. The second is – the consequence of global financial crisis, as statistics shows, that four of five who loosed a job during 2008-2010 were from industry sector, one – from services.

Analysing situation in CEE emerging countries, we can see that mean of employment in market services overtake non-market (Table 1). International trade in services both globally and in EU area grows rather stable (Table 2). Export of services from all EU 27 countries grew from 2006 to 2011 28% and by 7.5% during last year

(2011). Import for services also grows, but only by 3.7% that’s twice less than export.

Table 1. Employment by economic activity, 2011, % from the total employment

	Market services*	Non-market services**
<b>EU27</b>	<b>39.4</b>	<b>30.4</b>
<i>Emerging CEE (EU members)</i>		
Czech Republic	35.5	23.1
Estonia	37.2	25.8
Hungary	37.7	26.7
Latvia	40.9	26.0
Lithuania	39.4	27.5
Poland	33.9	22.8
Slovakia	34.9	24.7
<i>Rest of CEE (EU members)</i>		
Bulgaria	39.0	22.4
Germany	39.8	30.3
Romania	26.3	16.3
Slovenia	35.8	24.0

Source: Labour Force Survey, 2012

\*Market services: (NACE Rev. 2 section G-N) Wholesale and retail trade; Transportation; Accommodation and food service activities; Communication; Financial and insurance activities; Real estate activities; Professional, scientific and technical activities; Administrative and support service activities.

\*\*Non-market services: (NACE Rev. 2 section O-U) Public administration; Education; Health; Arts, entertainment and recreation; Other services activities; Activities of households as employers; Activities of extraterritorial organisations.

Table 2. International trade in services in CEE in 2006-2011 (EUR billion)

	Credits			Debits			Net	
	2006	2011	2010-11 growth rate %	2006	2011	2010-11 growth rate %	2006	2011
<b>EU-27</b>	<b>452.4</b>	<b>579.5</b>	<b>7.5</b>	<b>381.4</b>	<b>470.4</b>	<b>3.7</b>	<b>71.0</b>	<b>109.1</b>
<i>Emerging CEE (EU members)</i>								
Czech Republic	11.3	16.6	5.1	9.5	13.9	8.4	1.7	2.7
Estonia	2.9	3.9	15.0	2.0	2.7	27.1	0.9	1.3
Hungary	10.9	15.6	6.3	9.5	12.4	5.2	1.4	3.2
Latvia	2.1	3.2	14.9	1.6	1.9	11.4	0.5	1.3
Lithuania	2.9	3.8	20.7	2.0	2.7	23.8	0.9	1.1
Poland	16.4	26.6	7.5	15.8	22.2	-0.7	0.6	4.3
Slovakia	4.3	4.8	8.0	3.8	5.1	-0.4	0.5	-0.4
<i>Rest of CEE (EU members)</i>								
Bulgaria	4.2	5.4	4.7	3.3	3.1	-0.9	0.9	2.3
Germany	149.5	190.4	6.2	178.3	212.0	6.5	-28.8	-21.6
Romania	5.5	7.4	11.0	5.5	7.0	-2.6	0.0	0.4
Slovenia	3.6	4.8	4.0	2.6	3.4	1.9	1.0	1.4

Source: European Commission Statistics, 2012 [12]

Countries that are described by Emerging

European Monitor as emerging ones grew

their export of services from 5 to 21% per year, a mean is 11% (a mean is calculated from seven countries described as emerging). The import by the same CEE emerging countries grew to 27% and a few of countries decreased (Poland, Slovakia). A mean of grew of import by emerging CEE during 2010-2011 year is also 11%, while the rest CEE countries import grew mean is 1%.

Composition of international trade in services shows that the largest part of exported services is made by transport, after than – by travel, and by other services (Table 3). Among the service categories for which total world figures are available *other services* had the biggest share (51 %), followed by *transportation* (25 %) and *travel* (24 %). The sharp decline in the EU’s international trade in services due to the global financial crisis in 2009 did not affect all service sectors to the same extent. The highest reduction in exports and imports was recorded in transportation (falling by 19 %

and 21 %), because of its close link with international trade in goods. This sector contributed most to the overall decline in the EU’s international trade in services with the rest of the world. External trade in financial, other business services and travel also decreased. At the same time, imports and exports of communication services and computer and information services continued their steady growth despite the turbulent global situation. An interesting development was recorded in construction, where EU exports fell by 5% and imports again rose sharply (by 17% after 25% in 2008). Analysing the structure of EU, CEE, emerging countries of EU, the same situation could be developed – structure of export is made by three services classes: transport, travel and other (communication, construction, insurance, financial, computer and information, royalties and license fees, other business, personal, cultural and recreational, and government) services.

Table 3. Composition of international trade in services in CEE in 2010 (export, %)

	Transportation services	Travel services	Communication services	Construction services	Insurance services	Financial services	Computer and information	Royalties and licenses	Other business	Personal, cultural, recreational	Government services
<b>EU-27</b>	<b>24</b>	<b>15</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>30</b>	<b>1</b>	<b>1</b>
<i>Emerging CEE (EU members)</i>											
Czech Republic	24	31	2	5	1	0	6	0	30	1	0
Estonia	39	24	4	5	0	2	5	0	19	0	1
Hungary	19	28	2	2	0	1	6	5	28	7	1
Latvia	52	18	2	2	1	1	5	1	17	1	0
Lithuania	61	25	2	2	0	0	1	0	8	1	0
Poland	27	29	2	4	1	2	5	1	29	1	0
Slovakia	31	40	4	3	1	1	5	1	14	1	0
<i>Rest of CEE (EU members)</i>											
Germany	24	15	2	5	3	5	7	6	31	0	2
Slovenia	26	40	5	3	2	1	3	1	18	1	0

Source: Trade in services EBOPS 2010 – Trade in services by service category, 2012 [13], Services export trends in Lithuania, 2012 [14], International trade in services, 2012 [15], Trade statistics, 2012 [16]

OECD statistics does not provide statistics for Latvia, Lithuania, Bulgaria and Romania; as well information about EU 27 also is obtainable only from European Commission Statistics. Thus composition of export of services should be provided from other issues. Latvia and Lithuanian statistics provide this data on foreign trade;

unfortunately, there is no data about Romania and Bulgaria, latter entries to EU.

#### 4. International services trade specifics in Lithuania

Lithuanian services export, as we have seen in the Table 1, from Lithuania was the

highest one comparing to other CEE emerging countries. Latvia, Estonia and Romania also grew their export of services, but Lithuanian was the highest [17].

Unfortunately, Emerging European Monitor forecasts only export of goods for Lithuania, not for services (Table 4). This approves that interest and attention to international trade in services is rather

unrighteous. Former members of EU already established the normal statistics accounting for international trade in services, but Lithuania – not. Even if international trade in services makes only one quarter of export of goods and services, recent changes in economy shows, that international trade in services has a lot of opportunities to be valued.

*Table 4. Macroeconomic forecast for Lithuania*

	2010	2011	2012	2013
Population, million	3.3	3.3	3.3	3.3
Nominal GDP, LTL billion	95.1	106.0	111.4	116.5
GDP per capita, US\$	10 972	12 909	12 459	12 564
Real GDP growth, % change y-o-y	1.4	5.9	2.3	1.4
Industrial production index, % y-o-y	6.6	7.9	3.0	7.0
Budget balance, % of GDP	-7.1	-5.5	-4.7	-3.9
Consumer prices, % y-o-y	3.8	3.4	3.0	3.5
Goods imports, EUR billion	16.9	21.7	23.2	24.6
Goods exports, EUR billion	15.7	20.2	21.3	22.6
Balance of trade in goods, EUR billion	-1.3	-1.5	-1.9	-2.0

Source: Emerging European Monitor, 2012 [18]

Analysing the foreign trade in services, as % from GDP, Lithuanian trade integration overtakes the mean of EU (Table 5). The ration of services export and import mean with GDP is 10.4 (mean of EU 4.2). The same situation of foreign trade integration is identified with other CEE emerging countries. The rest four countries what are not defined as emerging CEE, also overcomes this mean.

*Table 5. Foreign trade in services in CEE emerging countries, % from GDP*

	Ratio of goods export and import mean with GDP, %	Ratio of services export and import mean with GDP, %
<b>EU27</b>	<b>12.9</b>	<b>4.2</b>
<i>Emerging CEE (EU members)</i>		
Czech Republic	63.0	9.8
Estonia	76.3	20.7
Hungary	74.4	13.9
Latvia	47.8	12.5
Lithuania	68.2	10.4
Poland	39.0	6.6
Slovakia	79.9	7.1
<i>Rest of CEE (EU members)</i>		
Bulgaria	55.1	11.1
Germany	40.3	7.8
Romania	35.7	5.3
Slovenia	59.9	11.5

Source: Statistics Lithuania, 2012 [19]

## 5. Conclusions

As the services sector is becoming as the major source of GDP in the most of the developed economies (e.g., USA, Western Europe, Australia, which account for approximately 80% of the world's trade), the volume and value of world trade in international trade in services are set to become even more dominant in the world economy, as well economy of emerging CEE countries. As country's market openness to international services and goods trade and investment is one of the major features of the emerging markets, as well economic growth, development of a middle class and infrastructure, the Lithuania, as an emerging CEE country resound all those factors.

Findings of the statistical data analysis showed that Lithuania as a trader of international services is similar to other CEE emerging countries and further development of services in order to gain larger part of international services market is very urgent. Transportation and travel services make the largest part of export. Business IT services and financial services have big opportunities for growing. It should be mentioned that in recent years Lithuanian services market became attractive for global IT and financial companies (e.g., “Barclays”, “Western Union”). During two years “Western Union”

and “Barclays” opened their subsidiaries in Vilnius, capital city of Lithuania, and created more than 1000 workplaces for high qualified IT and financial sectors employees. Other services such as insurance, construction, communication services still have a lot of challenges, as well opportunities to be developed abroad. These opportunities emerge with ambitions of Lithuanian services to compete globally, to create more valuable products as well Lithuanian governmental focus on creation of business services clusters, science and technology parks.

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## Corporate Governance for the Southeast Europe Banks

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### Abstract

*Corporate governance weaknesses within the structure of the companies and banks led to the assuming of higher risks, offering unjustified incentives for managers, and board directors got the tendency to value short-term benefits despite on-going performances in the long run. The crisis arrived in the Southeast European Countries from the outside; it shaken the banking system, but the consequences were less intense than in the occidental countries. However, the crisis offered the opportunity to reconsider the importance given to the corporate governance, on regulations and sustainable banking system.*

**Key words:** corporate governance, banking system, crisis, regulation.

**J.E.L. Classification:** G01, G39, M14

### Introduction

Global crisis affected more or less all countries around the world. One of the causes was the investments whose assets acquired from home loans granted to people who could not afford to pay them. The roots of the crises proceeded from: monetary policies, real-estate bubble, subprime lending, easy credit and with uncertain conditions.

The present economic situation determines the companies to search for solutions to continue their activity in optimal conditions to avoid bankruptcy. The economic instability make some measures necessary, as the strict control of all the economic operations, a responsible resource

management, filtering and lowering the costs, within the possibilities, and the adjustment of the strategies to the new market conditions [11].

Global crisis has shown, moreover in the US and Europe, both on national and international level, the insufficiency of regulations in terms of risks control. One of the reasons that facilitated crisis amplification is corporate governance failure. [1]

Corporate governance, conformity, risks management and compensations for executives became subjects of interest in enquiring the reasons for growth of the crisis.

The failure of corporate governance seems to be a key issue that facilitated the development of the crisis.

### General concepts about corporate governance

First, it is necessary to clarify what corporate governance means, to explain its benefits and the reasons for corporate governance failure.

Corporate governance represents the manner in which corporate entities are exercising the power. Managing a business means taking decisions, choosing the adequate strategies that will have consequences beyond the company itself.

There are several aspects that contribute to a good practice in governing, either at the company's level, or at national echelon. Many authors strive to identify those indicators of good practices in governance, in order to achieve essential meaning in analysis, thus enabling an accurate breakdown of the situation [12].

Since the beginning of capitalism, corporate governance considered several inquiries, such as designating the responsible with directions to get, the beneficiaries, the right person for choosing and controlling the managers and, which opposing powers will allow regulating the practice.

Stakeholders, meaning the capitalist owners, managers, employees, community have different interests to protect. Governance refers to the behaviour between management and directors, the interaction between governing bodies and management, the connections between the company and shareholders or other players on the stock market, and relations between the company and stakeholders.

The Institute of Internal Auditors defines governance as “the combination of processes and structures implemented by the board in order to inform, direct, manage and monitor the activities of the organisation toward the completion of its objectives”. [2]

In order to ensure the success of corporate governance, the organizations should set some minimum requirements:

- The existence of an internal control system;
- The assurance that the internal control system works;
- The board of directors empowerment towards monitoring the system/process control;
- Describing local government structure within a framework, namely a COSO/COCO model.

The non-management shareholders are the most direct beneficiaries of the corporate governance. The greatest advantage of corporate governance is efficiently allocation of funds to its most productive uses. [2]

The crisis offered the opportunity to the financial institutions and banks to assess the corporate governance procedures, to determine their role in crisis and learn from the mistakes they have done in the past. The inquiry extended internationally, from the countries directly involved in the collapse, towards developing countries, emerging markets and transitions economies. Assessment continued with the banks in Southeast Europe. In fact, governance was a serious issue regarding the integration into European Union and in the international banks party.

The European Bank for Reconstruction and Development and the International Financial Corporation kept the Corporate Governance of Banks from South East Europe convention on 16th of June 2011. [3]

At the event attended representatives of the World Bank, Global Corporate Governance Forum, senior officials in National Banks and other organisations. Together, they highlighted the lessons from the financial crisis, discussed the best international practices in bank governance, drawn recommendations and recovery plans for the countries in the SEE region. They also reported the weaknesses of the internal control in the region, audit and risk management.

The result of the Conference was reviewing and endorsing a Policy Brief including advice, in order to qualify group practices, disclosure and risk management practices. Their most challenging goal was to understand the differences between local and foreign banking markets and making recommendations to the circumstances and needs of SEE. The aim of the Policy Brief is to use the best international practice within SEE.

Its recommendations build to a large extent upon the BIS Basel Committee on Banking Supervision (BCBS) Principles for Enhancing Corporate Governance (2010) and also upon the BIS Enhancing Corporate Governance for Banking Organizations (2006). [4]

## **Banking system in the Southeast Europe Countries**

Trying to explain the Banks present in the SEE, can be said that they show higher foreign ownership, the equities markets are small and emerging, and almost all banks are closely-held. There are stock exchanges in every of these countries, but the liquidity on them is usually extremely limited. Therefore, banks provide financing to businesses. Banks are ensuring the financial intermediation.

Most of them are commercial banks whose primary purpose is being deposit-taking and loan-making activities. They do not use sophisticated financial instruments; many of them are small, few listed on the local exchanges.

The SEE countries passed from a central

planning to the market-driven economy with a strong restructuring of the banking sector and strong development of new banking institutions. State ownership decreased a lot in most of the countries in the area.

Foreign banks came in the SEE as strategic investors, bringing stability to the banking system and transferring knowledge from the most developed markets.

Foreign banks subsidiaries came with a long history in compliance and introduced the corporate governance practices and bank regulations from their home countries experience. They had to face both with local and parent requirements.

In Albania, the most significant financial intermediary is the banking system. Households' deposits compound the asset structure of the banks which focus on lending, primarily, to the private sector.

The supervisory authority of the banks, branches of banks and non-bank financial institutions is the Bank of Albania. Its purpose is to implement and develop best policies and practices in the area of licensing, regulation and supervision of banking/financial services in the Republic of Albania, to ensure the reliability of the entire banking system and to reduce the risk of loss to the depositors.

At the end of 2011 in the Federation of Bosnia and Herzegovina, there were 19 banks (18 banks with majority private ownership and one group with majority state ownership).

The Banking Agency of the Federation of BiH prioritised the directions for the banking system. One of the priorities is to implement activities through its authority, consolidating control on the state level. Another priority is to use the measures and activities within its powers to control and mitigate adverse effects to the banking sector of the FBiH caused by the global financial crisis. Other actions refer to proceeding with continuous banks' guidance both local and international examinations, focusing on targeted assessment of key risk segments of banking operations and work on continuing education and training of staff.

In Republika Srpska of Bosnia and Herzegovina, the Banking Agency of Republika Srpska's key strategic objective is maintaining stable and durable its banking system, improving its security, structure and

legal administration. Another goal of the Agency is to achieve the banking regulation harmonization with the European Union provisions and international standards for banking operation.

In 2011, there were 37 credit institutions operating in the Republic of Croatia: 31 commercial banks, one savings bank and five housing savings banks.

The Bulgarian National Bank (BNB) is in charge with custody of Bulgarian credit institutions and keeps the banking system stability. In 2011, the supervisors staff of the BNB monitored and assessed the adherence of credit institutions and non bank financial institutions to rules and practices of combating money laundering terrorist financing and financial crimes.

The Croatian National Bank implemented an Act on the CNB, promoted and safeguarded its reliability and strength and implemented other laws on its competence.

The Act on the CNB regulates activities of supervising and overseeing the credit institutions and credit unions in order to maintain confidence in the Croatian banking system.

As the Macedonian economy continued to improve in 2011, in the banking system have maintained safe and high solvency and capitalization ratios.

The National Bank of the Republic of Macedonia is focusing strategic guidance also on development of risk-based supervision, determining the amount of money demand according to the fund's overall risk profile; strengthening the Supervisory agency's capacity for analysis and licensing of banks' internal models for risk management.

The Montenegro's banking system is stable in 2011. Banks adopted a restrictive loan policy, sale or displacement of a part of the loan portfolio to factoring companies or parent banks. The normative banking activities focus on the law improvement and the harmonisation with EU regulations.

Central bank is supervising the Montenegrin banking system emphasising the comprehensiveness of risk assessment in banks, most on the credit risk which is dominating and overseeing the capital adequacy assessment process.

Furthermore, the procedures and processes used in preventing the financial crimes

(finance terrorism, money laundering) intensified.

In 2011, in Romania are 33 domestic credit institutions and a number of 8 foreign banks branches. 26 of credit institutions have majority foreign capital (83% in entire banking system assets) while other 7 credit institutions include most national capital.

In the difficult economic conditions both domestic and international, Romania remains in financial stability since the beginning of the global financial crisis.

Credit institutions took their own measures to in order to countervail the risks from the banking sector, such as consolidation of solvency, provisioning and liquidity levels. The National Bank of Romania suggested security measures against the impact of crisis: prudential regulation, supervision and adequate control of risks in the banking system. The results were controlling the liquidity and capital adequacy levels and monitoring the banks financial and economic conditions.

In Serbia, all 33 commercial banks are operating in 2011 as separate legal entities; no branching allowed. Serbian banking sector is fragmented, formed from an abundance of banks that hold small shares in total assets, lending, deposits and earnings.

*Table 1. State Ownership of Banks on the basis of assets total: Percent of Registered Capital*

Country	2008	2009	2010	2011
Albania	1.11	0	0	0
Federation of Bosnia and Herzegovina	4.1	1.1	1.1	2.4
Republika Srpska of Bosnia and Herzegovina	0	0	0	0
Bulgaria	0.62	1.27	1.86	2.44
Croatia	4.4	4.1	4.3	4.5
FYR Macedonia	1.2	1.4	2.3	3.1
Montenegro	0	0	0	0
Romania	5.2	7.3	7.4	8.2
Serbia	16.0	17.5	17.9	17.9

Source: Banking Supervisors from Central and Eastern Europe reviews [5]

### **Banking corporate governance in the context of SEE countries**

There are some characteristics describing the SEE countries that could be considered problematical.

First is concerning the extraordinarily strong external and reduced state ownership of banks. Second is about the boards' directors, with varying number of directors. The regulation is not specific about the independent directors, and the audit committee is popular.

Another feature considers the short maturities of financial liabilities on banks balance sheets, in both deposits and parent group funding.

Other characteristic is about the lack of private market instruments development. This fact leads to moderation options for the banks to fund themselves through local bond markets.

When the crisis came in SEE countries, first worry about banking sector was that the international banks will withdraw money from the region. This would have lead to a banking crisis, due the fact that foreign ownership banks have a tremendous role in the region, and the local and national encountered this respect.

European Bank Coordination implemented the Vienna Initiative (EBCI) in 2009, with the intent to manage crisis and assist in its resolution right when banks were trying to extract as much liquidity from the market,

Vienna Initiative aimed to:

- Try avoiding a large and badly organized transfer of cross-border bank groups from the region;
- Assure that parent group will not reduce their exposures and will provide more money to their branches;
- Make sure that branches in SEE of the national trans-boundary bank groups benefit from the national aid package and avoid misconceptions in the interaction with European banks;
- Consolidate trans-boundary assistance in regulation and exchange of information
- Reach a consensus regarding crisis management and crisis solving rules in the area
- Strengthen cross-border regulatory cooperation and information sharing. [9]

Even though, the banking system had problems and the foreign capital inflows and

care act decreased because of the economic conditions, the Vienna Initiative helped the SEE to withstand the crisis well.

#### **Topics on banking corporate governance after the financial crisis:**

- Forming a stable banking sector that could handle the risks of collapse
- Regularly review the strategic objectives emphasising the sustainable growth
- Consolidating the risk management policies and procedures
- Ascertain a clear role for banking cross-border supervisors, on banking groups, including promoting transparency.[6]

#### **Conclusion**

Given the presentation about the situation of the banking system in the SEE, we can make some statements about the existing corporate governance and develop some conclusions about the improvements suggested after the crisis period.

On banks' websites, there is insufficient disclosure about their corporate governance.

The executives' compensation system is not transparent.

There is no real connection between compensations and prudent risk management.

Boards and Audit Committees roles do not have the real significance; they are more formal.

Local conditions and risk profile are not fully understood by the boards.

Local governance and supervisors do not have a clear idea about the power and influence in the group.

Given the crisis situation, the emergent economies in the SEE countries have problems in dealing their banking systems and are trying to improve their corporate governance in order to resist the tough conditions of the market.

Vienna Initiative was a real help for the SEE countries and governments together with banking systems supervisors are trying to withstand the crisis.

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**Section I**  
**International Affairs and European Integration**

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**Subsection 2**  
**European Integration**

## Free Movement of Workers within the European Union. Transitional Measures on Romanian Workers

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### Abstract

*The free movement of persons is one of the four fundamental freedoms of the European internal market. One of its important components is the free movement of workers within the Union, as provided for in Articles 45 and 46 of the Treaty on the Functioning of the European Union. This provides any national of a Member State of the European Union the right to an employment activity and to pursue such activity in another Member State, subject to limitations justified on grounds of justified public policy, public security and public health restrictions.*

*As far as Romania is concerned a set of transitory measures was set up by the Treaty of Accession, temporarily restricting access of Romanian workers on the labor markets of the Member States, during which the access to the labor markets of the Member States may be regulated by national measures, or by those resulting from bilateral agreements.*

**Key words:** free movement of workers, European Union, transitory measures, Romanian workers

**Classification JEL:** O15, K31.

### Considerations on the free movement of workers within the European Union

The free movement of persons constitutes one of the fundamental freedoms on which the European internal market was built and has, over time, benefited the EU citizens, the Member States and the competitiveness of the European economy

overall[1]. Article 3 of the Treaty on European Union states that "The Union shall offer its citizens an area of freedom, security and justice without internal frontiers on the territory of which the free movement of persons is ensured in conjunction with appropriate measures with respect to external border controls, right to asylum, immigration and the prevention and control of crime". An important component of this freedom is the freedom of movement for workers within the Union.

The principle of free movement of workers is provided under Article 45 (formerly Article 39 EC) of the Treaty on European Union and its meaning and content were developed through the secondary Regulation legislation (EEC) no. 1612/68 on freedom of movement for workers within the European Union subsequently replaced by Regulation (EU) 492/2011 of the European Parliament and of the Council of 5 April 2011 on the freedom of movement for workers within the Union[2], Directive 2004/38/EC[3] and Directive 2005/36/EC[4], as well as following the legal solutions offered within the jurisdiction of the Court of Justice of the European Union.

The term “worker” was not explicitly defined in either the primary or the secondary EU law, but has been interpreted by the Court as covering any person who (i) undertakes genuine and effective work (ii) under the direction of someone else (iii) for which he is paid. This will cover somebody who works ten hours a week[5] and trainees[6].

According to the above-mentioned laws, the freedom of movement is a fundamental

right of workers and of their families, and labor mobility within the EU should be one of the means by which workers are guaranteed the opportunity to improve their living and employment conditions progress socially, also contributing to meets the economic needs of Member States.

Achieving free movement shall entail the abolition of any discrimination between workers of the Member States on grounds of nationality as regards employment, remuneration and other working conditions and the right of these workers to move freely within the Union to develop an employment activity, subject to justified public policy, public security and public health limitations.

By derogation from the European provisions in the field, by the Accession Treaty of Romania and Bulgaria to the European Union, there was established the EU-25 Member States possibility to impose a number of transitory measures on free movement of workers, aiming to temporarily restrict access of workers from Romania labor markets in their countries. These transitory measures allow Member States to determine the policy of employment access in relation to the local labor market so that there may not be any serious disturbances.

This paper aims to approach an analysis concerning the evolution applying of such measures by the EU 25 Member States.

### **Provisions of the Treaty of Accession**

The Treaty of Accession of Bulgaria and Romania signed on 25 April 2005 and entered into force on 1 January 2007 provides a total transition period of seven years, divided into three distinct phases (2 +3 +2), each of which being governed by specific rules, where there exists the possibility of applying transitory measures. Transitory measures will be irrevocably removed on December 31, 2013 and they apply only in respect of Romanian workers obtaining access on the EU 25 Member States labor market.

In the first phase lasting over two years after accession (1 January 2007 - 31 December 2008) Romanian workers' access on the labor markets of the EU25 Member States may be regulated by national measures, or those resulting from bilateral agreements.

For the second phase lasting over a three-year period (1 January 2009 - 31 December 2011) Member States shall provide the possibility to extend the application of national measures resulting from bilateral agreements subject to the Commission notification before the end of the first stage, otherwise the European legislation guaranteeing the free movement of workers is to be applied.

In the third phase lasting over two years (1 January 2012-31 December 2013), a Member State may maintain national measures or measures resulting from bilateral agreements only if serious disruptions are caused or are to be caused on the labor market of that Member State even after notifying the Commission, in the absence of such notification the provisions of Regulation (EU) 492/2011 of the European Parliament and the Council are to be applied.

A safeguarding clause is also introduced which allows any Member State which has ceased the application of national measures and is applying European standards before the end of the global transition period of seven years to reintroduce restrictions if there is a serious disturbance on the national labor market or there is the risk of such disturbance provided that the Commission, shall be notified, but without the need for consent of the European institutions.

Such transitory measures are not applicable in case of workers performing independent activities likely to be established or provide services on the EU territory, even though, in compliance to the Commission Directive 2011/503/UE from 11 August 2011 and to the Directive provisions on the transfer of workers to certain fields, countries like Germany and Austria are authorised to apply restrictions on the cross-border provision of services involving the temporary transfer of workers.

According to the principle of reciprocity, Romania also had the ability to restrict access on labor market for workers from previous Member States applying the transitory provisions, but did not impose such measures. The decision not to apply any restriction for the EU citizens was discussed in May 2007 with the Commissioner for Employment, Social Affairs and Equal Opportunities. It was not necessary another notification to the European Commission,



because Romania decided to eliminate all the restrictions in the field of free movement of the people

The first assesment of the measures applied by the EU 25 in compliance with paragraph 3 of annexes VI and VII from the Treaty of Accession of Bulgaria and Romania in 2005 occurred the end of the initial 2 year period, and a second assessment occurred in 2011 - 2012 at Romania’s request. The assessments were performed by the Council, following some reports of the European Commission.

For that matter, the European Parliament decided on the 15th December 2011 on removing all restrictions of employment in the European area for the Romanian and Bulgarian workers.

According to both reports prepared by the European Commission[7], the mobility flows following the accession have not reached alarming levels, but followed the trend of economy. Thus, mobility flows reached maximum rates in 2007, they declined substantially over the period 2008-2009, the growth rate was resumed in 2010 as a result of improving economic conditions. The main countries concerned were Italy and Spain.

Although, according to both reports made by the European Commission mobility has positive consequences on the European economy in general and on the economies of the Member States leading to an increase of EU GDP by 0.2% a on short term and 0.3% on a long-term, respectively by an average of 0.4% for the EU host countries (1.7% Spain 1.3% Italy) a part of the European Union States are currently.

Thus, as far as the application of these transitory measures is concerned, Member States have not adopted a common policy. A total of 12 states have not restricted access of Romanian workers on the labor market ever since 2007 including Estonia, Finland, Poland, Portugal, Slovakia, the Czech Republic, Cyprus, Sweden, Slovenia, Latvia, Lithuania and Bulgaria. Others have ceased applying transitional measures from January 2009 (Denmark, Greece, Hungary), and others since 2012 (Ireland, Italy). On the territory of the states which have abandoned such restrictions, the Community law in matter is still applicable (Regulation no. 1612/68), Romanian citizens can work without a work permit under the same

conditions as the nationals of that Member States.

*Table 1. Applying transitory measures in member states*

<b>Member state</b>	<b>Applying transitory measures</b>
Austria	maintains restrictions
Belgium	maintains restrictions
Bulgaria	opened its labor market (1 January 2007)
Czech Republic	opened its labor market (1 January 2007)
Cyprus	opened its labor market (1 January 2007)
Denmark	opened its labor market (1 May 2009)
Estonia	opened its labor market (1 January 2007)
Finland	opened its labor market (1 January 2007)
France	maintains restrictions
Germany	maintains restrictions
Greece	opened its labor market (1 January 2009)
Ireland	opened its labor market (July 2012)
Italy	opened its labor market ( 1 January 2012)
Latvia	opened its labor market (1 January 2007)
Lithuania	opened its labor market (1 January 2007)
Luxembourg	maintains restrictions
Malta	maintains restrictions
Great Britain	maintains restrictions
Holland	maintains restrictions
Poland	opened its labor market (1 January 2007)
Portugal	opened its labor market
Slovakia	opened its labor market (1 January 2007)
Slovenia	opened its labor market (1 January 2007)
Spain	maintains restrictions (22 July 2011 )
Sweden	opened its labor market (1 January 2007)
Hungary	opened its labor market (1 January 2009)

*Source: Drafted by the authors, based on already published data [8]*

Countries which still maintain restrictions on the free movement of Romanian labor force are: Germany, UK, France, Austria,

Belgium, Spain, Luxembourg, the Netherlands and Malta.

A special situation can be found in Spain, a state which has ceased applying transitory measures, permitting free access ever since 1 January 2009; still it used the safeguarding clause and ever since 22 July 2011 Spain has been applying restrictions on Romanian workers until the end of next year.

**The access of Romanian workers on labor markets in states which are still applying transitory measures in 2012[9]**

In states which are still maintaining restrictions on labor force coming from Romania, access to the labor market is usually based on a work permit, the conditions for obtaining it being different from state to state. Yearly, however, these states publish a list of occupations and sectors / industries open to citizens from the new EU member states and those for which the work permit issue is not conditioned by the situation existing on the national labor market.

Incompliance with national applicable regulations (art.284 and the following under the Social Code, Regulation on work permits) and bilateral applicable regulations, the access of Romanian workers on the labor market in Germany requires a work permit issued by the Federal Employment Agency. A residence permit in Germany which is freely issued to all European citizens is not necessary any longer while Romanian workers have priority in relation to citizens of third countries that require a job in this state.

Workers, who had been granted uninterrupted access on the German labor market for 12 months, now have the right to an EU work permit, without any restrictions and over an unlimited period.

As far as Austria is concerned, Romanian workers' access on their labor market is conditioned by a work permit required by the employer. In case the worker had been legally employed for a period of one year free access to the labor market will be confirmed by locally competent Labor Market Service. For obtaining the work permit, the employer must meet a number of conditions as follows:

- to ensure labor and wages conditions observance;
- to be willing to employ another worker instead of the requested one;
- he should not have violated repeatedly the Law on employment of Foreign Citizens and should not have already started the actual work relationship;
- he shouldn't have fired former workers for hiring new foreign workers;
- to hire foreign worker only in his business, with no right to place workers to a third party;
- the agreement on employment should not be a result of illegal labor intermediation
- the foreign worker for whom a work permit has been required should not have repeatedly violated the Law on employment of foreign workers;

Access on the UK labor market is subject to a work permit (Accession Worker Card) or a Certificate of Registration (Registration Certificate) before carrying out work relationships.

Developing work relations can occur with no authorization in case of workers who:

- were granted the staying right before Romania's accession to the European Union, which does not restrict their right to get employed in this state;
- worked continually and legally in Great Britain, in compliance with an employment contract for over 12 months, a period concluded on 31 December 2006 or later;
- they are detached in Great Britain by a company whose headquarters is located in another member state of the European Union/the European Economic Area;
- they have dual citizenship, and besides holding Romanian citizenship they also hold citizenship in the United Kingdom of Great Britain and Northern Ireland, Switzerland or another country of the European Economic Area (except Bulgaria);
- family members of Romanian citizens or nationals of other Member States of the European Union who have exercised their right to stay in Britain;
- they are family members (husband/ wife/ civil partner or direct descendant under 18 years) of a citizen of a State which is not a member of the European Economic

Area, who has a right to stay and work in the UK;

- they are members of a diplomatic mission or family members of a diplomat or a person enjoying diplomatic immunity;
- they have acquired the status of "highly qualified worker" based on programs such as: Highly Skilled Migrant Program/ International Graduates Scheme/ Scottish Graduates Scheme.

In Belgium, according to national legislation, access on the labor market is subject to a work permit. In order to obtain this permit, a Belgium employer shall obtain an employment authorization for the workers concerned. Work permit is granted only if the employer fails to find on the labor market a worker likely to occupy the position within a reasonable time, even after adequate training.

The same rules are available for Spain after 23 July 2011 (Article 67 of Regulation of implementing the law 4/2000) date on which it was decided to reintroduce the obligation of obtaining a work permit. Additionally in Spain work permit validity is subject to workers' registration available within social security system.

The same rule for obtaining a work permit can be found in Malta only that in such a case there is no special conditioning of employer.

In Holland, the permit can be requested only by employer and it is issued by the Agency for Labor and Social Security. In order to require a work permit, the employer shall prove the following conditions:

- he took all possible steps for the last 3 months to fill the position available with an employee who does not require a work permit;
- he published a notice of employment by the Agency for Labor Force and Social Security 5 weeks before the permit application;
- the person for which the license is required must be between 18 and 45 years;
- future employee must possess or have applied for a residence permit in the Netherlands.

Freelancers, highly skilled immigrants and their husband/wife may not get a work permit any longer.

Luxembourg either has not made any changes towards a general opening of its

labor market, extending on 9 December 2011 the application of transitory provisions which impose Romanian workers the obligation of carrying out working activities under a work permit.

Romanian nationals wishing to carry out a professional activity in France are obliged, by the end of the transitional period, to obtain a work permit and a residence permit to work and settle in France.

Such measures have been diminished or even cancelled for two categories of employees:

- employees who were offered a job appearing on a list of sensitive jobs (around 150) set by ministerial order, will benefit from a simplified procedure without being likely to be subject to any prevention from labor market (employment authorization must be prior to the performance of any employment activity).
- Romanian nationals holding a diploma at least equivalent to Master's studies (list fixed by ministerial order), a BAC+5 obtained in France, are exempt from work authorization in order to be able to perform a professional activity.

We can conclude by stating that although the EU *acquis* provides non-discriminatory treatment for workforce mobility within Member States while the EU mobility has not caused, on the whole, serious disturbances on the labor market, not all nationals are subject to this principle. More or less motivated by the unfavorable economic conditions most Member States are facing, the EU decided to maintain transitory restrictive measures concerning labor force coming from Romania.

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within the territory of Member States for Union citizens and their family members and repealing Directives 64/221/EEC, 68/360/EEC, 72/194/EEC, 73/148/EEC, 75/34/EEC, 75/35/EEC, 90/364/EEC, 90/365/EEC and 93/96/EC (JO L 158, 30.4.2004, p. 77).

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# The Relevance of Composite Indicators to Measure Countries Competitiveness

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## Abstract

*Competitiveness represents a dynamic process which long time ago ceased to concern only the business environment, entering the sphere of interest of the political environment and debate on academic level. The objective of this work is to offer a reference system which should represent a foundation for the analysis of the competitiveness measuring way according to different levels of reference, for the determination of the strategies intended for its stimulation, being considered a foreground objective in the global economy. Secondly, we intend to provide some evidences for the composite indicators to measure competitiveness, developed by the World Economic Forum, International Institute for Management Development, Heritage Foundation, European Commission or Financial Times Group, they emphasizing the citizens welfare, the economic freedom, the innovational process on the European level, the capacity of developing a lasting growth, the attractiveness of the European cities and regions for the foreign investors or the global economic soundness of economies.*

**Keywords:** competitiveness, economic growth, international finance, globalization

**J.E.L. Classification:** F43, F36, F62

## 1. Introduction

Paradoxically, although it is an omnipresent subject concerning the entire political, economic and social environment, experts' opinions about the conceptual definition of competitiveness are far from

being homogenous. In Nezeys' opinion (1993), “most of the ideologists did not unanimously agree on the defining of the competitiveness concept, its indicators and factors, a fact which makes competitiveness comprehension rather remain ambiguous”. Obviously we can ask ourselves then about the way in which we could provide the so much desired competitiveness if we don't have a clear image on its content, which is the real usefulness of the industrial policies and strategies applied by corporations on this purpose, but also if the tax policies applied on the stated purpose of stimulating competitiveness really produce or not the desired effects.

## 2. Competitiveness, strategic objective in the global economy

Most approaches have a high degree of generality and even ambiguity. Preponderant are the opinions defining competitiveness through the capacity of increasing the incomes, increasing the quality of life and the employment degree, without affecting the standard of living of the future generations. They lay stress on the quality of life improvement or maintenance on the long-term and on the trade performances, by providing assets and services which should correspond with the requirements on the international markets. However, all these purposes may appear as a result of other policies and measures as well, being implemented by different levels of decision. World Bank considers that “competitiveness cumulates elements which confer a higher position to an economic entity in comparison with its competitors”. On its turn, OCDE (1996) enlarges its reference system, asserting that “competitiveness represents the

enterprises, industries, regions, nations or supranational groups capacity of providing to the production factors a quite high profit and level of use on a permanent base, given the fact that they are exposed to the free competition”. On its turn, the Economic Forum defines competitiveness as being the “overall institutions, policies and factors which determine the productivity of a country”. The literature reflects the experts’ concerns on defining competitiveness through the identification of its determining factors. If in the comparative advantage theory David Ricardo analyzes competitiveness through production and costs, Kaldor (1981) instead considers that the most important factor providing the competitiveness of a company is the technological capacity which can be analyzed by the research expenditure, the number of patents, researchers and experts. In the opinion of Romer (1990), the human capital together with the available technology provides the competitiveness.

Porter (1990), the author the competitive advantage theory, starting from the concepts of competitiveness and comparative advantages, considers that the intangible factors such as research and development, as well as marketing provides, together with material factors endowment, a competitive advantage which is dependent on the market structures, the factors’ supply and demand conditions, the corporate strategies and the existing supporting industries. As a matter of fact, Michael Porter is the one who suggested the concept of poles of geographic competitiveness, joining at the level of the same geographic area and in the same field of activity a critical mass of resources and competences being designed to provide to the area a key position in the global economic competition.

We consider that notwithstanding the concept of comparative advantage is debatable as it is founded on suppositions based on the absence of price distortions and the efficient operation of the markets, aspects which are also emphasized by Barkema (1991). These suppositions don’t correspond to the real economic environment which is influenced by the policies applied by the worldwide states. Consequently, only if markets are efficient and the trade exchanges aren’t influenced by the distorted prices, by

the economic and financial policies, then we could explain competitiveness only from the perspective of the comparative advantages. In the opinion of Sharples and Milham (1990), competitiveness reflects the capacity of supplying assets and services requested by the foreign buyers with an equal or better price than the supplier’s price, gaining at least the opportunity cost of the used resources.

Approaching the competitiveness in the current context of the global economy and the policies promoted on the governmental level, Jorgenson and Landau (1992) states that “what we understand by competitiveness and so, the main objective of our economic policy, is the capacity of maintaining, in a global economy, an acceptable growth rate of the population standard of living with an equitable distribution, offering in the same time jobs for those who want to work, without reducing the growth potential of the living standard for the future generations” (1994), a defender of the free exchange and globalization of economies, expresses his opinion asserting that only corporations compete on the market through the assets and the economic services offered. He considers that countries compete in regard to the attraction of the mobile factors on the international level, namely the capital and the qualified workforce, using on this purpose the reduced level of the workforce, the efficiency of the public structures, correct regulations and reduced taxes on corporations which become location advantages in his belief. Being on an opposite side against the comparative advantage theory of Ricardo, Paul Krugman considers that we shouldn’t talk about comparative advantages but competitiveness advantages, and the competition between enterprises must not be assimilated with the competition between nations. The fact is that experts’ opinions converge towards a common denominator according to which productivity, its growth rate and costs influence on the corporations’ competitiveness. On the other hand, only the corporations possessing a competitiveness advantage manage to penetrate, keep up and develop on the external markets. The others are constrained to withdraw themselves from the market segment, in which they activate, no matter whether the action space is a

national or international one, as otherwise competition eliminates them anyway.

### 3. The relevance of certain composite indicators to measure countries competitiveness

The link between competitiveness and prosperity, reflected by the correlation between the competitiveness index calculated by the World Economic Forum and GDP/capita, is periodically reviewed by The Economist. In the study "Global Competitiveness Report", edition 2012-2013, World Economic Forum assesses the potential of global economies to achieve medium to long term growth, takes into account the fact that countries are not at the same level of economic development and, therefore, the relative importance of different factors of competitiveness is dependent on starting conditions. In the study published in the 2012-2013 edition is considered the competitiveness of 144 countries in the world, through Global Competitiveness Index. In the world rankings, Switzerland ranks first, followed by Singapore and Finland. The top 10 places are 6 European countries. If we take into account only the states in the Union, Finland is followed by Sweden, The Netherlands, Germany, UK, Denmark, and Austria.

Table 1. The Global Competitiveness Index, calculated by the World Economic Forum

The Global Competitiveness Index, 2012-2013					
COUNTRY	RANK (1-144)	SCORE (1-7)	COUNTRY	RANK (1-144)	SCORE (1-7)
Switzerland	1	5,72	Estonia	34	4,64
Singapore	2	5,67	Spain	36	4,60
Finland	3	5,55	Czech Republic	39	4,51
Sweden	4	5,53	Poland	41	4,46
The Netherlands	5	5,50	Italy	42	4,46
Germany	6	5,48	Lithuania	45	4,41
United States	7	5,47	Malta	47	4,41
United Kingdom	8	5,45	Portugal	49	4,40
Hong Kong	9	5,41	Latvia	55	4,35
Japan	10	5,40	Slovenia	56	4,34
Denmark	12	5,29	Cyprus	58	4,32
Austria	16	5,22	Hungary	60	4,30
Belgia	17	5,21	Bulgaria	62	4,27
France	21	5,11	Slovakia	71	4,14
Luxembourg	22	5,09	Romania	78	4,07
Ireland	27	4,91	Greece	96	3,86

Source: <http://reports.weforum.org/global-competitiveness-report-2012-2013>, data processed by the authors.

Among the main factors that adversely affect the competitiveness can be included: restrictive labor market regulations, ineffectiveness of government and bureaucracy, insufficient innovation capacity, inadequate education labor, inflation, access to financing, inadequate infrastructure, tax

rates, foreign exchange regulations, political instability, tax regulations, public health issues, corruption, crime and theft, government instability.

On its turn, the International Institute for Management Development (IMD) annually analyzes by means of the Global Competitiveness Index, the capacity of the countries to build and maintain a favorable environment for the support of the corporations' competitiveness. They started from the supposition that the economic environment either facilitates or blocks competitiveness which give richness on the company level. In the 2012 global classification of the 59 analyzed countries, Hong Kong is on the first place, being followed by USA and Switzerland. If we take the member states of the Union as reference system, then we have Sweden on the best position, being followed by Germany, Netherlands, Luxembourg, Denmark, Finland, Great Britain, Ireland, Austria, Belgium, France, Estonia, Czech Republic, Poland, Lithuania, Spain, Italy, Portugal, Hungary, Slovakia, Slovenia, Romania and Bulgaria.

Table 2. The Global Competitiveness Index, calculated by the International Institute for Management Development

The Global Competitiveness Index					
COUNTRY	RANK (1-59)	SCORE (0-100)	COUNTRY	RANK (1-59)	SCORE (0-100)
Hong Kong	1	100	Austria	21	77,673
United States	2	97,755	Belgium	25	73,484
Switzerland	3	96,679	France	29	70,003
Singapore	4	95,923	Estonia	31	66,947
Sweden	5	91,393	Czech Republic	33	66,187
Canada	6	90,289	Poland	34	64,179
Taiwan	7	89,959	Lithuania	36	63,422
Norway	8	89,673	Spain	39	61,118
Germany	9	89,257	Italy	40	60,641
Ostar	10	88,475	Portugal	41	60,380
The Netherlands	11	87,158	Hungary	45	57,340
Luxembourg	12	86,052	Slovakia	47	55,667
Denmark	13	84,876	Slovenia	51	52,957
Finland	17	82,467	Romania	53	48,929
United Kingdom	18	80,142	Bulgaria	54	48,450
Ireland	20	78,465	Greece	58	31,454

Source: <http://www.imd.org/research/publications/wcy/upload/scoreboard.pdf>, data processed by the authors.

The indicators which increase their attractiveness are identified on their level, but also the indicators which must be improved in order to increase competitiveness as well as the continuation of the economy diversification, cost competitiveness provision, the balance restoration regarding the social expenditures, the public sector reform, measures related to the expenditures for pensions payment and the population ageing, a better investment attraction and



planning. On its turn, the American foundation „The Heritage Foundation” published the Index of Economic Freedom in 2012. In the world classification, the first positions are occupied by Hong Kong, Singapore and Australia, and Switzerland occupies the 5<sup>th</sup> place in the world and the first place in Europe. If we take the member states of the Union as reference system, then the first place is occupied by Ireland which is followed by Denmark, Luxembourg, Great Britain, Netherlands, Estonia, Finland, Cyprus and Sweden. The global score reflects the intermediate scores analyzing the ownership, corruption, tax freedom, governmental expenditures, business freedom, workforce freedom, monetary freedom, trade freedom, investments freedom and the financial freedom.

Table 3. The Index of Economic freedom, according to The Heritage Foundation

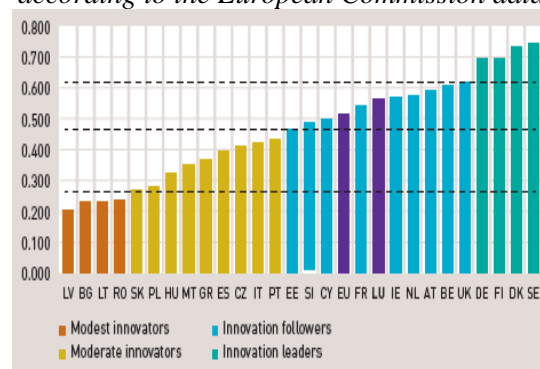
Index of Economic Freedom					
COUNTRY	RANK (1-129)	SCORE (0-100)	COUNTRY	RANK (1-129)	SCORE (0-100)
Hong Kong	1	89,9	Lithuania	23	71,5
Singapore	2	87,5	Germany	26	71,0
Australia	3	83,1	Austria	28	70,3
New Zealand	4	82,1	Czech Republic	30	69,9
Switzerland	5	81,1	Spain	36	69,1
Canada	6	79,9	Belgium	38	69,0
Chile	7	78,3	Hungary	49	67,1
Mauritius	8	77,0	Malta	50	67,0
Ireland	9	76,9	Slovakia	51	67,0
United States	10	76,3	Latvia	56	65,2
Denmark	11	76,2	Bulgaria	61	64,7
Luxembourg	13	74,5	Romania	62	64,4
United Kingdom	14	74,1	Poland	64	64,2
The Netherlands	15	73,3	France	67	63,2
Estonia	16	73,2	Portugal	68	63,0
Finland	19	72,3	Slovenia	69	62,9
Cyprus	20	71,8	Italy	92	58,8
Sweden	21	71,7	Greece	119	55,4

Source: <http://www.heritage.org/index>, data processed by the authors.

In order to apply Europe 2020 strategy, especially regarding the innovational process on the European level, the Commission has elaborated the „Innovation Union Scoreboard” IUS table board, according to which the composite indicator Summary Innovation Index SII shall be calculated. Pursuant to the classification published in February 2012, the member states which are leaders of innovation are Sweden, Denmark, Finland and Germany. Great Britain, Belgium, Austria, Netherlands, Ireland, Luxembourg, France, Cyprus, Slovenia and Estonia are included in the category of states considered as innovation followers. The innovational process is moderate in Portugal, Italy, Czech Republic, Estonia, Greece, Malta, Hungary, Poland and Slovakia (IUS). Instead, the innovational process is modest in Romania, Lithuania, Bulgaria and Latvia. Being globally analyzed, the Union is

considered as providing a favorable climate to the innovational process. Based on the IUS table board, the level and convergence are determined in the matter of the member states performance. On the first places we find Sweden, Denmark, Germany and Finland and the last places are occupied by Lithuania, Bulgaria, Latvia and Romania.

Figure 1. The Summary Innovation Index, according to the European Commission data



Source: <http://www.gouvernement.lu>

There are also other synthetic factors according to which countries classification on competitiveness is done. Therefore, Allianz Company analyzes and publishes in Euro Monitor for the 17 Eurozone states: the capacity of developing on a national level a lasting growth, the lack of macroeconomic unbalances in order to determine their contribution to its stability provision. On this purpose, it analyzes the public finance sustainability, the private debt and the external debt, the internal demand competitiveness, the use of the workforce, the productivity and the efficiency of the resource use, by means of 15 quantitative indicators, assigning a score depending on the performance level. The analyzed fields allow a diagnostic of the national economies’ diagnostic and implicitly, the possibility of assessing to which extent states can obtain the financial markets confidence and they can provide the citizens’ prosperity. Germany, Luxembourg, Austria, Netherlands, Slovakia and Finland rank on the first places, being states with potential to provide a sustainable growth and lacking unbalances. On the opposite side, we find Greece, Ireland, Portugal, Cyprus, Spain and Italy.

Table 4. Competitiveness Classification, according to Euro Monitor 2011



RANK 2011	COUNTRY	SCORE 2011	RANK 2010	SCORE 2010	RANK 2006	SCORE 2006
1.	Germany	7,6	1	7,1	3	7,3
2.	Luxembourg	7,2	2	7,1	1	8,0
3.	Austria	7,0	3	6,7	2	7,8
4.	The Netherlands	6,9	3	6,7	3	7,3
5.	Slovakia	6,3	5	6,0	10	6,3
6.	Finland	6,3	6	5,8	5	7,1
7.	Estonia	6,1	10	5,3		
8.	Belgium	6,0	8	5,5	8	6,6
9.	Malta	5,7	9	5,4	12	5,7
10.	France	5,7	11	5,3	8	6,6
11.	Slovenia	5,3	7	5,5	6	6,9
12.	Italy	4,9	13	4,9	11	5,9
13.	Spain	4,8	14	4,0	13	5,6
14.	Cyprus	4,3	12	4,9	13	5,6
15.	Portugal	3,9	15	3,9	16	4,7
16.	Ireland	3,7	16	3,5	6	6,9
17.	Greece	3,2	17	2,5	15	5,3

Source:<http://www.gouvernement.lu>

The German bank Berenberg Bank and the Lisbon Council published Euro plus monitor for the Eurozone states too, analyzing and elaborating a state classification regarding the global soundness of economies and the adjustment capacity according to the dangers which might appear in the future through four categories of indicators: growth potential, competitiveness, public finance sustainability and recovery capacity. The best scores for the global soundness of economy were taken by Estonia, Luxembourg, Germany, Netherlands, Slovenia, Slovakia, and Finland and on the opposite side were Greece, Cyprus, and Portugal. Regarding the adjustment capacity, the first place is occupied by Estonia which is followed by Greece, Ireland and Malta and the last places are occupied by Austria, Germany, France and Belgium.

Table 5. Global economic soundness of economies, according to Euro plus monitor

COUNTRY	2011	RANK
Estonia	1	7,4
Luxembourg	2	7,3
Germany	3	6,8
The Netherlands	4	6,8
Slovenia	5	6,6
Slovakia	6	6,3
Finland	7	6,2
Austria	8	5,6
Belgium	9	5,6
Eurozone		5,5
Ireland	10	4,7
Malta	11	4,6
Spain	12	4,5
France	13	4,5
Italy	14	4,4
Portugal	15	3,8
Cyprus	16	3,8
Greece	17	3,0

Source:<http://www.lisboncouncil.net/publication/publication/68-the-2011-euro-plus-monitor.html>

In the context of globalization and interdependence growth through the information and communication technologies, the financial centres are confronted with an increased competition in comparison with other fields of activity, and through the offered services they intercede foreign investments and facilitate the international trade. In order to determine the

competitiveness of the financial field, The Consulting Office Z/Yen and Long Finance initiative calculates and publishes „Global Financial Centres Index” for 77 financial centres biannually. On this purpose they use 86 quantitative indicators to which the financial field experts’ surveys are added. They analyze the training and the workforce flexibility, the business environment (taxes, regulations), the access to markets (securitization, clusters), the infrastructures (cost and available offices) and global determinants of competitiveness (the perception regarding the most attractive ...of living).

Table 6 The competitiveness of the financial centres, according to the Consulting Office Z/Yen

COMPETITIVENESS OF FINANCIAL CENTRES					
FINANCIAL CENTRE	RANK	SCORE	FINANCIAL CENTRE	RANK	SCORE
London	1	785	Ide ofMan	40	629
NewYork	2	765	Taipei	41	628
Hong Kong	3	733	Helsinki	42	627
Singapore	4	728	Hongkong	43	626
Zurich	5	691	Cayman Islands	44	625
Saudi	6	685	British Virgin Islands	45	624
Tokyo	7	684	Hamilton	46	621
Chicago	8	683	Brussels	47	620
Geneva	9	682	Sao Paulo	48	619
Toronto	10	681	Dublin	49	618
Boston	11	680	Madrid	50	614
San Francisco	12	678	Milan	51	612
Frankfurt	13	677	Rio de Janeiro	52	608
Washington D.C.	14	672	Vegas	53	604
Sydney	15	670	Luxembourg	54	603
Yamoucrar	16	668	Mexico City	55	602
Montreal	17	667	Isaebul	56	601
Melbourne	18	657	Bangkok	57	600
Shanghai	19	656	Hongkong	58	599
Jersey	20	654	Warsaw	59	598
Oakaa	21	650	Monaco	60	597
Dubai	22	648	Helsinki	61	596
Calgary	23	647	Rome	62	590
Luxembourg	24	646	Miami	63	586
Munich	25	645	Moscow	64	585
Kuala Lumpur	26	644	Riyadh	65	584
Stockholm	27	643	Tallinn	66	583
Guernsey	28	641	Manitras	67	579
Paris	29	640	Buenos Aires	68	578
Wellington	30	639	Malta	69	575
Amsterdam	31	638	St. Peterburg	70	574

Source: [www.longfinance.net/fcf-gfci.html](http://www.longfinance.net/fcf-gfci.html)

Pursuant to the report published in September 2012, the most competitive financial centre in the world is London which is followed by New York, Hong Kong, Singapore and Zurich. Within the Union, their classification is London and Frankfurt (13<sup>th</sup> place in the worldwide classification) which preserve their position of the previous year while Luxembourg (24<sup>th</sup> place in the worldwide classification) decreases on a lower position in regard to the previous year. As a matter of fact, while London rating goes up by 4 points, Frankfurt rating goes down by 4 points and Luxembourg rating by 2 points. From the point of view of volatility and sensitivity, London is considered a stable and dynamic city and the other two cities as being able to move from the stable category towards the unpredictable category.

Annually, Financial Times Group publishes the study „European cities and

regions of the future” in fDiMagazine, measuring the attractiveness of the European cities and regions for the foreign investors pursuant to the foreign investments entries, the economic development and the growth potential. On this purpose, it uses six categories of indicators: the economic potential, the business environment, the infrastructure, the human resources, the quality of life, costs, to which the experts’ opinion are added.

Table 7 The economic potential of the European cities, according to fDiMagazine

RANK	CITY	COUNTRY
1.	Luxembourg	Luxembourg
2.	Stavanger	Norway
3.	Cambridge	United Kingdom
4.	Geneva	Switzerland
5.	Bergen	Norway
6.	Linz	Austria
7.	Slough	United Kingdom
8.	Monaco	France
9.	Shannon	Ireland
10.	Basel	Switzerland

Source:<http://www.berlin-partner.de>

Classifications take into consideration the size of the analyzed cities, the reference parameter being the number of inhabitants. In top 10 of the cities, the first place is occupied by Luxembourg, which is followed by Stavanger in Norway, Cambridge in Great Britain, Geneva in Switzerland, Linz in Austria, Slough in Great Britain, Monaco, Shannon in Ireland and Basel in Switzerland.

#### 4. Conclusions

Competitiveness definition pursuant to the competitive advantage, leads to the conclusion that competitiveness, although being generated on the corporate level, reflects on the quality of life of all country citizens having a national and international size. The composite indicators to measure competitiveness reflects its correlation with the citizens welfare, the economic freedom, the European innovational process, the capacity of developing a lasting growth, the attractiveness of the European cities and regions for the foreign investors, as well as with the global economic soundness of economies.

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## Were the Crises in Eurozone Countries Predictable?

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### Abstract

*This paper is based on finding the characteristics that could have made the crises in weaker Eurozone economies forecastable based on lagged time series analysed as a set of binary models estimated with the extreme value approach which is suitable for irregular non stationary data on rare events. This method has been used in order to predict the possibility of rare events such as earthquakes, floods or other unpredictable by trend disasters. This methodology has major advantages compared to probit or logit approaches. The absence of currency volatility due to monetary union participation makes this crisis analysis unique and extends the definition of the possible incidents. My sample consists of four countries bailed-out by European Union and IMF joint mechanism (Cyprus, Greece, Ireland and Portugal respectively) and covers a seventeen years period (1995-2012). The results show that explanatory variables predicted the incidents of bailout.*

**Key words:** Crisis, Early Warning Systems, Extreme events

**JEL classification:** F41, P33

### 1. Introduction

Based on previous empirical works, nobody can be sure on making a forecast can be accurate and useful on studying and expecting economic variables. Especially when these forecasts are based on previous economic time series data sets. The Early Warning Models (EWS), developed earlier didn't give any positive signs, or even worst they have given false signals predicting an inexistent crisis. Kenneth Galbraith said that there are two kinds of forecasters: Those who that their forecast is wrong, and those who

don't know that their forecast is wrong. Although, the arguments on forecasting practices, its ability and significance can be compared to an early warning system. My dataset consists of four Eurozone countries recently bailed out by IMF and EU joint mechanism for a seventeen year period (1995-2012). For the years before Eurozone foundation the criterion for the crisis is a 10% devaluation on average month official rate compared to the previous month. Due to common international currency scheme the existence or not of crisis cannot be always provided by official rate volatility. During the examination period there were incidents of high interest rate volatility or external reserves reduction (over than 25% change compared to previous month). I get as an explaining the part finishing one month before the bailout in each country and I expect from a binary model of extreme value to forecast the forthcoming crisis. I have chosen the extreme value model because of the nature of the variable. Incidents of currency crises are very rare, and they meet the purposes of the model. Previous trend models excluded these periods from their analysis and their samples. For example if someone tries to analyse the trends on the labour market within 20<sup>th</sup> century, he should exclude the two world wars periods, the great recession and the oil crisis. But for this kind of studies these are the periods of interest and their characteristics are analysed intensively. The paper is structured as following: The next section describes selected previous empirical research. The third part provides a discussion of the main macroeconomic problems and policy outcomes in the countries concerned. A description of the data and the variables used is provided in section 4. Section 5 presents the set of models and the results of the empirical model. Finally, in the last section I offer some concluding remarks.

## 2. Empirical research

The empirical research started and inspired on the same time that pioneers [1] had developed the first Theoretical model on currency crises. Almost simultaneously [2] inspired of the idea of shadow rate using a probit model, found that it really had a forecasting ability but it wasn't important. In their later works [3] [4] on the light of the theoretical models of first generation and the payment stop of Mexico in 1982 and Argentina in 1981, show that the domestic credit growth didn't have forecasting significance for the next period. In a more comprehensive work [5] the official settlements with abroad had shown forecasting significance but within a period of 24 months.

Based on second generation theoretical models and the central banks' ability to face the speculators and resist [6] and added to their probit model unsuccessful speculators attacks. Later [7], using high inflation as an assumption for currency crises, but only 5 out of 117 incidents had a positive signal.

Models based on third generation variables didn't really succeed to make confident forecasts. Later, referring to practice [8] had developed an EWS (Early Warning System) for Croatia using a set of 40 variables had succeed to forecast and warn the central bank of the country using a logit model and successfully forecasting the forthcoming speculative attack 6 months before its break. With an insignificant cost for the size of the attack Croatia overlapped this incident.

## 3. Macroeconomic policies and outcomes in bailed out Economies

I focus my attention on four Eurozone economies (Cyprus, Greece, Ireland and Portugal respectively) I didn't develop any models for Italy and Spain because the current scheme of EFSF didn't fund them directly and therefore their economic rescue had different characteristics. The countries under examination had structural problems being the weaker members of the union. The macroeconomic environment is not favorable in any of these countries. High debt, increased fiscal deficits, lack of developed financial and fiscal institutions and low

confidence in economic policy were some of the common characteristics of their macroeconomic environment. Economic reforms were delayed. These weaknesses are shown in the high interest rate spread between this group of countries and the lending rate of Germany. The development asymmetries, the incomplete development processes gave to the wrong signals to the union authorities and potential investors. The capital flight from these countries to the safe "ports" of developed financial markets was high. Central banks were not independent and they lost their monetary policy autonomy with the Eurozone creation. Often EU funds they were used to finance large budget deficits. Credit policies were highly accommodating and repeatedly subject to direct intervention by the governments and the parliaments.

In the first weeks of 2010, there was rising anxiety about excessive national debt within Eurozone. The CEE Council has argued that the predicament some mainland EU countries find themselves in today is the result of a combination of factors, including over-expansion of the Eurozone, and a combination of monetarist policy, tax evasion, pursued by local policy makers and EU central bankers. Some senior German policy makers went as far as to say that emergency bailouts should bring harsh penalties to EU aid recipients such as Greece. However, such plans have been described as unacceptable infringements on the sovereignty of Eurozone member states and are opposed by key EU nations such as France. Some politicians, have sought to attribute some of the blame for the crisis to hedge funds and other "speculators" stating that "institutions bailed out with public funds are exploiting the budget crisis in Greece and elsewhere".

On 23 April 2010, the Greek government requested that the EU/IMF bailout package (made of relatively high-interest loans) be activated. The IMF had said it was "prepared to move expeditiously on this request" The initial size of the loan package was €45 billion (\$61 billion) and its first installment covered €8.5 billion of Greek bonds that became due for repayment. On 27 April 2010, the Greek debt rating was decreased to BB+ (a 'junk' status) by Standard & Poor's amidst fears of default by the Greek

government. The yield of the Greek two-year bond reached 15.3% in the secondary market. Standard & Poor's estimates that in the event of default investors would lose 30–50% of their money. Stock markets worldwide and the Euro currency declined in response to this announcement.

On May 1, a series of austerity measures was proposed. The proposal helped persuade Germany, the last remaining holdout, to sign on to a larger, 110 billion euro EU/IMF loan package over 3 years for Greece (retaining a relatively high interest of 5% for the main part of the loans, provided by the EU).

In April 2010, the Irish economy which first entered recession due to its defection to the global credit crunch through the banking sector faced severe liquidity problem. Its requirement for €20 billion in 2010 was matched by a €23 billion cash balance, and it remarked: On 18 May the banking union of the country tested the market and sold a €1.5 billion issue that was three times oversubscribed. By September 2010 the banks could not raise finance and the bank guarantee was renewed for a third year. This had a negative impact on Irish government bonds, government help for the banks rose to 32% of GDP, and so the government started negotiations with the ECB and the IMF.

On the evening of 21 November 2010, Ireland had formally requested financial support from the European Union's European Financial Stability Facility (EFSF) and the International Monetary Fund (IMF), a request which was welcomed by the European Central Bank and EU finance ministers. The request was approved in principle by the finance ministers of the Eurozone countries in a telephone conference call. Details of the financial arrangement were not immediately agreed upon, and remained to be determined in the following weeks, though the loan was believed to be in the region of €100 billion, of which approximately €8 billion was expected to be provided by the United Kingdom.

On November 28, the European Union, International Monetary Fund and the Irish state agreed to a €85 billion rescue deal made up of €22.5 billion from the European Financial Stability Mechanism (EFSM), €22.5 billion from the IMF, €22.5 billion from the European Financial Stability Facility (EFSF), €17.5 billion from the Irish

sovereign National Pension Reserve Fund (NPRF) and bilateral loans from the United Kingdom, Denmark and Sweden. The deal included €10 billion for bank recapitalization, €25 billion for banking contingencies and €50 billion for financing the budget.

The Portuguese Financial crisis is a major political crisis and economic crisis currently taking place in Portugal, which started during the first weeks of 2010. The anxiety about the excessive levels of debt in some EU countries and, more generally, about the health of the euro has spread from Ireland and Greece to Portugal. Some senior German policy makers went as far as to say that emergency bailouts to Greece and future EU aid recipients should bring with it harsh penalties. In 2010, acronyms PIGS were widely used by international bond analysts, academics, and by the international economic press when referring to the underperforming economies of Portugal, Italy, Ireland, Greece, and Spain.

The democratic Portuguese Republic governments have encouraged over expenditure and investment bubbles through unclear public-private partnerships. This has funded numerous ineffective and unnecessary external consultancy and advising committees and firms, allowed considerable slippage in state-managed public works, inflated top management and head officers' bonuses and wages, causing a persistent and lasting recruitment policy that has boosted the number of redundant public servants.

The economy has also been damaged by risky credit, public debt creation and mismanaged European structural and cohesion funds for almost four decades. Apparently, the Prime Minister Socrates's cabinet was not able to forecast or prevent any of this when symptoms first appeared in 2005, and later was incapable of doing anything to ameliorate the situation when the country was on the verge of bankruptcy in 2011. In April 2011, Portugal confirmed that it will have a financial bailout from the IMF and the European Union worth 80bn Euros (\$115 £70bn), following Greece and the Republic of Ireland.

In 2012, Cyprus became affected by the Eurozone financial and banking crisis. In June 2012, the Cypriot government announced it would need €1.8 billion of foreign aid to support the Cyprus Popular

Bank, and this was followed by Fitch downgrading Cyprus's credit rating to junk status. Fitch said Cyprus would need an additional €4 billion to support its banks and the downgrade was mainly due to the exposure of Bank of Cyprus, Cyprus Popular Bank and Hellenic Bank (Cyprus's 3 largest banks) to the Greek financial crisis. In June 2012 the Cypriot finance minister Vassos Shiarly stated that the European Central Bank, European commission and IMF officials are to carry out an in-depth investigation into Cyprus' economy and banking sector to assess the level of funding it requires. The Ministry of Finance rejected the possibility that Cyprus would be forced to undergo the sweeping austerity measures that have caused turbulence in Greece, but admitted that there would be some negative repercussion.

#### **4. The data set and the main variables used**

The variables used in the analysis are chosen in light of theoretical considerations and empirical determinants of crises. I apply a set of variables that have been proved useful by a large number of empirical studies as well as the circumstances similar to under examination economies. I denote crisis under any of the three circumstances analyzed (official rate devaluation, foreign reserves reduction over than 25% compared to the previous and monthly raise on interest rate over than 25%) where the binary variable “crisis” gets the value 1 otherwise it's a zero (0). In order to enhance the possibility of identifying the crisis factors, the process of evaluating the model applies nine variables, grouped into three groups: variables related to monetary policy, to the external sector and contagion. The data source is the International Financial Statistics and the Heritage foundation. Data frequency is monthly with the exception of Economic Freedom index which is annual. The variables cover all three known and applied generations along with their modified ones and the introducing fourth generation. There is a major debate on the existence and presence of a possible fourth generation. In an early approach [9] suggested the introduction of a possible fourth generation based on political risk and black market

premiums. A latter work [10] argues that poor institutional variables are an underlying cause for unsustainable policies. In their two years later work [11], they term institutional factors as “social capital” or “social infrastructure”. Weak institutional fundamentals are still present. Their analysis is based on second generation modified models [12] and [13] using variables such as central bank independence, financial liberation, coordinated wage and corruption. The conflict and overlap between generations is obvious and in a determinants of currency crises analysis [14] In later works following the global credit crunch [15] suggested a set of variables such as home price index (HPI) as long as economic freedom. In a PhD thesis author [16] suggested a double dimension on fourth generation crises analysis using the social variables and economic in contrast to the second real economy dimension explaining crisis through contagion and banking crises existence. They also are past works that seem to reject the existence of possible fourth generation arguing that the past three generations can explain possible crises [17]. Finally in an accepted and under consideration paper [18] used extreme value analysis and the same variables to forecast crises in Central and Eastern Europe between 1995 and 2008. The results show that the model worked as predictor for the cases of Bulgaria, Belarus and Moldova but not in the cases of Romania and Ukraine. The variables included in my model and their economic justification of the choice of the variables to be applied to five transition economies is as following:

##### *A. Variables related to monetary policy*

1. Real exchange rate (REER): The Real Effective Exchange Rate of the national currency given by IMF or by calculation of the real exchange rates of major trading partners, against national currency, weighted by their participation. REER is a measure of competitiveness. A decline of REER (overvaluation) has negative effect on competitiveness and vice versa.

2. International reserves (Reserves): Foreign exchange reserves expressed in USD. All the past theoretical or empirical



models used this fundamental as the main (and before first generation models the only) measure of crisis likelihood.

3. Money (Money): The money offer including quasi money. According to the first generation models, the months preceding the crisis should be characterized by highly expansionary monetary policy.

4. Inflation (CPI): The change of CPI over the last month. It is a proxy of macroeconomic mismanagement that is having an adverse effect on a country's economy. It is related positively with the occurrence of a crisis.

5. Lending rate (i): Official annual lending rate given by the national bank of the country. The variable is expected to have positive effect.

*Variables related to the external sector*

6. Balance of Payments(BOP): The balance of payments expressed in USD. The conventional view is that this variable is expected to have positive effect if the balance is positive and negative if there is deficit.

7. Gold price (GP): The price of fine troy ounce in London exchange market in USD. The effect depends on central bank policy. If the bank tends to keep gold reserves the effect is positive, if not it is negative.

*Variables related to contagion*

8. Crisis elsewhere (CE): It is a categorical binary variable which denotes the presence of a crisis in other country (1) or not (0). The so called crisis elsewhere or, in chaos theory, “butterfly effect”, has a significant role in an external currency crisis development. If a country has economic relations with a country hit by an incident it is possible to be infected.

*Variables specific to transition economies (institutional)*

9. Economic Freedom (EF): The Heritage rate of economic freedom, is a total score consisting on a set of indicators on economic freedom Market and institutional reforms (e.g. the establishment of a sound financial and banking system, the well-functioning of fiscal institutions etc.) offer great assistance to the countries in their effort to prevent a crisis. The effect of this variable is expected to be negative.

Based on an earlier work [19], I try to combine variables which represent the main

predictions of the first, the second and the third generation models. Variables 1-5 and 7 are closely associated with first-generation models. Variables 7-8 and 9 are associated with the third generation models. Fourth generation models in this analysis are present with their both variations in, 8 and 9 respectively.

## 5. The set of models and empirical results

I use as dependent variable the volatility that has been occurred between two successive months on the official rate against national currency rate. The empirical literature provides little guidance as regards a generally accepted definition of high volatility. The majority of the studies refer to devaluation as large, unique and infrequent or a set of small and repeated incidents. Others use a possible percentage compared to interest rate of the previous month. The interest rate that names the change as highly volatile is 25% as suggested by

I choose for this study to use the binary extreme value model as given by the Eviews™ statistics package. The extreme value model is developed in order to explain irregular and non-stationary situations such as earthquakes frequency, floods, crises and other turbulences. In fact then I use binary models it refers to incidents that 1 - the existences of the situation – is less than half per cent of the population. Especially, crises are unique facts and should be handled so.

The two situations are:

$$\Pr(y_i = 1 | x_i, \beta) = 1 - F(-x_i' \beta)$$

$$\Pr(y_i = 0 | x_i, \beta) = F(-x_i' \beta)$$

The possibility of crisis is given by:

$$\begin{aligned} E(y_i | x_i, \beta) &= 1 \cdot \Pr(y_i = 1 | x_i, \beta) + 0 \cdot \Pr(y_i = 0 | x_i, \beta) \\ &= \Pr(y_i = 1 | x_i, \beta). \end{aligned}$$

This can be written as a regression process:

$$y_i = (1 - F(-x_i' \beta)) + \epsilon_i$$

Where extreme value estimator can make:

$$\begin{aligned} \Pr(y_i = 1 | x_i, \beta) &= 1 - (1 - \exp(-e^{-x_i' \beta})) \\ &= \exp(-e^{-x_i' \beta}) \end{aligned}$$

I'm estimating a model with dependent binary variable the existence of incident (1)

or not in a month period, and a set of one month lagged independent variables. I selected one month lag through a preliminary on AIC and SBC criterion data analysis. The dataset consists of four countries as described with monthly frequency, in the 1995-2012 period. I choose to cut the sample one month before the crisis incident and the model should forecast the next month's crisis and its following tranquility at the end of a three month (quarter) period. Missing value analysis has also been done for the early years in the cases of Ireland and Portugal due to missed data. Possibility over 50% is a positive sign of existence of crisis but a tolerance of 5% bounds in the cases of Portugal and Ireland is acceptable. I have chosen the variables that seem to be important for each country under the Z-statistic confidence interval. I have chosen the bailout incidents in order to achieve the best possible results.

The explanatory results are shown on Table 1 bellow

Table 1: Explanatory results

	Cyprus	Greece	Ireland	Portugal
<i>C</i>	<b>44.59</b>	<b>-68.98</b>	<b>243.4</b>	<b>-460.5</b>
<i>REER</i>	-15.08	-0.476	<b>-3.424</b>	<b>-1.508</b>
<i>Money</i>	<b>0.008</b>	<b>0.0025</b>	<b>0.0031</b>	<b>0.0177</b>
<i>CPI</i>	0.4169	<b>0.4715</b>	1.2920	-2.502
<i>i</i>	<b>0.892</b>	1.8697	-0.3295	<b>10.357</b>
<i>BOP</i>	-0.003	<b>-0.007</b>	-0.0003	0.0117
<i>GP</i>	<b>0.007</b>	0.0719	<b>0.0009</b>	0.0001
<i>CE</i>	<b>0.117</b>	<b>-0.312</b>	<b>1.561</b>	<b>2.1012</b>
<i>EF</i>	-0.492	<b>-0.023</b>	1.1975	-0.7847
<i>N</i>	<b>210</b>	<b>185</b>	<b>190</b>	<b>195</b>
<i>n</i>	<b>5</b>	<b>6</b>	<b>13</b>	<b>16</b>
<i>R<sup>2</sup></i>	<b>0.861</b>	<b>0.770</b>	<b>0.609</b>	<b>0.795</b>

The results show that money supply and crisis elsewhere are important in all for cases and it have the expected signs with the exception of crisis elsewhere in Greece

where the sign is negative. The money aggregate raise is expected in every crisis incident as a first line measure. The contagion within the monetary union and the global credit crunch is shown in the significance of crisis elsewhere variable. The surprising result in Greece can be explained because of the delay between the subprime crisis and the Greek one, the absence of crisis in the banking sector and the small level of Greek banks' exposure to the American bond market. Lending rate is positive in the cases of Cyprus and Portugal and with the positive sign as expected. Gold price is important in Cyprus and Ireland and positive. Real effective rate is important for Ireland and Portugal and negative as expected. Price level seems to be important and positive and economic freedom and balance of payments negative for Greece.

The forecasts for the four countries are shown on the following table:

Table 2: Forecast results

<i>Crisis Possibility</i>	<i>Cyprus</i>	<i>Greece</i>	<i>Ireland</i>	<i>Portugal</i>
<b>Bailout month</b>	<b>1.00</b>	<b>0.94</b>	<b>0.83</b>	<b>0.99</b>
<b>Next month</b>	<b>0.00</b>	<b>0.82</b>	<b>0.50</b>	<b>1.00</b>
<b>2months later</b>	<b>0.00</b>	<b>0.86</b>	<b>0.00</b>	<b>1.00</b>

We can see that the crises were predicted in all four cases. For Cyprus the possibility of crisis on the following months was zero as really happened. Greek crisis possibility has fallen for the following month from 94 per cent to 82 and rose to 86 on the second month. Ireland had a positive sign on the crisis month and negative signs on the following two months. Surprisingly although the model forecasted the Portuguese bailout the following months the possibility is 100% but the incident didn't repeat.

## 6. Conclusions

In the current work I presented the Eurozone crisis and its predictable characteristics. The contagion following the global credit crunch and the monetary base expansion. Competitively and external variables presented seem to work in some cases. The capital flight presented through



the balance of payments change was important only for Greece. The extreme value model worked as an Early Warning System for the forthcoming crisis in a month's time. The results are structured and cannot be rated as random. The present work can be a basis on a EWS in a country or monetary union level with common characteristics. As a pessimist could say, no one can be sure if the model works if it doesn't succeed. Every forecast has its odds and I believe that this set of models based on extreme value analysis can be a base for a reliable prediction. Maybe in the future another more accurate model can be developed by us or the future researchers. The conversation for the forecast model developing can be profitable and creative, and it could become a lesson for forecasting economic phenomena newly formed and examined.

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## Concentration in Banking Sector and European Competition Policy

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### Abstract

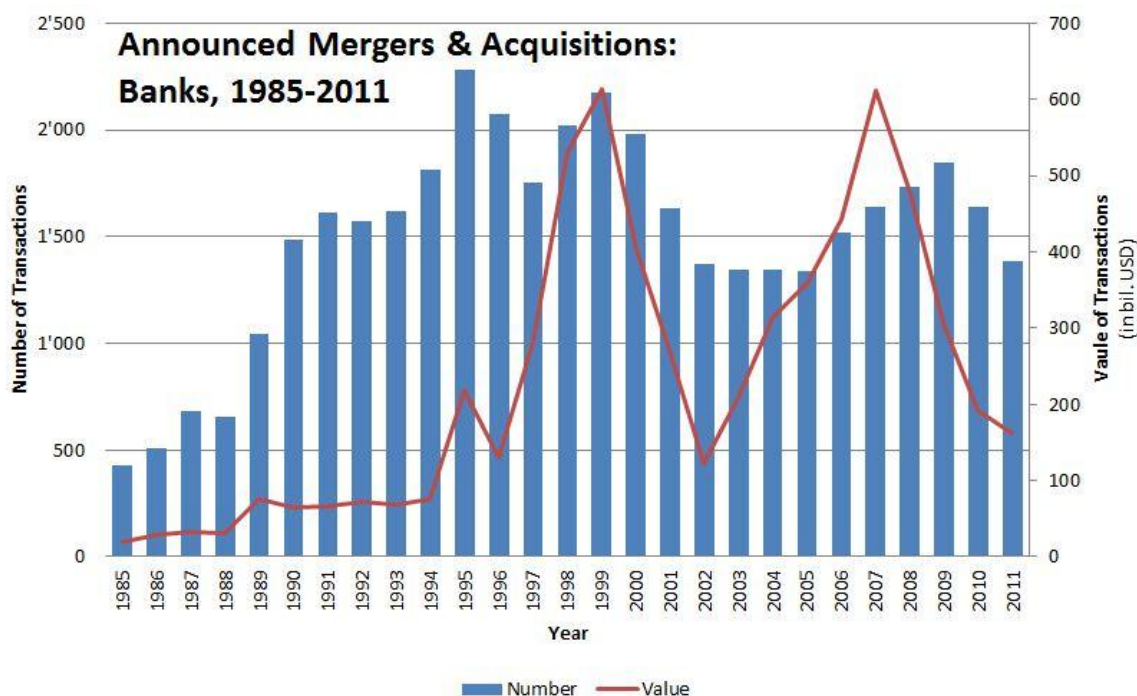
*In this paper, we analyze the evolution of global mergers and acquisitions in the banking sector during 1985-2011, given that a large number of banks all over the world have engaged in concentration activities. We focused in this section on the characteristics of the banking sector in Bulgaria and Romania. In parallel, we explain the reasons underlying these concentrations. In the second part of the paper, we present the essential steps in the european merger control enforcement: defining the relevant market, analyzing the market structure and assessing any harm to competition. In the analysis of market structure, we compare the degree of concentration in the banking sector in Bulgaria and Romania. In conclusion, we emphasize the importance of concentrations control for financial sector stability.*

**Cuvinte cheie:** banking, concentration  
**Clasificare J.E.L.:** G21; L11

### 1. Introducere

A large number of international and domestic banks all over the world are engaged in merger and acquisition activities. One of the principal objectives behind the mergers and acquisitions in the banking sector is to reap the benefits of economies of scale.

Deregulation in the financial market, market liberalization, economic reforms and a number of other factors have played an important function behind the growth of mergers and acquisitions in the banking sector.



As we see from the chart above, number of mergers and acquisitions globally peaked in 1995, approximately 2300 operations, the growth trend continue since the 90`s. Despite the global financial crisis in 2007-2009 the trend was increasing, with a slight decrease in 2011.

With the help of mergers and acquisitions in the banking sector, the banks can achieve significant growth in their operations and minimize their expenses to a considerable extent. Through mergers and acquisitions in the banking sector, the banks look for strategic benefits in the banking sector. They also try to enhance their customer base. Mergers and acquisitions in the banking sector have the capacity to ensure efficiency, profitability and synergy. They also help to form and grow shareholder value.

## **2. Merger control enforcement in European Competition Policy**

The Treaty of Rome made no explicit provision for merger control. It was only in December 1989 that the EC Merger Regulation (ECMR) brought explicit merger control at the European level. The primary legislation governing mergers is Council Regulation 139/2004 (the “Merger Regulation”) which came into force on 1 May 2004 (replacing ECMR).

Regarding the merger control enforcement, there are some essential steps: defining the relevant market, analyzing the market structure and assessing any harm to competition.

In the case of mergers, the definition of the relevant market is the first step in the analysis of a concentration operation, aiming at to determine whether the transaction will create or strengthen a dominant position in the market. The relevant market is the market on which the competition acts, the concept being used for the identification of the products and of the undertakings that compete directly. The European Commission Notice on the definition of the relevant market refers to three competitive constraints which can act on the undertakings: demand substitutability, supply substitutability and potential competition. The concept of substitutability is the key of the relevant market definition.

Normally, the European Commission uses current market shares in its competitive analysis. Commission often applies the Herfindahl-Hirschman Index (HHI) ( „Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings” 2004).

The last steps in the merger control enforcement is assessing any harm to competition. European Comision changed the substantive test for intervention in 2004 by introducing the so called significant impediment to effective competition (“SIEC”) test, aiming to emphasise an already ongoing move towards an “effects-based approach” in merger control. This means that the merger policy put greater emphasis on “economics” and rely less on structural factors such as concentration levels and market shares.

EU merger control enforcement has evolved gradually and in a consistent and stable way. The assessment has been made on the basis of sound economics using solid tools for investigation. (Villarejo C.M., 2011)

## **3. Brief overview of the merger legislation and banking sector in Bulgaria and Romania**

The accession of Romania and Bulgaria to the European Union implies the entering in “the single” European market and the existence of the single banking license. In this context, foreign banks can enter more easily the territory of a member country, which can determine the expansion of competition in the local banking activity. The methods to enter the banking market can be diverse: open branches or subsidiaries; equity investment in the local banks; mergers or acquisitions of local banks.

The Law on Protection of Competition (LPC) is the main law in Bulgaria containing provisions on the control of concentrations, entrusting the Commission on Protection of Competition (CPC) with the power to make an assessment of planned concentrations of economic activities and to decide on their authorisation. Taking into account the free regime in Bulgaria for the banking activities of EU credit and financial institutions, licensed in EU Member State, the CPC expects that the consolidation and

concentration processes in the banking system in Bulgarian market will further continue. (OECD, 2010)

The main provisions on the methods used by the CPC to determine the market share of undertakings are part of the Methodology on Investigation and Definition of the Market Position of Undertakings in the Relevant Market. The Methodology is adopted with decision No 393/2009 of the Commission and it reflects the amendments, introduced in the law. This new Methodology makes differentiation when setting how the market shares are to be calculated by the CPC, depending on the markets, in which the undertakings operate - markets of the real economy or financial sector markets, with further delineation for specific financial markets (banks and credit institutions, leasing companies, insurance companies, pension and health insurance companies, investment companies). This differentiation concerns the basis, on which the market share is calculated where markets in financial sector are analysed, as well as the calculation of the turnover of the undertakings, operating in these markets. The necessary data for the calculation by the CPC of the market shares of credit institutions is taken from the statistics of Bulgarian National Bank. The statistical data needed for the calculation of the turnover of the insurance companies, investment companies, etc. is taken from the Financial Supervision Commission. The Methodology provides for two main indexes to be used by the CPC to determine the level of concentration in the relevant market in merger proceedings – the Herfindahl index and the CR. The Methodology allows, however, using other indicators in addition to the CR and HHI, depending on the characteristics of the relevant market.

In the period 2006–June 2008, the Commission on Protection of Competition made an assessment and authorised without conditions 7 concentrations in the banking sector: MKB Bank, Hungary, to acquire control over Unionbank Commercial Bank; Eurobank EFG Holding, Luxembourg, to acquire DZI bank; Piraeus Bank Bulgaria, to acquire the retail banking business of ING Bank H.B.-Sofia city branch; Piraeus Bank Bulgaria, to acquire control over the leasing company Dirent Bulgaria; Setelem S.A., France, to acquire control over Jett Finance

International, Sofia – consumer finance; KBC Bank H.B., Belgium to acquire sole control over Economic and Investment bank) and Allied Irish Banks Public Limited Company (AIB), Ireland, to acquire control over Bulgarian-American Credit Bank.

After the accession of Romania to the EU and the liberalization of the service market, foreign institutions have expressed their intention to have direct banking activities on the Romanian territory. The Competition Council, as national competition authority, enforces and ensures the application of the national and Community rules on competition.

Next we summarize the main concentration in banking operations in Romania. Millennium Bank started its activity on the Romanian market on October 11, 2007, by simultaneously opening 39 branches in Bucharest and in other eight cities of the country. Before 2007, there was some foreign entrances in the Romanian banking system after the privatizations of certain Romanian state banks, such as: Banca Română pentru Dezvoltare (BRDGSG) bought by Société Générale and Bancpost in 1999, bought by a consortium formed by General Electric Capital Corporation (35%) and Banco Portugues de Investimento (10%); Banca Agricolă bought in 2001 by Raiffeisen Bank and Banca Comercială Română whose privatization process last between 2003 and 2006, when Erste Bank took the biggest bank of Romania. Also OTP Hungary overtook RoBank in 2004, the first acquisition of a bank with private capital in Romania. (Căpraru Bogdan, 2010)

In 2010, in Bulgaria there were 30 banks and in Romania 32, which shows a resemblance between the two countries on the structure of the banking system.

Above review of literature gives us the empirical substance to one of the theoretical advantages which is claimed for concentration ratios as a measure of market structure. Since the importance of concentration ratios arises from their ability to capture structural features of a market, these are therefore often used in structural models explaining competitive performance in the banking industry as the result of market structure. Concentration ratios are also able to reflect changes in concentration

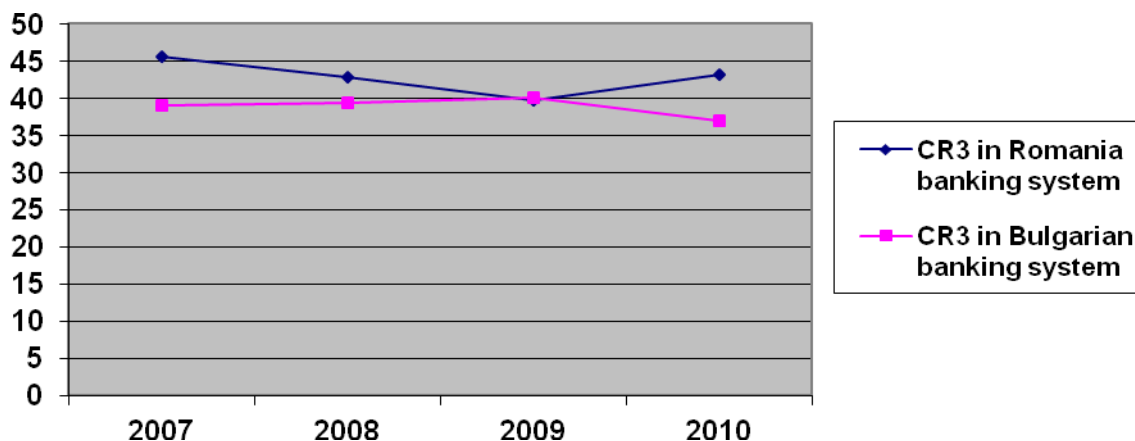
as a result of the bank’s entry into the market or its exit from it, or caused by a merger.

*Concentration Ratio (CR3):* Three-Bank concentration ratio equals to the sum of the assets, or deposits, of the largest three banks

in a given market divided by the total assets of that market, as in equation:

$$CR3 = \frac{\text{The Largest Three Banks' Assets}}{\text{Market's Assets}}$$

*Concentration Ratio (CR3) in Romanian and Bulgarian banking system*



The Romanian and Bulgarian banking sector remain relatively concentrated. Top-three banks (in terms of assets) held in 2010: 43,1% of aggregate assets on the credit institutions’ balance sheets in Romania and 37% in Bulgaria. As we see from the chart above, the banking system in Romania is slightly more concentrated than in Bulgaria.

#### 4. Conclusions

The competition in the Romanian banking system increases continuously in the last years. The main factors which have influenced this process were: the privatization of the majority of state capital banks and the perspective of accession of our country in the EU.

Consolidation in Bulgarian banking sector was moved by objective system features. Harmonised with the *acquis communautaire* regime of carrying out business and supervision, as well as public finance stability, growth prospective and level of services attracted big European banks in a market, where physical presence (offices and branches) is crucial.

There is a positive correlation between bank performance and market concentration. From a social viewpoint, bank concentration creates an environment that can reduce social welfare. This is an issue that has important public policy implications. Since the market

structure in Romanian and Bulgarian banking system is still relatively concentrated (due to the value still high of the indicator CR3 - Market share of the top three banks in total assets), public policy should focus on increasing competition such as discouraging mergers and acquisitions.

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## Convergence and Divergence in the European Union for New Member States

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### Abstract

*The objective of the article is to investigate the phenomenon of economic convergence across the new member states of the European Union, over the period 2000-2010. A significant aspect is considered to be whether convergence is the general rule, applicable to different countries, or whether in reality convergence and divergence coexist across different periods of time and different countries. An important aspect of the analysis is to single out several main drivers behind economic convergence and the relationships between them.*

**Key words:** convergence, divergence, GDP per capita in PPS, government debt.

**J.E.L. Classification:** E5, E6, F4

### 1. Introduction

One of the main principles of the European Union in terms of economic policy is the achievement of nominal and real convergence among member states.

The objective of the article is to investigate the phenomena of economic convergence and divergence across the new member states of the European Union, over the period 2000-2010. A key issue is considered to be whether convergence is the general rule, applicable to different countries, or whether in reality convergence and divergence coexist across various periods of time and countries.

We refer to different groups of countries from the EU27, but in particular to the classification old member states (EU15) and new member states (NMS) – countries that joined the EU after 2004. Another grouping

used is that of euro area and non-euro area members.

The period taken into consideration is divided into two: 2000-2007, regarded as the boom period, and 2008-2010 which is considered to be the post-boom period (*the boom – post-boom framework is inspired from a joint project of one of the authors with Geoff Kenny and Frank Smets at the European Central Bank*). The comparisons used in the analysis will involve comparisons across countries between the boom and post-boom periods, especially for New Member States.

### 2. EU countries and the New Member States

When discussing about groupings of countries in the European Union, various classifications are possible. There might be approaches looking at old member states (EU15) and new member states (NMS), as well as euro area members and non-euro area members.

For our purposes, the main groupings used will be the ones corresponding to the EU15 and the NMS. Also, references will be made to the euro area, which encompasses most of the EU15 and a few of the NMS.

In this article, we consider the countries that joined the EU after 2004. Most of these countries are not yet members of the euro area and are generally regarded as emerging economies. For these countries, the factors driving either convergence or divergence may be quite different from the ones valid in the case of the EU15 economies.

Maybe the most important convergence driver is the mere fact that most of the NMS are far below the EU27 average, and therefore a catching-up process is natural in a

common market that is becoming more and more integrated.

Another aspect is that most of these countries have not yet become members of the euro area, and therefore do not face the rigidities that are causing problems for a number of euro area countries.

In our framework, particular emphasis will be set on testing whether and to which extent growth and implicitly convergence depend on the level of public debt. From this point of view, most NMS have a public debt level considerably below the average level of the EU15. It is an initial hypothesis that this indeed has a positive contribution to the catching-up process of the NMS. This paper tries to bring evidence that would help test this hypothesis.

### 3. Data and exploratory analysis

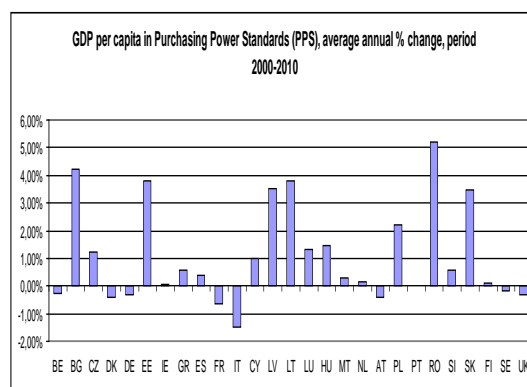
The source for the primary data used is Eurostat. The data are annual and generally expressed as average of levels or percentage changes over the boom (2000-2007), post-boom (2008-2010) or the whole period (2000-2010).

The main variables considered are: GDP per capita in purchasing power standards (PPS), expressed as an index relative to the EU27 average, real GDP growth, government debt as % of GDP, government deficit as % of GDP, inflation rate.

A powerful measure for the convergence of new member states is GDP per capita in Purchasing Power Standards. When looking at the whole period, Figure 1 illustrates that the largest growth rates for this indicator were recorded in Romania, Bulgaria, Estonia, Lithuania and Latvia, which can be translated into the highest speeds of convergence, considering that all above countries are below the EU27 average.

Seen from perspective of the boom and post-boom periods, we observe, for example, that Poland accelerates its convergence over the post-boom period, which is inline with the fact that it is the only EU country that avoided recession. At the same time, countries such as Estonia and Latvia have an opposite behaviour.

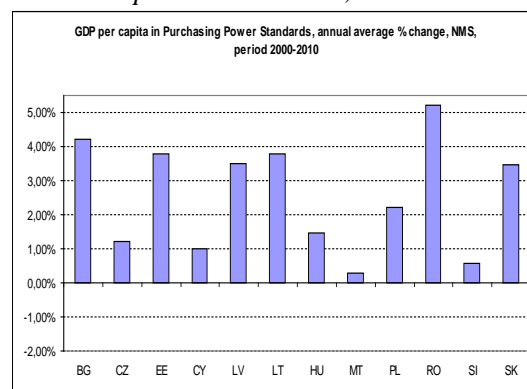
Figure 1. GDP per capita in Purchasing Power Standards, average annual % change, period 2000-2010



Source: <http://www.eurostat.ec.europa.eu>

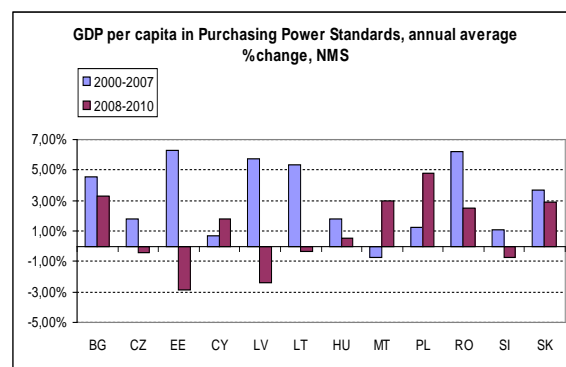
Figures 2 and 3 help to visualize the group of the New Member States (NMS). The scale is the same so it is easy to notice that in general the amplitude of movement is considerably higher for the NMS.

Figure 2. GDP per capita in Purchasing Power Standards, average annual % change, period 2000-2010, NMS



Source: <http://www.eurostat.ec.europa.eu>

Figure 3. GDP per capita in Purchasing Power Standards, average annual % change, NMS

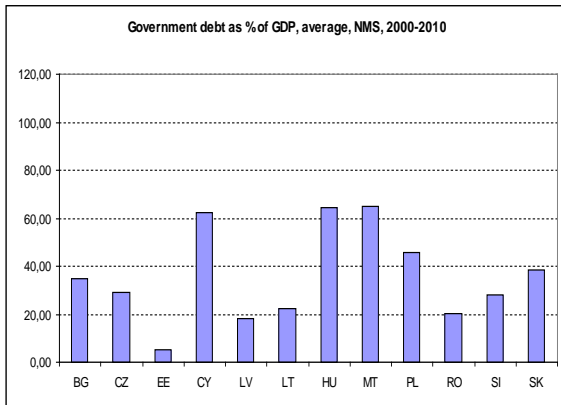


Source: <http://www.eurostat.ec.europa.eu>

The next figures present in a similar way the results of data exploration for the variable: public debt.

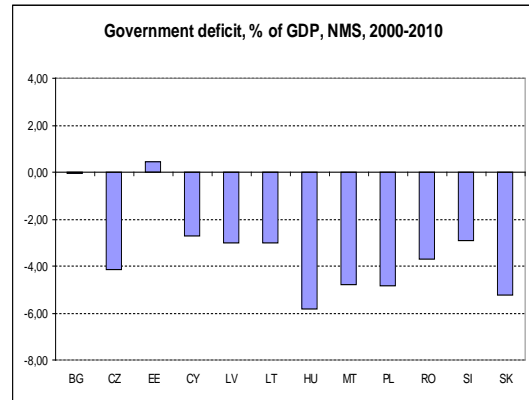


Figure 4. Government debt as % of GDP, average annual % change, period 2000-2010, NMS



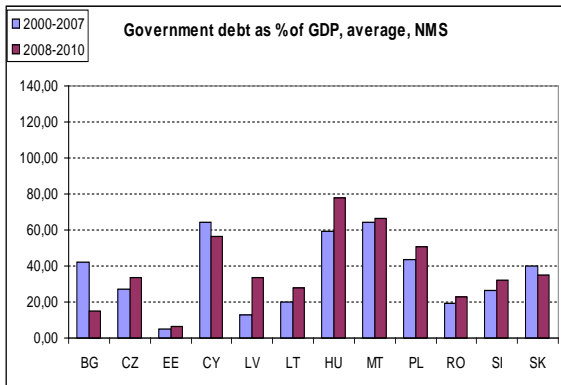
Source: <http://www.eurostat.ec.europa.eu>

Figure 6. Government deficit as % of GDP, average annual % change, period 2000-2010, NMS



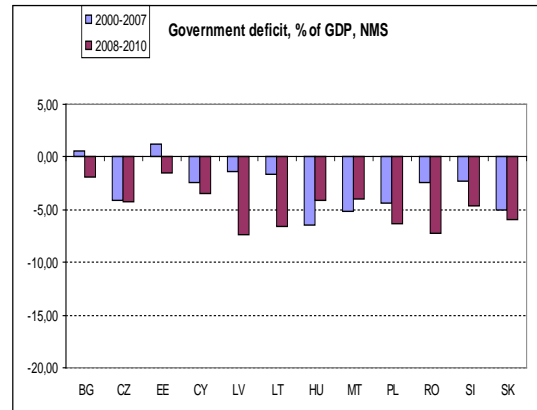
Source: <http://www.eurostat.ec.europa.eu>

Figure 5. Government debt as % of GDP, average annual % change, NMS



Source: <http://www.eurostat.ec.europa.eu>

Figure 7. Government deficit as % of GDP, average annual % change, NMS



Source: <http://www.eurostat.ec.europa.eu>

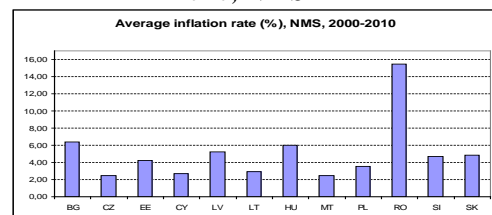
The government debt as % of GDP plots suggest that from the NMS, Hungary, Malta and Cyprus can be considered higher debt countries.

A development is that over the period 2008-2010 the debt ratio has increased for most countries in the respective group. This is explainable considering the fiscal pressures countries were faced with because of the crisis. These pressures become more obvious when looking at the charts of government deficit as percentage of GDP, displayed for both periods 2000-2007 and 2008-2010.

Over the whole period, the deficits of the NMS seem to be generally large, but this is not necessarily translated into higher debt ratios, because the higher GDP growth rates of the NMS have helped with the dynamics of debt.

The inflation charts illustrate the inflation differential between most of the NMS. There is also a notable outlier, Romania, which displays a rate of inflation far higher than any other NMS for the whole period. It seems to come more inline with the other countries for the period 2008-2010.

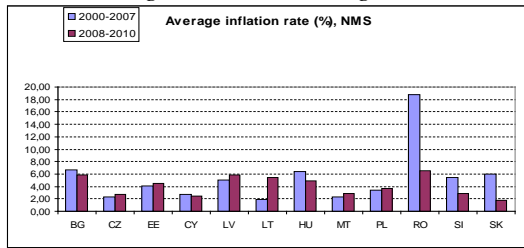
Figure 8. Average inflation rate (%), average annual % change, period 2000-2010, NMS



Source: <http://www.eurostat.ec.europa.eu>



Figure 9. Average inflation rate (%), average annual % change, NMS



Source: <http://www.eurostat.ec.europa.eu>

#### 4. Empirical analysis

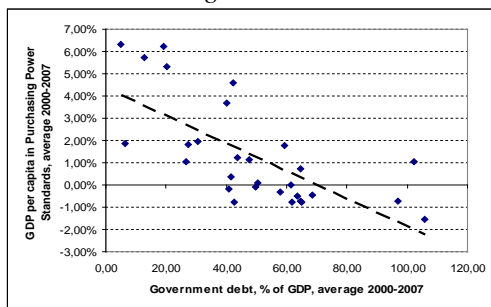
In this section relationships between variables are investigated by means of regression analysis. We try to find evidence in order to test the hypothesis that the lower debt ratio of the NMS is an advantage in the catching-up process, in the sense that lower debt ratios bring about higher GDP growth among the NMS.

The relevant results obtained are summarized in following regressions.

A result is the negative and significant relationship between GDP per capita in Purchasing Power Standards and Government debt as % of GDP. This is obtained over the boom period.

Regressions 1 illustrate this situation, which is also in line with our initial hypothesis. This is not direct evidence with regard to convergence, because the GDP per capita in PPS is expressed as an index relative to the EU27 average. Nevertheless, there is a clear indication that an increase in the level of debt leads to a decrease of the GDP per capita in PPS.

Figure 10. Government debt, % of GDP, average 2000-2007 vs. GDP per capita in Purchasing Power Standards, average 2000-2007

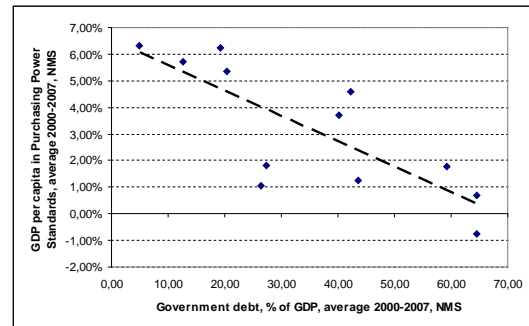


Source: <http://www.eurostat.ec.europa.eu>

Table 1. Regression 1.

Dependent Variable: GDP_PPS_BOOM				
Method: Least Squares				
Sample(adjusted): 1 28				
Included observations: 28 after adjusting endpoints				
GDP_PPS_BOOM = C(1) + C(2)*GOVERNMENT_DEBT_BOOM				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.043492	0.006975	6.235.747	0.0000
C(2)	-0.000617	0.000127	-4.852.287	0.0000
R-squared	0.475221	Mean dependent var		0.013590
Adjusted R-squared	0.455037	S.D. dependent var		0.023414
S.E. of regression	0.017285	Akaike info criterion		-5.209.239
Sum squared resid	0.007768	Schwarz criterion		-5.114.081
Log likelihood	7.492.934	Durbin-Watson stat		2.216.319

Figure 11. Government debt, % of GDP, average 2000-2007, NMS vs. GDP per capita in Purchasing Power Standards, average 2000-2007, NMS



Source: <http://www.eurostat.ec.europa.eu>

Table 2. Regression 2.

Dependent Variable: GDP_PPS_BOOM_NMS				
Method: Least Squares				
Sample(adjusted): 1 12				
Included observations: 12 after adjusting endpoints				
GDP_PPS_BOOM_NMS=C(1)+C(2)*GOVERNMENT_DEBT_BOOM_NMS				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.065303	0.009561	6.829.902	0.0000
C(2)	-0.000955	0.000237	-4.032.057	0.0024
R-squared	0.619156	Mean dependent var		0.031453
Adjusted R-squared	0.581072	S.D. dependent var		0.024491
S.E. of regression	0.015852	Akaike info criterion		-5.300.034
Sum squared resid	0.002513	Schwarz criterion		-5.219.216
Log likelihood	3.380.020	Durbin-Watson stat		2.799.268

#### 5. Conclusion

The article considers the phenomena of economic convergence and divergence within the European Union, over the period 2000-2010. This period is divided into a boom period 2000-2007, a period with a high macroeconomic stability and a post-boom period, 2008-2010.

An empirical study done by regression analysis tries to bring evidence in order to test the hypothesis that the lower debt ratio of the NMS is an advantage in the catching-up

process, in the sense that lower debt ratios bring about higher GDP growth among the NMS. Implicitly, convergence between NMS and EU15 is stimulated should this hypothesis be true.

The main point the article underlines is the following: convergence is more present when speaking about the NMS group, in the sense that the NMS show a significant catching-up path with the generally more economically advanced EU15 group.

The main finding of the article is that the hypothesis that the lower debt ratio of the NMS is an advantage in the catching-up process is verified. Lower debt is an important driver for growth in general and in particular lower debt of the NMS is an important driver for convergence between the NMS and the EU15.

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## A Study on Competitiveness Disparities Manifested in the European Union

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### Abstract

*The goal of this research is to identify the competitiveness disparities existing between the European Union and the other states of the world. For their emphasis and analysis we have used macroeconomic indicators such as GDP/inhabitant, GDP growth rate, employment rate for the people with ages between 15 - 64 years old, the employment rate, the unemployment rate, the share of research – development expenditure in GDP, the number of researchers, the public expenditure on education in GDP, labour productivity, the real salaries, unit workforce costs, the export market share held or the global market share of the high-technology products. The conclusion we have reached is that the European Union states must recover the competitiveness disparities so that they don't miss the insertion in the new technological paradigm based on information and communication technology, by restructuring the productive sectors and investments in research – development, in the context of an economic and financial environment which is confronted with structural unbalances.*

**Keywords:** economic competitiveness, globalization, international finance

**J.E.L. Classification:** F36, F62, C82

### 1. Introduction

If the companies' dimension influence on their competitiveness on the market through the capacity of mobilizing and managing efficiently the competitiveness determining factors, we could question ourselves if

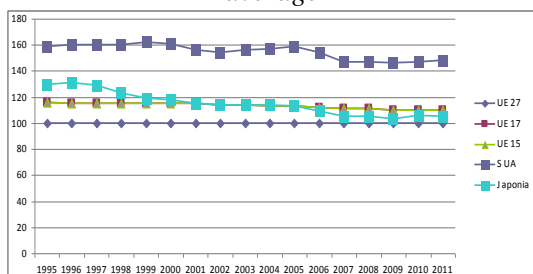
economy dimension has an importance. Within a globalized economic environment, characterized by a great mobility of the production factors, the economy dimension influences on the developed activities, performed turnovers, and the capitalization process by means of the market. The economic integration in the European Union and building a single market provide together with the free circulation of goods, services and capitals, the possibility of the free election of the economic activity localization and the possibility of developing on the largest market in the world, which has a higher dimension than the USA market. The competition growth, price drop and improvement of the economic activities' efficiency, the direct access to more than 500 millions of consumers provide a solid foundation to the European companies for the competitiveness provision because it allows the performance of economies of scale, productivity returns and prices' reduction. The economic integration provides the development of the trade exchanges on a market whose dimension becomes attractive both for the European companies and for the foreign ones as well. Notwithstanding, internal market integration and efficiency are negatively influenced by the diversity of the tax systems. With all efforts made towards the integration of the national markets, the building of the community institutions, the introduction of a single currency, limited to the level of certain member states so far, however the deficiencies related to the structural policies on the European level concerning the industrial policy, competition and innovation to which the total incompleteness of the liberalization process on all segments of the internal market is added, limit its advantages. The Union

competitiveness is affected by the insufficient investments in research–development, those oriented on the development of technologies related to information and communication, and by the reduced number of patents. From a practical point of view, the Union hasn’t granted preference to the profit achievement from innovation which should contribute to the productivity increase of the production factors, because it was mainly focused on profit achievement from integration, missing out the fact that integration cannot solve all the problems related to the internal market dimension. In order to provide the Union competitiveness and its citizens’ standard of living growth implicitly, economic policies are required in order to provide productivity profit by means of the new technologies.

## 2. The competitiveness disparities developed on the European Union level

According to data supplied by Eurostat, we notice the existence of certain disparities between the European Union and the other states of the world at the level of certain macroeconomic indicators. If we take as reference the GDP/inhabitant in comparison with the Union average for EU27 set to 100%, then we notice that if at the EU15 level in 1995 GDP/inhabitant was of 116%, at the level of the 17 member states of Eurozone it was of 114%, while in USA it was of 159% and in Japan it was of 130%. It decreased in 2011 to 110% for EU15, 108% for Eurozone respectively, while in USA it was of 148% and 105% in Japan.

Figure 1. GDP/inhabitant expressed in comparison with the European Union average

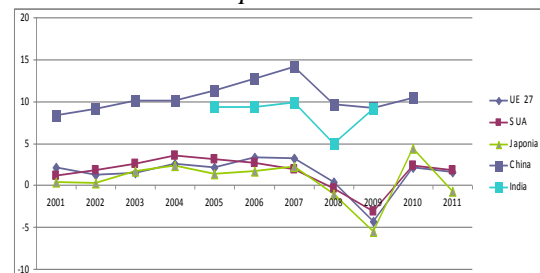


Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

Although GDP/inhabitant on the Eurozone level is higher than the EU27 average, which is a normal and explainable

economic aspect, however its level is advanced by the USA and Japan ones. The tendency of reducing GDP in EU15 and Eurozone is not connected with the crisis because the statistical data show a slightly decreasing trend on their level after 1995, so much before the global structural crisis of 2008, while in USA the trend was increasing up to 2000, the most important decrease occurring in this country beginning with 2001 and 2007 respectively, against the subprime crisis, while in Japan the decreasing tendency has occurred faster, namely beginning with 1997, and in the moment of the global structural crisis transmission by contagion. There are also disparities regarding the growth rate of real GDP between the three economic areas. The existence of certain important disparities between Union and the two developed states of the world which continue in spite of a trend for their reduction reveals the existence of certain structural unbalances between the economies of the economic areas taken as reference.

Figure 2. Growth rate of GDP in the European Union



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

We can notice the bloom of two Asian economies, an aspect bringing into focus of the European institutions the necessity of certain immediate measures on the European level towards the increase of the European corporations’ competitiveness. Otherwise, the Union shall become a net consumer of goods produced out of it, and the advantages of the regionally integrated market shall disappear in time. The performed graphical analysis reveals an important disparity between EU27, USA and Japan in comparison with the higher growth rate registered by China and India. However, GDP growth rate closeness between Union and USA doesn’t eliminate the existing historic disparity. There are also disparities

on the employment rate level for the people with ages between 15–64 years old in the Union comparatively with USA and Japan, confirming the structural issues faced by the European economy.

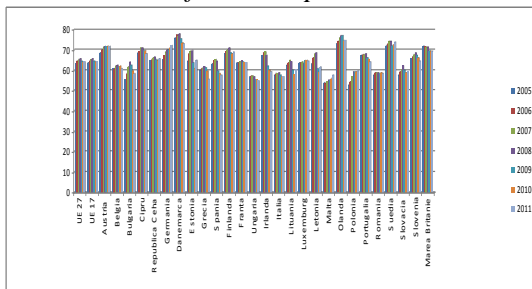
Figure 3. Employment rate for the people with ages between 15 – 64 in the European Union comparatively with USA and Japan



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

Although the employment rate for the people with ages between 15-64 on the EU27 and EU17 level (Eurozone) is almost identical for the analyzed period, however it was ranged below the objective of 75% for the whole period 1997-2011 within the Union, being below the registered levels in USA and Japan. The analysis refinement on the member states level reveals significant disparities between them, reflecting the existing important economic disparities.

Figure 4. Employment rate for the people with ages between 15 – 64 in the member states of the European Union



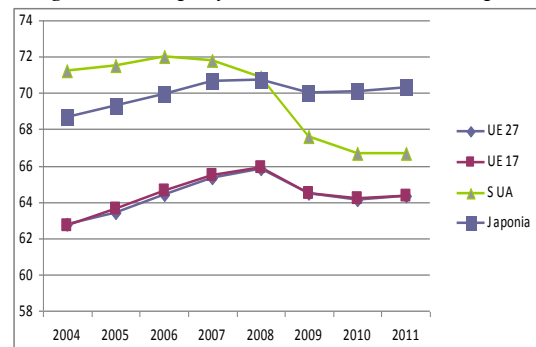
Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

In regard to the 75% - objective, the only states which got next to it or exceeded it temporarily are the Netherlands, Sweden and Denmark. A second group of states standing apart from the others is represented by Germany and Austria. Instead, a significant number of states ranges below the average of EU27 which coincides with the one registered on the Eurozone level. This last sample is represented, besides the states making the object of the latest two

enlargements, by old member states too, being also part of the Euro group, namely Greece, Italy and Spain.

Although the employment rate increased during 2004-2011 period with 1,5% on EU27 and Eurozone level, and a negative adjustment of 4,6% took place in USA, however it continues to have a low level in the Union. Its level permanently ranged below the level registered by USA and Japan and it comes to confirm the competitiveness disparities of the European corporations in regard to the foreign ones.

Figure 5. Employments in EU, USA, Japan



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

The low level of the employment rate corresponds with a high level of the unemployment rate. The current economic and financial crisis made the disparity in favour of USA to disappear in 2010, when in EU27 and USA this was of 9,6% while among the states of Euro group this was 0,4% higher. Although the situation of the next year (2011) continued to be the same, instead a slight decrease was registered in EU27 and USA, reaching the 9%, a level which is significantly higher than the one registered in Japan, namely of 4,6%.

Figure 6. Unemployment rate in the European Union, USA and Japan



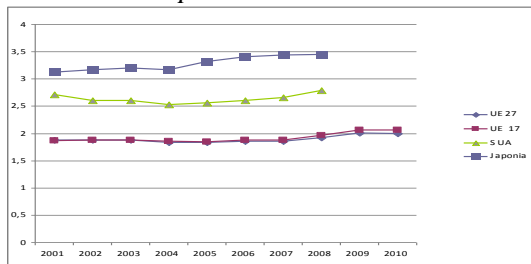
Source: <http://stats.oecd.org>, data processed by the authors

However, in the knowledge-based



economy, the expenditures concerning the research and the level of the young generation training represent determining factors of competitiveness on the medium-term and long-term. In regard to the assignment of 3% of GDP for research – development, the gross domestic expenditure assigned for this purpose was below this level during 2001 – 2010, namely of 1, 87% in 2001, followed by a slightly increasing trend in 2002, when they represented 1,88% and then the trend became downward reaching 1,83% in 2005, followed by a slight recovery and with a maximum level of 2,01% in 2009. Instead, in USA and Japan, during the whole period, the expenditures assigned for research and development were above the level assigned in the European Union.

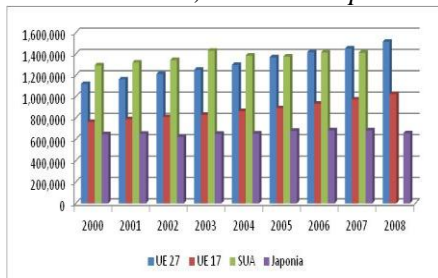
Figure 7. Share of research – development expenditure in GDP



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

We also discover disparities at the level of the number of researchers in the European Union, USA and Japan, but also between EU27 and Euro group. If in 2000, on the Euro group level there were 68.09% of the total number of researchers, in 2008 the level increased to 67,55%. The supremacy held by USA in comparison with the EU continues for the whole analyzed period. Simultaneously, we notice during 2003 – 2007 period a recovery of the disparity by Japan, but sinking again in 2008.

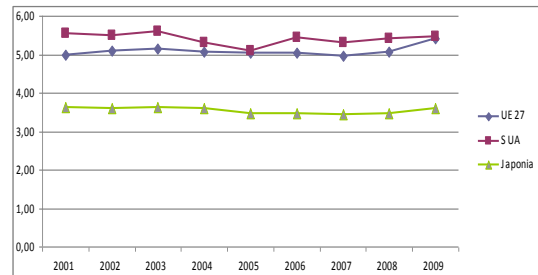
Figure 8. The number of researchers in the EU, USA and Japan



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

The state involvement in education is different. The Union has assigned significantly more reduced resources in comparison with USA, but however higher than those assigned by Japan during the whole analyzed period.

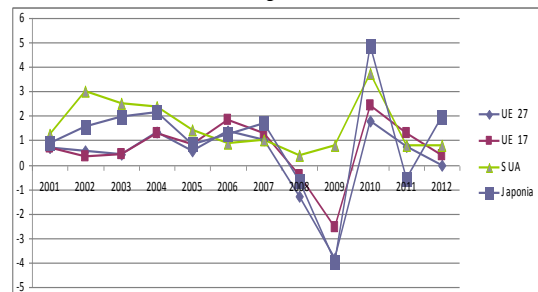
Figure 9. Public expenditure on education in GDP



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

Labour productivity, one of the factors influencing the profitability of the European corporations, reflects the existence of certain deficiencies related to the technological equipment but also related to the quality of the human capital employed in order to add value affixed to the assets and services. If at the beginning of the analyzed period it had the same medium level in the Union and Eurozone, subsequently an improvement was registered in the euro group states and in comparison with USA and Japan. Notwithstanding, in the last ten years, on the Union level, although fluctuations of this indicator took place, after the crisis starting and the registered productivity losses, the Union came back to a medium level, being identical with the one at the beginning of the analyzed period.

Figure 10. Labour productivity in EU, USA, Japan

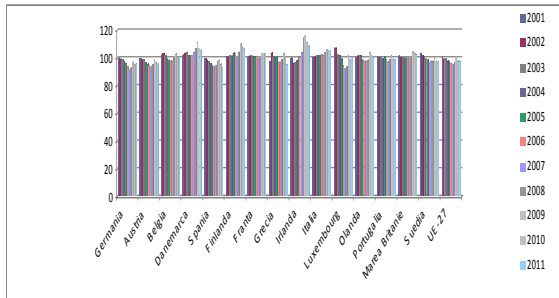


Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

The analysis of the real salaries on the EU27 level, taking year 2000 as a base, reflects an average decrease of more than 3% at the end of 2011. However, on the level of

the old member states, the evolutions were differentiated. While in Ireland, Finland, Denmark, Italy and France a more significant increase occurred and in Great Britain and Netherlands a lower one, in other European states the adjustments went downward. Decreases of the real salaries took place in Spain, Luxembourg, Greece, Portugal, Belgium and Sweden.

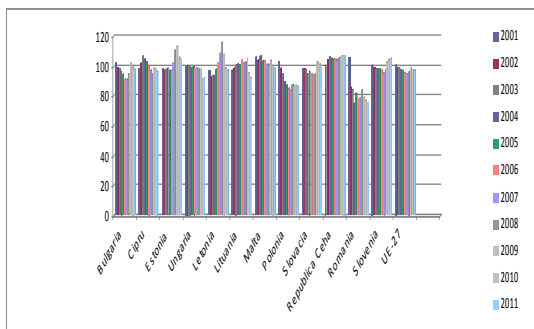
Figure 11. The real salaries on the EU27 and EU15 level



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

In the case of the states which made the object of the two latest enlargements, with five exceptions represented by Czech Republic, Slovenia, Estonia, Malta and Latvia, the real salaries of the other states ranged below the EU27 average. In Bulgaria, Cyprus, Hungary, Lithuania, Malta, Poland and Romania downward adjustments of this indicator have occurred, the most important happening in Romania.

Figure 12. The real salaries on the EU27 and EU12 level



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

One of the cost competitiveness analysis indicators is the unit costs for the workforce. In the case of the last ten years analyzed, we can notice the existence of four moments of adjustment and the most significant happened in 2003 if we taken into account the level they decreased from. Other two downward adjustments occurred in the context of the

economic and financial crisis and sovereign debt crisis starting.

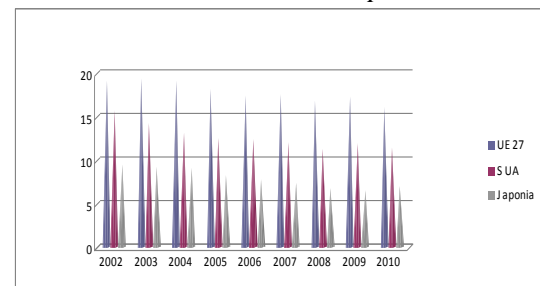
Figure 13. The unit costs for the workforce on UE27, UE25, UE15 level



Source: <http://epp.eurostat.ec.europa.eu>, data processed by the authors

Given the fact of the single internal market and the increase of the integration degree of the member states economies, although the export market share decreased during 2002 – 2010 with 3%, it is still higher than the one held by USA which, on its turn, registered a decrease of 4,2%. Japan registered a decrease of 2,5% too. These decreases happened due to the Asian goods competition whose price and quality was crucial for the grab of new segments and the market share expansion.

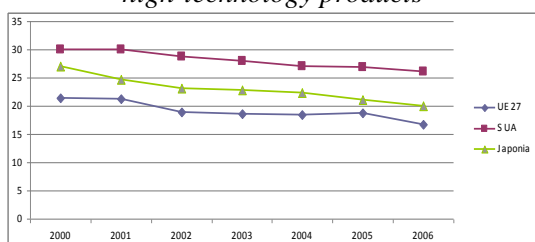
Figure 14. The export market share held by EU27, USA and Japan



Source: <http://appsso.eurostat.ec.europa.eu>, data processed by the authors

If the analysis reference is the high-technology products market, we notice that although all three economic areas have registered negative adjustments of the held quota, USA remains the leader. The most important adjustment was suffered by Japan, followed by EU27.

Figure 15. The global market share of the high-technology products



Source: <http://stats.oecd.org>, data processed by the authors

We consider that the loss in market share is due to the lack of investments in new technologies, the low level of resources assigned to research – development designed for their development, the productivity stagnation, which determined a lack of competitiveness of the economic offered assets, by price and except price.

### 3. Conclusions

Although it is generated at the corporations' level, competitiveness reflects upon the quality of life of all citizens of a country, having a national and an international dimension. In the context of the globalization process, the disparities deepen on the research and development level and on technological level, with a direct and immediate impact on the economic disparities between countries and economic regions. The internationalization of research – development, production, integration of the production and merchandising networks, together with the agreements and strategic alliances between corporations, the appearance of the industrial clusters, the relocalization of processes and activities, the specialization sinking, which produce effects on the markets of the production, assets and services factors, need new strategies on regional, national, district and corporate levels, being oriented on the development of capabilities to the detriment of the development of productive capacities. Given the fact that, apart from USA and Japan being recognized as economic powers, certain Asian countries struggle to consolidate their economic position on the global level, the European Union states being confronted with a slow increase and a persistent unemployment must recover the competitiveness disparities for not losing the

insertion in the new technological paradigm based on the information and communication technology at the millennium beginning, by restructuring the productive sectors and investments in research – development, in the context of an economic and financial environment which is confronted with structural unbalances. Although the attention is oriented on research and the assignment of the resources meant for innovation, we must bring into focus the function of the institutions in the new global economy in order to support and propel this process.

### Acknowledgements

This work was supported by the project “Post-Doctoral Studies in Economics: training program for elite researchers-SPODE” co-founded from the European Social Fund through the Development of Human Resources Operational Programme 2007-2013, contract no. POSDRU/89/1.5/S/61755.

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## The Impact of the Great Recession on the Euro Area: the Impossible Adjustment of Greece

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### Abstract

*At present the Euro Area is confronted with the persistence of the sovereign debt crisis. Despite the amount of measures implemented by the policymakers over the past years, the adjustment process is tough and seems impossible in several countries (for instance Greece, where the GDP contracted for the 17th quarter in row). In fact, these economies risk becoming permanent asymmetric shocks at the Monetary Union level. In this paper I estimate the evolution of the potential GDP in Greece during the period 1996-2011 by employing the Cobb-Douglas methodology. According to the results, the potential GDP of Greece turned negative after the shock of the 2008 global liquidity crisis. This indicator deteriorated severely afterwards, as the capital investment contracted, with negative impact for the total factor productivity. One can draw an important conclusion from this analysis: the European policymakers should take active measures for the relaunch of the investment flows in Greece in other Southern economies.*

**Keywords:** Greek economy, potential GDP, Cobb-Douglas.

**J.E.L. classification:** E32, E62, H30, H60

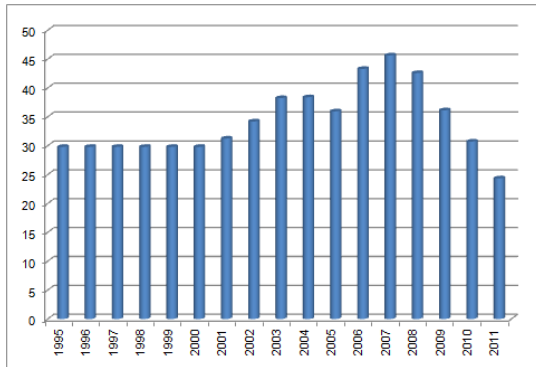
### 1. Introduction

The first wave of the Great Recession determined the *sudden stop* of foreign capital flows, with important negative consequences for the economies that accumulated macroeconomic disequilibria during the last years of the *Great Moderation*. It is the case of Greece, with important private and public sector deficits in 2007/2008. At present,

the Greek economy passes through a tough macroeconomic adjustment process. The GDP contracted during Q3 2012 for the 17th quarter in a row and the short-run perspectives are not favourable. In other words, this macroeconomic adjustment process seems impossible. Being a member of the Euro Area, the adjustment cannot be accomplished through monetary or currency measures. On the other hand, the fiscal policy cannot help the economy, due to the huge level of public debt. Until now the adjustment process of the Greek economy consisted in the decline of the wages and of the asset prices. However, the adjustment process seems impossible. In my opinion, the policymakers (in the Euro Area and in Greece) should pay attention to the relaunch of the investment flows in the economy. Otherwise, the Greek economy risks becoming a permanent asymmetric shock in the Euro Area.

In this paper I estimate the evolution of the potential GDP in Greece during the period 1996-2011, by employing the Cobb-Douglas methodology. According to the results, the Greek potential GDP turned negative in 2009 and the rhythm of the decline intensified afterwards. This evolution was determined by the decline of the capital investment (as can be seen in the figure 1.1) with negative consequences for the total factor productivity.

Figure 1.1 Gross fixed capital formation in Greece (EUR, bn)



Source: Eurostat

The rest of the paper has the following structure: chapter II shortly describes the methodology employed; the main empirical results are presented in the third chapter; the macroeconomic policy recommendations and the concluding remarks are drawn in the last chapter.

## 2. Methodology

This chapter shortly presents the methodology employed in order to estimate the evolution of the potential output in Greece during the period 1996-2011.

I employed the Cobb-Douglas approach in order to determine the potential output. I started from the relation

$$Y_t = \alpha N_t + (1 - \alpha) K_t + U_t \quad (2.1),$$

where  $Y_t$ ,  $N_t$ ,  $K_t$  and  $U_t$  represent the evolution of the GDP, Labour input, Capital stock and total productivity factor.

In order to estimate the potential GDP ( $Y^*$ ), I determined the trend components of  $N_t$ ,  $K_t$  and  $U_t$  ( $N^*$ ,  $K^*$  and  $U^*$ ) by directly applying the Hodrick-Prescott methodology (presented at the end of this chapter).

I define labor input as the labor force multiplied by the labor participation rate, by the number of hours worked and by the difference (1-unemployment rate).

I used annual data from Eurostat Database for the period 1996-2011.

In what regards the Capital Stock, I applied the Perpetual Inventory Method (PMI), expressed by the following formula:

$$K_t = K_{t-1} * (1-d) + I_t \quad (2.2),$$

where  $d$  is the depreciation ratio and  $I_t$  represents the Gross Fixed Capital Formation.

I considered the initial capital stock of 1995, as estimated by Derbyshire et al (2010) and an annual depreciation ratio of 5%. The annual Gross Fixed Capital Formation was considered from the Eurostat Database.

The Total Factor Productivity trend was estimated by applying the Hodrick-Prescott filter to the  $U_t$  series, variable determined as  $U_t = Y_t - \alpha * N_t - (1 - \alpha) * K_t$  (2.3).

I considered an  $\alpha$  of 0.65, as considered in the paper of D’Auria et al. (2010).

### On the Hodrick-Prescott filter

The Hodrick-Prescott filter is a method used to distinguish between a cyclical component and a trend component of a macroeconomic variable ( $Y_t = Y_t^* + Y_{tc}$ ). Mathematically, the following relation determines the cyclical component:

$$\text{Min} \sum_{t=1}^T (Y_t - Y_t^*)^2 + \lambda \sum_{t=2}^{T-1} ((Y_{t+1}^* - Y_t^*) - (Y_t^* - Y_{t-1}^*))^2 \quad (2.3)$$

where  $Y_t$  represents a macroeconomic variable,  $Y_t^*$  represents the trend of this variable,  $\lambda$  is a measure of smoothness, so that the lower the value of this parameter, the closer potential variable follows actual variable. In the extreme case when  $\lambda = 0$ , then the trend would equal actual variable.

Hodrick-Prescott (1997) suggests a value of 1600 when working with quarterly data and 100 for annual data. However, some other contributions in the literature suggest the use of other values for  $\lambda$ .

Bouthevillain et al (2001) evidence some studies where the value chosen for this parameter is 400 for annual data. On the other hand, they mention other contributions where for a value of 1600 for quarterly data corresponds to a value of 6 to 8 for annual data.

### 3. Empirical results

According to the results of the estimations, the potential GDP rhythm of the Greek economy accelerated during the period 1996-2003, from 3.7% to 4%, evolution mainly determined by the total productivity factor (whose contribution increased from 0.4 p.p. to 1.3 p.p.).

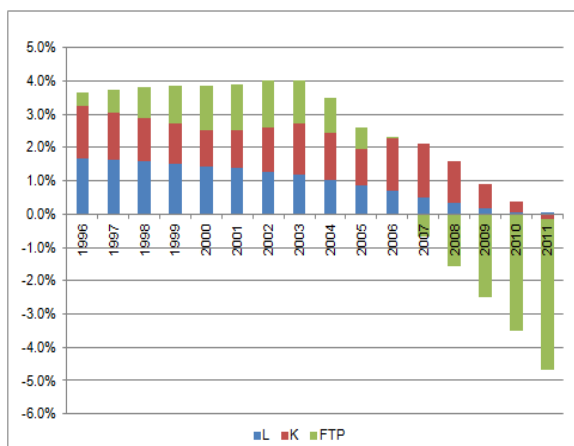
This evolution should not surprise, given the upside trend of the gross fixed capital formation during that period, in the context of the economic European convergence of the Greek economy.

However, I point out that the acceleration of the capital investments in the first part of the analysed period did not have positive effects for the labour factor. In fact, the contribution of the labour factor to the formation of the potential GDP decelerated, from 1.7 p.p. in 1996 to 1.3 p.p. in 2003.

In other words, one can say that these investments were not very productive and efficient in terms of the impact on the labour markets. This evolution might be explained by the characteristics of the labour markets in Greece.

The Greek potential GDP entered a downward trend after 2004, which intensified in 2007 and 2008. The rhythm of the potential GDP turned negative after the global liquidity crisis hit the economy in 2008. This negative evolution intensified in 2010 and 2011 in the context of the launch of the sovereign debt crisis, which turned the macroeconomic adjustment process of the Greek economy impossible.

*Figure 3.1 Evolution of potential GDP (rhythm) (contributions of the factor, p.p.)*



Source: Own estimates employing the methodology on Eurostat data.

According to the estimates, the Greek potential GDP rhythm was -1.6% in 2009, -3.2% in 2010 and -4.7% in 2011.

The deterioration of this indicator since 2004 was determined mainly by the total productivity factor (TPF). The contribution of this factor to the potential GDP diminished from 1.3 p.p. in 2004 to 0.1 p.p. in 2006 and turned negative since 2007.

This evolution is surprising, given the fact that the contribution of the capital stock accelerated during the past years of the Great Moderation to 1.6 p.p. in 2007.

On the other hand, the contribution of the labour input continued to diminish over the period 2004-2007.

In other words, it seems that the capital investments did not play the engine role during the last years of the Great Moderation. In fact, one can say that the capital investments during that period were directed towards sectors that did not manage to generate positive productivity shocks.

The first wave of the Great Recession – the global liquidity crisis – surprised the Greek economy with important macroeconomic disequilibria (either current account, or public finance). Consequently, the sudden stop of foreign capital resulted in negative impact for the investment flows directed towards small-open economies with important macroeconomic disequilibria. Is the case of Greece! The gross fixed capital formation contracted by 7% y/y in 2008, 15% y/y in 2009.

The launch of the sovereign debt crisis determined an intensification of the decline of gross fixed capital formation: -21% y/y in 2011. The negative evolutions of the capital investments determined had consequences for the total productivity factor: negative contribution of 1.6% in 2008, 2.5% in 2009, 3.5% in 2010 and 4.6% in 2011 to the formation of the potential GDP rhythm.

### 4. Conclusions

There can be drawn several interesting conclusions from this analysis. On the one hand, the Great Recession determined the decline of the Greek potential GDP rhythm, to negative territory since 2009.

In other words, the economic growth during the pre-crisis years did not have a sustainable path. In fact, this growth was

determined by capital investments that did not manage to play the engine role for the total productivity factor and for the labour input.

On the other hand, the dependence of the Greek economy on the foreign capital investment and profligacy fiscal policy of the government turned dangerous, as the economy accumulated huge imbalances before the launch of the Great Recession.

The global liquidity crisis determined a sudden stop of the capital flows, with negative consequences for the economies with important macroeconomic disequilibria dependent on international financing.

The launch of the sovereign debt crisis amplified the risk perception, resulting in important capital outflows. These outflows in turn determined the persistence of the economic contraction.

Several measures have been adopted and implemented by the European and international financial institutions in order to counter the Greek economic and financial crisis. However, the contraction persists in Greece.

In my opinion, the adjustment measures in the case of Greece should focus on the relaunch of the investment flows in the economy (mainly in the tradable sectors), the reform of the labour market and also the implementation of the Europe 2020 Strategy.

Otherwise, the Greek economy risks becoming a permanent asymmetry in the Euro Area.

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## Challenges at the European Level of the Recent Financial Crisis: Towards a Banking Union

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### Abstract

*The major negative implications of the recent financial crisis, including those of the sovereign debt crisis, especially in the case of the euro zone, on the financial integration process have determined the adoption at the EU level of some significant measures, without precedent, aimed at enhancing the resilience of the European financial system and the consolidation of the financial stability. In this context, our research aims to underline on the one hand, some major implications of the international financial crisis on the financial integration and intermediation process, the adopted measures and on the other hand the debate regarding the content of the main proposals for the creation of the new institutional framework represented by the European Banking Union.*

**Key words:** financial integration, financial stability, crises management mechanisms

**J.E.L. classification:** E44, G01, G21

### 1. Introduction

The recent financial crisis had major negative implications on the financial integration process, that has been stopped and even reversed on some segments of the European banking market. The effects of the crisis on the financial integration have come, especially, because of the institutional framework from the pre-crisis period that has registered major deficiencies, proving that it was unable to sustain a common market in crisis conditions [4]. Such an approach

results from the fact that the regulation, supervision and management of the crisis have been organized at national level, thus being unable to prevent the accumulation of risks at European level.

In order to limit the enhanced risks of fragmentation for the banking markets in the EU, that will affect tremendously the common market for financial services and the efficient transmission of the monetary policy on the euro zone real economy, but also in order to break the link between the sovereign and banks, the European Commission has published in September 2012 the proposal for the creation of a banking union that will ensure a solid and stable banking sector, while also restoring the trust in the euro currency [7].

Our research is focused on three main areas. The first part aims at underling the major changes determined by the crisis on the intermediation and financial integration processes. The second part of the research reviews the significant measures adopted at the EU level in order to consolidate the resistance and the stability of the financial system. The last part of the research synthetically discuss the main content of the proposal regarding the creation of the new institutional framework represented by the European Banking Union.

### 2. General changes in the European banking system in the context of the recent financial crisis

In the pre-crisis period, the financial integration process and the common market have stimulated the development of the EU banking sector and of the cross-border capital



flows, thus the European banking sector reaching a considerable size comparatively with the banking sector of other economic powers like the USA or Japan (see table 1). Such a situation underlines the significant dependency of the EU economy on banking financing, banking loans being the main source of external financing for the private sector. The enhancement of the banking sector size is reflected, especially, by the ratio of the banking assets and of the banking loans in GDP, that has been in 2010 at the level of 349% of the EU GDP, 144%, respectively, much over the levels registered in the case of the USA and Japan.

*Table 1. The size of the banking sector in EU27, USA and Japan, in 2010*

	EU 27	USA	Japan
Total assets of banks (Euro trillion)	42.9	8.56	7.15
Bank assets, % of GDP	349	78	174
Total Bank Loans (Euro trillion)	17.7	4.9	3.9
Bank loans to GDP (%)	144	45	96
Top 10 banks' assets (Euro trillion)	15.0	4.80	3.75*
Top 10 banks' assets, % of GDP	122	44	91*

\*Top 6 banks

Source: [5]

The development of the European banking sector has been determined by the enhancement of the cross-border banking activities, that presents differences from one country to another. Thus, in the case of the EU member states, especially the big economies of EU15 (like Germany, France, Sweden and Italy), the ratio of the foreign banks assets is lower as these countries have the tendency to export banking services in other member states and are home to large banking groups [11, p.16]. Comparatively, in other member states of the EU (e.g. Czech Republic, Estonia, Lithuania, Luxembourg, Romania, Slovakia) the foreign banks dominate the banking sector, owning over 80% from the total banking assets (see table 2). The presence of foreign owned banks has provided a series of advantages for the host countries, among which the diversification of

the banking products offered and the improvement of their quality, the significant expansion of the loans provided to the private sector from the host country, a better management of banks risks, the enhancement of the banking activity, the facilitation of the access to foreign financing for enterprises and private persons from the host country. But, beside these advantages, the presence of foreign banks presents also a significant risk for contagion and threat to the financial stability, these aspects being underlined by the recent financial crisis. Moreover, as a result of the interdependencies between the states, the crisis has underlined that when a banks faces difficulties, this is propagated in the financial system and even beyond the borders of the host country.

*Table 2. The ratio of the assets held by the foreign banks in total assets in 2011*

Country	% foreign	Country	% foreign
AT	25.1	IT	8.5
BE	51.5	LT	90.1
BG	76.5	LU	92.1
CZ	94.6	LV	62.3
CY	31.6	MT	79.8
DE	5.2	NL	11.2
DK	12.3	PL	63.8
EE	94.3	PT	22.2
ES	7.9	RO	83.3
FI	77.9	SE	0.4
FR	3.3	SI	27.4
GR	19.2	SK	89.0
HU	60.9	UK	31.0
IE	68.0	Total EU	19.9

Source: [11, p. 17]

A significant change registered by the European banking sector, in particular by the euro zone, in the context of the crisis is represented by *the fragmentation process*, especially as the sovereign debt crisis has been deepened. The fragmentation and implicitly the reversal of the financial integration process can be illustrated, for example, by the variation coefficient of the short term borrowing cost for non-financial corporation's between the euro-zone countries, which has increase without precedent [1]. Also, in some countries, the interest rates for retail loans have increase while the policy rates have decrease. Moreover in the countries that are facing severe economic and financial difficulties,

the loans criteria's have been tightened especially for SMEs, thus these firms are facing increase challenges regarding their financing. For example the spread between the interest rates for small and large-sized loans have increase in August 2012 to 286 basis points in Spain and to 188 basis points in Italy [1].

Another significant change registered by the EU banking sector is represented by *the deterioration of the financial intermediation process*. If we report ourselves to the banking loans flows, we acknowledge a significant drop of the growth rate of the loans granted to the economy, on the overall EU, especially in the case of the non-financial corporations [10], as a result of the tightening of the credit standards by the banks but also as a result of the diminished demand for loans from the firms in the context of negative economic perspectives.

### **3. Supporting measures for the financial integration process and the soundness of the European banking sector**

In order to sustain the banking sectors, implicitly of the credit flows, the maintenance of the financial stability, to protect depositors, but also to diminish the economic turbulences, the European governments have injected significant sums of public money in banks and have issued guarantees with a value without precedent. For example, in period between October 2008 and October 2011, the European Commission has approved state help measures for financial institutions, accounting 4500 billion euro, the equivalent of 37% of the EU GDP [9]. In this context it has been registered a deterioration of the public finances and an increase of the burden on the taxpayers.

The extremely severe implications of the recent financial crisis and the of the current sovereign crisis on the EU financial system has lead to the adoption of significant measures at the EU level in order to consolidate the resistance and the stability of the financial system. Among these measures we underline the:

- *The reform of the financial supervision framework of the EU*, through the creation of new financial supervision architectures which came into force on 1<sup>st</sup> of January 2011 and it

is formed from two pylons, the macro-prudential pylon represented by the creation of the European Systemic Risk Board (ESRB) and the micro-prudential pylon sustained by the establishment of three European Supervisory Authorities: for banks (EBA - European Banking Authority), for insurance and occupational pension funds (EIOPA - European Insurance and Occupational Pensions Authority) and securities (ESMA - the European Securities and Markets Authority);

- *Consolidation of the financial regulatory framework* in order to enhance the resilience and stability of the EU banking sector, especially through the implementation in the European norms of the Basel III provisions;

- *The improvement of the crisis management* and the adoption of a European framework for banking resolutions. Thus, in June 2012 the European Commission has adopted the proposal for the introduction of rule at the EU level regarding the recovery of banks and the banking resolution [8], that will guarantee that in the future the authorities will have the adequate means that will allow them to intervene decisively both before the start of the problem but also in the case of the star of crisis situations. Also, the new rules state the measures proposed to maintain the functioning of the essential functions of the bank in the case in which the financial situation of that institution is deteriorating irreversibly, while the costs for the restructuring and the solving of the crisis should be covered by the owners and creditors and not by taxpayers;

- *The creation of new instruments for the management of crisis in the euro zone*, that will support the financial stability of the Monetary and Economic Union. As part of these instruments, we underline especially the European Financial Stability Facility (created in June 2010) and the European Stability Mechanism that has come into force on 27<sup>th</sup> September 2012;

- *The proposal for the creation of the European Banking Union*, to which we will refer below.

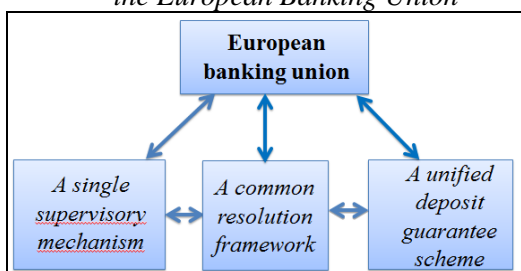
### **4. Components of the European Banking Union**

As part of the euro zone summit from 28-

29 of June 2012, the head of states and governments have requested the European Commission to develop a “roadmap” based on four pylons, among which one is represented by the creation of a banking union, in order to create a genuine Economic and Monetary Union, characterised by long term stability and prosperity.

In September 2012, the European Commission has published the proposal for the creation of a new institutional framework represented by the European Banking Union, that will constitute one of the main engines for the consolidation of the Economic and Monetary Union and the deepening of the financial integration [3]. For this, it is considered that the new framework must be based on three pylons: *a single supervisory mechanism, a common resolution framework and a unified deposit guarantee scheme* (see figure 1). These pylons are on a thigh link thus a coherent approach for the banking union implies the assignment of the same governance level for each of them [12]. As such, in the context of a single supervision mechanism we must ensure also a common resolution framework and a unified deposit guarantee scheme. If otherwise, the national resolution authority can invoke that it does not have the necessary information for the adoption of measures in the context of deficiencies in the supervision process at the European level, while the national taxpayers will not accept to support the consequences of some deficiencies of a European institution over which they have not control.

Figure 1. The Pylons of the European Banking Union



Source: own simulation

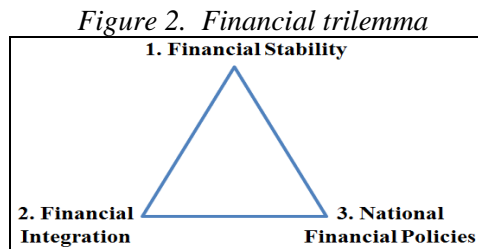
The single supervisory mechanism is considered the first vital step in the creation of the banking union, that will provide its contribution to the re-establishment of thrust in the supervision of banks from the euro zone. The new mechanism aims to transfer at

the European level, at the ECB level respectively, some significant responsibilities related to the supervision of the banks established in the euro zone states, especially the responsibilities that are significantly important for the keeping of the financial stability and the identification of the risks related to banks viability. Thus, the ECB will be attributed the tasks regarding the granting and suspension of licensing for credit institutions, the insurance of the capital requirements, liquidity and leverage ratios, the undertaking of stress-tests on credit institutions in order to support the supervision on a consolidated basis and that of financial conglomerates [8]. Also, the ECB will apply in coordination with the resolution authorities the quick response measures in the case when banking institutions do not fulfil or risk not fulfilling the regulatory capital requirements. The supervision attributions of the ECB will be undertaken as part of the European System of Financial Supervision- ESFS which was founded in 2010, thus the ECB will have to cooperate tightly with the other three European authorities for supervision from the ESFS, European Banking Authority, the European Securities and Markets Authority and the European Insurance and Occupational Pensions Authority, respectively.

The necessity to create a common supervision mechanism is needed especially because of the enhanced interconnections between institutions and the financial markets from the euro zone, that have determined, as the recent international financial crisis underlines, that the problems that a bank faces in one country will be propagated on the financial system of that country and through contagion will affect also other member countries and event stability of the euro zone banking system. On the other hand, as a result of the enhanced level of interdependency, the national supervision policy, and also other macroeconomic policies impact not only that country but also other member countries [2]. As a result, in the context of financial integration, the financial stability cannot be insured at the European level through national policies. Such a notion is underlined by the famous “financial trilemma” that reflects the impossibility to obtain



simultaneously in a global financial environment three objectives: financial stability, the integration of the financial markets and the maintaining of national financial policies, respectively (see figure 2). Thus, in the context of European financial integration in order to insure financial stability in the EU and in particular in the euro zone, the banking supervision must be undertaken at the European level.



Source: [14]

The granting of specific attributes to the ECB regarding banking supervision is in full compliance with article 127, paragraph 6 from the Treaty on the functioning of the European Union, according to which specific tasks regarding the prudential supervision of credit institutions and other financial institutions, with the exception of insurance undertakings can be attributed to the ECB. The European Central Bank will receive those supervision tasks that must be fulfilled at the EU level, in order to guarantee the uniform and efficient application of the prudential norms, of the risk control and of the prevention of crisis. In regard to national supervision authorities, they will still fulfil certain tasks that can be carried out more efficiently at the national level. For example, the national supervision authorities could still have responsibilities regarding customer protection, combating money laundering and the supervision of non-EU banks that are opening branches in that country or are providing cross-border financial services [6]. In regard to the EU member states that have not yet adopted the single currency they can voluntarily participate in the single supervisory mechanism with the condition that they must closely cooperate with the ECB in the banking supervision process, but without having the right to vote in the ECB supervision council.

The single supervisory mechanism is to be implemented by 1 of January 2013, the

date from which the ECB can exercise its supervision attributes over the euro zone banks, especially on the banks that have received governmental support. For all other banks the ECB supervision will be introduced progressively, thus: from 1 of June 2013 for the major systemic importance European banks and from 1 of January 2014 for all other banking institutions.

In order to reduce the risk for eventual conflicts between the monetary policy and the supervision policy, the European Commission proposal aims a clear separation between the two policies. For example, it is envisaged that all activities specific to the supervision policy to be undertaken through a supervisory board created solely for this purpose in the ECB.

The effective functioning of a single supervisory mechanism in the banking union aims at enhancing the solidity and resilience of the banks, thus in the context of a crisis the banking institutions will be subject to a resolution in an orderly manner, while the depositors have the insurance that their savings are safe. As a result, the efficient functioning of a European Banking Union implies naturally also a centralised management of the banking crisis through the creation of “common mechanisms to resolve banks and guarantee customer deposits” [7]. Thus, the European Commission aims to present a proposal regarding the creation of a single resolution mechanism, that will regulate the resolution of banks and will coordinate the usage of resolution instruments for all the banks from the banking union. It is estimated that the creation of such a mechanism will be more efficient than a network of national resolution authorities, especially in the case of the cross-border banking groups that are facing troubles, taking into account the necessity for rapid actions and especially the need for credibility in the management of the banking crisis. Practically, the creation of a single resolution mechanism the first aims to make the shareholders and creditors be the first ones to bear the costs, and instead of the taxpayers money the private sector should search for solutions.

In regard to the third pylon, through its development it is aimed that all the clients of the European banks should benefit from the same protections. One of the main arguments

used in favour of the creation of such a mechanism refers to the fact that as a Deposit Guarantee Scheme becomes more centralised the more the chances it will run out of money during a crisis decrease [12]. Until present, deposit insurance is only partial harmonised, in 2009 a minimum coverage of 100.000 euro per depositor per institution being introduced. But the deposits guarantee schemes, their structure and financing way are different from one EU country to another.

## 5. Conclusions

The enhanced risk for fragmentation of the banking markets from the EU, that significantly affects the common market for financial services and the efficient transmission of the monetary policy on the euro zone real economy, but also the necessity to cut the ties between banks and sovereigns have determined the intensification of the European authorities concerns regarding the finding of new remedies to the severe effects of the crisis. Among this, it stands out in particular in the current context the proposal for the creation of a banking union, that implies a complex process at the European level for the development of its three main pylons.

The general conclusion of our research indicates that as a result of the severe effects of the crisis on the financial system and the real economy, the European Union, in particular the euro zone is faced with new challenges, namely the creation of a solid and credible banking union that will provide a substantial contribution to the consolidation and enhancement of the financial integration and the support of the Economic and Monetary Union.

As a new research direction we consider appropriate an analysis on the benefits that the Banking Union will provide for all Europe or if it will provide benefits just for the euro zone.

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# Main Drivers Behind Economic Growth in the European Union

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## Abstract

*The objective of the article is to investigate the phenomenon of economic development in old member states (EU15) in two periods: 2000-2007, regarded as the boom period, and 2008-2010 which is considered to be the post-boom period. Particular emphasis will be set on the GDP per capita in Purchasing Power Standards, on the real GDP relationship between GDP growth and public debt.*

**Key words:** GDP growth, GDP per capita in PPS, government debt.

**J.E.L. Classification:** E5, E6, F4

## 1. Introduction

An important aspect of the analysis is to single out several main drivers behind economic convergence and the relationships between them. Particular emphasis will be set on the relationship between GDP growth and public debt.

There are a number of reasons why convergence between countries could be expected. Some examples are given by Romer [6]. For instance, he indicates that “the Solow model implies that the rate of return on capital is lower in countries with more capital per worker. Thus there are incentives for capital to flow from rich to poor countries”, which would result in convergence. Moreover, according to Romer [6], “if there are lags in the diffusion of knowledge, income differences can arise because some countries are not yet employing the best available technologies. These differences might tend to shrink as poorer countries gain access to state-of-the-art methods”.

## 2. EU countries

The policies of the EU envisage cohesion and convergence, but is this the general rule or is reality more heterogeneous? When looking at the old members of the EU, things do not seem to be very clear-cut. Considering that most EU15 countries are members of the euro area, the facts that are valid for the euro area can be extrapolated to the EU15.

The European Commission [3] issued a report in 2008 referring to 10 years of economic and monetary union (EMU). The report, preceding the crisis in Europe, saw the EMU as very successful. Moreover, it was stated that “the EMU years can be characterised as displaying a typical convergence pattern, with the catching-up phenomenon heavily geared towards a greater use of the factors of production, labour and capital.” Another excerpt from the text mentions that “the benefits of EMU with regard to catching-up have been reinforced by EU cohesion policy. Structural and Cohesion Funds have contributed to the convergence of the four catching-up countries by supporting public investment targeted at growth enhancing factors, thereby facilitating their structural adjustment within EMU.”

However, even at that moment in time, it was noted that “the big disappointment amongst the group was undoubtedly the marked deterioration in the outturn for the Portuguese economy, especially over the last decade, with its potential growth rates now pointing to divergence, rather than convergence, relative to the living standards in the rest of the Euro area.”

Landmann [5] underlines evidence and mechanisms that lead to imbalances and eventually to divergence among the member states of the EMU. The illustrative examples he uses are those of Germany and Spain.

These countries seem to have followed different paths over a longer period of time (early 1990's), phenomenon referred to as “rotating slumps”, a term introduced by Olivier Blanchard.

One fact that Landmann [5] emphasizes is that even though the euro area enjoyed aggregate macro stability, “it became increasingly divided into groups of countries following diverging paths”. Of the concepts used to illustrate the divergence tendency, particularly relevant are those of unit labour costs and inflation. Landmann [5] also states that the monetary policy that is appropriate for the average of the euro area is not tight enough for the booming regions and too tight for the rest of the regions.

Another point of this author is that controlling divergence would prevent the double trap some countries are caught in: high debt and low competitiveness. Particularly important is the fact that to say that these countries are paying for past mistakes is a wrong approach, because potential output and income have contracted far below potential GDP. This would lead to the idea that adjustment is causing damage to the economy that is long-lasting and of an increased amplitude compared to the initial benefits.

The arguments presented in this subsection do not try to suggest that convergence cannot occur also among countries of the EU15 (or the euro area), but merely to state that in this subgroup of the EU27, evidence is rather mixed and the situation is quite heterogeneous.

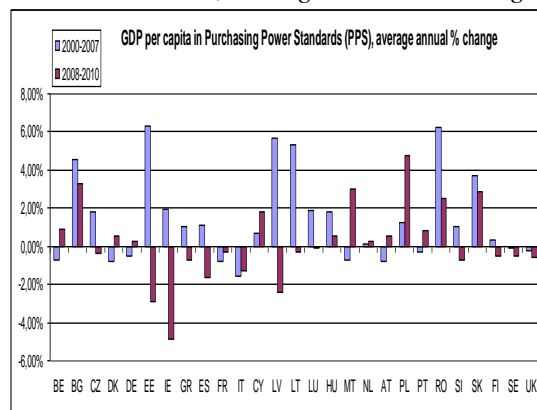
### 3. Data analysis

The primary data are from Eurostat Data Base. The analyse is for the whole period 2000-2010, but there are two period considered: the period 2000-2007, before crisis and the period 2008-2010, in recession. Data are expressed as annual average of levels or percentage changes over the period, for the variables: GDP per capita in purchasing power standards (PPS), expressed as an index relative to the EU27 average, real GDP growth, government debt as % of GDP, government deficit as % of GDP, inflation rate.

For measuring the economic development in EU member states we used GDP per capita

in Purchasing Power Standards. Convergence can be showed also by means of negative growth rates for this variable over the considered period, if we take into account countries that are situated above the EU27 average: Italy, France, Denmark, Austria, United Kingdom. Figure 1 displays the evolution for each country for both the boom and post-boom periods.

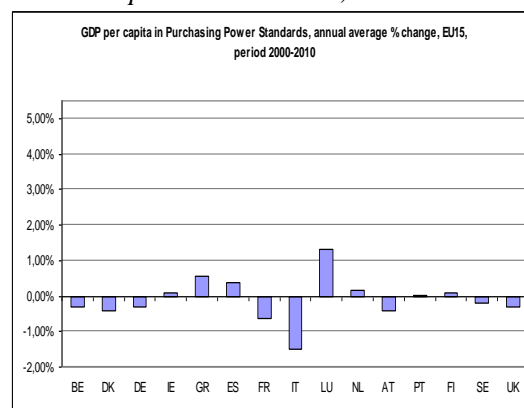
Figure 1. GDP per capita in Purchasing Power Standards, average annual % change



Source: <http://www.eurostat.ec.europa.eu>

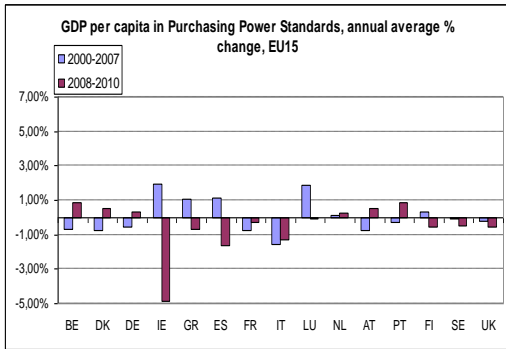
Figures 2 and 3 are very similar to figures 1, but they show us the group of the EU15 countries.

Figure 2. GDP per capita in Purchasing Power Standards, average annual % change, period 2000-2010, EU15



Source: <http://www.eurostat.ec.europa.eu>

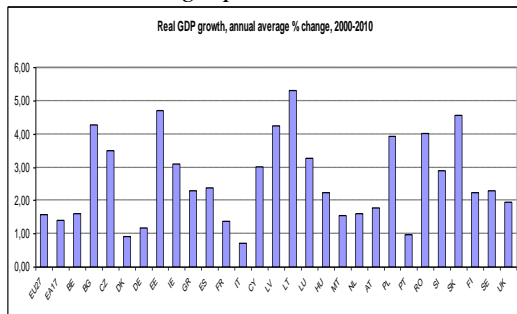
Figure 3. GDP per capita in Purchasing Power Standards, average annual % change, EU15



Source: <http://www.eurostat.ec.europa.eu>

We can look forward in a similar way, to the variables: real GDP growth and Government debt, as percentage of GDP, as follows:

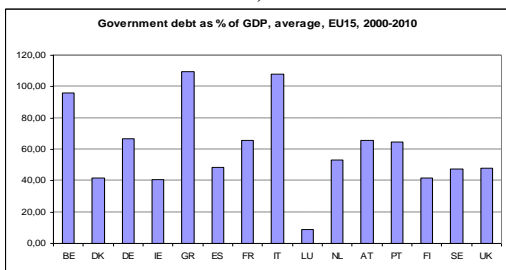
Figure 4. Real GDP growth, average annual % change, period 2000-2010



Source: <http://www.eurostat.ec.europa.eu>

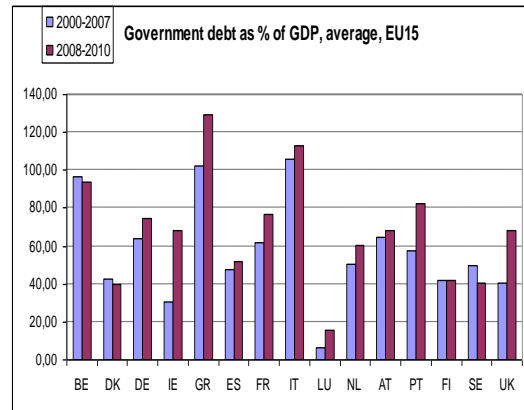
The government debt as % of GDP plots suggest that the EU15 countries generally have a higher debt to GDP ratio. There are some exceptions, however. Among the EU15, Luxembourg is a special case and an outlier in more ways, including that of a particularly low debt ratio.

Figure 5. Government debt as % of GDP, average annual % change, period 2000-2010, EU15



Source: <http://www.eurostat.ec.europa.eu>

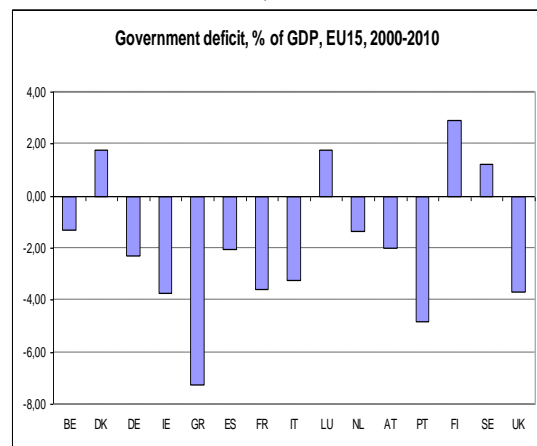
Figure 6. Government debt as % of GDP, average annual % change, EU15



Source: <http://www.eurostat.ec.europa.eu>

We can see that in the most of the countries public debt is grater in post boom period. Exceptions are the following countries Belgium, Denmark, Sweden and Finland. This is explainable considering the fiscal pressures countries were faced with because of the crisis. These pressures become more obvious when looking at the charts of government deficit as percentage of GDP, displayed for both periods 2000-2007 and 2008-2010.

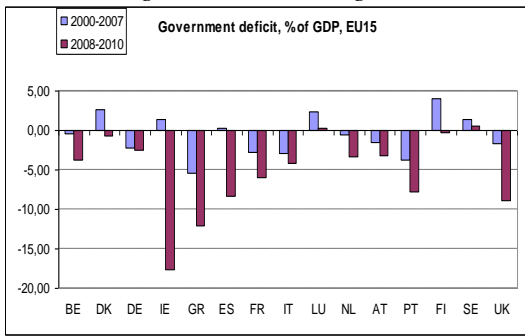
Figure 7. Government deficit as % of GDP, average annual % change, period 2000-2010, EU15



Source: <http://www.eurostat.ec.europa.eu>

As we observe the countries for wich the government deficit as % of GDP had a positive average annual % change were: Denmark, Luxembourg, Finland and Sweden.

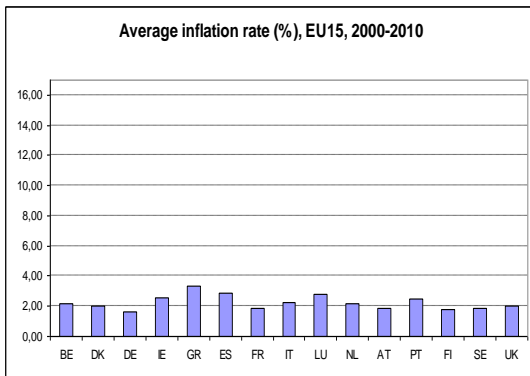
Figure 8. Government deficit as % of GDP, average annual % change, EU15



Source: <http://www.eurostat.ec.europa.eu>

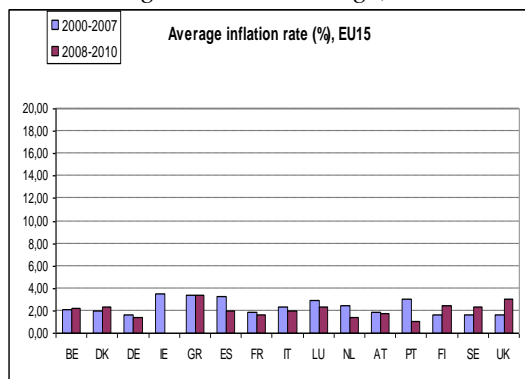
Dispersion in average inflation rates seems to be lower for the EU15, with values close to 2 percent in most cases, as we can see in figures 9 and 10.

Figure 9. Average inflation rate (%), average annual % change, period 2000-2010, EU15



Source: <http://www.eurostat.ec.europa.eu>

Figure 10. Average inflation rate (%), average annual % change, EU15



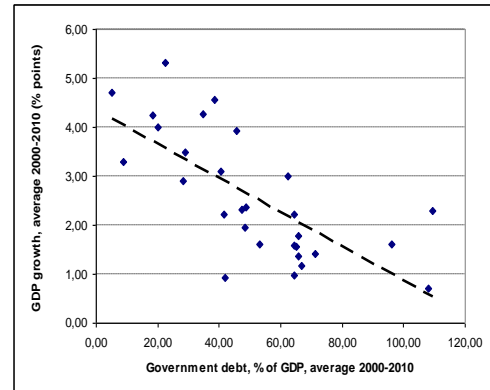
Source: <http://www.eurostat.ec.europa.eu>

The relationships between variables will be investigated by means of regression analysis. In Regressions 1 to 3 it is shown that there is a negative correlation between Government debt and GDP growth for EU

countries and between Government debt and GDP per capita in Purchasing Power Standards.

Regression 1 indicates a negative and significant relationship between GDP growth and Government debt as % of GDP, for the whole period. Therefore, over the period 2000-2010, an increase in the level of public debt leads to a lower level of GDP growth, in line with our initial hypothesis.

Figure 11. Government debt, % of GDP, vs. GDP growth, average 2000-2010



Source: <http://www.eurostat.ec.europa.eu>

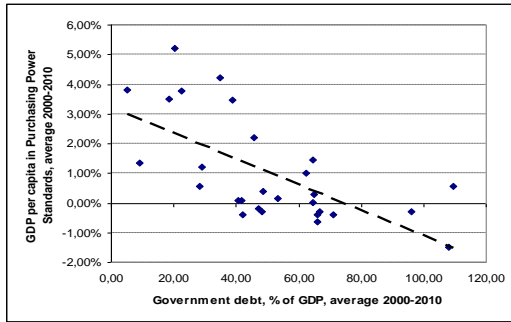
Table 1. Regression 1.

Dependent Variable: GDP_GROWTH_TOTAL				
Method: Least Squares				
Sample(adjusted): 1 28				
Included observations: 28 after adjusting endpoints				
GDP_GROWTH_TOTAL=C(1)+C(2)*GOVERNMENT_DEBT_TOTAL				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	4363336,00	0.385357	1132285,00	0.0000
C(2)	-0.034578	0.006790	5092553,00	0.0000
R-squared	0.499366	Mean dependent var	2618929,00	
Adjusted R-squared	0.480110	S.D. dependent var	1295572,00	
S.E. of regression	0.934151	Akaike info criterion	2770392,00	
Sum squared resid	2268859,00	Schwarz criterion	2865549,00	
Log likelihood	-678549,00	Durbin-Watson stat	2071870,00	

Another result is the negative and significant relationship between GDP per capita in Purchasing Power Standards and Government debt as % of GDP. This is obtained over the boom period, over the whole period, and over the boom period for the EU15 countries.

Figure 12. Government debt, % of GDP, vs. GDP per capita in Purchasing Power Standards, average 2000-2010



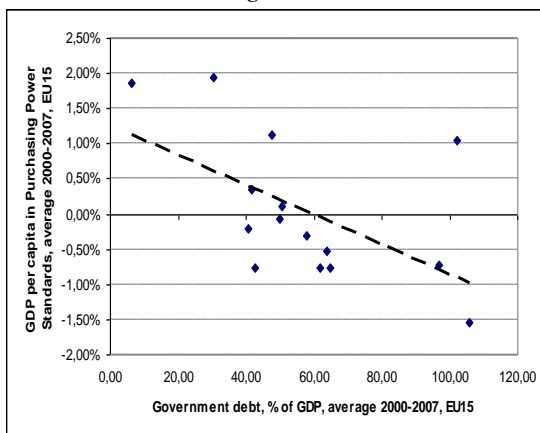


Source: <http://www.eurostat.ec.europa.eu>

Table 2. Regression 2.

Dependent Variable: GDP_PPS_TOTAL				
Method: Least Squares				
Sample(adjusted): 1 28				
Included observations: 28 after adjusting endpoints				
GDP_PPS_TOTAL=C(1)+C(2)*GOVERNMENT_DEBT_TOTAL				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.032060	0.005656	5.668.335	0.0000
C(2)	-0.000431	9.97E-05	4.320.464	0.0002
R-squared	0.417907	Mean dependent var		0.010339
Adjusted R-squared	0.395519	S.D. dependent var		0.017635
S.E. of regression	0.013711	Akaike info criterion		5.672.523
Sum squared resid	0.004888	Schwarz criterion		5.577.366
Log likelihood	8.141.533	Durbin-Watson stat		2.461.775

Figure 13. Government debt, % of GDP vs. GDP per capita in Purchasing Power Standards, average 2000-2007, EU15



Source: <http://www.eurostat.ec.europa.eu>

Table 3. Regression 3.

Dependent Variable: GDP_PPS_BOOM_EU15				
Method: Least Squares				
Sample(adjusted): 1 15				
Included observations: 15 after adjusting endpoints				
GDP_PPS_BOOM_EU15=C(1)+C(2)*GOVERNMENT_DEBT_BO_EU1				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.012695	0.005503	2.307.011	0.0382
C(2)	-0.000212	8.70E-05	-2.434.722	0.0301
R-squared	0.313182	Mean dependent var		0.000505
Adjusted R-squared	0.260350	S.D. dependent var		0.010281
S.E. of regression	0.008842	Akaike info criterion		-6.495.125
Sum squared resid	0.001016	Schwarz criterion		-6.400.718
Log likelihood	5.071.344	Durbin-Watson stat		1.199.453

### 3. Conclusion

The article underlines that the lower debt ratios bring about higher GDP growth and higher GDP per capita, among EU states and, in particular, among EU15. These are evidences obtained for the whole period 200-2010 and for the both periods considered: the boom one (2000-2007) and the post-boom one (2008-2010).

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**Section I**  
**International Affairs and European Integration**

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**Subsection 3**  
**Regional Development Strategies**



# Analysis of the Innovation Impact on Romanian Competitiveness. The Effectiveness of the EU Funds and Public R&D Expenditures

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## Abstract

*This paper pursues to find whether there is a correlation between the funds spent for innovation and the general Romanian competitiveness in the global economy. We also propose that the number of patent applications by Romanian economic actors is the only pertinent metric for the respective expenditure effectiveness. We check a number of databases from Patent registration establishments (OSIM, EPO and WIPO) for the patent applications and we rely on the official report issued by the Romanian Government concerning the public expenditure to improve innovation processes.*

*We find there is no direct correlation between the two, leading to the suggested conclusion that the public funding is not attaining its stated objectives, as not effectively or/and not efficiently allotted.*

**Key Words:** Innovation, Competitiveness

**JEL Classification:** O32, O34

## 1. Introduction

The European Union published the Seventh Framework Programme (FP7) aiming for the EU aggregated economy to become the „most dynamic competitive knowledge-based economy in the world" [9]. It is a goal for which the EU member States are willing to spend billions per year, although achieving it will take more in terms of efforts than simply allocate funds. In the same line and pursuing same final objective, the EU shapes up the Competitiveness and Innovation Framework Programme (EU CIP) which takes these objectives further: “With small and medium-sized enterprises as its main target, the Competitiveness and Innovation Framework Programme (CIP) supports innovation activities (including eco-

innovation), provides better access to finance and delivers business support services in the regions. It encourages a better take-up and use of information and communication technologies and helps to develop the information society“[10].

## 2. EU funds for innovation in Romania

In terms of financial engagements, we find that the indicated budget for FP7 is 50,5 billion Euros (whole EU) while the budget for CIP is 3,621 billion Euros for Romania [1&2]. The question whether this latter amount was spent properly by the Romanian authorities towards the specified goals appears thus legitimate and we propose to answer it.

The logic chain for implementing the research and development (R&D) thus innovation process has several steps:

1. The public administration assigns funds in the stated purpose to improve innovation by allotting various amounts to selected recipients, on algorithms and criteria;
2. The recipients integrate the given resources and invest them in their own processes, the end being creating something new (invention) or improving something existent (innovation);
3. The emerging innovations will then trigger patent applications registered with various organisms (OSIM for Romania, European Patent Office (EPO) for the European Union, and World Intellectual Property Organization (WIPO) for all the treaties it administers); as a methodological approach of this paper and because there is considerable overlap and because an application at WIPO is registered by the national registries as well, we will concentrate on the WIPO statistics for further developments.

As a feedback of the entire process, supposedly, the patents that were granted would have a detectable contribution to the

competitiveness of the Romanian economy which will translate into the ranking improvement by increasing the Gross Domestic Product (GDP) of the economy.

The stated objectives of the implementation of this project, funded by EU in order to increase Romanian competitiveness thru innovation are:

“1. Creating knowledge [...] in order to increase the international visibility of the Romanian research and to subsequently transfer the results in the socio-economic practice.

2. Increasing the competitiveness of the Romanian economy by innovation, with impact at the level of companies and by transferring knowledge in the economic practice.

3. Increasing the social quality, namely finding technical and scientific methods which support the social development and improve its human dimension.” [11]

The plan is listing several performance criteria to measure its effectiveness against. The list is commendably long showing a severe commitment to account for the correct expenditure. We decided against citing it entirely here but the interested reader will find it in the list referenced documents.

The absolute majority of criteria are measuring input quantities to the programme. Only the criteria (common to several axes of funding) regarding the patent applications and patent grants are *actually* measuring a programme output, in our opinion. As such, we are going to retain only the latter for our evaluation.

It would be expected that some beneficiaries of the payments are to be found among the patent applicants at least, if not getting the patent grants. We will see further that regrettably this is not the case.

We look at the annual expenditures for

*Table 2 Allotments of PN II per axes and operations, 2007-2013*

Axe/operation, as stated by the National Plan II (NP II) -no. and name	Allotment year	CONTRACTED amounts (million lei)	Total EFFECTIVE expenditures
2.1.1. R&D projects in partnership: Universities,R&D institutes and companies	2010 to 2012	70,289	non specified
2.1.2. R&D projects of high scientific level with abroad specialists participation	2010	198,833	non specified
2.2.1. R&D existent infrastructure development and creation of new research infrastructure (labs, research centers)	2009 to 2010	1.159,153	null
2.2.3. Development of a R&D centers network at national level, related with international similar networks (GRID an GEANT)	2009	21,057	null
2.2.4. Strenghtening of the management capacity	2009 to 2010	111,289	null
2.3.1. Supporting innovative start-ups and spin-offs	2009 to 2012	66,785	null
2.3.2. R&D infrastructure development and creation of new jobs in the field of research	2009, 2011 and 2012	284,916	null
2.3.3 Promoting innovation into business environment	2008, 2010 and 2011	164,200	null
<b>TOTAL</b>		<b>2.076,523</b>	<b>null or n/s</b>

Romania as described in The National Plan for Research, Development and Innovation for the period 2007-2013 (NP II).

The budget for the 2007 – 2013 period is 15 000 million lei, in terms of the State budget financing (Table 1), declined in 6 main axes of innovation to be funded.

*Table 1 State funding of NP II*

Axes of innovation	(billion lei)
Human resources	1350
Capacities	2025
Ideas	2700
Partnerships in the main domains	5400
Innovation	2025
Sustaining the institutional performance	1500
<b>TOTAL</b>	<b>15000</b>

Source: NP II data [11]

This shows the planned (ideal) scenario, but then we look further into the actual contracts that have been signed [13] by the authority assigned to implement the PNII, that is the National Authority for Scientific Research (ANCS). We find that in the specific Operational Sectorial programme on the Increase of the Economic Competitiveness (axe 2: Competitiveness thru Technological Research, development and Innovation), between 2007 and 2012, some 2.076,5 million lei were contracted with Romanian entities in order to achieve thru projects above mentioned goals. As we can see from table 2, as the contracting part was fairly productive, the main implementation indicator (funds effectively distributed) is null or non-specified at the reporting date, which is October 2012 as per source [13].

This is a dramatically bad result which gives a clear indication on the huge gap between planning, implementing and effecting.

Source: ANCS [13]

Such lack of performance in implementation of the National Competitiveness plan speak for itself of the poor results we will find further in our demonstration, as well as of mismanagement or plainly misconduct of these funds.

We then look at the actual amounts allotted out of the GDP into the Romanian economy under the general heading of competitiveness. The Romanian Institute of Statistics (INSSE) publishes several indicators clustered under this heading:

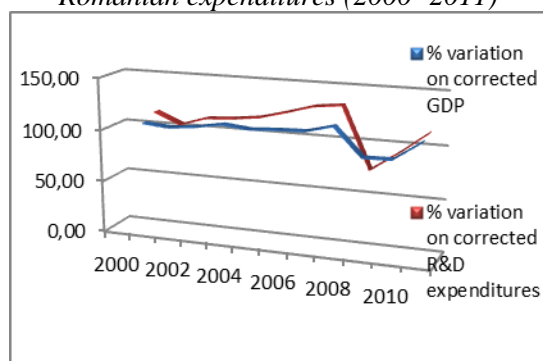
Table 3 Romanian R&D Expenditures and GDP( 2000–2011)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
% R&D expenditures in GDP, on:	0,37	0,39	0,38	0,39	0,39	0,41	0,45	0,52	0,58	0,47	0,47	0,48
% R&D expenditures in Private Sector	0,26	0,24	0,23	0,22	0,21	0,20	0,22	0,22	0,17	0,19	0,18	nc
% R&D expenditures in Public Sector	0,11	0,15	0,15	0,16	0,17	0,21	0,23	0,30	0,40	0,28	0,29	nc
GDP (billion lei)	80,3	116,7	151,4	189,1	238,7	287,2	342,4	404,7	513	499,5	504,2	578,5
R&D expenditures (billion lei)	0,2971	0,4551	0,5753	0,7375	0,9309	1,1775	1,5408	2,1044	2,9754	2,3477	2,3697	2,7768
Inflation rate (%)	0,457	0,345	0,225	0,153	0,119	0,091	0,066	0,049	0,063	0,0474	0,0796	0,0314
GDP corrected (billion lei)	80,3	86,7658	91,8898	99,5414	112,288	123,835	138,495	156,048	186,084	172,987	161,741	179,925
% of variation (GDP corrected)		108,05	105,91	108,33	112,81	110,28	111,84	112,67	119,25	92,96	93,50	111,24
R&D corrected expenditures (bill. lei)	0,2971	0,3384	0,3492	0,3882	0,4379	0,5077	0,6232	0,8114	1,0793	0,8130	0,7602	0,8636
% of variation (R&D corrected)		113,89	103,19	111,18	112,81	115,94	122,75	130,20	133,01	75,33	93,50	113,61

Source: INSSE [15]

As we look at the trends of variation (%) of GDP and R&D (both in constant monetary unit), we see a similarity which is to be expected. With peaks on the same year (2008), the two curves diverge only in 2009 when the deteriorating rhythm of the GDP (92,96% as compared to 2008) is overtaken by the abrupt decrease of the R&D percentage in GDP (7,33% as compared to 2008).

Fig. 1 Trends on rhythms of R&D and GDP Romanian expenditures (2000 -2011)



Source: INSSE [15]

### 3. Funds spent for innovation in the EU and worldwide

The statistical report issued by the European Union [14] shows that practically

Innovation, public Education expenditures, R&D expenditures and continuous education [1]. For the purposes of this paper, we will focus on the R&D expenditures, as % of the GDP (Table 3).

We find a relatively constant progress in allotments for the R&D sector between 2004 and 2008, with a peak in 2008 (0,58% of GDP) and an abrupt 0,47% of GDP one year later and a frail increase in 2011, accompanying a bouncing of the GDP as compared to 2010.

all fellow nations spent more on innovation subsidies and directed investment than Romania, both in absolute terms as well as share of GDP. We see a quite wide range of percentages of R&D expenditures, varying in 2010 from a top Finland (3,9%), closely followed by Sweden (3,39%) and Denmark (3,07%) relative to GDP. In the same year Romania scores worst (0,47%), while Bulgaria (0,6%), Cyprus (0,5%) or Malta (0,67%) score closely, still ahead. The EU27 average is thus 2,01% R&D expenditures out of GDP, in 2010. This directly correlates with the ranking that leaves something to be desired for Romania and for its tendency to deteriorate.

Looking beyond the numerical analysis and the correlations computed to the third decimal place, we have to admit that the quantitative approach is of limited value.

There are several reasons for this but we will emphasize the most obvious one: the reported data should be considered with caution and checked from multiple sources, and even then we might consider it unreliable. The budgets that were voted in various committees gets amended maybe in a less transparent fashion, certain amounts are spent by unrelated entities for overlapping

purposes yet are reported under different heading, the competitions for funding are dragging from one budget cycle to the next and their financing gets rerouted through different budgetary codes making the tracking all more difficult.

At the other end, the funds recipients' reports are not always clear in reporting the expenses under the correct project. Finally, the auditing entity has the performance criteria chosen in a haphazardly way that will not capture the essence of the work and correctly asses its impact. Worse, at all stages, we see only a half-hearted effort to follow through from allocation to spending to impact but we see no reign-in on the obfuscation which creeps in unavoidably in any public works project.

Because of all these allegations, we will consider the bigger picture and the trends as inputs in our conclusions.

#### 4. Competitiveness output: Romanian patent applications with WIPO

The World Intellectual Property Organization (WIPO) country statistics which, in a way, could be considered a good

Table 4 Romanian Patents and ranking with WIPO (1996-2010)

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Resident							1	2	9	5	11	11	11	7	
Non-Resident	467	626	383	274	224	232	158	128	153	38	35	24	12	13	14
Abroad	1	2	4	8	5	7	4	4	27	31	39	70	59	22	21
<b>TOTAL</b>	<b>468</b>	<b>628</b>	<b>387</b>	<b>282</b>	<b>229</b>	<b>239</b>	<b>162</b>	<b>132</b>	<b>180</b>	<b>69</b>	<b>74</b>	<b>94</b>	<b>71</b>	<b>35</b>	<b>35</b>
<b>Attributed ranking</b>	<b>43</b>	<b>48</b>	<b>56</b>	<b>53</b>	<b>59</b>	<b>54</b>	<b>68</b>	<b>74</b>	<b>52</b>	<b>55</b>	<b>50</b>	<b>51</b>	<b>56</b>	<b>69</b>	<b>73</b>

Source: WIPO statistics [12]

We also note that the number of patent applications made in Romania by non-residents had its peak in 2006, ever decreasing since. As a side observation, maybe this number is a better indicator for the 2008 financial crash that was to come.

These foreign applicants reduced their efforts for their own reasons but we consider this as pointing to a relative decrease of interest in the Romanian market, pointing in turn to a decrease of Romanian competitiveness.

Another data point supporting the consideration above is the fact that an increasing number of Romanian applicants chose to apply abroad for patents, grants, trademarks.

We trust the acumen of the Romanian innovators and economic actors as well as

proxy for the global share and impact of Romanian patent applications, show some interesting trends and tendencies (Fig. 2).

There are three types of patent applications: first is patent applications made in Romania by Romanian residents, second type is patent applications made in abroad by Romanian residents, and the third type is patent applications made in Romania by foreign residents. The same applies for IP filings, Trademark applications, Trademark registrations, Industrial Design applications, and Industrial Design registrations.

We observe that the patent applications made by residents increased sensibly from 2005 onwards, in step with the GDP growth. This is more or less to be expected. About 57% of them were made in various technological fields stoking the hope that they will improve the Romanian competitiveness at some point (Table 4).

The patent grants however are not increasing at the same pace and we draw the conclusion that the originality of an increased share of applications was not appropriate for the patent grant. This shows that the quality of the patent applications is decreasing.

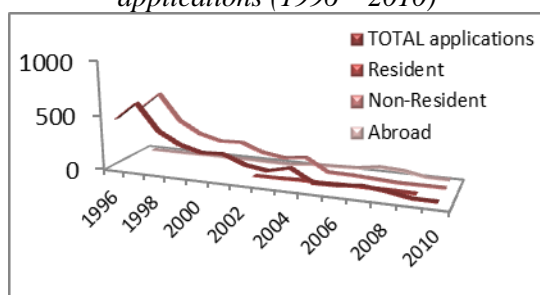
their intimate knowledge of the inner workings of the economy. Their decision - to look elsewhere for protection and markets - does not augur well for the Romanian economy, in our view.

The fact that the foreign WIPO applications under the Madrid treaty is shown as exploding in Romania is only an artifact of the automatic EU-wide patent application treatment regardless of their point of entry in the system. Incidentally, this shows that the intellectual property activity is as intense as ever even if it is not quite to be seen in Romania as such.

Lastly, the most Romanian applicants have not more than one patent application. A notable exception is one company (Hellenic Tiler Invest) with four applications in 2011.



Fig. 2 Romanian Patent granted per types of applications (1996 – 2010)



Source: WIPO statistics [12]

The conclusion we can draw is mixed. On one hand, it is favorable that the SMB (small, medium businesses) are active in this area as they are usually regarded as the engine of the economy. On the other hand, the intellectual property efforts and research are cumulative and iterative thus we expect the real engines of technological progress to be bigger organizations with more than a few patents already granted. Regrettably, this is not to be seen.

The overarching observation that validates in our view the general conclusion is the deteriorating international rank of Romania in the WIPO statistics from 43 in 1996 to 73 in 2010.

This reality, combined with the total ineffectiveness of administering and distributing EU funds for Innovation (2076,5 million lei contracted with no actual reported disbursements) and the increase public expenditure for R&D between 2006 and 2008 (122,75 billion lei to 133,01 billion lei in constant monetary units), while on the same interval the patents granted ranking in WIPO deteriorated (from 50 to 56), speak about a significant gap between governmental intentions and actions on one hand and a gap between inputs and outputs on the other hand.

## Conclusion

As long as the expenditure performance criteria are not reformed to measure the really relevant outputs of the programs, the administrators of funds are informed incorrectly and further funds will be wasted, in our opinion.

Despite the expenditure announced, contracted and supposedly effected by the National Authority for Scientific Research (ANCS), the number of patent applications

has not increased significantly during the covered period, on the contrary (from 2007 onward, which corresponds with the implementation period stated by PN II).

The top patent applicants at the World Intellectual Property Organization are not to be found among the competitions winners or contract signatories [12 and 13], a significant fact in the light of either misuse of allotted funds, or else mislead of the said national fund competition winners, who never got the funds they had successfully competed for. On this line of discussion, data for 2012 is not complete and 2013 is still to produce its results. It remains to be seen if on the last year of implementation of the PNII relevant patent applications will be revealed, as the filings are expensive and time consuming.

We conclude that the innovation process in Romania is decreasing on all aspects and the gap to the developed economies is increasing (neatly captured by the ranking). This is regardless and indeed despite of the important resources assigned centrally by the European Union and additionally by the State. It is then a small blessing that Romanian bureaucracy did not dissipate even more.

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## Consideration on the Financing of Tourism Development and Promotion Strategies in Romania

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### Abstract

*Over the last decades, as the tertiary sector gained an even larger share in national economies, tourism became an engine of economic growth and a determinang of long-term sustainable development.*

*Today, tourism represents much more than a service category – it is a complex industry, exerting a strong multiplier effect on the activity of various economic sectors, such as agriculture, commerce, and constructions.*

*The current article aims to analyze the impact of the EU structural and cohesion funds on the implementation of tourism development policies in member states.*

*A case study of Romania is provided, which focuses on the implementation of the Regional Operational Programme over the period 2007-2012. The results point out that the private and NGO sector should be given a higher importance in the programming of the next financial exercise and that coherent public policies may lead to a to a better development and promotion of the tourist potential in Romania.*

**Cuvinte cheie:** tourism, European Union, structural funds, development policy

**J.E.L.** classification: F36, L 83, L 88

### Introduction

With over 380 million tourists per year, the European Union is the tourist destination with the highest annual number of visitors in the world [1]. In 2007, the contribution of tourism to

the overall gross domestic income in the EU was of over 5 percent [2].

At EU level, over 1.8 million companies are currently operating in the tourism sector, employing over 9 million people, which represent approximately 5 percent of the active population in the EU [3].

The creation of a common policy in tourism is a natural response to the continuous development of this economic sector. The Cohesion Policy is probably the European policy with the largest impact on tourism development in the EU, through the European Fund for Regional Development.

On one hand, ERDF finances, under the “Convergence” objective, infrastructure projects - including tourism infrastructure projects – with the aim of reducing development differences among EU regions and states. On the other hand, ERDF supports direct investments in private companies, particularly in SMEs, both in tourism as well as in complementary fields, such as entertainment [4].

In each EU state, ERDF takes into consideration the territorial characteristics of member regions [5]. The European Union particularly encourages the development of regions which are disadvantaged because of spatial isolation and economic disparities, by financing investments in activities which exploit and value the natural tourist resources and the tourist heritage.

Last but not least, ERDF provides financial support for the implementation of public tourism development and promotion strategies by local, regional and national authorities [6]. These strategies may be addressed either to the tourism industry in its entirety as well as to specific

types of tourism, such as seaside tourism, ecotourism, wellness and spa tourism or mountain tourism.

### Cohesion policy and convergence in the EU

In the 2007-2012 financial period, approximately 347.4 billion Euros were assigned to the ERDF, 200 billion of which were allocated under the “Convergence” objective, which covers infrastructure investments – including investments in tourism and culture, environment protection, transportation, entrepreneurship and innovation – all these being complementary to tourism development while supporting the comprehensive and integrated growth of tourist destinations.

18 EU states are currently benefitting from investments from ERDF under the “Convergence” Objective. The states with the highest allocation for the 2007-2013 period are Poland (44.4 billion Euros), Italy (21.2 billion Euros), Spain (21.2 billion Euros), Portugal (17.1 billion Euros), the Czech Republic (17.2 billion), Hungary (14.2 billion), and Romania (12.7 billion) [7].

For the 2014-2020 financial period, the Commission proposed an allocation of 376 billion Euros for the Cohesion Policy, 162.6 billion of which will be assigned to the “Convergence” objective, and 40 billion to the “Connecting Europe” facility [8], an instrument which supports investments in the transportation and communication infrastructure – infrastructure which is central to tourism development in European destinations [9].

Although the budget proposed by the Commission for 2014-2020 does not include sections dedicated exclusively to tourism development [10], enhancing competitiveness in the field of tourism is one of the major objectives defined in the initiative “An industrial policy adapted to the age of globalization”, initiative included in the Europe 2020 Strategy [9].

### Tourism development and EU funding. The case of Romania

The availability of EU structural and cohesion funds makes it possible for public and

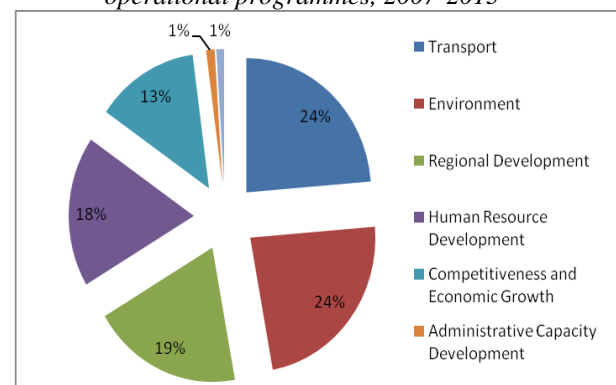
private actors alike to finance the implementation of tourism development policies and strategies. However, can we identify a positive correlation between the absorption and use of structural funds and the development of tourist destinations in Romania?

The Cohesion Policy offered Romania the opportunity to attract almost 20 billion Euros in the period 2007-2013 [11], 12.7 billion million of which are allocated under the „Convergence” objective.

At national level, the funds allocated through the Cohesion Policy are distributed among seven operational programmes. Three of these programmes are financed through the European Regional Development Fund – the Regional Operational Programme (1), the Competitiveness and Economic Growth Programme (2), and the Technical Assistance Programme (3) - while another two programmes are funded through the European Social Fund, namely the Human Resource Development Programme (4) and the Administrative Capacity Development Programme (5). The remaining two programmes – the Environment Programme (6) and the Transport Programme (7) - are financed from both the European Regional Development Fund and the Cohesion Fund.

The total allocation is illustrated in Fig. 1:

Fig. 1. The distribution of the overall allocation to operational programmes, 2007-2013



Source: Ministry of European Affairs, 2012

In the period 2007-2013, projects in the field of tourism are financed under the European Development Fund through the Regional Operational Programme (ROP), which has a total allocation of 3.73 billion Euros [12].

In fact, ROP is the operational programme with the highest absorption rate in Romania.



Thus, the share of the sums reimbursed by the European Commission for the projects contracted until October 31st, 2012 in the total ROP allocation is over 20 percent (21.1 percent), which is more than two times higher than the overall absorption rate computed by the Ministry of European Affairs for the seven operational programmes in Romania [13].

According to the National Strategic Reference Framework, the ROP aims to support the economic and social sustainable development of the Romanian Regions, according to their specific needs and resources, focusing on urban growth poles, improving the business environment and basic infrastructure, in order to make the Romanian Regions, especially the ones lagging behind, more attractive places to live, visit, invest in and work [14].

To this aim, the Regional Operational Programme finances projects focused on the development of transport, social, business, tourism and urban infrastructure. The Regional Operational Programme is structured as indicated below [12]

- Priority Axis 1: Support the sustainable development of urban growth poles – 1.117,8 mil. € (30% of the total ROP allocation)
- Priority Axis 2: Improvement of regional and local transport infrastructure – 758,4 mil. € (20% of the total ROP allocation)
- Priority Axis 3: Improvement of social infrastructure – 585.5 mil. € (16% of the total ROP allocation)
- Priority Axis 4: Strengthening the regional and local business environment – 502.4 mil. € (13% of the total ROP allocation)
- Priority Axis 5: Sustainable development and promotion of tourism – 663.4 mil. € (18% of the total ROP allocation)
- Priority Axis 6: Technical Assistance – 98.6 mil. € (3% of the total ROP allocation)

The distribution of the ROP allocation on priority axes largely coincides with the distribution of the total value of the projects contracted until October 31st, 2012 [14]. Thus, Priority Axis 5 - Sustainable development and promotion of tourism has an allocation of approximately 663 million Euros, representing 18 percent of the total ROP allocation.

As shown in Table 1, the 522 projects contracted so far under ROP – Priority Axis 5 have a total value of approximately 1 million Euros, representing 18 percent of the sum contracted under all the six axes of ROP [11].

Similarly, the sum allocated through ERDF for the projects contracted under Priority Axis 5 represents approximately 17% of the total nonrefundable value allocated for the Regional Operational Programme.

An interesting issue revealed by the present analysis is that almost 90 percent of the sum assigned through the European Regional Development Fund for tourism development and promotion has already been contracted, which shows that potential beneficiaries, either public or private, are highly interested in implementing projects financed from structural funds in the field of tourism.

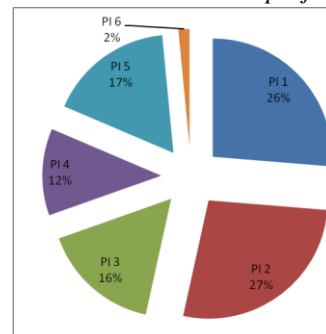
*Table 1. Number and value of projects contracted under ROP*

Priority Axes	No. of projects	Total project value (mil. €)	Non ref. value (mil. €)	Share of nonref. value in tot.alloc.
PA 1	241	1.445	892,9	80%
PA 2	137	1.322	921,7	>100%
PA 3	449	812,7	547,8	94%
PA 4	1733	760,7	403,1	80%
PA 5	522	1.004,7	578,8	87%
PA 6	57	86	51,4	52%

*Source: ROP Management Authority, 2012*

The shares of each priority axis in the total value of the projects contracted until October 31st, 2012, is presented in Figure 2.

*Fig.2. The share of each PA in the total value of contracted projects*



*Source: ROP*

*Management Authority, 2012*

Priority Axis 5, dedicated to the sustainable development and promotion of tourism, is structured into three major intervention domains, according to the priorities set out in the National Tourism Development Master Plan for the period 2007-2026 – document analysed in the previous sections.

The three major intervention domains are [12]:

- Major intervention domain 5.1: The restoration and sustainable exploitation of the cultural heritage and the creation/modernization of complementary tourist infrastructure;
- Major intervention domain 5.2: The creation, development and modernisation of the specific infrastructure necessary for the sustainable exploitation of natural resources and for improving the quality of tourist services
- Major intervention domain 5.3: Promoting the tourist potential and creating the infrastructure necessary to increase Romania's attractiveness as a tourist destination by projecting a positive image of Romania, defining and promoting the national tourism brand, the development of domestic tourism by diversifying the offers and the specific marketing activities, including the development of a on-line tourist information and statistics system

The allocation and the value of the projects implemented under each MID are presented in Table 4:

*Table 2 Number and value of projects contracted under the 3 MDIs within PA 5*

MDI	ERDF alloc. (mil. €)	No. of contr. projects	Total value of projects (mil. €)	Nonref. value of contracted projects (mil. €)
MID 5.1	239,9	69	340,3	224,2
MID 5.2	295,6	105	510,7	245,4
MID 5.3	127,8	348	153,4	109

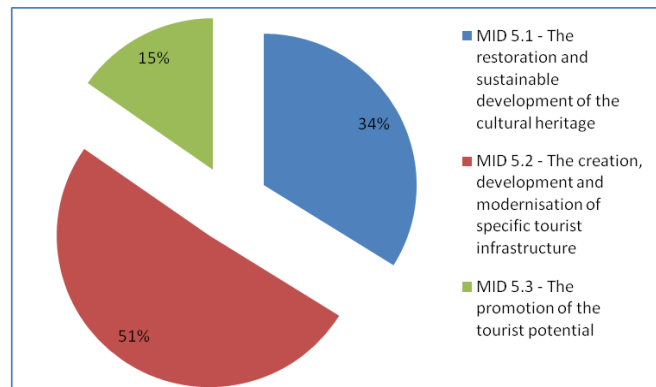
*Source: ROP Management Authority*

The data reveals that although the highest number of projects in the field of tourism has been contracted under MID 5.3 – The promotion of the tourist potential, MID 5.2 – The creation, development and modernization of specific tourist infrastructure is the major intervention domain with the highest value of contracted projects, as shown by Figure 3.

Thus, over 50% of the sum contracted until October 31, 2012, was accessed under MID 5.2, while approximately 34% of the total value was accessed under MID 5.1. However, these statistics are not surprising, as MID 5.1 and MID 5.2 focus on the creation, rehabilitation and modernization of infrastructure.

*Fig. 3 – Share of projects financed under the 3 MDIs within PA 5*

*Source: ROP Management Authority*

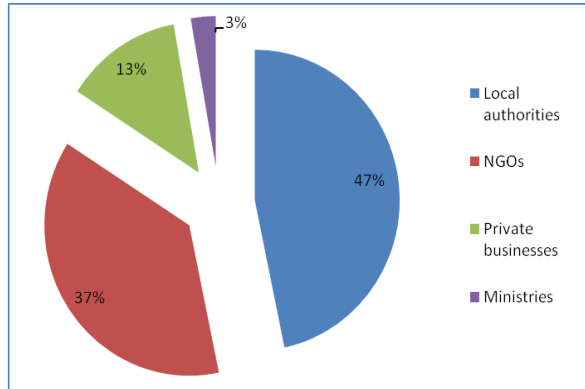


Therefore, the projects financed through the first major intervention domains of Priority Axis 5 require a higher expense, which means that beneficiaries generally apply for larger sums than those requested for the implementation of tourist promotion projects.

**Who benefits the most? An analysis of ROP beneficiaries**

An analysis of the types of beneficiaries eligible for funding and implementing projects under the Regional Operational Programme – Axis 5 (Figure 4) shows that the great majority of organizations contracting EU funds for projects in the field of tourism belong to the public sector.

Fig. 4 – Share of projects financed under PA 5, per types of beneficiaries



Source: ROP Management Authority, 2012

Nongovernmental organisations represent an important category of beneficiaries. NGOs applying for funding under ROP – Priority Axis 5 are community development associations, tourist associations, cooperatives, religious congregations and parishes. Almost half of the contracts signed under MID 5.3 – The promotion of the tourist potential, represent projects implemented by NGOs.

Thus, the social entrepreneurship sector plays a crucial role in the promotion activities developed in the field of tourism.

As far as private companies are concerned, small and medium enterprises may apply for funding only under MID 5.2 – Creation, modernisation and development of tourist infrastructure. Until October 31, 2012, 66 projects were contracted by private enterprises, with a total value of approximately 249 million Euros – 123 million of which were nonrefundable.

As this represents only 18.5 percent of the total nonrefundable allocation available under Priority Axis 5 (Figure 6), it is obvious that the private sector still plays a secondary role in the implementation of projects aimed at enhancing the development of Romanian destinations.

## Conclusions

The analysis above shows that the contribution of EU structural and cohesion funds and particularly of ERDF to the implementation of tourism development strategies in Romania was indeed significant.

The Regional Operational Programme registers the highest absorption rate of the 7 operational programmes in Romania, while the contracting rate for Priority Axis 5 - Sustainable development and promotion of tourism – is of approximately 90 percent.

However, the public sector remains the main beneficiary of EU funds, with 50 percent of funds assigned to tourism development being contracted by local authorities and governmental structures, such as ministries.

However, the interest of private and nongovernmental organizations for attracting EU financing for tourism development has significantly increased in the past years. Particularly, the nongovernmental sector has proved both dynamic as well as effective in contracting projects financed through ROP under Priority Axis 5.

This finding poses serious implications as far as public policies are concerned, as it shows that facilitating the development of nongovernmental organisations may lead, on long term, to a better development and promotion of the tourist potential in Romania.

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## Premises for Developing the Port of Ust-Dunajsk

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### Abstract

*The major document defining the requirements to development of estuary port of Ust-Dunajsk is the Memorandum of mutual understanding concerning development of the all-European transport corridor VII (Danube). According to the Memorandum of mutual understanding within the limits of port Ust-Dunajsk development the following themes should be considered: a condition of an infrastructure of port and a corridor; an estimation of requirements; the general concept of the coordinated development of port and a corridor; necessary conditions for participation of the international financial institutions and a private sector for development and port/corridor operation; organizational, legal, economic and social problems.*

**Key words:** Estuary ports, Low Danube region, port of Ust-Dunajsk

**J.E.L. Classification:** R 42

### 1. Introduction

Nowadays the transport complex of the Low Danube is the most integrated element of the Ukrainian economy in the European transport system.

The use of transport potential of this region will allow at the same time to solve a critical social and economic situation in region which demands stimulation of developing economic activities.

The element of a sea's economic complex of the Danube region is, first of all, the fleet of the Ukrainian Danube shipping company; other important elements of this complex are seaports of Izmil, Reni, Ust-Dunajsk, ship-repairing (ship-building) yards.

Estuary ports are characterized by sea and river waterways converging in them. Almost all largest ports of the world (St.-Petersburg,

London, New York, Hamburg, Rotterdam, Antwerp, etc.) are located in mouths of rivers.

The major document defining the requirements to development of Estuary port of Ust-Dunajsk is the Memorandum of mutual understanding concerning development of the all-European transport corridor VII (Danube).

The purpose of the Memorandum of mutual understanding is cooperation in case of development of the basic and auxiliary infrastructure of corridor VII.

Corridor development means maintenance, reconstruction, restoration, modernization and building of a new basic and auxiliary infrastructure, and also its operation and use with a view of assistance to the most effective and ecologically safe use of the corridor.

According to the Memorandum of mutual understanding within the limits of port development Ust-Danube the following themes should be considered:

- the condition of port and corridor infrastructure;
- the estimation of requirements;
- the general concept of port and corridor coordinated developing;
- the necessary conditions for international financial institutions and private sector to take part in developing port and corridor operation (for example Romania);
- the organizational, legal, economic and social problems.

The basic functions of the port of Ust-Dunajsk are defined according to its intended purpose as a water transport knot which connects traffics of transportations of the Danube with the sea.

Transforming the port of Ust-Dunajsk into a modern sea merchant estuary port – a large-scale and long-term problem demanding considerable capital investments, mainly, at the expense of attracting interested investors (for example, Romania).



It is obvious that this problem may be solved expediently stage by stage, on the basis of available time, means and real cargo base during this or that moment.

In connection with the above-mentioned statements it is expedient to follow the next strategic stages of developing the port:

1. Restoring the depths lost as a result of high waters and drifts of last period of time, first of all, in area of the connecting channel which joins water area of the port with Kilijsky sleeve of the Danube.

2. Arranging warehouse areas for accumulation cargoes in the zone of the connecting channel. These operations are expedient to be carried out in a complex with work in reconstruction of the connecting channel as well as the building of stationary moorings for sea and river ships in the form of quays, piers or point type.

3. Building a full profile ship canal with locks which begins on a deep-water site of Solomonov sleeve and ends on water area of the Zhebrijansky bay with the further carrying over the basic capacities of the port of Ust-Dunajsk to a lower part of the channel. [1].

## 2. Modern components of port of Ust-Dunajsk

Sea commercial port of Ust-Dunajsk is located in a southern part of the Zhebrijansky bay of Black Sea and adjoins to Ochakovsky sleeve of the Danube (Fig.1). Marine approach channel to the port of Ust-Dunajsk is 7 km long and leads to three anchor parking for heavy-tonnage vessels. One more connecting channel of 1,5 km lies from a ladle of bay to a sleeve Prorva.

Depths of water area of port and approach the channel (in the present time-11,5 m) allow to accept vessels load capacity to 50 thousand t with draught to 10 m, length to 250 m, width to 35 m.

In marine port the moorings as hydrotechnical engineering constructions are absent (Fig.2).

## 3. Port development on medium-term prospect

On the basis of the technological scheme of cargo passage through the port, its basic components are subjected to calculation.

Characteristics of elements of port counted directly on cargo turnover are: 1) length of a berthing line; 2) the sizes of water area; 3) depths of port; 4) the sizes of warehouses; 5) quantity of cargo paths of port .

Fig.1. Location of sea commercial port of Ust-Dunajsk

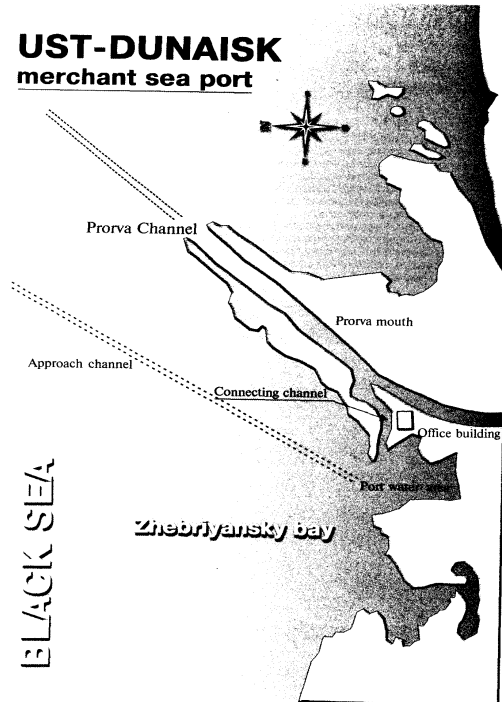


Fig.2. Sea commercial port of Ust-Dunajsk



A plan of the port means the general arrangement of its separate parts, which rationally grouped in one unit.

Development of port on intermediate term prospect supposes 2 stages.

Stage 1. Duration of stage is 12-18 months. Volume of dredging on restoration of depth consist of about 300-500 th. t of earth.

Stage 2. Duration of a stage from 2 till 5 years (depending on constructive decisions of berthing front), design and other technical documentation being developed at the first stage of developing the port. The warehouse areas, basically opened for accumulating cargoes should provide placing bulk, general, container and other cargoes.

It will allow river ships not to wait arrivals of the heavy-tonnage vessel and to be unloaded at a mooring from the river part to a storage ground.

After the arrival of «panamax» or «handimax» the cargoes from a storage ground through a mooring of the sea part will go for loading on a vessel. Work can be similarly organized for movement of cargoes in the opposite direction.

Reconstruction of the connecting (technological) canal should include flattening of its line and provide further possibility for transforming it into a sluiced canal to minimize siltation of port the harbor through the canal.

Realisation of the second stage of development of port will provide:

- reducing the time of stay for expensive sea-going ships while loading-unloading
- increasing the intensity of reloading operations
- reducing the number of barge passes along the connecting channel
- increasing the competitiveness of the port..

It is expedient for mooring front of the port to be executed in the form of quays with warehouse grounds adjoined.

While designing moorings one should take into separate consideration not only cargoes of various categories, but also cargoes with various types of transportation, the movement direction according to classes of ships transporting the cargoes, etc.

It is necessary to note, especially, the overloading of containers.

In general, the container terminal can be presented as an open system passing material streams through itself and having two external interfaces (Fig. 3).

Resulting from the purpose of the terminal, it is possible to formulate its basic functions. The first function is to transfer containers from one type of transport to another (transfer) or from the main vessel to

the feeder, or on the contrary, (transshipment), observing the principles: *correctly, guaranteed and safely* (Table 1).

Fig. 3. The container terminal as an open system

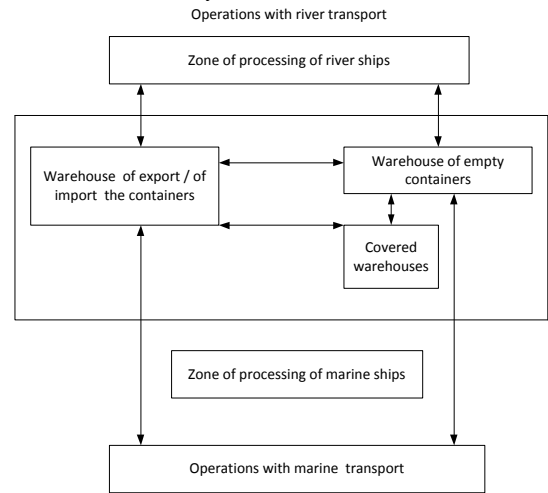


Table 1: Correspondence between functions and container terminal means

MEANS	FUNCTIONS		
	Transfer	Storage	Consolidation
Berth and Berthing territory	+		
Storage yard	+	+	
Check-point	+		
Office buildings	Δ	Δ	Δ
Warehouse of empty containers		+	
Point of handling of freight			+
Repair Workshop	Δ	Δ	Δ
Oil filling station	Δ	Δ	Δ
Transformer substation	Δ	Δ	Δ
Means on repair of containers		Δ	
Remarks: Δ shows support functions			

It should be noted that for today the quantity of containers transferred within the terminal from one vessel to another (transshipment), in many respects determines the status of a port (terminal) in universal hierarchy.

#### 4. Port development for long-term prospect

The port development for long-term prospect is implemented at the 3 stage. It includes constructing the deep water connecting canal and a new port infrastructure.

Construction of a port infrastructure assumes, except universal quays, creation of specialized complexes for processing containers and fluid cargo. The new deep water connecting channel of the general length 13,5 km consists from:

- river outer harbour within natural deep water area on a site of confluence Kilijsky and Solomonova of sleeves;
- sorting pool created by expansion of the existing cove of Bazarchuk;
- an lock chamber a length of 300 m, breadth 40 m, depth - 8,25 m (corresponds to the higher class of waterway VIC of category E on classification Danube Commission);
- a ship canal of a complete structure with length of 9,1 km and breadth on its bottom of 100 m (navigational depth is determined depending on the received projected ship at the third stage of the port development);
- marine protective facilities and the means of navigation at the exit to sea;
- a navigable sea channel with length of 4,5 km (on a coastal part of the Zhebrijansky bay's waters);
- marine outer harbour within natural deep water area of the Zhebrijansky bay;
- capacity of a lock canal - not less than 12,500 ships of the "river -sea" type and sea-going ships with draught to 7,5 m.

The offered channel, owing to the arrangement, tracing and constructive solutions possesses the advantages caused by following circumstances:

- all objects and constructions are erected outside of strictly reserved zone of Danube biospheric reserve being under the aegis of UNESCO;
- refusal to use the natural water currents forming shallow estuary bars, arrangement of stream directing dam at the inlet to accumulative pool and locking of the canal, in a combination of favorable mode of silt movement in the Zhebrijansky bay provide

the minimum silting and dredging during the operational period;

- there are convenient deep-water anchoring places on the ways from the river and sea;
- navigation is provided round the clock.

It is expedient to build new capacities for the port of Ust-Dunajsk in lower part of the full profile canal.

The question of river navigation will be solved when the port is built on the continental part of coast: reception of ocean vessels with draught 14,5 m, overload of cargoes on river ships and further transportation along all water arteries of Europe. It is possible to lead the railway to the port .

The given variant of the canal lock arrangement and development of the estuary port in its lower part result in solving some problems of regional character, namely:

- the canal can be used as an additional spillway in the case of flooding the city of Vilkovo during high waters or ice jams in lower part of the Danube;
- in connection with degradation of Zhebrijansky flooded areas, it is provided maintenance and improvement of their water balance thanks to fresh water dumping from the lock chamber;
- transport and engineering communications of the region are improved;
- the anthropogenous loading on environment is reduced in the Potapovsky sleeve (sturgeon locality), on the Vilkovsky sand spits, on underwater dumps and so on because of carrying over the intensive transport-production processes outside the active delta of the Danube;
- construction of the canal, port and their infrastructures in the immediate closeness to the basic settlements of region (Vilkovo, Primorskoe, Kilija and others) will lower social intensity, especially at the time of project realization.

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## Youth Unemployment in the Developed World: The Complex Facets of an Alarming Phenomenon. A Comparative Study

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### Abstract

*It is a well-known fact that unemployment around the world has soared during past few years as a result of the latest financial crisis. Everyone is affected, but statistics show that the youth are the group hit the hardest in the aftermath of a recessed global economy.*

*Our paper’s objective is twofold. On one hand we aim at depicting this precarious situation as explicitly as possible, as a warning for the incredibly baleful long-term consequences of youth unemployment and how it may affect both individuals and societies at large. On the other hand, we propose a comparative qualitative study of how different countries in the developed world have tried to address this critical issue.*

*Focusing particularly on the perimeter of the European Union, we compare the ways in which different countries adopt measures to combat youth unemployment, such as “guaranteed” access to job markets or implementing a dual education system.*

*The results show big discrepancies between countries in the north and those in the south of the European continent, explained both by structural differences, as well as a disproportionate capacity to take concrete action at the local government level.*

**Key words:** youth unemployment, financial crisis, developed economies, NEETs, macroeconomic measures

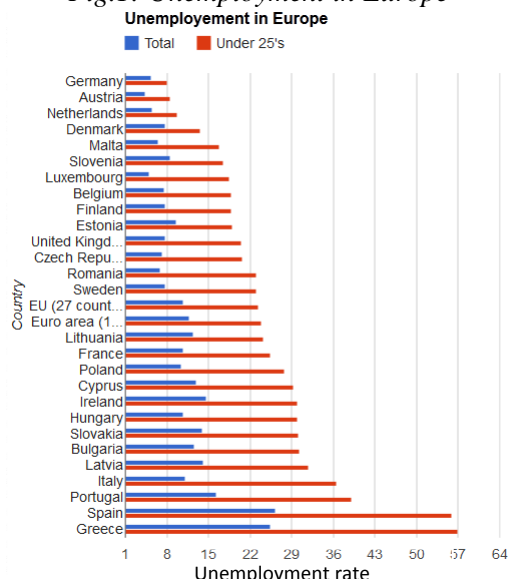
**J.E.L. classification:** J64, J21, O52, P51

### 1. Introduction

Youth in most developed countries are facing a depressing paradox: while they represent the most highly educated generation to ever enter the labor market, they are also the one with the dimmest prospects of finding a decent job or any job

at all for that matter. For the first time in history more and more parents are expecting their children to lead a harsher life than they did. Within the European Union, this picture is rendered by a simple statistic: 22,8% of the youth (15-24 years old) are unemployed, while this figure goes slightly down for the USA, at 15,5% (International Labor Organization, October 2012).

Fig.1: Unemployment in Europe



Source :

<http://www.euronews.com/2012/12/05/young-people-urged-to-change-countries-for-work/>

Thus we can say that, four years after the latest financial crisis broke out, youth unemployment remains one of the biggest concerning factors stalling the economic recovery. Unemployment in general seems to be the Achilles’s heel of most developed countries in this sense, but what becomes clearer and clearer for everyone is that the youth generation is most affected. Between 2008 and 2009, right after the beginning of the financial crisis, the number of globally unemployed youth rose with an

unprecedented 4,5 millions. This signifies an incredible growth in comparison with the average growth rate in the pre-crisis period (1997-2007) of less than 100,000 people per year.

Moreover, youth have bigger difficulties in finding a job right after finishing their education or after being laid off than adult persons with more accumulated skills and experience. As a consequence, they tend to be facing longer periods of unemployment than other actors on the labor market, as well as the likelihood of receiving lower salaries than before in the event they do get hired. And since entry-level salaries determine future salaries, young people facing unemployment today risk obtaining lower salaries for a long period of time, even after economic recovery is achieved.

The frustration of millions of young people around the world is hence very understandable. They just happen to be so unlucky to enter the job market at one of the most unpropitious moments and it is none of their fault. This is why governments are fighting to find innovative solutions through interventions on the labor market, such as making sure the skills of young graduates match with those needed on the market, offering help with job searching, entrepreneurial training, hiring subsidies etc.

Many voices are stating though that real solutions to this problem lay within bigger measures, those aimed at eliminating the obstacles in front of economic growth recovery and bringing real progress to global demand rebalancing. As true as this might be, we believe that strictly labor market related measures can help a great deal in softening the burden during the longer period of time needed for more ample macroeconomic measures to become effective.

Therefore, the main objective of this paper is to look at different coping mechanisms countries in the EU decided to adopt in order to fight the youth unemployment problem. We will do this within the framework of a qualitative two dimensional comparative study. The two main dimensions will consist of the adopted measure and the country of implementation, while the needed data will be collected from secondary sources such as OECD, ILO and UN reports, academic research and business press articles.

## **2. Reasons for focusing on the youth cohort**

Before proceeding with our analysis we would like to reiterate the relevancy of this research work by explaining our focus on the unemployed youth in the developed world and consequently debate the accuracy of the available statistical data illustrating this phenomenon.

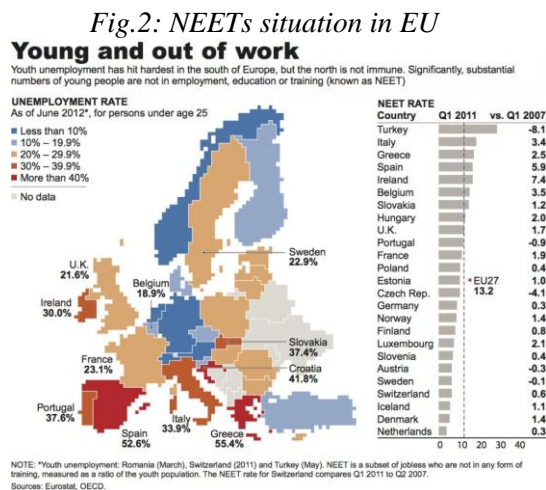
First of all, when talking about youth we adopted the internationally agreed upon convention of the 15 to 24 years old population group, sporadically expanding it up to 29 years old. The importance of these years is crucial in the life of an individual, as it represents a development stage where many decisions are taken, decisions that will impact the whole lifespan of that individual.

According to the ILO report “Global Trends in Youth Unemployment” from 2011, this cohort represents approximately 40% of the total of unemployed persons worldwide, although they represent only a quarter of the total population of working age. If we regard the evolution of the unemployment rate among youth and adults during the past decade we will notice that young persons are on average three times more likely to face unemployment than adults, with more accentuated long-term negative effects too (Verick, 2009; Bell & Blanchflower, 2009). O’Higgins (2001) notices that youth unemployment rates are generally higher than those for adults for every country with available statistical data.

But let’s look at this available data with critical eyes. In the European Union we see incredible youth unemployment rates of over 50% for Greece or Spain. Such figures are shocking but also somewhat misleading. Just like general unemployment statistics, youth unemployment is measured as the share of job-seeking youngsters in all youngsters who are either working or looking for work. But many young people do neither. Millions are in education. Many have simply given up looking for a job. These groups are not captured in youth unemployment statistics, which pushes up the youth unemployment rate.

A more accurate indicator of the youth employment crisis is the NEET concept - the total of young people not in employment, education or training. Last year, Europe had

7.5 million NEETs aged 15 to 24. Extend the age bracket to 29 and the number swells to 14 million – the equivalent of 15 per cent of all young people in the EU.



Sources: Eurostat, OECD

Even with this paradigm adjustment, youth unemployment is still a big concern for everyone. Volatile local economies in an era of recurrent economic crises solidify the vulnerable position of youngsters within the labor market, especially since their interests are not particularly high on the priority list of policy makers.

If overlooked, youth unemployment has a potential to have significant and serious social repercussions. Youth unemployment has implications for social exclusion and division within the society (ILO, 2008). If prolonged, unemployment may have negative consequences for the latter stages of working life in terms of lower wages and longer periods of unemployment (Arulampalam, Gregg & Gregory, 2001; Ellwood, 1982, O’Higgins, 2001). Such serious scenarios imply that youth unemployment also has a potential to impact not only a person’s lifetime economic wellbeing, but also social and political participation and the economic inequality in the society at large. Increasingly, it becomes more and more evident that youth experiences related to the labor market need to be viewed within macro-level contexts, while taking micro-level perspectives into consideration.

Last but not least, we would only like to briefly mention that our study focuses on the situation of a few developed countries (EU countries more precisely) because, according

to ILO, youth unemployment rate is considered a relevant concept only in the countries of the developed world. The complex socio-political and economic situation in most third world countries lay the ground for completely different premises when talking about youth unemployment, which do not make the object of this study.

### 3. Comparing measures against youth unemployment in the EU: analysis and results

The main argument for our comparative study is the fact that, faced with such soaring youth unemployment rate and the risk of having to deal with complex long-term consequences of this situation, EU states should share their wisdom. By this we mean comparing the effectiveness of methods already implemented in some of the states and trying to export those best practices in countries suffering the most at the moment.

After a thorough analysis of the academic and business press articles and, most importantly, European Commission’s initiatives for fighting youth unemployment, we have been able to delimitate three main methods used in the EU countries in order to decrease the number of youth without a job:

- Guaranteeing access to job market for young people
- Implementing a dual education system
- Promoting and supporting youth entrepreneurs

For each of these methods we tried analyzing the overall status of their implementation, the champion countries obtaining the most effective results by applying the methods and the main challenges other countries would face in trying to replicate their example (specifically those countries in need of pushing such measures).

The first of these measures is one taken very seriously by EU officials at this moment. It implies introducing guarantees for young people below 25 years of age to get job or qualification offers within four months after the end of their vocational training or within four months after being laid off.

This measure draws on examples from the past. Sweden has had a similar guarantee program in place since the 1990s and Austria

for several years now. Both countries have a low level of youth unemployment; in Austria it's at just over 8%, while in Spain and Greece – countries without such programs – every second young person is unemployed. Austria is indeed the model to be followed in this sense. The successful implementation of job “guarantees” there is based upon an intense collaboration with the small and medium business sector.

There are two main challenging aspects when it comes to replicating this best practice: the legal and the financial one. Legally, implementing this measure means only that the EU gives certain recommendations to the countries. Since education is a national responsibility, the EU cannot interfere here.

Then comes the money problem. According to ILO, job offer guarantees in the 17 euro zone countries would cost the single currency bloc about 21 billion euros. But the European Commission argued that the overall costs from youth unemployment amounted to 153 billion euros annually, the equivalent of 1.21% of the EU's economic output. So even if it makes sense to do it, the remaining issue is where to find the necessary funds. As said, when regarded at the whole EU level, this method stays a recommendation that cannot be written into law. Nevertheless, the EU executives could accept supporting national governments in implementing such measures with resources coming from the European Social Fund.

Moving on to the second identified measure – implementing a dual education system – it is a measure we come across only in a few European countries like Holland, Austria, Switzerland and Germany and it basically offers the possibility of an on-the-job training in parallel with the vocational training. This style of training brings future job applicants in closer contact with the job market and generates more reliability when it comes to qualification standards. It also offers a long period in which employers can get to know young employees, offering managers a relatively reliable insight into trainees' skills and potential for development. That limits employers' risks when taking on young workers.

The clearly detached success story in this sense is that of Germany. Here more than half of each age-group graduate from dual

training programs in which they simultaneously earn academic credentials along with gaining work experience, rather than attending classes alone like in many other countries. The system also manages to render futile one of the biggest obstacles for youth, that of tight regulations on the job market. In countries that offer workers strong protection against being fired, young people find it especially hard to gain a foothold in the work force. As long as they do not have any or enough work experience, few employers are willing to take a chance on letting in a bad employee who will be difficult to fire.

In spite of its strongly regulated market, Germany's dual educational system works so effectively that the youth unemployment rate here is lower than that in countries with more open job market regulations. Without the dual training system, Germany's youth unemployment rate would likely be similar to that of France or Italy. It is the necessary answer to a strongly regulated job market. And without tight controls on firing workers, this system would probably not exist because when companies have the ability to part with employees more or less at will, the risk of making bad personnel decisions becomes less weighty. The necessity of financing a costly internal training system evaporates. In Germany, job market regulations and the dual training system have apparently formed a fruitful symbiotic relationship.

Germany's example shows another interesting fact and a fairly counterintuitive one. The general belief is that good training is key to entering the work force. Nevertheless, it seems that many EU countries have a very high youth unemployment rate, despite graduating many well-trained people. In Great Britain, for example, the rate is double that of Germany's, although the percentage of university degree-holders is also nearly double that of Germany.

The main challenging aspect when it comes to exporting Germany's model is the strong financial investment it requires. Since training programs are expensive for companies, those headquartered in countries with weak job market regulation will have little reason to introduce such programs on a large scale. But in countries that have tight labor law this could actually be an excellent

measure. It is true that the initial costs of setting up such a system act as a major obstacle to creating a country-wide network for training options. But we believe that, with the proper support from EU executives, these countries could set up a long-term base for a more efficient system in terms of youth unemployment and transitioning from education and training years to the adult working life.

Within the framework of potential efforts and strategies to boost employment and job creation for young people, the last measure we looked into refers to promoting and supporting entrepreneurship. We believe that entrepreneurship is increasingly accepted as an important means and a valuable additional strategy to create jobs and improve livelihoods and economic independence of young people. It is an innovative approach to integrating youth into today's changing labor markets. Although the crucial role played by entrepreneurship in driving economic development and job creation is generally more and more understood, there has been little effort to look at it from a youth perspective. Young people's specific needs and particular entrepreneurial potential, as well as their critical contribution to economic and social progress are largely underestimated.

Unfortunately, there is still a general lack of in-depth research and concrete data on youth entrepreneurship, especially as it relates to different (entrepreneurial) framework conditions and to creation of new firms. This is why our investigation could not go further at this point. We believe this could be the subject of an entire study, therefore our suggestions for future research are headed mainly in this direction, with the strong conviction that through such an attempt a new inter-disciplinary research field could be mapped out.

All in all, if we take into consideration the two main measures for which we could find enough available data, our results show a clear discrepancy between the North and the South of Europe, the former leading the way, while the latter is struggling to face this dire crisis. Countries like Spain, Greece, Portugal, Italy should take the example of those like Germany, Austria, Switzerland or the Nordics – their low youth unemployment rates show that whatever they are doing is

working and maybe successful practices from up North could be transferable down South as well.

The cruel paradox makes the countries in the South of the continent also the ones most hindered in the aftermath of the financial crisis and therefore having few resources to implement costly measures such as youth guarantees to work or a dual training system. And even if the EU helps with that, the local governments have a tough job, as a lot more than mere cooperation is needed in order for these initiatives to be fully effective. The structural differences between the North and the South, as well as the fact that it's pretty late to start implementing such long-hit measures only now makes the success chances of such initiatives questionable. Nevertheless, doing something is better than waiting even longer and hoping for demographics to solve the situation, even if it will take a while until real improvement will be seen. In the meantime, growth and deeper reforms need to be pursued too, as active labor market policies alone sure won't do the trick.

#### **4. Concluding remarks**

Reducing youth unemployment is one of the major challenges facing most governments in the world for decades to come. While bound up with the whole employment situation, this challenge has its own specific dimensions and therefore requires targeted responses. Young people tend to be three times more affected by unemployment than other cohorts and have bigger difficulties at finding a job after being laid off. This has multiple negative consequences, of economic, social and psychological scale. In the absence of concrete measures to combat youth unemployment, societies hardest hit by this phenomenon would soon degenerate to harboring a large number of young people reaching the adult age without the experience, training and financial stability that only continuous presence on the job market brings. This particular group of educated young people without a job has been given a large amount of attention in the latest debates, being named “the lost generation”. Young people without many competences who have lost their job present

a higher risk of becoming discouraged, voluntarily withdrawing themselves from the job market and becoming dependent of their families and social programs, especially in developed countries where such programs exist.

This article has tried to depict as closely as possible the true gravity of this phenomenon faced by the current generation of young people entering the labor market and to encompass the most common methods against youth unemployment in a comparative study between the main EU countries. Our scientific approach is based on the fact that young Europeans suffer disproportionately within the context of the economic crisis and this is why the most severely affected countries should learn from those proven to be stronger facing the vicissitudes of the crisis, when the examples of the latter are transferable.

However, major structural differences between EU countries make this a difficult goal to achieve. Hopes are not lost, but each country's specific socio-economic context must be taken into consideration when quickly and tactfully taking action. Within such conditions one thing is clear: reinvigorating economic growth and implementing deep reforms seem to be the only viable methods in the long run. The only concern is that the underlying issue implies urgent measures. Europe cannot afford such a “lost generation”, it cannot afford to jeopardize the economic future of these young people, or the scenario of losing the

opportunity to benefit from the strength and creativity they bring into the job market. Because ultimately all these young people will be the ones leading tomorrow's growth.

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**Section II**  
**Business Economy and Administration**

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**Subsection 1**  
**Economy and Economic Informatics**



# Influence of Labor Flexicurity on Organizational Performance in Mehedinți County

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## Abstract

*We intend to present in this article the results of an empirical study conducted in Mehedinți County by the means of which we seek to highlight the link between labor flexicurity and performance of economic entities. Labor flexicurity signifies the relationship between the flexibility and security of labor and states that necessary balance between the interests of employees and those of employers, at macroeconomic level, that are pointed out by the partnership government - employers - trade unions. At the microeconomic level, flexicurity fits into the set of values that compose the organizational culture, making it difficult to detect and even more hard to assess. Once we have selected businesses with an average number large enough to be able to identify the elements of organizational culture, we tried through a questionnaire to put every trader in one of the four quadrants of the flexicurity matrix. Choosing a homogeneous set of performance indicators allowed us to visualize the correlation between labor flexicurity and performance of economic entities in Mehedinți County.*

**Keywords:** flexicurity, flexibility, security, performance indicators.

**JEL Classification:** D04, J24.

## 1. Introduction

Since it was introduced in the European political discourse at the middle of the last decade of the last century, the concept of flexicurity has been described in detail in the works of Wilthagen and Rogowski (2002), and Wilthagen and Tros (2004) who have regarded it from macroeconomic level as a "historical process" or a "political strategy".

In any of these situations, flexicurity contributes to social security and employment and increases productivity and competitiveness. The results of macroeconomic analyzes have led to highlighting certain international flexicurity models joined by a larger or smaller number of states, depending on the realities of the labor market in each country and a series of values related to the tradition, culture and level of economic- social development, and discussions on flexicurity is addressed not only to economists, but also proved to be incentive for jurists, sociologists, psychologists, political analysts, etc.

Labor flexicurity can be considered at the microeconomic level a suitable analytical framework for analyzing labor flexibility and security that finds its place in the organizational culture, respectively "values, symbols, beliefs, myths, rituals, ceremonies and spiritual aspirations that define the space of an organization" (Bratianu, 2006). In this "spiritual space", flexibility and safety are creating a work environment that may contribute to increase the performance of any organization, or contrary to damage them.

Performance can be evaluated through a series of indicators well-defined in the specialized literature of which we have chosen for our study: labor productivity, profit per share and profit per employee in two consecutive years, by comparison, 2010 and 2011.

## 2. Research Methodology

The main difficulty met during this study was to assess the flexibility and security of labor on a sample of businesses in Mehedinți County. We selected a total of 30 trade companies which in 2010 and 2011 financial years had an average number of at least 25 employees and filed their annual financial



statements to the specialized bodies, data on their economic performance being extracted from the website <http://www.mfinante.ro>. The selected companies are operating in the fields shown in Table 1:

Table no.1. Situation of selected companies on fields of activity

Nr.	Field of Activity	Number of economic entities	Number of employees
1	Agriculture and Food Industry	2	92
2	Electricity industry	1	537
3	Manufacturing	3	237
4	Engineering industry (marine and rail)	4	1449
5	Constructions	5	367
6	Transports	6	678
7	Commerce	4	168
8	Services	5	871
	TOTAL	30	4399

Source: own projection

There were selected businesses registered with the Trade Registry of the Mehedinți County Tribunal that met two conditions: the minimum number of employees - 25 people and the company must have been created before the year 2000, assuming that, in order to crystallize the elements giving consistency to the organizational culture, a certain number of people and a certain period of time are required.

Questionnaires sent were meant to evaluate labor flexibility with questions about:

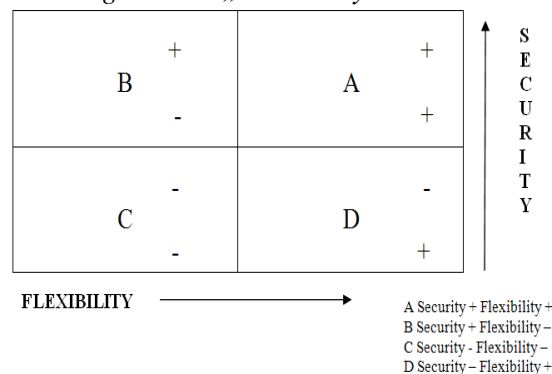
- overtime working hours,
- weekends and legal holidays,
- study leaves,
- rebounds, reprogramming, permissions,
- work rules.

Questions necessary for the assessment of labor safety were also considered regarding:

- wage levels,
- social security benefits for disability,
- safety,
- collective redundancies
- labor disputes.

The responses allowed us the construction of a flexicurity matrix based on the flexibility and security of labor as Figure No.1 shows:

Figure no.1 „Flexicurity Matrix”



Source: Avram, C.D. „Development of Human Resources in Romanian Bank System”, Ed. Universitaria, Craiova, 2010, page 357.

Data taken from the website [www.mfinante.ro](http://www.mfinante.ro) allowed the calculation of the following indicators:

- ❖ labor productivity in 2010 and 2011,
- ❖ profit per share in 2010 and 2011,
- ❖ profit per employee in 2010 and 2011.

The increase / decrease each indicator in 2011 compared to 2010 was calculated to ensure comparability of data and, performance was assessed depending on the results as presented in Table 2:

Table no. 2. Performance Evaluation Scale

Nr	Indicator	Very Good VG	Good G	Satisfactory S	Unsatisfactory U
1	Labor Productivity 2011/2010	Over 10%	5,1-10%	0,1-5%	Negative
2	Profit per share 2011/2010	Over 15%	10,1-15%	0,1-10%	Negative
3	Profit per employee 2011/2010	Over 15%	10,1-15%	0,1-10%	Negative

Source: Own projection

### 3. Presentation of Results

After capitalization of questionnaires completed by each company investigated, a distribution on the quadrants of flexicurity matrix has resulted as presented in Table 3.

Table no. 3. Distribution of answers to flexicurity test

Total of Companies	From which in quadrant			
	A	B	C	D
30	14	5	3	8
100%	46,67 %	16,66 %	10 %	26,67 %

Source: Own projection

Almost half of the companies investigated (14) were located in quadrant A where the flexibility and security were at high levels, and only 10% of companies investigated were found in quadrant C in which nor flexibility or security was up to the expectations. Quadrants B and D groups 5, respectively 8 of the companies investigated and the components of flexicurity are positive only in one of them.

#### 4. Labor productivity analysis

Labor productivity is an indicator that have an oscillating evolution on the analyzed sample, so more than a third of the businesses registered a decreased labor productivity in 2011 compared to the previous year, but some companies have seen an increase in this indicator which have been obtained as a result of staff reduction under the impact of lower workload due to the financial crisis.

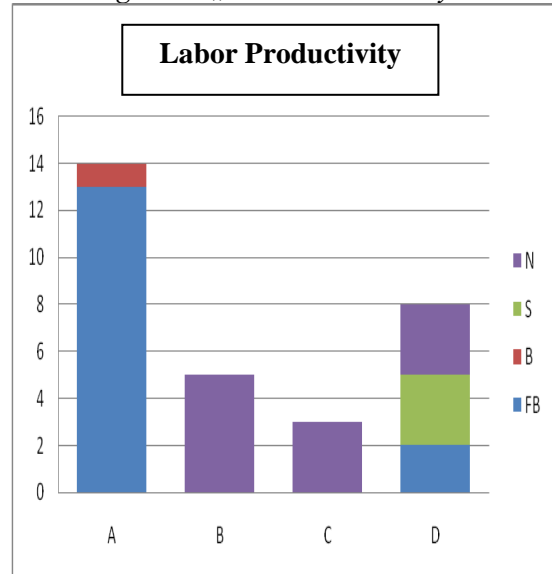
Distribution of performance related to labor productivity based on flexicurity is presented in Table 4, and it is graphically shown in Figure 2:

Table no.4. Labor Productivity

	A	B	C	D
VG	13	0	0	2
G	1	0	0	0
S	0	0	0	3
U	0	5	3	3

Source: Own projection

Fig. no. 2 „Labor Productivity”



Source: Own projection

It can be seen that, from the companies that were evaluated as Very Good (15), 13 were in quadrant A and 2 in quadrant D. Companies in quadrants B and C were grade only as Unsatisfactory.

#### 5. Analysis of profit per share

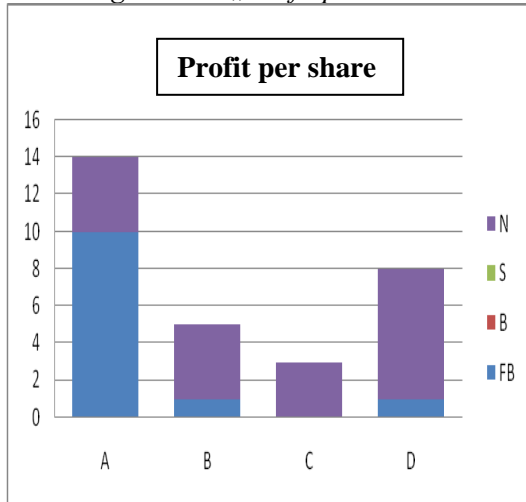
Profit per share is an important indicator for investors and company's management. Distribution of performance related to profit per share based on flexicurity is presented in table 5 and it is graphically shown in Figure no.3:

Table no.5. Profit per Share

	A	B	C	D
VG	10	1	0	1
G	0	0	0	0
S	0	0	0	0
U	4	4	3	7

Source: Own projection

Figure no.3 „Profit per share”



Source: Own projection

Out of the 12 marks of Very Good, 10 companies were registered in quadrant A, one in quadrant B and one in quadrant D, and companies in quadrant C were rated only as Unsatisfactory.

## 6. Analysis of profit per employee

Profit per employee along with labor productivity gives us a consistent picture of the contribution that human resource has in the achievement of organizational performance.

Distribution of performance related to profit per employee depending on flexicurity is presented in Table no. 6 and it is graphically shown in Fig. 4:

Table no. 6. Profit per employee

	A	B	C	D
VG	9	0	0	1
G	0	1	0	0
S	0	0	0	1
U	5	4	3	6

Source: Own projection

Figure no.4 „Profit per employee”



Source: Own projection

Out of the 10 marks of Very Good, 9 were obtained by companies in quadrant A. Of the 18 qualifiers for Unsatisfactory, 5 were obtained by companies in quadrant A, respectively 28%; 4 were obtained by companies in quadrant B, respectively 22; 3 were obtained by companies in quadrant C, respectively 17% and 6 were obtained by economic entities in quadrant D, representing 33%.

## 7. Conclusions

Results of this study reveals a link between labor flexicurity and economic performance of the economic entities/companies in Mehedinți County, meaning that 86.4% of grades of Very Good has assigned to entities in quadrant A, in which both flexibility and security of labor are at high levels. On the other hand, companies in quadrant C, where nor flexibility or security is at the expected levels, were 100% rated as Unsatisfactory.

There are economic entities in quadrants B and D worth to be carefully considered, in which only one of the elements of flexicurity has recorded positive values. Thus the added flexibility in quadrant D entities brought a 4 Very Good grades and 4 Satisfactory grades, while the added security for the companies in quadrant B brought one Very Good grade and one Good mark, which is suggesting that labor flexibility contributes to the achievement of performance in a greater degree than security.

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# Macroeconomic Forecasts Comparisons in Romania During the Crisis Using New Methods of Assessing the Predictions Accuracy

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## Abstract

*This research brings as a novelty in literature the use of other methods to compare the forecasts accuracy: multicriterial ranks, non-parametric tests and binary logistic regression. Starting from the a conclusion stated in literature that Dobrescu model failed to predict the actual crisis in Romania, we got less accurate predictions for unemployment rate and exchange rate on forecasting horizon 2009-2011 with respect to the forecasts provided by National Commission of Prognosis (NCP). However, the inflation rate predictions based on Dobrescu model are more accurate than those of NCP. These results were gotten using the classical UI Theils's statistic used in making forecasts comparisons, but also the methods proposed by us that are not mentioned in literature in this context.*

**Key words:** forecasts, accuracy, logistic regression, multi-criteria ranking, non-parametric tests.

**J.E.L. Classification:** E21, E27, C51, C53

## 1. Introduction

The evaluation of forecasts accuracy becomes essential especially in crisis periods. The uncertainty grows in these times, so the economic environment needs more than in other times to have a mirror of the forecasting process efficiency.

In Romania, there are two important institutions specialized in establishing macroeconomic forecasts, but they did not have concerns in assessing the accuracy of their own predictions. These institutions are: National Commission of Prognosis (NCP) and the Institute for Economic Forecasting (IEF). Therefore, this paper utilizes two types

of forecasts: those based on Dobrescu macromodel and those made by NCP. Actually, there are many comments in literature regarding the failure of Dobrescu model in predicting the crisis started in 2009.

The tendency of evaluating the accuracy of predictions provided by more institutions, especially in crisis periods, is an international one, Abreu (2011) assessing the performance of macroeconomic forecasts made by IMF, European Commission and OECD and two private institutions (Consensus Economics and The Economist).

Österholm (2012) estimated the probability of USA recession using a Bayesian VAR model. A low value of the probability was gotten, even when the model was combined with experts' expectations.

In this article we propose the use of other statistical methods to compare the forecasts accuracy, these methods never been mentioned in literature in this context.

## 2. New statistical methods used to compare the predictions accuracy

New methods that were not mentioned in literature can be used in order to make comparisons between the forecasts in terms of accuracy: multi-criteria ranking, logistic regression and non-parametric tests.

Two methods of multicriterial ranking (ranks method and the method of relative distance with respect to the maximal performance) are utilized in order to select the institution that provided the best forecasts on the horizon 2009-2011 taking into account at the same time all computed measures of accuracy.

If we consider  $\hat{X}_t(k)$  the predicted value after  $k$  periods from the origin time  $t$ , then the error at future time  $(t+k)$ , according to Bratu

(2012) is:  $e_i(t+k)$ . This is the difference between the registered value and the predicted one.

The indicators for evaluating the forecasts accuracy that will be taken into consideration when the multi-criteria ranking is used are:

- Root Mean Squared Error (RMSE)

$$RMSE = \sqrt{\frac{1}{n} \sum_{j=1}^n e_x^2(T_0 + j, k)}$$

- Mean error (ME)

$$ME = \frac{1}{n} \sum_{j=1}^n e_x(T_0 + j, k)$$

The sign of indicator value provides important information: if it has a positive value, then the current value of the variable was underestimated, which means expected average values too small. A negative value of the indicator shows expected values too high on average.

- Mean absolute error (MAE)

$$MAE = \frac{1}{n} \sum_{j=1}^n |e_x(T_0 + j, k)|$$

These measures of accuracy have some disadvantages. For example, RMSE is affected by outliers. Armstrong and Collopy stresses that these measures are not independent of the unit of measurement, unless if they are expressed as percentage. If we have two forecasts with the same mean absolute error, RMSE penalizes the one with the biggest errors.

A common practice is to compare the forecast errors with those based on a random-walk. “Naïve model” method assumes that the variable value in the next period is equal to the one recorded at actual moment. Theil proposed the calculation of U statistic that takes into account both changes in the negative and the positive sense of an indicator:

U Theil’s statistic can be computed in two variants, specified also by the Australian Treasury.

The following notations are used:

- a- the registered results
- p- the predicted results
- t- reference time
- e- the error (e=a-p)

n- number of time periods

$$U_1 = \frac{\sqrt{\sum_{t=1}^n (a_t - p_t)^2}}{\sqrt{\sum_{t=1}^n a_t^2} + \sqrt{\sum_{t=1}^n p_t^2}}$$

A value close to zero for  $U_1$  implies a higher accuracy.

$$U_2 = \frac{\sqrt{\sum_{t=1}^{n-1} \left(\frac{p_{t+1} - a_{t+1}}{a_t}\right)^2}}{\sqrt{\sum_{t=1}^{n-1} \left(\frac{a_{t+1} - a_t}{a_t}\right)^2}}$$

If  $U_2=1 \Rightarrow$  there are not differences in terms of accuracy between the two forecasts to compare

If  $U_2 < 1 \Rightarrow$  the forecast to compare has a higher degree of accuracy than the naive one

If  $U_2 > 1 \Rightarrow$  the forecast to compare has a lower degree of accuracy than the naive one

**Ranks method** application supposes several steps:

1. Ranks are assigned to each value of an accuracy indicator (the value that indicates the best accuracy receives the rank 1);

The statistical units are the four institutions that made forecasts. The rank for each institution is denoted by:  $(r_{ind_j})$ ,  $i=1,2,3,4$  and  $ind_j$  –accuracy indicator j. We chose 5 indicators: mean error, mean absolute error, root mean squared error, U1 and U2.

2. If the ranks assigned to each institution are sum up, the score to each of them is computed.

$$S_i = \sum_{j=1}^5 (r_{i,ind_j}), \quad i=1,2,$$

3. The institution with the lowest score has the highest performance and it will get the final rank 1.

**The method of relative distance with respect to the maximal performance** is the second way of ranking.

For each accuracy indicator the distance of each statistical unit (institution) with respect to the one with the best performance is computed. The distance is calculated as a



relative indicator of coordination:

$$d_{i\text{ind}_j} = \frac{\text{ind}_i^j}{\{\min \text{abs}(\text{ind}_i^j)\}_{i=1,2, \dots, 4}}, \quad i=1,2 \quad \text{and} \\ j=1,2, \dots, 5$$

The relative distance computed for each institution is a ratio, where the denominator is the best value for the accuracy indicator for all institutions.

The geometric mean for the distances of each institution is calculated, its significance being the average relative distance for institution  $i$ .

$$\bar{d}_i = \sqrt[5]{\prod_{j=1}^5 d_{i\text{ind}_j}}, \quad i=1,2$$

According to the values of average relative distances, the final ranks are assigned. The institution with the lowest average relative distance will take the rank 1. The position (location) of each institution with respect to the one with the best performance is computed as: its average relative distance over the lowest average relative distance.

$$\text{loc}_i^{\%} = \frac{\bar{d}_i}{\min(\bar{d}_i)_{i=1,2, \dots, 4}} \cdot 100$$

Wilcoxon Signed Ranks test or other nonparametric tests could be used when the series distribution is not normal or when the type of repartition is not known. These parametric procedures give good results regarding differences between populations when the assumptions regarding the population are not fulfilled.

For our sample we do not know the shape of distribution, the appliance of nonparametric tests being the best choice.

Wilcoxon Signed Ranks test is used to compare the means of two populations or to make inferences about the population mean. It is based on a random selection and a symmetric distribution. The variable is measured on a scale that is at least an ordinal one. The hypothesis set supposes that the null assumption ( $H_0$ ) implies the equality between the medians of the two samples ( $\theta = \theta_0$ ). If  $H_0$  is accepted, then the samples come from the same population. The alternative hypothesis supposes that there are differences between samples medians ( $\theta \neq \theta_0, \theta > \theta_0$  or  $\theta < \theta_0$ ).

Using the sample with “ $n$ ” observations ( $x_1, x_2, \dots, x_n$ ), the difference scores are

computed:  $D_i = x_i - \theta_0, \quad i = 1, 2, \dots, n$ .

The difference scores data series is ascending ordered and ranks are assigned to  $|D_i|, \quad i = 1, 2, \dots, n$ . Null scores are removed from analysis.

We denoted by  $W$  the sum of the positive ranks. The test statistic is:

$$Z = \frac{W - \frac{n(n+1)}{4}}{\sqrt{\frac{n(n+1)(2n+1)}{24}}}$$

If the  $p$ -value corresponding to this statistic is less than 0.05, then the  $H_0$  is rejected. So, the samples come from different populations or there are statistically significant differences between the two samples (or the two variables in the analysis).

In our research all the conclusions drawn using the data from our survey are guaranteed with a probability of 95% (a significance level of 0.05).

Kruskal-Wallis test is used to compare two or more populations. The null hypothesis tests that the medians of the populations are equal. If at least two medians are different the alternative hypothesis is accepted. Actually, in this case, we do not have reasons to accept the null hypothesis. The interest variable is not necessarily numerical one and the factors that may affect it are independent. The assumptions of normality and homoscedasticity are not checked when the test is applied. If the statistic test is lower than 0.05, the null hypothesis is rejected and the alternative one is accepted. So, there are differences between the populations or the interest variable does not depend on the specified factors.

For samples of low volume you may wish to refer to tables of the statistic but the chi-square approximation is better in most cases than Kruskal-Wallis test, according to Conover (1999).

Another method of comparing forecasts accuracy is based on logistic regression.

Logistic regression measured the impact of more independent (exogenous) characteristics that appear simultaneously in order to predict membership of one or other category of the two dependent characteristics. The dependent variable is categorical and the exogenous ones are categorical or a mix of continuous and categorical.

There some important advantages of the logistic or multinomial regression: some

assumptions are not taken into consideration (the errors non-correlation, the normality or homoscedasticity of the independent variables). However, the maximum likelihood estimation method is used instead of ordinary least squares.

The dependent variable takes values between 0 and 1 and the independent one (X) takes real values. With p is denoted the probability that a case is in a certain category. The odds ratio of an event (likelihood ratio) are  $p/(1-p)$ . The log of the odds ratio is  $\ln \frac{p}{1-p} = b_0 + b_1X + \varepsilon$ . The parameters that should be estimated are  $b_0$  and  $b_1$ . The error is denoted by  $\varepsilon$ .

The p is determined as:  $p = \frac{e^{b_0+b_1X+\varepsilon}}{1+e^{b_0+b_1X+\varepsilon}}$   
The estimated of the parameters are:  $\hat{b}_0$  and  $\hat{b}_1$ .

An odds ratio (OR) equalled to one shows that if X increase by an unit, the odds remain the same. In other words, X does not influence the dependent variable Y.

An OR higher than 1 implies the following: an increase by one unit in the exogenous variable determines a growth by  $e^{\hat{b}_1}$  in the level of the dependent variable. If OR is lower than 1, we will have a decrease by  $e^{\hat{b}_1}$  in the dependent variable.

We calculate the absolute errors for each year in the forecasting horizon. We test if the errors in time crisis differ significantly from those in other times. A binary variable is created and it will take value “1” if the error is registered in time crisis and “0” for the rest of the time in the horizon.

A logistic regression is built starting from this binary variable and the predictions made by an institution.

### 3. The forecasts accuracy comparisons using the new methods

In this study we used the forecasted values of inflation, unemployment and ROL/EUR exchange rate made for Romania by Dobrescu and NCP.

Armstrong and Fildes (1995) showed that it is not sufficient to use a single measure of accuracy. Therefore, more accuracy indicators were computed for the three types of forecasts on the specified horizon.

The two methods of multi-criteria ranking are applied in order to take into account all

the values of the computed accuracy indicators.

Table 1. The accuracy of inflation rate forecasts in Romania during the crisis (2009-2011)

Accuracy measure	Forecasts based on Dobrescu model	National Commission for Prognosis (NCP)
ME	0.1256	0.9933
MAE	0.3390	1.0666
RMSE	0.1940	1.7334
U1	0.9131	0.1222
U2	0.2476	0.8580

Source: own computations using Excel

The U1 values show that the inflation forecasts based on Dobrescu model are less accurate than NCP ones, but the other indicators (ME, MAE and RMSE) recommend the first ones as the best. Both predictions are underestimated and better than the naive forecasts.

Table 2. The accuracy of unemployment rate forecasts in Romania during the crisis (2009-2011)

Accuracy measure	Forecasts based on Dobrescu model	National Commission for Prognosis (NCP)
ME	-1.4026	-1.2
MAE	1.4026	1.2
RMSE	2.176821	1.966667
U1	0.9852	0.0973
U2	1.42855	1.3850

Source: own computations using Excel

NCP unemployment rate predictions are better than those based on Dobrescu model, according to the values of all accuracy indicators. Both forecasts are too high in average and less accurate than those based on random walk model.

Table 3. The accuracy of ROL/EUR exchange rate forecasts in Romania during the crisis (2009-2011)

Accuracy measure	Forecasts based on Dobrescu model	National Commission for Prognosis (NCP)
ME	-0.0195	0.0050



MAE	0.03364	0.03356
RMSE	0.00130	0.00147
U1	0.9961	0.0045
U2	0.0523	0.0579

Source: own computations using Excel

NCP forecasts for exchange rate are better than those based on Dobrescu macro model, both of them outperforming the naive predictions. However, we have an underestimation for NCP predictions despite those of Dobrescu model.

Table 4. The ranks of institutions according to the accuracy measures of selected macroeconomic variables predictions (ranks method)

Variable	Dobrescu forecasts	NCP forecasts
<b>Inflation rate</b>		
Sum of ranks	6	9
Final ranks	1	2
<b>Unemployment rate</b>		
Sum of ranks	10	5
Final ranks	2	1
<b>Exchange rate</b>		
Sum of ranks	8	7
Final ranks	2	1

Source: own computations using Excel

According to ranks method, the best predictions for inflation rate belong to Dobrescu, the same result being obtained applying the computation of classical U1.

For the unemployment rate NCP provided the best forecasts in time crisis (2009-2011).

The NCP predictions for the exchange rate are the most accurate in the period of crisis. The results of ranks method are the same as those given by U1 computation.

Table 5. The ranks of institutions according to the accuracy measures of inflation rate predictions (method of relative distance with respect to the best institution)

Variable	Forecasts based on Dobrescu model	National Commission for Prognosis (NCP)
Inflation rate		
Average relative distance	1.077	3.026
Ranks	1	2

Location (%)	555.20%	302.56%
Unemployment rate		
Average relative distance	1.737	1.000
Ranks	2	1
Location (%)	168.36%	100.00%
Exchange rate		
Average relative distance	3.860	1.046
Ranks	2	1
Location (%)	385.95%	104.59%

Author's computations using Excel

This method gave the same results as the ranks method and the U1 indicators used in making comparisons between forecasts.

The Wilcoxon Signed Ranks and Kruskal-Wallis and chi-squared tests were applied in SAS software for the unemployment predictions provided by the two institutions for 1997-2011. The Prob. (p-value) greater than 0.05 drove us to the conclusion that with 95% probability we do not have significant differences between the two types predictions. There are not significant differences between each type of forecasts and the registered values, but the p-value is greater for the tests between NCP forecasts and the effective ones (0.3899>0.3756). This implies that NCP predictions of the unemployment rate are more accurate.

The odds of having a growth of errors in time crisis with respect to the other periods increase with 93.5% for Dobrescu unemployment rate predictions and only with 58.7% for NCP expectations.

#### 4. Conclusions

This research brings as a novelty in literature the use of other statistical methods to assess the forecasts accuracy. We were interested in the evaluation of some macroeconomic variables forecasts accuracy in years of crisis to point out the failure of Dobrescu model in anticipating the actual economic crisis. The inflation rate was better predicted than NCP, but for unemployment

rate and exchange rate a lower accuracy was assessed.

The proposed methods (multicriterial ranking, non-parametric tests and binary logistic regression) gave the same results as the classical U1 statistics used in literature.

We recommend the introduction of these new methods in literature, taking into account that a single measure of evaluating the predictions accuracy is not enough.

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# Tourism Impact in Romania Pre and Post Crisis- Evolution, Analyses and Previsions

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## Abstract

*Tourism industry is the strongest economy in the world. Romania is based on a high tourism potential. The economic crisis has also affected tourism, but the sector's characteristics made possible adjustments in order to maintain a satisfactory level of indicators. This paper aims to analyze the evolution of tourism's impact on the Romanian economy and a series of indicators of tourism traffic in the context of global economic crisis. The paper is structured as follows: an introductory, analysis of the impact of tourism on the economy, analyzing the evolution of tourism traffic indicators, forecasting based on linear trends and conclusions.*

**Keywords:** tourism, economic crisis, GDP, Romania

**J.E.L. Classification:** L83, O40, O52

## 1. Introduction

Tourism is very vulnerable to economic uncertainty and market volatility for a simple reason: most travel involves discretionary spending. During economic difficulties, people keep their money for necessities of life: food, shelter, family needs.

Tourism has been affected by the global economic crisis, as all prices have increased and people will be more careful when they spend money. Economic slowdown, combined with current uncertainties, volatility of markets and a decline in both consumer confidence and the business world is expected to continue to affect tourism demand, at least in the short term.

There are several directions for development of tourism, which attenuates the effects of the crisis and economic growth relaunching, development of travel industry, travel closer to home will be preferred instead of long distance, decrease the number of days of stay as well as the costs will be more pronounced than the drop in arrivals, destinations that offer "value for money" and favorable exchange rates have an advantage since the price is a key issue, companies will and should focus on price stability to maintain their competitive edge. It is more necessary than ever to work together in the tourism chain, for example, the public and private sector, and destinations passenger transport industry.

Marin, Pop (2009) analysis the changes registered in the reasons for travel of the tourists in general, and of the Romanian tourists in particular. The results indicated not significant changes from 2004 to 2008 in reasons for travel of the world inbound tourism from 2004-2008 but notable transformations in growth of the three segments (Marin, Pop 2010 [1]).

Ozgan et al in "The effects of European economic crisis on the tourism travel companies in Turkey" the study has been made for the assessment of effects of economic crises on the expected changes of management, revenues, expenditures, employees and customers of tourism companies.

Although recent economic crises have caused shrinkage in EU economy, and reduced their tourism revenues, Turkey has increased its tourism revenues in the same period comparing to EU countries.

EU crises could turn into an opportunity for Turkish Tourism, in 2012. It has been

noted that 2012 year reservation has increased by %50. While the touristic tours disperse into the whole year evenly, One can expect that Turkish tourism revenues will reach to upper levels in the standing (Ozgan et al, 2012 [2]).

Wang in "The impact of crisis events and macroeconomic activity on Taiwan's international inbound tourism demand" finds that a long-term equilibrium exists among all variables, indicating that macroeconomic variables may be used to determine the rise or fall of the number of inbound tourism arrivals.

The number of inbound tourism arrivals has a direct impact on the tourism industry and the investments of government agencies therein (Wang, 2009 [3])

O'Brien in "WASTING A GOOD CRISIS - Developmental Failure and Irish Tourism Since 2008" analyze the politics of tourism development that underpinned the crisis.

Despite the fact that most other European destinations returned to growth late in 2009 and early in 2010, Irish tourism remained in crisis (O'Brien, 2012 [4]).

## 2. Analysis of impact of tourism in Romania, post and pre crisis

**To analyze the impact of tourism on the economy we chose the following indicators:** Travel & Tourism Direct Contribution to GDP, Travel & Tourism Total Contribution to GDP, Travel & Tourism Direct Contribution to Employment, Travel & Tourism Total Contribution to Employment, Internal Travel & Tourism Consumption. The source of data was the site of the World Travel & Tourism Council, [www.wttc.org](http://www.wttc.org) [5].

**Direct contribution to GDP** – GDP generated by industries that deal directly with tourists, including hotels, travel agents, airlines and other passenger transport services, as well as the activities of restaurant and leisure industries that deal directly with tourists. It is equivalent to total Internal Travel & Tourism spending within a country less the purchases made by those industries (including imports). **Total contribution to GDP** – GDP generated directly by the Travel & Tourism industry plus its indirect and induced impacts (see below). Total

contribution to employment – the number of jobs generated directly in the Travel & Tourism industry plus the indirect and induced contributions (**WTTC Travel & Tourism Economic Impact 2012, Glossary**)

*Table.1 Travel & Tourism Direct and Total Contribution to GDP*

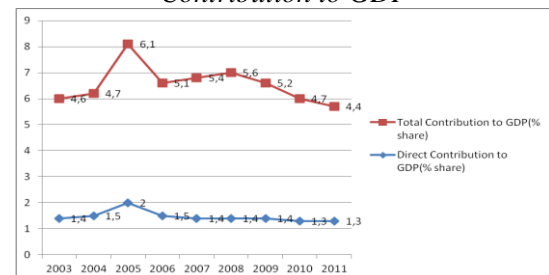
GDP Contribution	Travel & Tourism Direct Contribution to GDP			Travel & Tourism Total Contribution to GDP		
	Year	RON (bn)	Real growth* (%)	% share	RON (bn)	Real growth* (%)
2003	2.811	15.8	1.4	9.008	16.3	4.6
2004	3.714	14.1	1.5	11.570	10.9	4.7
2005	5.771	37.7	2	17.596	34.8	6.1
2006	5.229	-18.2	1.5	17.678	-9.3	5.1
2007	6.143	3.7	1.4	22.361	11.7	5.4
2008	7.555	5.5	1.4	28.712	10.1	5.6
2009	7.041	-10	1.4	25.993	-12.6	5.2
2010	7.132	-3.1	1.3	24.098	-11.3	4.7
2011	7.683	1.4	1.3	25.133	-1.7	4.4

Source: by author, based on data from [www.wttc.org](http://www.wttc.org) [6]

Note: \*real growth refers to the annual percentage change in the 2000 US\$ bn series

In the 9 years analyzed, the direct contribution of tourism to GDP of Romania was between 2% (in 2005, the year pre-crisis and pre-accession EU) and 1.3% in 2010 and 2011. The sudden drop was recorded between 2005 and 2006 during 2003-2005 registering increases. The contribution of the tourism industry in the total GDP of Romania in the last year decreased by 0.2 percentage points in the series. The highest percentage was the same year 2005, 6.1%, a value close by registering in 2008 to 5.6%, year of crisis. The total contribution of tourism to GDP is somewhere to be worth 3 times higher than direct contribution so we talk about respecting the multiplier effect of tourism.

*Fig.1 Tourism Direct and Total Contribution to GDP*



Source: based on table nr. 1

**Direct contribution to employment** is the number of direct jobs within the Travel & Tourism industry. (**WTTC Travel & Tourism Economic Impact 2012,**

**Glossary**), and Total contribution to employment is direct addition indirect and induced contributions.

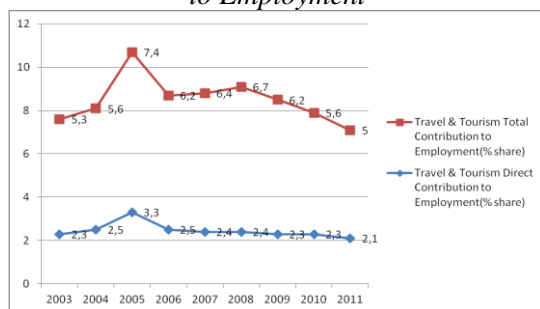
*Tabel.2 Travel & Tourism Direct and Total Contribution to Employment*

Year	Travel & Tourism Direct Contribution to Employment			Travel & Tourism Total Contribution to Employment		
	Real growth (%)	% share	Population (Thousands)	Real growth (%)	% share	Population (Thousands)
2003	14.5	2.3	199.9	9.2	5.3	448.3
2004	8.1	2.5	216.3	5.2	5.6	472
2005	27.5	3.3	275.8	31.4	7.4	620.6
2006	-22.9	2.5	212.5	-15.2	6.2	525.8
2007	-0.7	2.4	211	5.6	6.4	555.4
2008	0.6	2.4	212.4	5.5	6.7	586.4
2009	-5	2.3	201.6	-9.3	6.2	531.8
2010	-3.3	2.3	194.9	-10.7	5.6	474.6
2011	-5.4	2.1	184.4	-8.3	5	435.1

Source: by author, based on data from [www.wttc.org](http://www.wttc.org) [6]

Percentage of jobs created directly by the tourism industry in the analyzed period was between 2.1% (even last year in the series, 2011) and 3.3 (in 2005), low rising trend among the 2003 - 2005 and between 2003 - 2011. The same trend was recorded for total population employed in the tourism industry, directly or indirectly, with the maximum rate in 2005 to 7.4% and the minimum in 2011, only 5%. The multiplier effect of tourism was somewhat attenuated in the case of employed population, being about 2.5 times.

*Fig.2 Tourism Direct and Total Contribution to Employment*



Source: based on table nr. 2

**Internal tourism consumption** – total revenue generated within a country by industries that deal directly with tourists including visitor exports, domestic spending and government individual spending. (WTTIC Travel & Tourism Economic Impact 2012, Glossary)

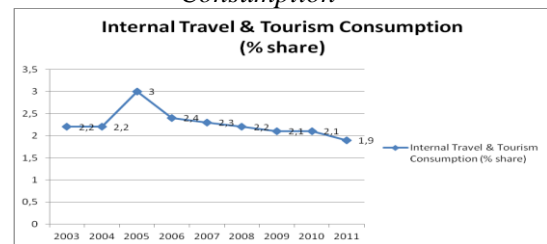
*Tabel.3 Internal Travel & Tourism Consumption*

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
RON bn	6.357	8.135	12.652	11.979	13.820	16.764	14.576	15.014	15.751
Real growth (%)	4.5	10.5	37.8	-14.5	1.9	4	-16.1	-1.5	-1.1
% share	2.2	2.2	3	2.4	2.3	2.2	2.1	2.1	1.9

Source: by author, based on data from [www.wttc.org](http://www.wttc.org) [6]

The trend has been preserved for internal Travel & Tourism consumption, with growth rate for 2003-2005, when he recorded the highest value, 3% and decreases among 2005 - 2011, reaching a minimum of 1.9% in 2011.

*Fig. 3 Internal Travel & Tourism Consumption*



Source: based on table nr. 3

### 3. Tourism indicators

According to Eurostat metadata, night spent (or overnight stay) is each night a guest / tourist / resident actually spends (sleeps or stays) in a tourist accommodation establishment or non-rented accommodation. An arrival is defined as a person (tourist) who arrives at a tourist accommodation establishment and checks in or arrives at non-rented accommodation. Number of tourists (persons engaged in tourism) - visitors who stay at least one night in a collective or private accommodation in the place/country visited throughout the reference period (month/year) and number of tourism trips-trips made by tourists.

*Tabel.4 Domestic tourists in Romania*

	Total nights spent by residents(Thousands)	Arrivals of residents	Number of tourists - holiday trips (4 or more overnight stays)
		Total(Thousands)	
2004	18,501	5,639	3,839
2005	18,373	5,805	3,583
2006	18,992	6,216	3,152
2007	20,593	6,972	5,086
2008	20,726	7,125	5,264
2009	17,325	6,141	5,213
2010	16,051	6,073	4,289
2011	17,979	7,032	5,031

Source: by author, based on data from Eurostat [7]

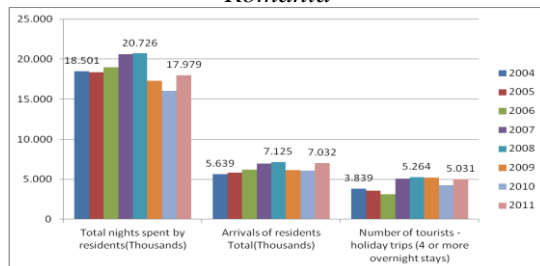
Total nights spent by residents had a low rate between 2004-2005, or 2008-2010, and an increasing rate between 2005-2008, or

2010-2011. Throughout the period 2004-2011, the trend has been slightly downward.

For Arrivals of residents, trend was increasing between 2004 and 2008 and 2010-2011, and low between 2008 and 2010.

Number of tourists - Holiday trips indicator has declined between 2004 and 2006 and 2008-2010, and increases in the periods 2007-2008 and 2010-2011.

Fig.4 Domestic tourist circulation in Romania



Source: based on table nr. 4

On these trends we can conclude that in 2008 are recorded the highest values and in 2011 tourist traffic approaching (for total nights) on the first year of the series, or maximum value of series-for arrivals and holiday trips.

#### 4. Predictions – linear trend method

To make a series of predictions we used the linear trend. For indicators Direct Contribution to GDP, Total Contribution to GDP, Internal Consumption, we started from empirical series during 2003-2011 and extrapolate for 2012-2016.

Table.5 Trends for Direct Contribution, for Total Contribution and for Internal Consumption to GDP

Year	Direct Contribution to GDP (RON (bn))		Total Contribution to GDP (RON (bn))		Internal Consumption (RON (bn))	
	empirical series	adjusted series	empirical series	adjusted series	empirical series	adjusted series
2003	2811	3590	9008	11577	6357	8326
2004	3714	4167	11570	13743	8135	9440
2005	5771	4744	17596	15908	12652	10554
2006	5229	5320	17678	18073	11979	11669
2007	6143	5897	22361	20238	13820	12783
2008	7555	6474	28712	22403	16764	13897
2009	7041	7051	25993	24569	14576	15011
2010	7132	7628	24098	26734	15014	16125
2011	7683	8204	25133	28899	15751	17239
2012 stima		8781		31064		18353
2013 stima		9358		33229		19467
2014 stima		9935		35395		20581
2015 stima		10512		37560		21695
2016 stima		11088		39725		22810

Source: by author, based on data from table nr. 1, 2, 3

The three indicators follow a linear trend increasing with a higher coefficient for Total Contribution to GDP.

For Total nights spent by residents, Arrivals of residents, Number of Tourists - holiday trips indicators, empirical data series was for the years 2004-2011 and forecast for 2012-2015

Table.6 Trends for Total Nights Spends, Arrivals of Residents, Number of tourists

Year	Total nights spent by residents		Arrivals of residents		Number of tourists - holiday trips	
	empirical series	adjusted series	empirical series	adjusted series	empirical series	adjusted series
2004	18501	19384	5639	5950	3839	3686
2005	18373	19180	5805	6056	3583	3872
2006	18992	18976	6216	6162	3152	4059
2007	20593	18771	6972	6269	5086	4245
2008	20726	18363	7125	6481	5264	4618
2009	17325	18159	6141	6588	5213	4804
2010	16051	17954	6073	6694	4289	4991
2011	17979	17750	7032	6800	5031	5177
2012 stimate		17546		6906		5364
2013 stimate		17342		7013		5550
2014 stimate		17137		7119		5737
2015 stimate		16933		7225		5923

Source: by author, based on data from table 4

#### 5. Conclusions

Tourism is going well in general and this is probably one of the only sectors able to stimulate the global economy, particularly on creating jobs. Tourism has managed, against all expectations, to adapt to the economic crisis, being a sector highly flexible, adapts well to circumstances.

The contribution of the tourism industry in Romania's GDP should follow an upward trend, this branch of the economy creating added value in a higher rate. Indicators of tourist traffic, as long as they are registered and quantified important sector in the economy shows.

Regardless of how long it will adjust the Romanian economy, tourism should be the engine of growth and a pillar for a long term development.

#### 6. Acknowledgments

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources

Development 2007-2013; project number POSDRU/107/1.5/S/77213, Ph.D. for a career in interdisciplinary economic research at the European standards”.

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# A Comparative Analysis of Inequality and Social Protection Expenditure Across Europe

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## Abstract

*The objective of this study is to provide some empirical evidences regarding the trends of inequality and social protection expenditures. We are involving a small sample of 27 countries (EU27) for an observation time span between 2005 and 2009. The GINI coefficient and the expenditure per inhabitant reported by Eurostat are used as criteria of analysis. We conclude that social protection expenditure doesn't have a clear direct impact on inequality.*

**Key words:** social protection, social security, inequality, welfare states

**J.E.L. classification:** H53, I38

## 1. Introduction

In literature we can find mentioned a lot of factors that affect the level of inequality [1, 2, 3, 4]. For example, relevant for our research, studying the OECD countries, Afonso et al found that public policies significantly affect income distribution, notably via social spending, and indirectly via high quality education/human capital and via sound economic institutions.

Today in Europe social protection systems are designed to protect people especially against risks like: sickness, disability, old age, survivors, family/children, unemployment, housing, social exclusion [5, 6].

The objective of this study is to provide some empirical evidences regarding the trends of inequality and social protection expenditures across Europe. We also want to verify if an increase in social protection expenditure determine a decrease in inequality. In other terms do we have a strong negative correlation between them?

For this analysis we looked at a small sample of 27 countries (EU27) for an observation time span between 2005 and 2009. For these countries we took into consideration the values of two indicators: Gini coefficient and social protection expenditure expressed as Euro per inhabitant at constant 2000 prices. The Gini coefficient is defined as the relationship of cumulative shares of the population arranged according to the level of equalised disposable income, to the cumulative share of the equalised total disposable income received by them [7]. The lower the coefficient is, the more equally income is distributed. The values of the indicators were obtained from the Eurostat database. To verify the mentioned hypothesis we study the correlation between the proposed indicators at an aggregated level and also at county level. The formula used for the correlation coefficient calculation is as follow:

$$r = \frac{n \sum GINI \times SPE - \sum GINI \sum SPE}{\sqrt{n \sum GINI^2 - (\sum GINI)^2} \sqrt{n \sum SPE^2 - (\sum SPE)^2}}$$

Where n represents the number of pair of bi-variable values and SPE the social protection expenditure.

## 2. Inequality and social protection expenditure across Europe

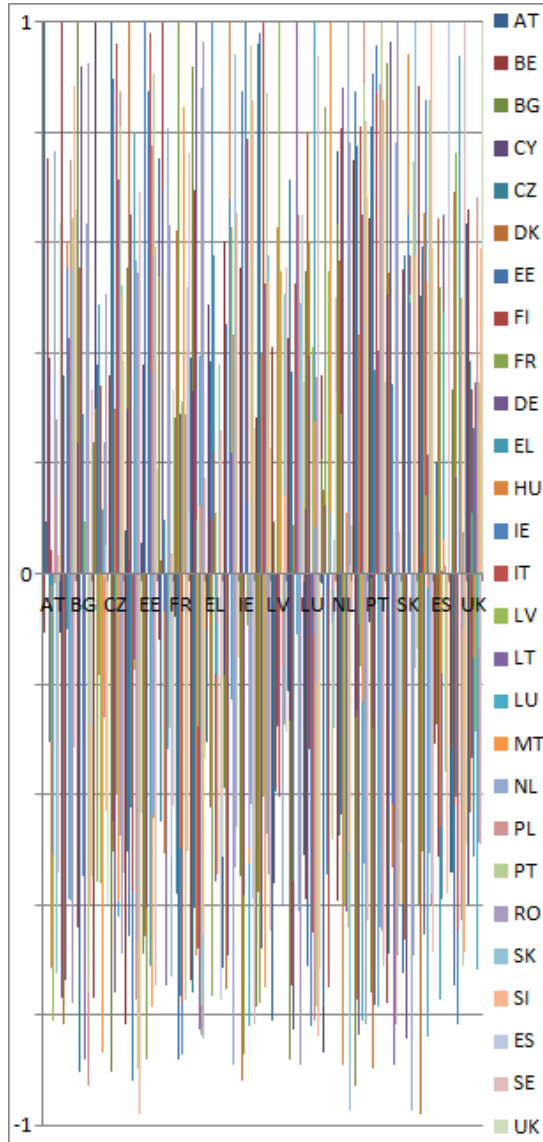
At aggregated level we try to compare the general tendence of social expenditure with the one of inequality.

In a previous paper [8] in which we studied the dimension of social protection we concluded, that, in general, in all EU27 countries, the expenditure related to social protection had a similar increasing trend with some exception, for example, Sweden and United Kingdom. As average we had o strong

positive correlation of 0.896.

In the case of inequality the situation is different (figure no. 1).

Figure 1. Inequality tendency correlation across EU 27 countries

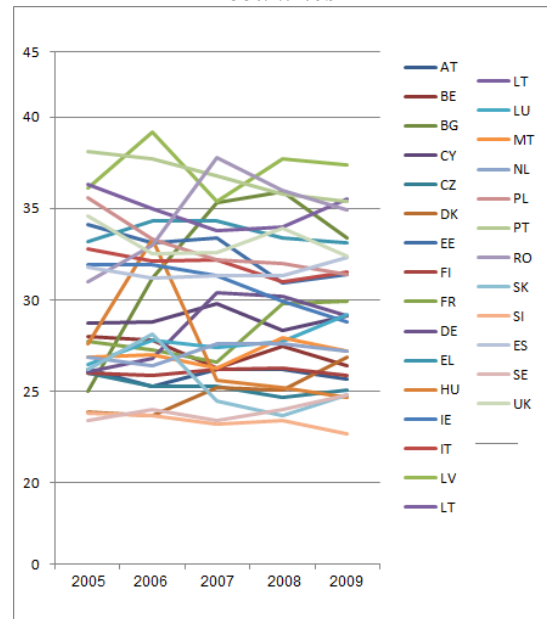


Source: Own calculations – on Eurostat data

From a total of 351 of trends correlation analyses we had 170 positive correlations and 181 negative correlations. Among this, 80 have a correlation above +0,5 and 96 below -0,5. In total we have a correlation in 176 of the cases (50%) regardless if it is positive or negative. Therefore we cannot say that we have a general tendency with a clear direction at EU 27 level. From 2005 to 2009 within the EU27 zone 8 countries had an increase in the inequality level (Bulgaria, Denmark, France, Germany, Latvia, Luxembourg, Romania, Sweden), 11 a

decrease (Belgium, Czech Republic, Estonia, Hungary, Ireland, Italy, Poland, Portugal, Slovakia, Slovenia, United Kingdom) and 8 approximately maintained their level (Austria, Cyprus, Finland, Greece, Lithuania, Malta, Netherlands, Spain). The average increase was of 12% and the decrease of 7%.

Figure 2. Inequality tendency across EU 27 countries



Source: Own calculations – on Eurostat data

Comparing the general tendency of social protection expenditure with the one of the inequality we cannot conclude that there's a clear relation of implication between them. For this to be true we should have had a general increase of social protection expenditure and a general decrease in the tendency of inequality.

At country level (table no. 1) we see a negative correlation between social protection expenditure and inequality in case of 14 countries (Austria, Belgium, Czech Republic, Estonia, Greece, Hungary, Ireland, Italy, Lithuania, Poland, Portugal, Slovakia, Slovenia and Sweden) and a positive correlation in 13 (Bulgaria, Cyprus, Denmark, Finland, France, Germany, Latvia, Luxembourg, Malta, Netherlands, Romania, Spain and United Kingdom).

Table 1. The correlation between social protection expenditure and inequality tendency at EU27 country level

Country	Correlation between GINI and SPE
Austria	-0,045436131
Belgium	-0,603568413
Bulgaria	0,674134212
Cyprus	0,032936579
Czech Republic	-0,851774773
Denmark	0,934112106
Estonia	-0,914684616
Finland	0,036469682
France	0,762769833
Germany	0,392768634
Greece	-0,358464349
Hungary	-0,601403365
Ireland	-0,975435144
Italy	-0,866116224
Latvia	0,146641036
Lithuania	-0,394845962
Luxembourg	0,875677083
Malta	0,475555737
Netherlands	0,478284251
Poland	-0,825684725
Portugal	-0,933311922
Romania	0,754856856
Slovakia	-0,684660339
Slovenia	-0,886580416
Spain	0,477433373
Sweden	-0,573417097
United Kingdom	0,084184379

Source: Own calculations – on Eurostat data

We can identify four groups of countries:

- Group 1 (with negative correlation below -0,5): 11 cases: Belgium, Czech Republic, Estonia, Hungary, Ireland, Italy, Poland, Portugal, Slovakia, Slovenia and Sweden;
- Group 2 (with negative correlation above -0,5): 3 cases: Austria, Greece and Lithuania;
- Group 3 (with positive correlation above +0,5): 5 cases: Bulgaria, Denmark, France, Luxembourg and Romania.
- Group 4 (with positive correlation below +0,5): 8 cases: Cyprus, Finland, Germany,

Latvia, Malta, Netherlands Spain and United Kingdom.

Basically the formulated hypothesis that we have a strong correlation between the increase on social protection expenditure and the decrease of inequality is confirmed only in 41% of the cases.

### 3. Conclusions

According to our results, we can conclude that social protection expenditure doesn't have a clear direct impact on inequality. The same result is obtained even if we compare the general aggregated tendency of the EU27 countries or if we analyze each country separately. In the second case we find a negative correlation which confirms the hypothesis – that an increase in social protection expenditure determines a decrease in inequality – only in 41% of the cases. As consequence the evolution of inequality level is determined by a complex cumulus of factors with synergetic effects and cannot be related strictly with only one factor.

### 4. Acknowledgement

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 „Performance and Excellence in Postdoctoral Research in Romanian Economics Science Domain”.

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## Mergers, Acquisitions and the Financial Crisis

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### Abstract

*The economic crisis is a subject long debated at the national and international level, and it is analyzed by economists in all aspects. Extensive analysis of the causes and behavior indicators is motivated by the desire to anticipate the crisis behavior.*

*An important component of economic life, also involving cross border cooperation is the mergers and acquisitions market.*

*The purpose of this paper is to analyze whether the merger and acquisitions market and its activity can be used as an indicator for the international economic crisis.*

*Examining the number of M & A over the years of crisis for international regions and for Romania, the paper determine the relationship between the concepts of M & A number and economic crisis and the way those concepts are related.*

**Key words:** Mergers and Acquisitions, Economic crisis.

**J.E.L. classification:** G34, G30, H.

### 1. Introduction

The current situation, although hardly affected by the economic crisis, had last year a positive evolution in the number of mergers and acquisitions. Even though, the most recent study of Ernst & Young, “Capital confidence barometer”, describes the situation through the opinion of over 1500 top executives from 50 countries. [5]

This favorable economic environment did not convince the big corporations to take part in big mergers and acquisitions. In this questionnaire from March 2012, there can be observed the evolution of mergers and acquisitions in the next period of time: the percent of the companies which are looking for selling grows with 5 percent, from 26% to 31%. Only 31% of them are planning to be

involved in a transaction next year, 41% less than last year.

Romanian situation, described also in the Barometer of M&A Market for the first half year of 2012, made by Ernst & Young, highlights a slight increase of the closed transactions: from 64 to 67 deals from H1 2011 to H1 2012.

Compared to 2010 and 2011, Ernst and Young appreciates that the targets involved in the transaction in 2012 are stronger and this fact indicates the growing confidence of the investors. As an example for the Romanian market, one of the largest transactions from the last several years was finalized this year: Azomures, a producer of chemical fertilizer was acquired by Ameropa Holding. [3]

The second half of the year no longer predicts a trend as positive as the one from H1, given the international economic problems and parliamentary elections defined by political tensions. That is why the forecast for the sector of M&A shows that it will be probably affected by caution.

### 2. International M&A market analysis

The Eurozone was affected by the crisis since 2008. The major difference that occurred this year is the fact that in March, for the first time, the press presented the acceptance of the crisis by all the politicians from Eurozone. One of the most important moments was the implementation of the second bailout of Greece, in March 2012.

The market reactions were complex. Some of them believe that this phase is just postponing the inevitable; others are positive and consider that this is the first step out of the crisis. Of course this environment had an impact of the number and value of mergers and acquisitions in Europe, but the most important thing is that there cannot be done a realistic long-term forecast.

The decision makers of the companies which plan to be involved in a transaction are affected by this uncertainty and the waiting theory that they apply is obvious and understandable. From another point of view, at a macroeconomic observation, the most used mechanism of national banks is to sell assets and to protect the national economies from crisis. This can be done by privatization of the banking sectors and a growing confidence in the stability of the economies. Even if the central banks support economies providing liquidity, banks do not increase loans, but keep everything within very strict limits.

In order to describe the global behavior of mergers and acquisitions market, the paper presents data of transactions by region, for the first quarter of past six years. The data were taken from the report prepared by Allen & Overy, an international legal practice company.

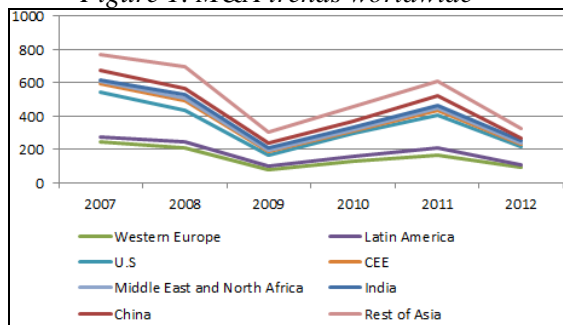
Table 1. M&A number in Q1

No. of M&A Q1	2007	2008	2009	2010	2011	2012
Western Europe	245	212	81	129	164	89
Latin America	31	31	16	31	41	16
U.S	265	193	70	133	198	114
CEE	51	54	19	19	33	14
Middle East and North Africa	16	15	9	6	10	6
India	9	22	11	13	16	10
China	60	41	32	40	61	21
Rest of Asia	92	125	68	85	86	58

Source: Allen & Overy M&A Index [4]

We highlight the trend of the transactions, by processing the data concerning the number of mergers and acquisitions.

Figure 1. M&A trends worldwide



The total number of M&A in Q1, 2012, which is 346, makes it to be the worst quarter for the market since 2009. That can be an indicator of the crisis and a new bottom point

of W's crisis (economic crisis of this period was considered as one of type W). The various international political and economic tensions made the decision makers more cautious. Therefore, they are extremely careful approaching new market segments or new companies, and most transactions are based on speculating on certain poor financial companies situations.

The value of transaction in Q1, 2012 was 294, 5 billion USD, and the Western Europe had 38% of it.

All the regions had a decrease of the M&A number in 2012 compared to 2011 but the biggest decrease was in China, -66%. The reason might be the fact that China's economy, even strong and attractive for developing large international companies, is subject of political discussion. The rising inflation and the dissension within the ruling Communist Party brought uncertainty and low number of transactions in this part of the world. The easiest access on this market was achieved through joint venture transactions. Electing a new central committee in China in November this year can bring increased stability and greater confidence.

The situation of China may be a way in which the slightest drop, the one of the rest of Asia, can be justified. The lack of confidence in China and Europe made the investors to abandon plans in this area.

Table 2. Evolution 2012 vs. 2011

No. of M&A Q1	2011	2012	Evolution
Western Europe	164	89	-46%
Latin America	41	16	-61%
U.S	198	114	-42%
CEE	33	14	-58%
Middle East and North Africa	10	6	-40%
India	16	10	-38%
China	61	21	-66%
Rest of Asia	86	58	-33%
Total	609	328	-46%

If we analyze this type of global crisis, W designed, from theoretical point of view, we expect a second minimum point lower than the first. One of the assumptions and ideas of the article, that the number of M & A can be an indicator of the crisis can be taken even further, comparing the number of M&A with the figures of 2009. So further on we realized a comparative analysis between the values of



2009 and 2012, which may show better what 2012 might bring.

Table 3. Evolution 2012 vs. 2009

No. of M&A Q1	2009	2012	Evolution
Western Europe	81	89	10%
Latin America	16	16	0%
U.S	70	114	63%
CEE	19	14	-26%
Middle East and North Africa	9	6	-33%
India	11	10	-9%
China	32	21	-34%
Rest of Asia	68	58	-15%
Total	306	328	7%

Under the hypothesis of considering the number of M&A as an indicator of the economic crisis, the table below demonstrates the fact that 2012 is not the bottom of the economic crisis, and the great depression might follow.

Again China is the most affected, with the biggest percent, even if during 2010 and 2011 the number of M & A was growing. An important conclusion from this analysis is that US had a sustained growth and this means that the policy adopted, of low interest rates and recovery of equity market, are working and with positive results.

### 3. Romanian M&A market analysis

For analyzing the Romanian merger and acquisitions market the paper uses the number of M&A from 2002 to 2011, and the one for the first half of 2012. For a good description of the evolution, we estimated the number for 2012, not taking into consideration that the second part of the year is not optimistically forecasted.

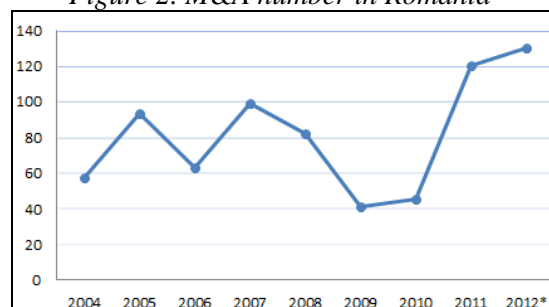
Table 4. Number of M&A in Romania

M&A no of Transactions Romania											
2004	2005	2006	2007	2008	2009	2010	2011	2012*	2012 H1		
57	93	63	99	82	41	45	120	130	67		

Source: E&Y M&A Barometer, Business Cover [1]; [3]

The evolution of the number of M&A can be presented graphically as follows:

Figure 2. M&A number in Romania



As we can see from the graph, the trend cannot correspond to a W-crisis evolution. Considering the data described, we can see that 2011 had a very large increase of the number of mergers and acquisitions 167%.

Table 5. Variation of no. of M&A vs. previous year

M&A no of Transactions Romania								
2004	2005	2006	2007	2008	2009	2010	2011	2012*
57	93	63	99	82	41	45	120	130
EV vs prev Y	63.16%	-32.26%	57.14%	-17.17%	-50.00%	9.76%	166.67%	8.33%

Also, we can see that 2009 was the worst year for M&A, as the decrease was with 50 percent from the previous year. The negative impact of the crisis on M&A continued in the following year, 2010 being also under 2004's level

The crisis in Romania begun in 2009 and the effects were not removed in 2010, on the contrary have been fully felt in all the sectors of economy. Also the political crisis with referendums and government change affected the confidence of the investors in the economy and stability. That is why the predictions for this year cannot be fully positive. It can be seen that the most affected years regarding the number of M&A are also the years affected by the crisis. We can conclude that the number of mergers and acquisitions can be used as an indicator of the economic crisis.

From another point of view, we can see that the first half of 2012, with 67% increase from 2011 regarding average deal size, can predict a recovery year. This hypothesis cannot be sustained by other sector of the economy.

The increased number in 2011 and 2012 can be also a consequence of the postponed deals from the deep crisis. All the decision makers take into consideration postponing the mergers and acquisitions to more stable economic environments, and 2011 was a year



of small recovery. Regarding 2012, the data is available only for the first half of the year, but the most intense point of the political crisis was at the end of the spring, so at that time the deals were about to be closed. An important argument of this theory will be the value for the second half of the year in terms of number of mergers and acquisitions.

We can also take into consideration in the analysis of the postponed and increased transactions from 2011 and 2012, the behavior of the acquirer. The players in this market can be divided into two types, depending on the type of merger or acquisition made. They may be strategic or financial, and the way their numbers have changed over the past two years shows whether those transactions were postponed or were last minute speculations.

*Table 6. Buyer behavior*

	Strategic	Financial
H1 2011	39	25
H1 2012	54	13

Source: E&Y, M&A Barometer, [3]

The above table shows that the number of the strategic transactions increased with 38 percent from 2011, so our hypothesis can be proved.

On the other hand, the small number of the financial transactions, decreased from 39% in 2011 to 19% in 2012, demonstrating that Romanian economy is not interesting anymore for investments and the buyers will focus on selling maturity investments.

Thus, we can conclude from the behavior analysis that the speculations on this market are not attractive anymore and the strategic transactions are more likely to happen. At this point, even the transactions planned long before but without proper conditions, are likely to close.

Another test that can bring out the way how transactions are affected and an explication of the market apparent recovery in 2011 and 2012, is the analyzes of inbound-outbound transactions. That means a comparison between the number of mergers made by foreign buyers in Romania and the number of mergers made by Romanian buyers abroad.

As in 2012 H1, the number of outbound transactions was null, the data presented is

about inbound and domestic transactions, which demonstrates the focus on the national economy.

The most important companies that made transactions in Romania in H1 were from USA, followed by Germany, UK, Italy, Spain, France and Switzerland.

*Table 7. Type of transactions*

	Inbound	Domestic
H1 2011	27	37
H1 2012	34	33

Source: E&Y, M&A Barometer, [3]

The growth rate of inbound transactions is 26%, a good percentage, encouraging for the Romanian economy. Romanian experts are not very optimistic about M & A market evolution for the second half of this year and for the next year, so this percentage is relevant.

#### 4. Conclusions

This paper presents an analysis for mergers and acquisitions market in terms of number of transactions that are performed over time. Both international and Romanian M&A markets are described during the recent years, affected by the economic crisis.

The study starts from the idea that the economic environment needs indicators which can predict and anticipate the economic crisis. This paper uses as an indicator the number of mergers and acquisitions from a certain period of time, affected by the crisis.

We examined how this indicator can cause or describe the existence of economic crisis or vice versa, how the economic crisis affects mergers and acquisitions market. The question was: Can we use the number of transactions as an indicator of the economic crisis?

Using data both for different parts of the world, and those in Romania, we found a number of relevant conclusions.

The economic crisis does not have an immediate effect on the M & A market, but on the medium term, so this indicator cannot be used as an alarm or anticipation of a crisis.

The effects of an economic crisis, for example the current one, are even stronger as

they are correlated with other factors, for example the political environment.

Moreover, an economic crisis W type, as this one, involves a lower point than the one from 2009. Thus, we can use this theory to forecast the evolution of the M & A market in the following years.

The analysis for Romania demonstrates an economic recovery, but the economists and other financial indicators have no optimistic forecast for the next year. So we cannot conclude that the hypothesis is proved.

Thus, the conclusion of this paper is that the market for mergers and acquisitions cannot be an indicator for the economic crisis; on the contrary, the crisis affects the market and the number of mergers and acquisitions.

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## Romanian People’s Health Condition in Relation to Nutrition Quality

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### Abstract

*The standard measurement of health systems from the European states based on Euro Health Consumer Index revealed the fact that Romania is situated among the last places in Europe, also being registered a continuous depreciation of the health system during the last years. In Romania, the morbidity and mortality models have suffered important modifications lately, in the sense of an increasing prevalence of chronic diseases and mortality due to these causes, in the context of the increasing share of old population, associated with the multiple action of biological risk factors, environment and behavioral factors as well as under the influence of social, economical and medical assistance conditions. Food quality directly influences the population’s health condition. The disaggregation of food consumption of Romanian population on nutritive factors suggests a series of nutritional imbalances due to excess or deficit, the failure to correct them leading to the increased risk of chronic diseases.*

**Key words:** Euro Health Consumer Index (EHCI), health condition, nutrition quality, nutritional imbalances, life quality.

**Classification J.E.L.:** I15

### 1. Introduction

The differences of vision and approach between European States health systems can be encountered at the level of direct indicators of the health condition, the modality of managing the sanitary system having a major impact on

the health condition of the population.

The health condition of a population depends, among others, on their life environment. Out of the descriptive analysis of the European sanitary systems, it results that the population from the rural environment is more susceptible to various disorders and leads a less healthy life compared to the population from the urban environment. The ex-socialist countries (such as Romania) present a higher rate of the rural population compared to industrialized countries, these having an extremely high rate of urban population.

Health remains tributary especially to human behavior. Having in view the immutability of the biological factor genetically determined and within the context of some financial community difficulties, the behavioral areas characteristic to the risky lifestyle should represent the target of the strategies meant to improve the population’s health condition.

The quality of food is a reason of concern because it directly influences the population’s health condition. Thus, it is well known that certain poor food models are associated with 4-10 death causes (coronary heart disease, several types of cancer, strokes, type 2 diabetes). Moreover, a healthy diet can reduce the main risk factors for a series of chronic diseases such as: obesity, arterial pressure, high level of cholesterol in blood etc. It is thought that the main mean of improving the population’s health condition is to improve their diet.

### 2. Romanian people’s health condition

Health is one of the main components which define the concept of “*life quality*” together with all the other social, economic

and cultural aspects. The difficulty in elaborating a standard method of measuring is greatly determined also by the multitude of the factors which can influence the health condition of the population. Health and illness are approached in a global multifactorial concept, as we speak today about a multidisciplinary participative interference of the contributions to the well being state from the mental as well as social point of view when it comes to the individual and the collectivity.

The comparative analysis of health indicators registered by member states of European Community (ECHI) can help us form an overall picture of the health condition of Romanian population and identify the causes which lead to this situation and to the possible measures which should be taken to improve the population health condition in the future.

The average life expectancy in Romania, considered to be a synthetic indicator of measuring the population's health condition, highly dependent on the social and economic development level of the state, although it presents a slight improvement, continues to be among the lowest at the level of the state of European Union (73.5 years in Romania compared to the average level registered in the EU 27 of 79.4 years). Regarding the life expectancy in a good health condition in Romania, this is also inferior to the average registered at the level of the 27 member states of the European Union, noticing at the same time a decline from 60.4 years, registered in 2007 (compared to 61.5 years, the average level registered in the EU 27), to 59.5 years, registered in 2009 (compared to the average level registered in the EU 27 of 60.9 years).

This situation is due to a high morbidity at adults of up to 65 years old, as a result of the accumulation of a complex of negative factors (economic underdevelopment, stress, moral pressure, a life style not favorable to health).

Although at European level we notice a decrease of the percent of population under the risk of poverty and social exclusion, in Romania this indicator registers values high above the European average, being even close to the maximum level registered at the level of European countries.

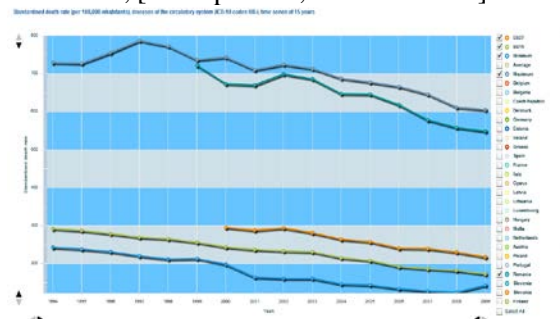
What is worrying herein is the fact that the percent of population under 18 years old under the risk of poverty and social exclusion, in

Romania registered a significant growth, from 50.5% registered in 2007 to 52% registered in 2009.

The standardized mortality rate in Romania registered some of the highest values at the level of the states of European Union. The low rates of mortality in the member states of the European Union have also been anticipated from the evolution of a much superior life expectancy in these states compared to the one registered in Romania.

Regarding the standardized mortality rate caused by diseases of the circulatory system (figure 1) the situation is much worse in Romania compared to other countries from the European Union, although we notice a slightly descending trend of the evolution of this indicator. Thus, in the year 1999, in Romania the standardized mortality rate caused by diseases of the circulatory system was of 721.6 deaths to 100,000 inhabitants (compared to 255.9 deaths to 100,000 inhabitants at the level of the European Union 15), which in 2009 became 548.6 deaths to 100,000 inhabitants at the level of the European Union 27).

**Figure 1.** Standardized death rate caused by circulatory system diseases, between 1994-2009, [death per 100,000 inhabitants]

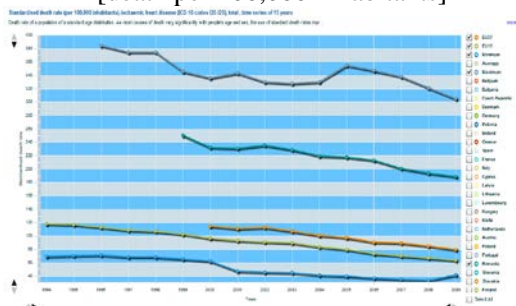


European Community Health Indicators – UE portal for public health

Among the diseases of the circulatory system, the most frequent are the ischemic heart diseases and cerebrovascular diseases. Regarding the standardized mortality rate caused by diseases of the ischemic heart diseases (figure 2), we can notice a descending trend of this indicator, both in Romania and at the level of the other state of the European Union. Despite this evolution, the range of the standardized mortality rate caused by diseases of the ischemic heart diseases in Romania is much over the average registered at the level of those 27 member states of the European Union,

as it can also be remarked in figure 2 (with 136.6% higher than the average of EU 27, in the year 2009).

**Figure 2.** Standardized death rate caused by ischemic heart diseases, between 1994-2009, [death per 100,000 inhabitants]



European Community Health Indicators – UE portal for public health

Regarding the evolutions of the standardized mortality rates caused by cerebrovascular diseases, in Romania these indicators are at the level of maximum values, much more superior to the average levels of the standardized rates of mortality caused by cerebrovascular diseases at the level of the countries from the European Union. In 2009, for men the standardized rate of mortality caused by cerebrovascular diseases is of 195.3 deaths to 100,000 inhabitants compared to the average at the level of EU 27 of 57.7 deaths to 100,000 inhabitants, and for women the indicator has the value of 149.5 deaths to 100,000 inhabitants compared to the average at the level of EU 27 of 46.4 deaths to 100,000 inhabitants.

Regarding the evolution of the standardized mortality rate caused by malign neoplasm at the level of the entire population, in Romania we notice a slightly ascending trend, although there are not registered great differences between this rate and the average of the 27 states of the European Union. Thus, in the year 2009 the standardized mortality rate caused by malign neoplasm is with only 12.4% higher in Romania compared to the registered average at the level of EU 27.

The main death causes in Romania are represented by the diseases of the circulatory system followed by tumors, traumatic lesions, poisonings and other consequences of external causes, diseases of the digestive system and diseases of the respiratory system, at men, namely diseases of the circulatory system, tumors, diseases of the digestive system,

diseases of the respiratory system and traumatic lesions, poisonings and other consequences of external causes, at women.

An analysis in the structure of morbidity on types of diseases indicates the fact that the disorders which present the highest incidence specific to the latest years are the diseases of the respiratory system (29-40.77% of the rate of annual incidence), followed by the diseases of the osteo-muscular system, diseases of the digestive system, diseases of the circulatory system and diseases of the nervous system and of the sense organs. Moreover, we notice a strictly ascending rate of morbidity in the case of the osteo-muscular system diseases as well as the diseases of the circulatory system. On the other hand, the diseases of the digestive system registered a strong descending trend, registering a decrease of their incidence with 60.06% registered in 2010 compared to 1992. The diseases of the nervous system and of the sense organs as well as the diseases of the genital and urinary organs register an oscillating evolution, on an ascending background. Infectious and parasitic diseases according to the recrudescence signaled during the period 2000-2005, registered a decreasing incidence, while the skin and subcutaneous tissue present an oscillating incidence on a slightly decreasing background. Instead, we notice a growth in the incidence of endocrine, nutritional and metabolic diseases and tumors.

From the analysis of the morbidity and mortality data, we notice that, in Romania, the set of indicators is specific to developed countries (increased mortality and morbidity through diseases of the circulatory system, the increased incidence and prevalence of neoplastic diseases).

As a general appreciation, in Romania, the models of mortality and morbidity have suffered important modifications for the last decades, in the sense of the increased prevalence of chronic diseases and of mortality due to these causes, in the context of the increased percent of old population, associated to the multiple action of the factors of biological risk, environment, behavioral and under the influence of the social and economic conditions and of medical assistance.

According to international statistics, in Romania there is the highest level of mortality avoidable in comparison to the countries of the European Union, for the last years we have remarked an increased avoidable mortality in



Romania in contrast with the tendency manifested in the other European countries. More than that, if the tendency in this domain is of significant decrease in all the other countries of the European Union, in Romania, it is either reduced (for women) or stationary (for men) (Vlădescu, A., 2010).

### **3. Food consumption of Romanian population**

The reduction of the real income as well as the amplification of the inequality of income distribution triggered off mutations in the structure of the families expenditures. Thus, in the periods when we register the reduction of the population's incomes, the consumers have to reduce their consume expenses and there occur a series of mutations with involuntary character, resulting in the increase of expenditures for food purchase namely for the consume of agriculture products from own resources accompanied by the reduction of the percent for the purchase of nonfood products. During these periods there are also mutations in the structure of the food consumption which results in involuntary modifications of eating habits, some of them being considered benefic by specialist (such as the increase consumption of margarine at the expense of butter consumption, due to the relatively more affordable price of margarine). Moreover, farming families use in the highest proportion products of own resources (44%, corresponding to 2010), namely the products obtained from the agricultural surfaces or from the animals they have, a reason for which they record the largest share of production costs (3.6% corresponding to 2010). The contribution of their own resources in consumption is also significant for other social categories, namely pensioners (20.2% in 2010), unemployed (16.3% in 2010) and employed people (8.75% in 2010). This can also be a survival strategy as well as a strategy of adapting to the problems generated by poverty (the incapacity of purchasing food from the market or the lack of other alternatives). In the periods when the incomes of population register a slight increase, we notice an ascending rate of expenditures for the acquisition of nonfood products, expenditures for the payment of services, expenditures for investments and

implicitly of those for paying the taxes, fees and contributions, due to a slight decrease in expenditures for the purchase or consumption of food and agricultural products from own resources.

Romania records one of the highest rates of food expenditures among those 27 member states of the European Union, being 2.63 times higher than the EU 27 average.

The magnitude of this average decreases with the increasing of purchasing power which confirms Engel's law regarding consumption.

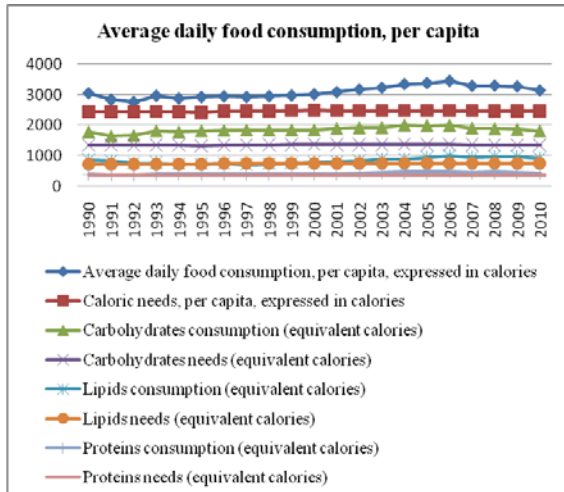
Although the expenditure indicator is indicative of average and covers important variations within each state, this offers an image of the low living standards in Romania compared to EU member states, measured by the importance of food expenditures in the family's budget, their increased size diminishing the opportunities of consumption of nonfood goods and services. Even in comparison with less developed states from Europe, Romania has an increased average of food expenditures in the total consumption expenditures, being almost twice as Estonia, Hungary and Malta, which suggests the fact that the convergence process of consumption patterns specific to the European Union is a long one.

The analysis of the average daily food consumption, per capita, expressed in kcal (figure 3) compared to the average daily caloric needs, per capita, calculated taking into account the structure of the population of Romania and FAO recommendations, indicates a surprisingly dietary caloric surplus of up to 20%, in the period 1990-2000, in the context of the decreasing average real incomes very probably maintained by the consumption of cheap calories, while in the period 2001-2008 caloric surplus to increase to 24-33% compared to the necessary intake, and after the year 2008, as a result of recording a new decrease of the level of average real wages of population, this surplus to drop to 27.2% compared to the necessary intake.

The reduction of food quality in Romania during the period 1990-2000 can be evidenced by reducing protein intake with 3.16% in 2000 compared to that corresponding to 1990. More than that, the proportion of animal protein with high biological value is inferior to the proportion

of vegetable protein and to the value recommended of 50%. In the period 2000-2010 the food quality is slightly improved, a fact noted by increasing the protein intake with 1.51% compared to the one corresponding to the year 1990, as well as by increasing the share of animal protein, with high biological value.

Figure 3. Evolution of average daily consumption, per capita compared with the recommendations



Processing after National Institute of Statistics

Thus, in 2004, the average of proteins of animal origin with high biological value equals the share of vegetable protein and dietary recommendations, and in 2005 the protein share with high biological value exceeds 50%.

Regarding the balance between fat intake and requirements, we can appreciate that during the period 1990-2000 it is quite balanced, and starting with 2001, due to higher real incomes of consumers, the fat intake increases to a maximum of 32.7% from the necessary, in 2006, while afterwards it decreases slightly to until 24% from the necessary (corresponding to 2010). Analysing structurally the fat intake, we can observe an imbalance compared to the recommendations of the nutritionists determined by the share of over 10% of saturated fatty acids, detrimental to the intake of polyunsaturated fatty acids which is far below FAO recommendations of 10%. Starting with 2003, we notice a fat intake of over 35% of the average daily energy intake, which can be associated with the increased

intake of saturated fat and daily caloric intake, promoting obesity.

The greatest imbalance between the intake and the necessary is registered in the case of the glucides due to high dietary the intake of cereals and cereal products which in the context of the reduced level of incomes in Romania contributes in a high proportion to provide the necessary calories (over 40% compared to 30% in developed economies). Thus, the imbalance between intake and needs of glucides is noticed during the entire analyzed period, this imbalance being being continuously up from 21.78% in 1991 to 46.16% in 2003, a moment when, due to an increase in the incomes of the populations, it starts to drop reaching 32.7% in 2010.

The structure of calory intake at the level of the year 2010 does not reflect major signs of concern, the proportion of proteins (14.13%), glucides (57.39%) and lipids (29.23%) being close to OMS recommendations.

However, regarding the structure of consumption in depth, although fat intake is within the limit of the nutritional recommendations the increased share of saturated fat (by high consumption of pork and animal fats), increases the risk of cardiovascular diseases, which is actually supported by the high rate of cardiovascular diseases in Romania, one of the highest at the level of the European Union. Saturated fats are consumed in excess by the Romanian population which contributes to a significant increase of the daily calory intake. Numerous studies indicate that the increased intake of saturated fat is associated with high levels both of the total cholesterol in blood and of the level of LDL- cholesterol, considered to be important risk factors for cardiovascular diseases. In the diet of the population in Romania the intake of animal fats is 15.5% of total daily energy intake, which exceeds the recommendations of the experts, this being largely due to the high consumption of pork meat and animal fats.

After analyzing the food consumption of the population of Romania, we noticed a high intake of cholesterol from food, over 450 mg cholesterol / day, the most important sources being eggs, pork, beef, whole milk and dairy products high in fat and animal fat. The intake of cholesterol could be reduced by



limiting the consumption of these foods rich in cholesterol.

Most of the glucides present in the diet of Romanians have the origin in the sugars added during food preparation / processing. High consumption of sugary foods constitutes a risk of the occurrence of overweight, obesity and tooth decay. The most common foods high in sugars present in the food of Romanians are juices, energy drinks, confectionery products, confectionery and dairy drinks of dessert type. Reducing the consumption of these foods could reduce the body's daily energy intake without compromising the nutritional intake. Excessive consumption of refined grain products rich in saturated fats and sugars, increases energy intake far beyond dietary recommendations which may be a risk of the occurrence of obesity and other chronic diseases. It is recommended a greater moderation in terms of consumption of refined grains and their replacement with whole grains.

Correcting all these errors in food consumption of the population of Romania is absolutely necessary to achieve and maintain the health of the population, for the avoidance of nutritional imbalances that could lead to an increased risk of chronic diseases.

#### 4. Conclusions

We can conclude that the levels of economic and sanitary indicators are inferior for Romania in comparison to the other European states, which has an indirect impact of the population's health condition. In the context of Romania, a set of factors may explain the current situation: the different contribution of health determining factors, inequities in availability and access to health services (higher in rural areas than in urban areas), the inefficient response of the health system to the major health problems (the accent is placed on the hospital treatments at the expense of preventive primary care), inadequate and insufficiently used funding (underfunding, the unsustainability of funding), poor management of human resources, lack of integration of health services within the system so as to ensure continuity of care, poor management of health information, inadequate intersectoral cooperation etc.

As can be seen from the analysis of food consumption of the population of Romania, a number of foods or nutrients are consumed in excess, which increases the risk of chronic diseases. It's about high saturated fat intake (foods rich in saturated fatty acids and trans fatty acids), cholesterol, salt, sugar, refined grains, and even alcohol. Although the prevalence of obesity in the population of Romania is much reduced compared with developed countries, a diet rich in saturated fat, cholesterol, refined sugar and alcohol increase the risk of chronic diseases. Therefore some nutritional recommendations are required to limit consumption of these foods or nutritional factors, to meet nutrient and energy needs of the body, thus reducing the risk of chronic diseases.

The analysis of nutritional factors in the consumption by income deciles suggests that as income increases there is a reduction in the share of plant products in the caloric intake especially in the protein.

With the growing of the education and income level, and with the reduction of the average size of the family, there is an increase of the contribution of animal products in the caloric intake, especially in the protein. Moreover, the increase of the education level is accompanied by a reduction in the fat of animal origin, which indicates a possible positive association between this variable and the level of knowledge of healthy eating.

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## The Correlation between the Learning Process within the Organization and its Performance

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### Abstract

*This paper is based on a research conducted between September 2011 and March 2012, in order to identify the position of the domestic organizations in their transition process to learning organizations.*

*The study was based on a questionnaire addressed to several Romanian employees from all hierarchical levels and has 3 parts. The purpose of the first part, was to identify the position of the domestic organizations in their transition process to learning organizations. The second part measures the organizational performance through financial and non-financial indicators and the last part of the questionnaire aims to shape the profile of the respondents.*

*The purpose of the research was to confirm or infirm several hypotheses regarding the correlation between the main features of the knowledge based organization and the organizational performance.*

*This paper will present the results of the validation of one of the five hypotheses examined: " Is there a positive correlation between the learning process within the organization and its performance?."*

**Key words:** knowledge organization, knowledge, performance, correlation

**J.E.L. classification:** D83

### 1. Introduction

In the quantitative analysis conducted, the questions were formulated taking into account, several characteristics of the knowledge-based organization:

- the foundation of the organization's activities mainly on intangible resources,

- the implementation of learning processes within the organization,

- the preponderance of research-development and innovation activities within the organization.

- the flexibility of the organization.

The characteristics mentioned above, led to the establishment of several research variables that were correlated with the organizational performance, resulting five hypotheses:

H1: Is there a positive correlation between the foundation of the organization's activities mainly on intangible resources and the organizational performance?

H2: Is there a positive correlation between the learning process within the organization and its performance?

H3: Is there a positive correlation between research, development and innovation activities within the organization and its performance?

H4: Is there a positive correlation between motivated employees and the organizational performance?

H5: Is there a positive correlation between the flexibility of on organization and its performance?

Through this paper we intend to present how much learning activities within the organization influences organizational performance, presenting the results obtained from the validation of the hypotheses H2.

*Learning refers to the learning potential of Romanian organizations through the following components [6]:*

*a. Encouraging excellence and professional training of the organization through access to knowledge and learning resources.*

b. Knowledge sharing between team members and its dissemination within the organization.

c. Encouraging experimentation and innovation.

d. Swap positions within the organization for gaining new knowledge and skills.

In the questionnaire, organizational performance was analyzed through financial and non-financial parameters such as: satisfaction and employee commitment, customer satisfaction and financial performance [6].

Employee satisfaction and commitment refers to: affiliation of humans to the vision and values of the organization, satisfaction with the work performed resulting voluntary cooperation to achieve goals.

Customer satisfaction - requires knowing the customer wishes and satisfying them in order to gain the customer's loyalty,

Organizational performance can be assessed by various synthetic indicators such as financial performance, profit per employee.

**2. Calculation methodology in order to validate the hypothesis "Is there a positive correlation between the learning process within the organization and its performance?"**

Quantitative investigation was conducted using a questionnaire addressed to Romanian employees. The formulation of the statements is simple and straight using interrogation methods that lead to valid and representative results.

Items have five possible answers, using the Likert scale, the attitude scale used in a survey (Table no. 1).

Table no. 1

Item model using Likert scale

	1 Total Disagree	2 Partial Disagree	3 Neutral	4 Partially agree	5 Totally agree
Statement		x			

Each statement will be evaluated with 1 to 5 points, depending on the response, 1 representing the minimum and 5 maximum. There are some statements for which values will be reversed due to their formulation with aspect of negation.

To obtain the scores (averages) for each statement, we will weight each response

with the number of respondents to each answer, and then we will divide the result to the total number of respondents, as is shown below:

Table no. 2

Calculation score of each statement.

Statement	1	2	3	4	5
Number of respondents	10	5	15	10	10

The score is calculated as:

$$(1*10+2*5+3*15+4*10+5*10)/50=3,1$$

For statements whose maximum value is 1, the score obtained by calculating the weighted average must be subtracted from 6. The average to be used for such a statement will be on usable average = (6 - average calculated). Thus, we will obtain an usable average, which can be compared with other statements whose maximum is 5 and can be used to calculate the scores of the variables.

This calculation is carried out only on the negative statements whose minimum is 5 and the maximum is 1. Once we obtain the scores of each statement, we will calculate the score for the related variable: learning within the organization and organizational performance in order to validate the hypotheses H2. The minimum score for the variable is 1, and the desired maximum is 5.

The statistical analysis was carried out using SPSS (Statistical Package for Social Sciences) and for the database design, for monitoring, analyzing and interpretation of data was used Microsoft Office Excel.

**3. Profile of the respondents**

The questionnaires were addressed to Romanian employees belonging to executive staff, base management, middle management and top management.

Incomplete and incorrectly full field questionnaires were removed, representing 3 questionnaires, and resulted 50 valid documents for the research.

The database related to each questionnaire was constructed in a workbook. The rows of the database recorded the results from each questionnaire and the columns

represented the questions of the questionnaire.

The profile of the respondents is revealed through the social, economical and administrative features of both employees and communities in which they belong and are shown in the table below.

*Table no. 3  
Profile of the respondents*

Features	%
<b>Age</b>	
Under 30 years	26%
Between 30 and 40 years	34%
Between 40 and 50 years	22%
Over 50 years	18%
<b>Sex</b>	
Female	44%
Male	56%
<b>Respondent's level of education</b>	
Doctoral studies	6%
Master studies	38%
Higher education	48%
Secondary education	8%
<b>Seniority at work</b>	
Under 1 year	14%
Between 1 and 3 years	24%
between 3 and 10 years	38%
Between 10 and 20 years	16%
Over 20 years	8%
<b>Respondent's position within the organization</b>	
Top management	36%
Medium management	24%
Base management	12%
Executive	28%
<b>Ownership of the organization</b>	
Public sector	25%
Mix	2%
Private sector	72%
<b>Type of organization</b>	
Public institution	18%
Commercial society	78%
Non-profit organization	2%
Other types.....	2%
<b>Number of employees</b>	
Between 1 and 9	28%
Between 10 and 49	44%
Between 50 and 249	12%
Over 249	16%
<b>Economic sector of the organization of the respondent</b>	
Primary sector	23,85%
Secondary sector	26,39%
Tertiary sector	25,75%
Quaternary sector	24,10%

*Source: data processed from the analyzed questionnaires*

*Table no. 4  
Evaluation of the learning process within the knowledge-based organization.*

Statements	Usable average			
	Primary sector	Secondary sector	Tertiary sector	Quaternary sector
A7. Your colleagues and leaders share their experience and knowledge to complete a task.	3,78160	3,4040	4,1808	4,18
A8. You have access within the organization o necessary learning resources: books, videos, course packs, etc.	2,77011	3,33333	3,909	4,1382
A9. You are encouraged to experiment and try new things, including dedicating time to this activity.	2,42528	2,58585	3,8409	4,0851
A10. The organization encourages professional development	3,20689	3,74747	4,2764	4,3682

**Age and gender distribution** of the respondents is balanced so that participants of all ages were included in the study: 26% of the respondents are under 30 years, 34% are between 30 and 40 years, 22% are between 30 and 40 years, 18% of the respondents are over 50 years. Of all respondents, 44% are women and 56% men.

Regarding **education level**, most of the respondents have followed a higher education institution, representing about half of all respondents-48%, 38% have master degrees, 8% secondary education and 6% doctoral studies.

Most of the respondents have an **experience at the workplace** between 3 and 10 years, respectively 38%. The lowest share of the respondents represent those who have 20 years experience at the current job.

According to the **position held in the company**, most of the participants, occupy top management positions within the organization - 36%, employees from executive posts -28%, and those who occupy medium management positions represent 24% of all respondents.

Regarding the **ownership**, most of the organizations surveyed, are private organizations -72% , 25% are public and only 2% mix organizations.

If we look at the **economic sector** of the surveyed organization we can see that the percentages are almost equal for all four investigated sectors: primary sector (23.85%), secondary sector (26.39%), tertiary sector (25.75%) and quaternary sector (24.10%)

#### **4. Evaluation of the learning process within the knowledge-based organization.**

A11. The organization is receptive to proposals made by its members.	2,89655	3,17171	4,1364	4,3297
A12. The organization invests in the education and training of its employees	2,56321	2,62626	3,4091	4,0531
A13. Within the organization, lifelong learning is considered a key factor.	2,63218	3,20202	3,864	4,3085
A14. Employees are focused on gaining knowledge.	2,51609	2,29292	4,023	4
Learning	2,88649	3,04545	3,9289	4,1529

Source: data processed from the analyzed questionnaires

*In the knowledge-based organization, the leader must create a culture that will lead to individual and team learning.*

*There is now a necessity (proven by the strong relationship between learning and performance) to train the employees through training programs at the workplace, to facilitate their access to learning resources, to encourage them to experiment and disseminate the knowledge possessed in order to develop a skilled workforce.[6].*

The score obtained by studying the responses to the statement A7, shows to what extent the knowledge are shared and everyone has access to them. The high score obtained by all four economic sectors, shows that within the studied organizations, employees from different departments interact with each other in order to solve together various problems.

The eight statement (A8) obtained a high usable average: 3.909 for the third sector and 4.1382 for the quaternary sector. This means that the leaders within these economic sectors encourage training by providing access to learning resources: books, trainings, dialogue sessions, etc. Although learning is also here encouraged, the employees within the primary economic sector don't have access to a wide range of learning resources.

The ninth statement (A9) examines the extent to which the management creates a work environment where experimentation is encouraged. The score obtained here indicates that Romanian leaders have not yet fully understood the need to encourage experimentation at the work place.

Romanian organizations inspire their members to lifelong learning. An argument in this direction is the usable average obtained to statement A10: primary sector-3.2068, quaternary sector-4.3682.

From the centralized responses to A11 we can observe that the scores obtained in all

four analyzed economic sectors are significant, which leads to the conclusion that organizations, particularly from the quaternary and tertiary economic sectors accept the feedback from its staff.

Statements A12-A14 examines the extent to which organizations invest in the training of its employees. It is found that the scores obtained for organizations belonging to primary and secondary economic sector are lower compared to the other sectors. This result indicates a lack of concern of the organizations in training and educating employees.

In the context of the knowledge-based economy the permanent access to education plays role an important in achieving high competitiveness. This is demonstrated through the results obtained in the tertiary and quaternary economic sector. The total score of *learning* places the organization of the quaternary economic sector on the first place, with a score of 4.1529, the nearest value to the maximum desired-5.

For the primary and secondary economic sectors, the road to developing in a knowledge-based economy must begin with learning and developing the intellectual capacity of their employees (see table no.4).

## 5. Performance evaluation within the studied organizations

“Although it seems simple to define and measure, organizational performance is a complex universe within different ideas and theories mingle [7]”.

*Performance has a multidimensional nature and using only financial parameters in order to measure it, ignores the fact that profitability depends also on external factors [6].*

Table no. 5  
Performance evaluation within the organizations studied by economic sector

AFIRMATIA	Usable average			
	Primary sector	Secondary sector	Tertiary sector	Quaternary sector
1. Employees are fulfilled at the work place.	2.56321	3.12121	3.4893	3.6
2. People within the organization voluntarily cooperate to achieve goals.	3.40229	3.22222	3.6063	3.5909
3. There is respect and trust between employees and management.	3.81609	3.56565	3.9680	4.1818
4. The organization collects information on customer needs.	3.66666	2.95959	3.9893	3.4545
5. The organization provides customer service to the highest quality standards.	3.28735	3.68686	3.9468	4.0227
6. The organization consults its customers to improve the quality of the services and products provided.	4.08046	3.40404	4.0319	3.9545
7. The organization manage with success the customer complaints.	4.10344	3.85858	4.0744	3.9091
8. Your organization considers customers as partners.	4.36781	3.15151	4.2446	4.1591
9. Financial result per employee has increased in recent years.	1.91954	2.09090	3.1276	3.3636
10. Financial performance of the company is positive.	2.10344	2.38383	3.4574	3,5
<b>Organizational performance</b>	3,3310	3,1444	3,793	3,7818

Source: data processed from the analyzed questionnaires

“Performance should be addressed by its many facets, being influenced by internal factors, such as management, employees, product quality or production costs, but also by external factors, such as customers’ preferences and expectations, competition, access to information.”[8]

“Unlike traditional approaches to enterprise performance, which evaluate performance only through financial calculus, the modern approaches highlight the importance of estimating several non-financial indicators”.[8]

In order to measure performance we used a series of statements, based on three parameters: the satisfaction and commitment of the employees, satisfied customers, financial performance.

Employee satisfaction and commitment is assessed through affirmations A1-A3. Customer satisfaction is measured by statements A4-A8 and profitability is analyzed through A9 and A10.

In all four economic sectors analyzed, the scores obtained by the three parameters calculated, indicate a level of performance situated at a mediocre level. It can be seen from table no.5 that the usable average regarding performance registered the lowest values, especially in the primary sector.

Employees through the contact they have with customers, become an important mean in achieving organizational performance. Knowledge workers have an important role in obtaining performance that’s way we can see in the above table that high values are registered in the quaternary economic sector.

Satisfaction of the clients depends directly on those loyal

employees of the organization, interested in achieving its objectives, who are consequently taking care of the needs of the costumers.

From the research conducted, it appears that the three performance indicators interact with each other. Positive changes in the satisfaction of an employee lead to customer satisfaction, which turns into sales, and financial performance.

It is difficult for the organization to have excellent long-term financial results, without providing quality services. High quality services offered to customers depends on the commitment and dedication of employees towards the organization.

## 6. Conclusions. Validation of the hypothesis H2: Is there a positive correlation between the learning process within the organization and its performance?.

To confirm or infirm this hypothesis it is necessary to demonstrate that there is a causal correlation between organizations based on learning processes and their performance. In this direction in the study conducted we have calculated the **Pearson correlation coefficient (r)** that is probably one of the most used statistical tests applied to social and economic sciences. The coefficient measures the strength and the direction of the link between two variables. This coefficient was calculated in Microsoft Office Excel and the values obtained are shown in Table no. 5. The two variables considered were the usable averages of learning and performance.

Pearson coefficient can take values from +1 (positive correlation, direct, perfect) to -1 (negative correlation, inverse perfect). Between these extremes, a coefficient with the value 0 (zero) indicates the independence between the two variables analyzed.

Table no. 6 Correlation (r) between learning and performance

	Organizational Performance			
	Primary Sector	Secondary Sector	Tertiary Sector	Quaternary Sector
Learning	0.135938	0.897317	0.583065	0.746806

Source: data processed from the analyzed questionnaires

correlation coefficients are higher than 0.1, then between learning and performance is a dependent relationship.

The value of 0.135 obtained for the primary economic sector indicates a weak connection but still validates the analysed hypothesis.

In the secondary economic sector, the coefficient obtained is 0.897 and indicates a strong relationship between learning and performance.

The score of 0.583 obtained in the tertiary economic sector indicates a medium correlation which allows to validate the hypothesis.

The coefficient obtained for the quaternary economic sector is 0.746 indicating a strong link between learning and performance within the organization of this sector. The hypothesis is validated.

The strong dependence of performance on learning processes within the organization from secondary, tertiary and quaternary economic sectors indicates that it is becoming increasingly important that Romanian organization have a well-trained workforce.

In such organizations, people can develop the ability to continuously create results, are supplied and enhanced new models of thinking by encouraging creativity and

experimentation, and people learn together from each other.

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# Free-Market Economy – The Guarantor of Consumer Sovereignty

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## Abstract

*The present paper debates the liberal apology of free market operation that assigns to the rational consumer absolute sovereignty on the producer, the economic success of the latter being conditioned by the best possible satisfaction of “master’s” interests – the consumer.*

**Key words:** free-market economy, consumer sovereignty, consumer’s interests

**J.E.L. Classification:** D11

## 1. Introduction

The starting point of the traditional approach concerning consumer behavior is represented by the postulate of rationality. Thus, considering that goods offered on the market generate utility, by virtue of this postulate it is estimated that, in the consumption act, the person is capable of solving simultaneously two problems, namely: one of decision, with regard to the choice among several consumer goods that can respond to his needs and one of maximizing the satisfaction felt after the undertaken choice, respectively of maximizing the utility. Within this context rational consumer equilibrium is built forward, taking into account, on one hand, the needs he feels at a certain moment, and on the other hand, the budget constraints imposed both by the prices of those goods, and by the income which is effectively at his disposal.

Together with the rationality of human behavior, the priority of individual interest over the social one represents another principle embraced by known philosophers, as well as by classic economists, who shifted it from the political and social field into the economic one. In the acceptance of the latter, the engine of economic development is

represented by every individual’s freedom to act by following his own interest, to buy and sell what he wants, as much as he wants and to whom he wants. This “self-love” of the individual, as named by Adam Smith, has a beneficial role at global level, because “by pursuing his own interest, he frequently promotes that of the society more effectually than when he really intends to promote it”. [1]

## 2. How free-market economy works in favor of the consumer

The famous metaphor of the “invisible hand” - which is introduced by Adam Smith with regard to this situation and in whose content not only a justifying principle of liberalism is hidden, but also the vital idea of the regulatory role played by free market – has been the object of several interpretations over time [2]. In a personal acceptance, from the economic point of view, the “invisible hand” operates under the form of the individuals who lead these towards the performance of mutually advantageous exchange of goods and services with the other participants in economic life. These exchanges encourage the development of a competition between sellers and buyers within the free market, a competition which guides the price mechanism and by the agency of which the maximization of production and consumer’s satisfaction is allowed.

Consequently, the key-element of market economy is represented by individual freedom, which, by being perceived as positive freedom, regards the tangible possibility of the economic agent of operating within the market as he wishes and of choosing, out of the multitude of available options, the one which best responds to his own interests. Thus, individual freedom primarily involves rationality – the individual has to be guided by his own will in everything he undertakes and to operate by

virtue of his convictions and the calculations for optimizing his own interest, and secondly responsibility – each individual has to incur the consequences of his own actions, both the positive ones, but mostly the negative ones.

However, freedom is mostly viewed as negative freedom, sense in which the individual is free when he disobeys any restraint, any form of coercion being absent, by this understanding the environmental of circumstance control of an individual by someone else, so that, in order to avoid a greater evil, he is forced to act not based on a personal, coherent plan, but in order to serve the other's interests, according to the definition provided by Friedrich A. Hayek.[3] In spite of that, coercion can not be fully eliminated, because, paradoxically, the only modality of avoiding it is still the coercion or “the threat of coercion”.

In free society the solution to this difficult problem is represented by granting the coercion monopoly in favor of the state, public authorities being certificated to intervene when other individuals' freedom is threatened; in the rest of the situations the individuals are free to use their freedom and knowledge as they see fit, having as sole limitation the one of not doing violence to the others' freedom and rights. In this context, the main function recognized to the state within a society is that of defender of physical and moral integrity of the individual, but also of individual rights, liberties and property, both against any violent or unlawful attack by offenders or other independent societies (by the agency of police or army), and against any injustice by another member of the society (by the agency of justice).

Although contemporary liberals, and especially ultra-liberals, are unanimous in supporting the famous dictum “government is better when it governs less”, the least does not necessarily means default, but also presence, particularly regarding the creation of propitious environment in which free-market economy can safely work. To this effect, we consider the acceptance of state intervention for assuring a legal framework thoroughly elaborated for obtaining the beneficial effect of competition, going to the length of adopting also other orientation methods of economic activity, where there are no conditions for a competition which

fulfills its role concordantly.

Also, in free-market economy the producers must sell their products to the consumers, trying to offer them only what they want to buy, in order to survive. Producers compete, and consumers choose. Accordingly, offer represents only an instrument, a means of satisfying the consumer and of his dissatisfaction with regard to the society he lives in.

The belief according to which consumer's dissatisfaction is the ultimate economic objective and economy is fundamentally guided by consumers' desires represent the foundation of consumer's sovereignty doctrine in market economy.

Despite its long history, the concept of “consumer's sovereignty” is relatively modern. Its introduction to economic science belongs to William H. Hutt, very cautious, on his turn, with regard to accrediting himself as the owner of this term [4]. Initially, Hutt defined “consumer's sovereignty” as follows: “The consumer is sovereign where, in his role of citizen, he has not delegate to political institutions for authoritarian use the power which he can exercise socially through his power to demand (or refrain from demanding)”. [5] Later, Hutt reformulated the definition, giving it a different form, and also a different meaning: “it simply refers to the controlling power exercised by free individuals, in choosing between ends, over the custodians of the community's resources, when the resources by which those ends can be served are scarce”. [6]

Hutt's major argument in favor of consumer's sovereignty focuses on the role played in the promotion of political and social stability. There must be specified that, as imagined by Hutt, the consumer is a real human being, guided by all sorts of contradictory and concurrent reasons, the economist showing his abstention in relation to his ability of best knowing his own interest. Thus, the defense of consumer's sovereignty by appealing to the commitment of a tolerant society towards other people's wishes, does not assumes as *sine qua non* conditions – consumer's self-knowledge and rationality, Hutt specifying that: “...our plea for the consumer's sovereignty ideal does not rest on the assumption that “The Voice of the People is the Voice of God”. It rest on the common-sense view of history, which

suggests that the people will consent to be ruled only in a regime which can be seen to give them equal rights and equality of opportunity”.[7] That is exactly why Hutt pronounces in favor of state intervention in economy, especially by anti-monopoly politics, considered by him as mostly damaging to consumers’ interests.

Although criticized - especially because of “daring” to introduce a term reserved to political field and, additionally, controversial by its nature, as “sovereignty”, in an expression that is intended to be a contribution to pure economic analysis, even suggesting that it would have been much more pertinent the use of the term of “individual sovereignty” than that of “consumer’s sovereignty”[8] - the thesis put forward by Hutt represented the inspiration source that further allowed the development of a real doctrine to this effect.

Thus, although the concept of “consumer’s sovereignty” inevitably keeps some characteristics from political theory, Ludwig von Mises conferred it a new acceptance, this time strictly economical, which suggests the necessary logical connection between production and consumption. “The control” exercised by the consumer on the production is put forth in two moments, by means of economic calculation. Firstly, it is about *ex ante* moment of the prospective economic calculation, in which contractors decide to bid for the production factors and to invest in a certain production process and not another one, as a result of the higher profitability they anticipate, and which is decisively influenced by the specific conditions of consumers’ demand. Secondly, *ex post* control refers to the validation through profit or, on the contrary, the invalidation proved by the suffered loss, of the abovementioned entrepreneurial anticipation.

Mises pleads in favor of consumer’s sovereignty as follows: “The direction of all economic affairs is in the market society a task of the entrepreneurs... They are bound to obey unconditionally the captain’s orders. The captain is the consumer. Neither the entrepreneurs nor the farmers nor the capitalists determine what has to be produced. The consumers do that... They determine precisely what should be produced, in what quality, and in what quantities. They

are merciless bosses, full of whims and fancies, changeable and unpredictable. For them nothing counts other than their own satisfaction... In their capacity as buyers and consumers they are hard-hearted and callous, without consideration for other people.”[9]

Consequently, by following the absolute satisfaction possible of their own interests, consumers permanently transmit information, orders to producers, by means of prices and interdependences between productive flows, information, orders to the producers, leading their capital to the realization of those products demanded on the market, going as far as the biggest affairs entirely depend on the patronage of those who buy their products. Thus, consumer represents not only a “devourer” of goods, but also a judge of the entire human activity, to which effect the role of putting each person in the right place in society comes to him, by the decision of buying or resisting this action.[10]

It is worthy of note that the political foundation of “consumer’s sovereignty” permeates into the economic analysis of free-market upholders in the sense in which they appreciate free choice process as “a market democracy”, which assures the right to choose to every consumer similar to the voter. This analogy is older than the term of “consumer’s sovereignty” itself, and the comparison between market and voting process can be found much earlier to Frank A. Fetter, who suggested treating market as a democracy where every penny gives a right of vote.[11]

From this perspective, we estimate as representative the synthesis made by Jean Baechler on the way in which, within free-market, the principles of democratic delegation of power are scrupulously observed that by and in their purchase act, consumers delegate a power (that of combining rare factors) to those actors they consider capable (in order to offer them best quality products, to the best price, in the desired quantities), with limited title (for a certain product), temporarily (during only one purchase), reversibly (they can change their option to the next purchase). An economic market is neither more nor less than a forum of direct, permanent democracy, probably the only one possible in the democracies with an important population.[12]

Of course this analogy is doubtful, bearing certain critics, remarked both by Fetter, Hutt, and by Mises, as the one that, within the market the consumer additionally enjoys the advantage of a daily plebiscite in comparison to the voter, and also the possibility of reaping only the beneficial effects of such an action, while the voter has to bear the undesirable effects of a parliament or government which he did not vote, but which was elected by virtue of the guiding principle of democracy, that of majority vote. From this perspective, free market represents a much more performant social organization system in comparison to any democracy, offering the possibility to satisfy even the preferences of the minorities by the contractors willing to trade on them.

On the other hand, the difference between political plebiscite and market run also consists in the fact that, in case of plebiscite, equal citizens act, each one of them having the right to only one vote, regardless of the economic condition, whereas within the market the capacity of different consumers in expressing their option or “vote” and therefore in influencing producers’ decisions, pertains to their buying capacity, property and incomes.

Mises’s disciple, Murray N. Rothbard also draws attention on the risks involved by using terms borrowed from other fields of studies in economy: “In a purely free society, he says, each individual is sovereign over his own person and property, and it is therefore this self-sovereignty which obtains on the free market. No one is “sovereign” over anyone else’s actions or exchanges. Since the consumers do not have the power to coerce producers into various occupations and work, the former are not “sovereign” over the latter”. [13] In fact, only the producer is the one who decides if he keeps his property inert or sells it on the market in exchange of the money received from the consumer.

### 3. Conclusions

Beyond the discussions with regard to the opportunity of associating the terms in the concept of “consumer sovereignty”, there must be retained the economic essence comprised in this expression which involves, - on one hand, the rational characteristic of consumer behavior, to which effect he is the

best judge of his welfare and that the economic choices he makes within the market serve best to performing his own needs, and – on the other hand, the conditioning of the success of producers’ economic activity in order to satisfy best the consumer’s interests, any deviation from these fundamental pre-requisites acclaiming the intervention in favor of the latter.

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# Learning Organization: the Importance of Innovation and Adaptation

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## Abstract

*The main objective of this research is an investigative specific study of theoretical nature, applicable in the diagnostics of a business based on local knowledge. In this study, we intend to conduct an analysis using previous literature, research, debates, and information on knowledge-based company with the intention of creating a conceptual framework, develop new ideas, and ultimately, develop our own model. validated by the knowledge-based organization and proven to be effective in managing and achieving economic performance.*

**Key words:** knowledge, learning, organization, innovation, adaptation.

**J.E.L. Classification:** Q10.

## 1. Introduction

The world economy has suffered a series of irreversible changes: globalization that "creates great opportunities and lead to progress in many areas"[11] and the knowledge revolution. "The phenomenon of globalization has led to increased trade and investments, removed barriers and lead to increased economic interdependence, political, social, and military technology between countries of the world".[11]

"Financial markets and trade are the main beneficiaries of globalization, by intensifying unprecedented flows of goods and capital."[11]

In order to benefit from the knowledge revolution, concrete strategies are necessary to help countries in the transition process towards the knowledge-economy. Such strategies include properly educating population in order to generate and use knowledge or creating innovative systems in companies and research centers. "International economic relations reached

unprecedented dynamism, new states and markets are integrated in this economical system."[11]. The construction process of knowledge enabling organizational environment is a complex phenomena, requiring a long period for preparing and implementing all changes, focusing on human nature and the involvement of a number of specialists based on knowledge.

Knowledge involves the awareness and understanding of facts, truths or information gained from experience or learning processes [1]. Researchers noted the existence of two types of knowledge, respectively explicit and tacit knowledge. Tacit knowledge is personal knowledge embedded in individual experience and includes intangible factors, such as beliefs, values or feelings. Explicit knowledge can be articulated in formal language or mathematical representations[2]; it is well defined and self-contained, easily encoded, and refers to studies, patents, designs, analysis, licensing, standards, software, etc., based primarily on technology.

In the study *Knowledge Management: A Guide for Communities of Practitioners*, the authors address the two types of knowledge arguing that tacit knowledge represents about 80% of a company, being stored at the level of the individual members of the organization, and explicit knowledge is the difference up to 100%.

It is considered that on the long run, tacit knowledge will be the one that will ensure a competitive advantage, both at macroeconomic and microeconomic level.

## 2. The role of knowledge in the contemporary economy

In the new economy and knowledge-society, based on human intelligence and creativity, intangible assets such as knowledge and information management become the new core abilities. In the

traditional economy, the production factors were land, labor and capital, while in the new economy, knowledge becomes an essential component of the contemporary social economic development system[3].

As raw material, knowledge largely participates in obtaining modern products. For example, the production of a TV or a PC incorporates metal, plastic and other materials, which is a few percents of its total cost, but knowledge holds the majority share in the total cost. A regular phone costs about 100 euro, but if one examines the structure of the value, the approximately 100 grams of material that the phone is made of only costs about 4-5 euro. Therefore, the difference in value is determined by knowledge embedded in that phone.

Knowledge represents a production factor that participates, along with other classical inputs - labor, means of work - to all phases of production processes. The more modern a company is, the higher are the importance and the role of knowledge as a production factor. Technology is just a chain of knowledge.

Knowledge is a finished product by itself, materialized in software, technical designs, patents of inventions, etc. High-tech products, computers, cameras, satellite TVs, telephones, etc. are made up predominantly of knowledge, this actually giving their utility and value.

### 3. The intellectual capital. Assessment of intellectual capital

The intellectual capital consists of stocks and flows of knowledge available in an organization. They can be regarded as intangible assets, and together with tangible resources compose the market value of a business. The intellectual capital comprises all intangible resources available to the company and which give a relative advantage in combination with other advantages which can lead to possible future benefits [4].

“Without minimizing the importance of the other factors of production, in the new economy context and under the globalization phenomena, human factor becomes the main factor of economic growth, due mainly because of its self-capacity of development. Human capital is the direct and unique supplier of intellectual capital.”[10]

O. Nicolescu and L. Nicolescu assert T.Stewart's definition of intellectual capital: “the intellectual capital contains, besides the knowledge capital, those people, facilities and networks that participate in the processes of creating products and services for substance economy”[5]. In several studies, many authors (e.g. Basil Mazilescu in *Modeling Business Processes Based on Knowledge Management*, Europlus Publishing, Galati, 2006; Ovidiu Nicolescu, Luminita Nicolescu, in *Economy, Business and Knowledge Management*, Economic Publishing Press, 2005; Aurel Iancu (ed.), in *Economic Convergence*, Romanian Academy Publishing Press, Bucharest 2008, chapter IX, Marta Christina Suciuc - *Intangible Assets and the Intellectual Capital – Key Factors of Convergence*) structure the intellectual capital in: human capital, structural capital and relational capital.

Human capital is usually defined as all tacit and explicit knowledge, motivations of people in the organization, skills, qualifications, skills and experience that employees of a company have.

**Human capital** is usually defined as the following combination of implicit and explicit knowledge, the motivation of the people in the organization, the abilities and experience of the employees. Human capital was first defined at individual level as a combination of the following factors: genetics, education, experience and attitude towards life and businesses. These resources cannot be replaced by machines or be written on a sheet of paper. In the new economy, human capital is considered to be the most valuable resource a company holds and that can be partially controlled.

**(Fundamental) Structural capital** is consists of all remaining elements of the organization after the leaving of the employee, the former being the organization's property: patents, databases, informatics systems, etc..

**Relational capital** is the company's relationships with all collaborators. By employees we understand all those agents who have direct connection with the company and have clearly defined interests vis-à-vis the company's activities. This category includes customers, suppliers, the media, rivals, third parties, partners, local and central administration, the chamber of

commerce, consultants, etc..

“The big changes to which we assist in the economic and social environment, in the context of new economy based on knowledge, produced mutations in the way of thinking in terms of organization. Thus, wealth and power of organizations derives mainly from intangible intellectual resources as primordial factors.”[10].

When a company invests in tangible assets such as cars or computers, money is paid in cash and the corresponding amount is recorded in the balance sheet as assets under the heading “equipment”. The cost will be met gradually as the asset depreciates. But when a company invests in intangible assets (education, training, research programs), it should be considered investments. When each individual pays for his own education, then he or she invests in their own human capital, but when that education is paid by the company, the relationship between the beneficiary and the payer breaks down because the company pays for an acquisition that it does not possess. Individual competence is the property of the individual, not of the company. Money spent on education should be considered a cost, not an investment. There is no doubt that companies today tend to be those that innovate constantly, using new technologies, skills and the know-how of their employees.

Interest in the **intangible values** has become higher in the recent decades. The intangible assets have gradually become the most important sources of competitive advantage. The traditional production factors (land, labor, and capital) have gradually diminished their importance. At the same time the importance of intangible assets, such as knowledge, information and creativity has increased. While land, capital and labor are subject to decreasing returns law, knowledge and information induce increasing returns.

“To make the most of the new intangible assets that create wealth in a society based on knowledge, we must go to the engine of the old industrial economy, which in turn, replaced those of the agricultural economy. [...] The real source of the wealth of nations and companies must be sought in people, knowledge and their abilities and internal processes and the reputation of the company”[5].

In Romania, intellectual capital is not

sufficiently exploited because of the lack of adequate knowledge markets. In Romania, this problem is a major concern of academics and researchers, the Chamber of Commerce and Industry of Romania, but less of business people and the legislator.

“The success of the states in the new economy will become increasingly determined by how they will manage to trigger technological innovation, entrepreneurial relations, education, specialized skills and transition of all public and private organizations, from the bureaucratic hierarchy to learning networks” [6].

“The literature reveals that, intellectual capital increases the value of a company and allows a better and more effective combination of the other resources”[10]

#### **4. Empirical research in Romanian organizations**

##### **4.1 Objectives and hypothesis**

Knowledge based economy is often presented as based on science and advanced technology, on leading industry and high technology, fields in which Romania is still behind. Current priorities are focused mainly on putting an end to the economic crisis, providing jobs, companies' survival and achieving a high volume of production in order to obtain a minimum profit.

Through this research we aim to formulate questions that will lead to useful answers in order to analyze the position of Romanian organizations in their approach to the knowledge economy and organization. Thus, by using a questionnaire, we will:

- analyze all aspects connected to the learning potential of Romanian organizations, as well as the access to knowledge, learning resources, the investment in staff education (training, professionalized qualifications);

- identify aspects of adaptability and innovation of organizations as two important factors in promoting learning within the organization and I will also consider the level of Internet access among employees;

- demonstrate a causal relationship between the investigated variables: learning,



organizational adaptability and innovation of the organization;

- make a diagnosis of learning in Romanian organizations.

Since the research aims to demonstrate a link between learning and adaptability and the innovation of the organization, the following hypotheses were formulated for testing:

- **H1:** There is a positive dependence between the **learning** manifested in the Romanian economic organizations and **the innovation** of these organizations.
- **H2:** There is a positive dependence between **the learning** manifested in the Romanian economic organizations and **the adaptability** of these organizations.
- **H3:** There is a positive dependence between **the innovation** of Romanian organizations and their **adaptability**.

#### 4.2 Methodology

Within our research the investigation was based on an evaluation questionnaire. The results of the quantitative empirical research represent the foundation of conclusions of this research. *Quantitative research provides evidence and confidence in collecting and interpreting statistical data.*

The evaluation questionnaire is aimed at measuring and analyzing the views of employees on key practices of the knowledge economy and organization and the extent to which they are applied in local organizations.

The questions were raised as a result of a profound analysis of knowledge in the field. Their formulation is simple and straightforward, using interrogation methods that lead to valid and representative results.

The research unit is represented by the employee of the economic organizations in Romania. The total number of subjects investigated was 185. The valid results of the study: 183 questionnaires, 2 were incomplete.

The sample includes both employees who are part of the executives, the first layer of management and the environmental management or the top management. To ensure proper representation of the organizations investigated, their selection will be at random on a voluntary basis.

The sample structure is highlighted by the characteristics of the organizations, such as

ownership, organization, capital structure, field of activity, number of employees. Regarding respondents' differentiation, we took into account the following criteria: level of training, age, seniority in the organization, position. The data were organized in a database for processing and analysis.

Questions 1-7 in the questionnaire are related to learning within the organization. In this sense, we examined the extent to which adherents are given different training opportunities, thus improving and directing the organization to a continuous adaptation to the dynamics of the current economic environment.

The adaptability of the organization (questions 8-9), is analyzed through the importance attached to rules, regulations and procedures within the organization, the bureaucracy within the organization - the process of approval of a decision and the fastness of the decision.

Questions 10-14 refer to the innovation of the organization, analyzed by the organization itself and the actions of its adherents in this direction.

To obtain the scores (averages) for each statement, we weighted each response (from 1-5) to the statement with the number of respondents to each answer, and then we will divide it by the total number of respondents.

For the statements in the questionnaire the maximum points can be 1 or 5. For statements whose maximum is 1, the points resulting from the weighted average score should be subtracted from 6. The average used for such a statement will be:

***The usable media = (6 - calculated average).***

After we have the scores for each statement, we will calculate the scores for each variable (scores of the combinations of statements). For the three variables defined, the minimum score is 1, and the desired maximum is 5;

Methods of analysis of data series:  
- descriptive statistical analysis for the data sets of the variables studied;  
- analysis of the dynamics of responses;  
- Pearson correlation coefficient (r);

To confirm the hypotheses we calculated the Pearson correlation coefficient (r), which is probably one of the most used statistical tests applied to social and economic sciences. The correlation coefficient was used to measure the intensity and direction of the

link between variables. This quotient will be used for demonstrating dependence of the three variables studied and performance to validate hypotheses. The research is based on a linear relation between variables and establishes the connection and the intensity of this connection based on correlation. The correlation coefficient takes values between (-1, +1). The coefficient  $r$  can take values between +1 (positive correlation, direct, perfect) and -1 (negative correlation, reverse, perfect). Between these extremes, a correlation quotient 0 (zero) indicates the total absence of correlation or, in other words, their independence.

### 4.3. Research results

In the organizations under evaluation, we note that leaders tend to encourage staff training (we obtained a relatively high score for learning, 3.88), by implementing a learning system based on cooperation and evaluation within teams. However, we observed a lower degree of encouragement of experimentation and innovation (the score for innovation), compared with other learning characteristics studied.

Training is encouraged by allowing employees to improve the group or department in which they work and providing access to learning resources: books, training, videos, dialogue sessions, support, aspects evaluated within conducted questionnaire. In Romania, although learning is encouraged to a large extent, learning resources are not equally available to all employees. Training needs to be effectively implemented, taking into account the training needs of staff, how people learn, and options regarding the training. Thus, Romanian managers must implement a coherent and effective learning system, based on staff needs and a clear methodology, providing resources for training.

In Romania there is the necessity for an organizational learning based on experience, initiative, innovation and flexibility, strongly supported by the management. Regarding to managers' ability to support employee initiative and innovation, we found that, in Romania, there is a strong tendency to encourage employees in the organization, regardless of their position, to intervene with ideas, which are disseminated at all levels

and applied to all work for the highest possible performance.

Moderate correlations obtained for statements A4-A7 suggest that there is dependent position in organizations between the employees increased access to learning resources and their independence in terms of how they choose to fulfill their tasks.

We observed that there is a negative dependence between the firing of the employees and the use of temporary employees and the process of organizational learning, as the correlation coefficient registered the value of -0,397.

Flexibility and reduced bureaucracy allow an organization to adapt quickly, the decision making being a fast process. For flexible and adaptable organizations, each leader could increase employee willingness to cooperate, exchange information, to participate and improve their skills. Thus, we should shift to the flat organization with one or two hierarchical levels, in which the leader has the role of a coach and is designed to guide teams to collaborate and learn. The very low score obtained in statement A8 relating to that decision power within the organizations studied is located at the top allows us to understand that this is not the case for Romania.

In analyzing the organization's flexibility and adaptability, we are aware of issues such as the importance which the Romanian leaders attach to rules and procedures, bureaucracy in Romanian organizations and decision-making processes.

The score of A8 statement regarding the decision making process with a usable average of 1.78, out of a desirable maximum of 5, suggests that in the organizations researched, important decisions are taken at higher management level. The low score indicates a concentration of the decision-making power at higher levels and shows a limited possibility for employees to make decisions without having them approved by line managers. The recorded value of this feature is likely to highlight the importance given to the formal power of position in the Romanian organizations, enjoyed by managers at high levels. Referring to organization's bureaucracy and the difficulty of the approval of decisions, the usable media is 3.26 out of a maximum score of 5, which shows that in Romanian organizations, bureaucracy is not

excessive, the score suggesting a rather moderate bureaucratic level.

The score for flexibility, of 2.52, out of a maximum of 5, is relatively low, below the neutral value, which indicates a low adaptability of Romanian companies to business challenges.

Statements A10 and A12 have a use average close to 3.683 and 3.809, respectively, out of a maximum of 5. This suggests that employees are encouraged to experiment and try new things but they benefit from a moderate freedom to put their ideas into practice. The highest average of use is for the statement A11, namely 4.014, hence, the leaders of the organizations researched inspire employees to refine professionally.

The innovation score of 3.19, out of a maximum of 5, indicating a level slightly above average shows some concern for innovation in the organizations researched.

## 5. Conclusions

Considering hypothesis made, we can conclude that:

- ✓ **H1:** There is a positive dependence between **learning** manifested in the Romanian economic organizations and **innovation** in these organizations. The obtained value of 0.65 indicates a strong link – the hypothesis is demonstrated.
- ✓ **H2:** There is a positive dependence between **learning** manifested in the Romanian economic organizations and **adaptability** in these organizations. The value of 0.25 indicates a weak connection but it should not be neglected - the hypothesis is demonstrated.
- ✓ **H3:** There is a positive dependence between **innovation** in Romanian organizations and their **adaptability**. The value 0.21 indicates a weak connection but it should not be neglected – the hypothesis is demonstrated.

The weak correlations can be explained through the fact that Romanian employees do not only consider the concentration of power at top management as a negative aspect of leadership and a factor that disadvantages learning and innovation. This can be explained through the fact that the practice of centralizing power at top management is accepted by everyone.

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## Using Artificial Neural Network to predict the NASDAQ evolution

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### Abstract

*The authors present the result of a research that uses already trained and validated artificial neural networks (ANN) in order to simulate evolution of NASDAQ High values relatively to the evolution of the Nikkei 225 and the Shanghai Stock Exchange from the previous day. The development, training and testing the ANN as a predicting tool, offered good results as the maximum errors between the simulated NASDAQ values and real ones were smaller than 5%.*

**Key words:** Artificial intelligence, Artificial Neural Network (ANN), Nikkei 225, Shanghai Stock Exchange (SSE), NASDAQ.  
**J.E.L. Classification.:** C53

### 1. Introduction

The importance of predicting the stock exchange evolution is crucial for every trader, as the need to react quickly to the evolution of the market determines the difference between win and lose.

In the present paper the researchers uses the Nikkei index (N225) and the Shanghai Stock Exchange (SSE) and an artificial neural network in an attempt to determine a prediction of the next day *NASDAQ*. The researchers use this method which doesn't tries to establish a mathematical function or relation between the three values (N225, SSE and *NASDAQ*). Instead the ANN learns from the previous examples or values and trains

itself in order to create a structure that gives the specific output values (for the *NASDAQ*) as results to the values that are feed in as inputs (N225 and SSE).

In order to have an accurate train and future use of the ANN, the researcher defined as the error for the training process the maximum of 5%.

### 2. Theoretic elements

*Artificial neural network (ANN)*

Today, *Artificial Neural Network* (ANN) can be found in the majority of the human life activity, their potential being considered immense. Starting with the human brain and continuing with the actual common application of the ANN, their use effectiveness is demonstrated as can be seen in Akira Hirose's book "Complex-valued neural networks: theories and applications" (Akira, 2003).

*Input and Output data*

The input and output data can be found on <http://finance.yahoo.com> and they are defined as follows:

*The Nikkei 225*, more commonly called the Nikkei, the Nikkei index, or the Nikkei Stock Average, is a stock market index for the Tokyo Stock Exchange (TSE). It has been calculated daily by the Nihon Keizai Shimbun (Nikkei) newspaper since 1950. It is a price-weighted index (the unit is yen), and the components are reviewed once a year. Currently, the Nikkei is the most widely quoted average of Japanese equities, similar to the Dow Jones Industrial Average. In fact, it was known as the "Nikkei Dow Jones

Stock Average" from 1975 to 1985 [1].

*The Shanghai Stock Exchange (SSE)* is a stock exchange that is based in the city of Shanghai, China. It is one of the two stock exchanges operating independently in the People's Republic of China, the other is the Shenzhen Stock Exchange. Shanghai Stock Exchange is the world's 5th largest stock market by market capitalization at US\$2.3 trillion as of Dec 2011. Unlike the Hong Kong Stock Exchange, the Shanghai Stock Exchange is still not entirely open to foreign investors due to tight capital account controls exercised by the Chinese mainland authorities [2].

*NASDAQ* is a computerized system established by the NASD to facilitate trading by providing broker/dealers with current bid and ask price quotes on over-the-counter stocks and some listed stocks. Unlike the Amex and the NYSE, the Nasdaq (once an acronym for the National Association of securities Dealers Automated Quotation system) does not have a physical trading floor that brings together buyers and sellers. Instead, all trading on the Nasdaq exchange is done over a network of computers and telephones [3].

The *Nasdaq Composite* is a stock market index of the common stocks and similar securities (e.g. ADRs, tracking stocks, limited partnership interests) listed on the NASDAQ stock market, meaning that it has over 3,000 components. It is highly followed in the U.S. as an indicator of the performance of stocks of technology companies and growth companies. Since both U.S. and non-U.S. companies are listed on the NASDAQ stock market, the index is not exclusively a U.S. index [1].

For the research were used daily highest values of the Nikkei (N225\_High), Shanghai Stock Exchange (SSE\_High) and Nasdaq composite (NASDAQ\_High) between 1/4/2012 and 9/28/2012.

It must be specified that in order to predict the next value of the NASDAQ\_High, the researchers considered the previous day value of the SSE\_High and NASDAQ\_High. For example in order to predict the NASDAQ\_High value for in 09/12/2012 they considered the SSE\_High and NASDAQ\_High values for in 09/11/2012.

### 3. Simulating the NASDAQ using ANN

The ANN use has several steps no matter what the type of the data or the structure of the ANN are. Considering those steps the research was made as following.

#### Data evaluation

The analyze results were: 3 columns and 151 rows analyzed and 3 columns and 151 rows accepted for neural network training. Also, were defined 3 numeric columns: input columns - SSE\_High, N225\_High and output column - NASDAQ\_High.

Also, the analyzed data where organized in random sequence not in a temporal sequence. The reason for this method is that from previous experience, the researchers didn't want to train the ANN with a specified trend from the values.

The data was organized in partition as: 103 records to Training set (68.21%), 24 records to Validation set (15.89%) and 24 records to Test set (15.89%).

#### Preprocessing

Pre-processing means modification of the data before it is fed to a neural network. Pre-processing transforms the data to make it suitable for neural network (for example, scaling and encoding categories into numeric values) and improves the data quality (for example, filtering outliers and approximating missing values).

The preprocessing was made using the Numerical encoding - a column with N distinct categories (values) is encoded into one numeric column, with one integer value assigned for each category. For example, for the Capacity column with values "Low", "Medium" and "High", "Low" will be represented as {1}, Medium as {2}, and High as {3} [4]. The scaling range of the encoding is presented in table 1.

Table 1: Preprocessing results using Numerical encoding

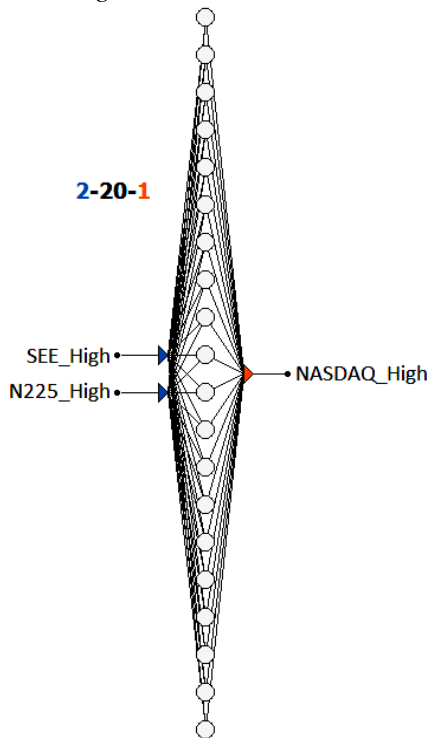
Input column name	Scaling range	Scaling parameter
SSE_High	[-1..1]	0.001903
N225_High	[-1..1]	0.001105
NASDAQ_High	[0..1]	0.001839

#### Design

The ANN is a feedforward network with the structure presented in figure 1 and contains 2 neurons in the input layer, 1

neuron in the output layer and 20 neurons in the hidden layer.

Figure 1. ANN Structure.



The activation function for the hidden neurons was a hyperbolic tangent (This function also has a sigmoid curve and is calculated using the following formula:  $F(x) = (e^x - e^{-x}) / (e^x + e^{-x})$ . Its output range is [-1..1]. Empirically, it is often found that this function performs better than the Logistic function) and for the output layer was a logistic function (This function has a sigmoid curve and is calculated using the following formula:  $F(x) = 1 / (1 + e^{-x})$ . Its output range is [0..1]) [4].

### Training

A back propagation learning algorithm as quick propagation algorithm was used to train the ANN (Quick propagation is a heuristic modification of the back propagation algorithm invented by Scott Fahlman. This training algorithm treats the weights as if they were quasi-independent and attempts to use a simple quadratic model to approximate the error surface) [4]

The training algorithm's parameters were:

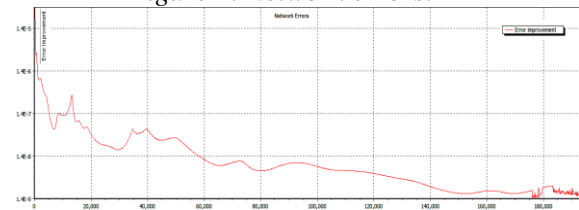
- Quick propagation coefficient = 0.9 (Quick propagation coefficient is additional training parameter for Quick propagation algorithm)[4];

- Learning rate = 1.5 (A control parameter used by several learning algorithms, which affects the changing of weights. The bigger learning rates cause bigger weight changes during each iteration) [4];

The training process resulted in the following

- Number of iterations: 192742;
- Time passed: 00:06:33;
- Training stop reason: User break – the network error improvement was too small to continue.
- The network error = 0.001614 (A value used to rate the quality of the neural network training process. The smaller the network's error is, the better the network has been trained. Minimization of the error is the main objective of neural network training), the evolution of network error can be seen in figure 2.
- Error improvement =  $1.67 \times 10^{-9}$  (Error change after each iteration (or several iterations). Error improvement shows how fast neural network improves its forecasting ability).

Figure 2. Network errors.



### Testing and Validation

Testing is a process of estimating quality of the trained neural network. During this process a part of data that wasn't used during training is presented to the trained network case by case. The result of automat testing showed errors between [0.24; 4.67] in % and the errors given by the validation of training revealed errors between [0.15; 3.24] in %.

The maximum and the minimum errors of training process were between 0.02% and 4.67 % (as difference between the real data and the simulated ones).

After the automatic testing that ANN made in the training process, the researchers made another test independent from all the other previous steps.

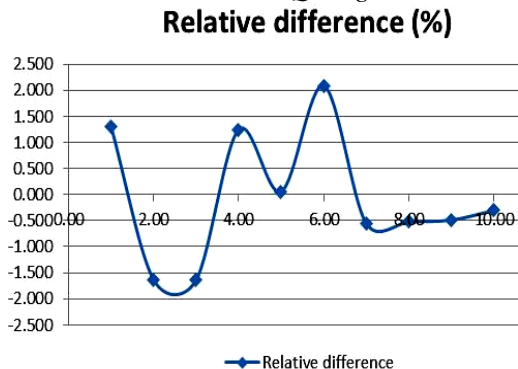
In this test the ANN was fed with new input data never trained with the ANN. This

type of testing was used by the researchers to determine the ANN reaction to the new completely new data. The result of this test is presented in table 2 and figure 3 as the difference between the real NASDAQ\_high values and the simulated NASDAQ\_High values.

Table 2: Real NASDAQ\_high values vs simulated NASDAQ\_High values

Real NASDAQ_high	Simulated NASDAQ_High	Error (%)
3189.35	3147.78	1.303
3076.80	3127.04	-1.633
3067.44	3117.81	-1.642
3022.69	2985.09	1.244
3018.90	3017.19	0.057
2903.03	2842.43	2.088
2952.65	2968.87	-0.549
3070.93	3087.02	-0.524
2993.98	3008.60	-0.488

Figure 3. Real NASDAQ\_high values vs simulated NASDAQ\_High values.



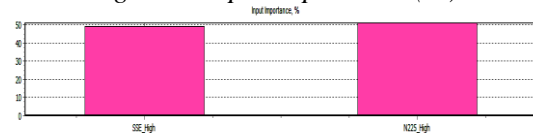
#### 4. Acknowledgment and Conclusions

The research established the necessary theoretical characteristics for the pre-processing, training, validating and testing of the ANN. The ANN training is considered a success and the initial condition (5% error) is respected as the maximum error was 4.67%.

Also, the training process offer an image about the importance that the two input data have over the output data. In figure 4 it can be seen that both the N225 and SSE have the same importance for the values of NASDAQ

as output data in the training process.

Figure 3. Input importance (%).



In terms of values the importance was 50.96% for N225\_High and 49.04% for SSE\_High.

The researchers consider that the studies must be extended over a larger period of time and also over a bigger database, but for a faster prediction. This can create a more prepared ANN, and thus a more accurate result.

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# Firm Performance Evaluation: Case Study in Dobrogea's Construction Sector

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## Abstract

*Generally speaking, performance indicators, whether financial or non-financial, should provide enough information that would help an actor drive the course of an action in order to achieve its objectives and evaluate the results. Undoubtedly, financial indicators are necessary in assessing companies performance. But they are certainly not enough. Previous literature and research in the field stresses the increasing importance of several factors that affect business performance, many of them unquantitized in monetary terms.*

*The purpose of this paper is to highlight the importance of the non-financial indicators in performance evaluation. The paper consists of an empirical research conducted on Romanian small and medium enterprises activating in the construction sector in Dobrogea region.*

**Key words:** Survey, business performance, performance variables.

**J.E.L. Classification:** L25.

## 1. Introduction

Performance evaluation is difficult to assess. Traditionally, performance evaluation has been made through accounting calculus. We will further refer to performance determined using the accounting methods as financial performance.

“In early 1990s, two major phenomena began transforming the economy and daily life throughout the world, including Europe. On one hand, there was economic globalization, meaning increasingly interdependence between economies around the world, and on the other hand, there was

the knowledge revolution. With the current knowledge revolution, obtaining the economic performances are conditioned by the existence and use of knowledge, of course calling also the other forms of capital that are and will always remain necessary in certain proportions.” [11]

Still, the evolution of the modern economy has argued since the nineteenth century that performance represents more than quantifying the actions of a company in monetary terms. Business performance is determined by diverse factors, many of them impossible to quantify, but as important as the quantifiable ones. We will further consider performance determine in this latter sense as non-financial performance.

„In the context of the knowledge-based economy, continuous access to education is considered extremely important. The role that education plays is ensuring what today is one of the most important elements for obtaining the performance in a economy –the competitiveness of an economy.”[13]

Researchers have studied in the past six decades the multiple dimensions of business performance, showing that leadership, loyalty and dedication of the employees, communication within company, strategy, environment responsibility, strategy, innovation and many other aspects drive firm performance. These are internal factors that drive business performance.

Moreover, there are external factors that can positively or negatively influence firm performance. Important issues such as competition, customer satisfaction, relationships with the suppliers must also be taken into consideration.

Through this paper we will conduct an empirical study within which we will analyze the non-financial aspects of business performance.

## 2. Research methodology

The research method we used to conduct this empirical research is a qualitative one. Our research is based on a survey called "Evaluating non-financial performance in Romanian construction companies". The survey is aimed at analyzing the responses of employees and managers referring to performance policies and several practices in performance evaluation. They will be further used in order to:

- ✓ identify significant influence within the system of non-financial performance evaluation;
- ✓ assess the influences of non-financial indicators on business performance;
- ✓ analyze correlations between non-financial indicators of performance.

The survey consists of a 50-statement questionnaire. Statements included in the questionnaire refer to key issues and characteristics of non-financial performance of companies in the construction sector. Respondents were asked to evaluate these statements by using a five-point Likert scale (1 = strongly disagree, 2 = partially disagree, 3 = neutral, 4 = partially agree, 5 = totally agree), which highlight nine dimensions of enterprise performance:

- ✓ Employee satisfaction;
- ✓ Customer satisfaction;
- ✓ Competition;
- ✓ Communication;
- ✓ Relationships with suppliers;
- ✓ Innovation;
- ✓ Strategy;
- ✓ Management quality;
- ✓ Environment responsibility.

The nine dimensions analyzed within the questionnaire represent variables of non-financial performance (endogenous variables).

Employee satisfaction has been evaluated using eight statements that refer to job fulfillment, job fluctuation, working conditions, salaries, trainings and bonuses.

Customer satisfaction variable was analyzed considering customer oriented activities of firms, customer preferences and needs, product quality and number of customer surveys in the past three years.

The third variable evaluated is competition. Statements related to

competition refer to participating and winning a public auction, market share, number of competitors and number of contracts in the last three years.

Communication within companies has been analyzed through several statements of the questionnaire regarding willingness to communicate daily, solving problems within working teams, requesting employees to say their opinion, period of time between request of additional information from employees and superior's feedback.

Relationship with suppliers is the fifth variable evaluated throughout the questionnaire and refers to exceeding payment terms, negotiating efficiently, long-term relationships and trust between business partners.

The innovation variable was analyzed using four statements that assess the companies' abilities to renew production capacities, to use the latest technology in the field, to permanently improve activities and to generate new products.

Strategy was computed through statements referring to knowledge of the company's objectives, developing plans in order to achieve objectives, obtaining a competitive advantage on the market and resource allocation.

"In the context of the knowledge-based economy, it is necessary to shape a new type of organization - one based on knowledge, a new type of management - knowledge management"[12] consequently in order to measure management quality variable, several aspects were assessed: workplace atmosphere, managers' willingness to request opinions from employees, team work, cooperation between subordinates and managers, perception of management decisions.

Lastly, environment responsibility was evaluated considering staff compliance with the environmental protection rules, periodical staff training in the domain of environment protection, use of non-pollution equipment and number of certifications in environmental protection.

## 3. Sample structure

As mentioned above, the survey was conducted within employees within companies in the construction sector located

in Dobrogea region.

Our sample consists of 74 companies activating in the construction sector, all situated in Dobrogea region. The selected companies are small and medium enterprises. Respondents were both employees and managers of the companies included in the sample. The questionnaire was distributed to a number of 150 subjects within the sample. Only 122 subjects sent a valid questionnaire.

Given the sample, by age, the 122 respondents of the questionnaire (employees of the companies considered) can be grouped as follows:

- ✓ less than 25 years old: 5,36%;
- ✓ between 25 and 35 years old: 27,42%;
- ✓ between 35 and 45 years old: 28,71%;
- ✓ between 45 and 55 years old: 22,63%;
- ✓ older than 55 years: 15,88%.

By gender, respondents are grouped as follows:

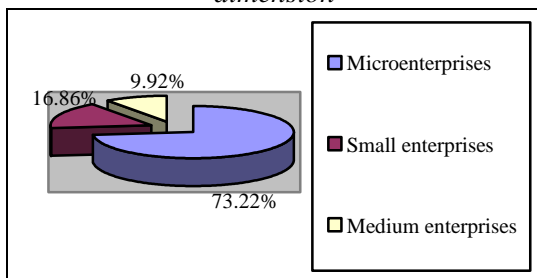
- ✓ females: 48,93%;
- ✓ males: 51,07%.

Taking into account dimensions of the employing firm, respondents of our survey can be grouped as follows:

- ✓ 73,22% work in microenterprises;
- ✓ 16,86% work in small enterprises;
- ✓ 9,92% work in medium enterprises.

Figure no.1 illustrates the respondents profile by employing firm dimensions.

Figure no.1 - Sample structure by firm dimension



Source: Authors' own processing

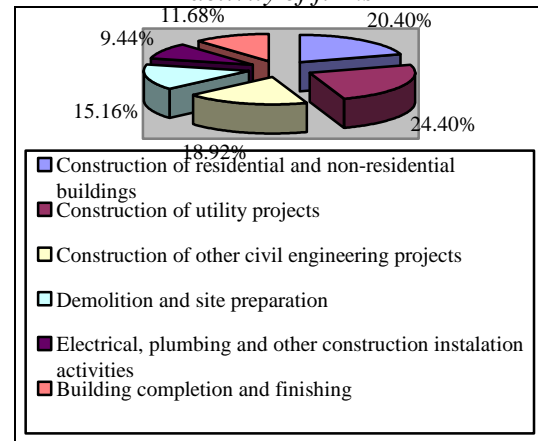
Given the form of property, the sample is structured in:

- ✓ 95,24% are limited liability companies;
- ✓ 3,38% are stock companies;
- ✓ 1,38% are companies founded as other legal forms.

Referring to the main activity of the

companies in the construction sector of Dobrogea region, these are: construction of residential and non-residential buildings (20,4%), construction of utility projects (24,4%), construction of other civil engineering projects (18,92%), demolition and site preparation (15,16%), electrical, plumbing and other construction installation activities (9,44%) and building completion and finishing (11,68%).

Figure no.2 - Sample structure by main activity of firms



Source: Authors' own processing

#### 4. Research results

After collecting data from valid questionnaires, we created a database using the Statistical Package for the Social Sciences program (SPSS). Further, the database was used to calculate the mean score for each of the nine variables considered. The results are shown in the table below (table no.1).

Table no.1 - Scores of the variables

No.	Variable	Score
1.	Employee satisfaction	2,893
2.	Customer satisfaction	3,861
3.	Competition	3,328
4.	Communication	3,762
5.	Relationships with suppliers	3,134
6.	Innovation	2,771
7.	Strategy	3,995
8.	Management quality	3,569
9.	Environment responsibility	2,788
	<b>Performance</b>	<b>3,344</b>

Source: Authors' own processing

Within analyzed variables, the lowest score was the one registered by innovation - 2,771. The score reflects the fact that Romanian construction companies pay less attention to innovation as a cause-factor of

performance. Indeed, reality has shown that many of these companies allocate low or insignificant funds for research & development activities.

Referring to the environment responsibility variable, the second lowest score registered highlights the fact that Romanian companies activating in the construction sector are not so concerned about the negative effects of their actions on the medium and long term (pollution, global warming, etc.). In fact, most construction companies in Romania seek to obtain higher profits, even with the cost of damaging the environment.

A relatively low score was registered by the employee satisfaction variable, showing that companies do not pay enough attention to its employees. Indeed, Romanian construction companies often fail in managing employees demands and needs and do not offer good salaries. Moreover, the majority of the employees are not offered the possibility of upgrading or benefit from professional training.

High scores for customer satisfaction, communication, management quality and strategy variables indicate strenghts of the companies within the reserched field. Still, the scores registered by all variables do not exceed the absolute value of 4, resulting an overall score for non-financial performance of 3,344. Consequently, the score reflects reality: Romanian companies in the construction sector need to improve their activity in order to have higher scores of performance.

Correlations between scores registered by variables considered and overall performance are shown in table no.2. As shown below, employee satisfaction, customer satisfaction, competition, communication, relationships with suppliers, innovation, strategy, management quality and environment responsibility are nine basic characteristics of performant companies, as all values of the Pearson correlation coefficient (Table no.2) signal a strong dependency.

Table no.2 - Pearson correlation coefficients between performance and variables

	Performance
Employees satisfaction (V1)	0.783
Customer satisfaction (V2)	0.829

Competition (V3)	0.712
Communication (V4)	0.755
Relationships with suppliers (V5)	0.593
Innovation (V6)	0.728
Strategy (V7)	0.685
Management quality (V8)	0.704
Environment responsibility(V9)	0.634

Source: Authors' processing using SPSS

Customer satisfaction is the key aspect of performant companies, as Pearson correlation exceeds 0.8 value, followed by management quality, employee satisfaction and strategy.

According to social sciences practices, Pearson correlation coefficients above 0.7 indicate very strong and positive relationships between variables (they are strongly dependent). Therefore, we may note that performance is strongly correlated with customer satisfaction, employee satisfaction, communication, competition innovation and management quality. Values of the correlation coefficient between 0.5-0.7 signal a moderate positive relationship between variables. In our case, performance is moderately dependent on strategy, environment responsibility and relationships with suppliers.

In order to analyze the interdependence of the variables we will further discuss the correlation matrix. Table no.3 shows the correlations between variables. As noted, correlations between the nine variables of the model are high, indicating that variables are strongly dependent.

Table no.3 - Correlation matrix

	V1	V2	V3	V4	V5	V6	V7	V8	V9
V1	1								
V2	.655	1							
V3	.575	.548	1						
V4	.582	.641	.605	1					
V5	.540	.628	.636	.529	1				
V6	.450	.545	.509	.453	.611	1			
V7	.538	.482	.550	.688	.715	.549	1		
V8	.691	.531	.752	.704	.672	.618	.737	1	
V9	.591	.630	.771	.655	.589	.620	.503	.518	1

Source: Authors' processing using SPSS

The greater satisfaction employees have, the more customer satisfaction, competition, communication and all other five variables will improve. This is due to the fact that correlation matrix indicates a strong

statistical relationship between employee satisfaction and last eight variables.

Moreover, customer satisfaction is the basic factor that determines any score of the eight variables. Companies exist because of customers, therefore if they were not satisfied, there will be no demand and a company would eventually go bankrupt. This is why customer satisfaction is of great importance when evaluating a company's performance, as our survey reveals.

It is almost impossible for employees to feel happy with their jobs without an effective communication with superiors and subordinates. In addition, employees would not feel fulfilled if managers would supervise and control all their work and would not commend them at any time. A decrease in sales of a company could affect employees morale, as they would feel afraid that, at some point, they could lose their jobs. These findings are highlighted by the high correlations between employees satisfaction and communication (0.782), management quality (0.691) and customer satisfaction (0.655) shown in table no.3.

## 5. Conclusions

The present paper is an empirical research conducted in order to evaluate performance of construction companies in Romania using a subjective instrument - the questionnaire.

Our survey shows that:

- ✓ when evaluating a company's performance, it is possible to use unquantifiable factors;
- ✓ in Romanian construction companies, performance is driven by numerous and diverse factors, such as employee satisfaction, customer satisfaction, competition, communication, relationships with suppliers, strategy, innovation, management quality and environment responsibility;
- ✓ there are positive correlations between employee satisfaction, customer satisfaction, competition, communication, relationships with suppliers, strategy, innovation, management quality and environment responsibility;
- ✓ construction companies in Dobrogea region lack in satisfying employees and protecting the environment.

Moreover, innovation is not likely to occur in many Romanian construction companies;

- ✓ overall performance of construction companies located in Dobrogea region is medium.

Due to the limited number of respondents of the questionnaire, findings of our survey may be improved by enlarging the sample. Additionally, improvements can be made by expanding the questionnaire as it would be possible to have a broader view on the topic of business performance.

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# A New Proposal to Ranking Countries Based on Their Environmental Performance

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## Abstract

*In the actual economic situation the environment has an important role in the nation's wealth. In this paper we propose a novel methodology to measure the national socio-environmental capital based on Intellectual Capital.*

*Using this methodology we make a ranking of 71 countries considering this socio-environmental capital to analyze the environmental performance of each country. Moreover, we compare the ranking obtained with others generally used in the literature verify that these rankings are similar based on the Spearman's rank correlation coefficient. The results show a highest position of the Northern Europe countries and United States.*

**Key words:** Environment, ranking, intellectual capital, countries.

**J.E.L. classification:** E01, Q56

## 1. Introduction

Nowadays the environmental aspects constitute one of the more important conditions in the long term development of the countries. However, more people think that the economic development of a country has been associated to its economic growth measured in Gross Domestic Product (GDP) terms. Nevertheless, the GDP does not consider aspects as important as the environmental performance of a country.

In these sense, there are several approaches propose in the literature to measure the sustainability of a country although more of these are only countries rankings without a monetary measurement of

the environmental capital.

In this paper, we propose a method based on an Intellectual Capital approach that allows measure the environmental capital in per capita terms at constant dollars. This capital, together with other kinds of capital proposal in [2] can be used to measure the nation's wealth considering aspects, very important in the actual society that are not considered by the GDP.

Thus, in the Section 2 we show the main proposal exist in the literature to measure the environmental performance of the country, more of these based on countries ranking. Next, in Section 3 we describe the procedure used in this paper to measure the environmental capital based on Intellectual Capital. Section 4 analyses the correlation between our environmental ranks and existing indices of environmental performance using the Spearman correlation coefficient. Finally, in section 5 we show the main conclusions of this paper.

## 2. Literature review

Although the analysis of environmental performance in the countries is a very novel subject, there are more people that they are making important effort towards captures its essence through test the sustainability of region. In this sense, we show the main proposal developed in the literature distinguishing between approximations using countries rankings and other proposal developed considering different dimensions in order to measure the sustainability or environment. In the first approach, we can emphasize the following:

1.- Ecological Footprint (EF). The concept and calculation method was developed by [15]. Ecological footprint analysis compares



human demands on nature with the biosphere's ability to regenerate resources and provide services. A measure of how much area of biologically productive land and water an individual, population or activity requires to produce all the resources it consumes and to absorb the waste it generates, using prevailing technology and resource management practices. The Ecological Footprint is usually measured in global hectares. It can be used to explore the sustainability of nations and details of its communication and calculation are available at [www.footprintstandards.org](http://www.footprintstandards.org).

2.- Environmental Sustainability Index (ESI). The ESI is a composite index tracking socio-economic, environmental, and institutional indicators that characterize and influence environmental sustainability at the national scale [7]. The ESI report was calculated for the Pilot 2000, 2001, 2002 and 2005. In the last ESI [8] were used 76 data sets into 21 indicators of environmental sustainability considering a total of 146 countries. The ESI was the precursor to the Environmental Performance Index that began to be calculated in a pilot in 2006.

3.- Environmental Performance Index (EPI). The EPI arise due to a shift in focus by the teams developing the ESI, the EPI uses outcome-oriented indicators, then working as a benchmark index that can be more easily used by policy makers, environmental scientists, advocates and the general public. Actually, there are four EPI reports released in 2006, 2008, 2010 and 2012. The last ranks 132 countries on 22 performance indicators spanning ten policy categories reflecting facets of both environmental public health and ecosystem vitality.

4.- Genuine Savings Index (GSI). This index is also known as Adjusted Net Saving. Genuine savings is a simple indicator devised by World Bank's researchers to assess an economy's sustainability. It defines wealth more broadly than orthodox national accounts, and recalculates national savings with the aim to denote the rate at which national wealth (broadened to include human capital and natural capital) is being created or destroyed. Positive savings allow wealth to grow over time thus ensuring that future generations enjoy at least as many opportunities as current generations. The indicator is measured in percentage by

dividing ANS by Gross National Income.

5.- Sustainability Assessment by Fuzzy Evaluation (SAFE) can be analyzed in [9,13,14]. It is a model for the numerical assessment of sustainability that uses fuzzy logic reasoning and basic indicators of environmental integrity, economic efficiency and social welfare, and derives measures of human, ecological, and overall sustainability. Concretely, a total of 75 basic indicators are used for 128 countries and finally, provides an overall sustainability index between 0 and 1.

6.- Sustainability Society Index (SSI). The SSI integrates Human Wellbeing and Environmental Wellbeing. That is the proper way to look at development to a sustainable world. Economic Wellbeing is not a goal in itself. It is integrated as a condition to achieve Human and Environmental Wellbeing. It can be considered as a safeguard to wellbeing. The index uses 24 indicators for 151 countries directly as the un-weighted average for the aggregation into categories. The SSI has been published for the first time in 2006 and is updated every two years (2008 and 2010 are available).

7.- Proportional composite environmental (pENV) proposed by [4]. This measurement ranks countries by their proportional (relative to resource availability per country) and absolute (total degradation as measured by different environmental metrics) resources consumption, deforestation pollution and biodiversity loss. The full proportional ranking is provided for 179 countries.

In the others proposal developed we can emphasize:

1.- City Development Index (CDI). This index was developed for the Second United Nations Conference on Human Settlements (Habitat II) in 1996 and measures the level of development in cities. The idea is to consider concepts relating to cities and urban development that, although complex and multifaceted, are meaningful and desirable to measure such as sustainability. The technique used to construct the City Development Index is similar to the Human Development Index and is based on five sub-indices: City Product, Infrastructure, Waste, Health and Education, all of them range from 0 to 100. Moreover of this index is there other urban index named City Product per person, which is analogous to the GDP at the city level.

2.- Living Planet Index (LPI). The Living Planet Index (LPI) is an indicator of the state of global biological diversity, based on trends in vertebrate populations of species from around the world. It is calculated using time-series data on more than 7000 populations of over 2,300 species of mammal, bird, reptile, amphibian and fish from all around the globe. The results of the LPI are published biennially.

3.- Well-Being Index (WI). This index is developed in the United State base on 1,000 completed interviews to adults nationally, seven days a week, excluding only major holidays. Based on their response, individuals and communities receive an overall well-being composite score that is composed of six sub-indices: life evaluation, emotional health, physical health, healthy behavior, work environment and basic access.

4.- Pressure-State-Response (PSR). The OECD has pioneered the pressure-state-response (PSR) model to structure its work on environmental policy and reporting. The PSR framework, or modified versions of it, is being used worldwide as a reporting tool, although its primary focus is on ecological aspects also consider socio-economic indicators. In this sense, OECD has developed:

- Core environmental indicators. A set of 50 indicators designed to track environmental progress and analyze performance of environmental policies in OECD member countries.

- Key environmental indicators. A subset of Core environmental indicators that inform the public and provide key signals to policy makers on important environmental issues and trends.

- Sectorial environmental indicators. A set of indicators intended to help integrate environmental concerns into transportation, energy, and agriculture.

- Indicators derived from environmental accounting - indicators designed to integrate environmental concerns into economic and resource management policies.

5.- Barometer of Sustainability. This methodology was developed by several specialists linked with the International Union for the Conservation of Nature (IUCN) and the International Development

Research Centre (IDRC). It is a systems sustainability measurement model designed to measure human and ecosystem well-being together without submerging one in the other. This model is now operational in 37 countries worldwide and combines a series of environmental and social indicators, all of them scaled between 0 and 100 [12].

### 3. Measuring environmental performance using Intellectual Capital

The model that we have used in this paper to measure the environmental performance is based on the model proposal in [2] and applied to the European Countries in [3] and to 71 countries in [11].

This model begins with the following equation in order to define the wealth (W) in a nation (n), as economic production (GDP) plus National Intellectual Capital (NIC).

$$W_n = \text{GDP}_n + \text{NIC}_n \quad (1)$$

Following this method, two large groups of capital are identified as intangibles: human and structural or non human capitals. Structural capital covers several intangibles related to the socio-economic framework of a country. Within this capital is the socio-environmental capital. The social and environmental capital (SEC) is determined by the social commitment of the social welfare state in relation to the quality of life of its inhabitants, together with action related to the environment and sustainable development.

The indicator scorecard used to determine the socio-environmental capital considers two kinds of indicators: absolute indicators (AI), in monetary terms, and efficiency indicators (EI), in a percentage scale. In order to obtain the latter, when the variable does not have a percentage scale, variables have been rescaled assigning 100 to the highest value and 0 to the lowest. As a result, all the variables generated by the indicators have values ranging from 0 to 100 (minimum and maximum). That is, the maximum must coincide with the highest score obtained by the country with the highest value in the sample for the year in question, whereas the minimum will coincide with the countries that record the lowest scores. This scorecard is:

Table 1. Indicator Scorecard

Intangibles	Indicators	
	Absolute (AI)	Efficiency (EI)
Social and Environmental	Health expenditure (WHO)	CO <sub>2</sub> emissions per capita
		Hectares of green areas/habitant
		Life Expectancy Index
		Access to health system in rural areas
		Access to water

Source: Own Elaboration

The socio-environmental capital is obtained by the process presented in [10] and [1] based on the Skandia Navigator [5].

$$SEC = \sum_{c=1}^m \left( AI_c \cdot \sum_{i=1}^k w_i PC_{ic} \right)$$

$$\text{with } PC_{ic} = \sum_{i=1}^k u_i x_i$$

Where the socio-environmental capital (SEC) is estimated by one or m absolute indicators (AI), filtered by k efficiency indicators synthesized into only one indicator, weighted in accordance with a principal component analysis. More specifically, bearing in mind that it is impossible to directly assign weights to each efficiency indicator, we proceeded to transform them into the same number of principal components (PC), where  $u_i$  are the characteristic vectors of each principal component and  $x_i$  the variables used to make the efficiency indicators.

In this form, we can build one indicator of efficiency by weighting each component in accordance with the percentage of variance retained by each, as we show in the equation 4. Where  $w$  is the percentage of variance retained by each component (a total of k, the same number as variables).

$$EI_c = \sum_{i=1}^k w_i PC_{ic}$$

As a result, we can obtain a socio-environmental capital (SEC) value in monetary terms, filtering the absolute indicator (health expenditure) with the efficiency indicator. Using this capital we can ranking the countries based on their environmental performance.

#### 4. Correlation with others environmental rankings

Using information referring to 71 countries, selected considering the limitation from statistical data availability, we have estimated the SEC capital, in efficiency and monetary terms. In this sense, we prepare a database using information from the World Bank Group (WBG) to 2008 that allow calculate the SEC capital. We have used this year in order to make possible the results comparison with other proposal without eliminate more countries due to not availability information.

The results ranked the following 5 countries as having the highest environmental capital: Switzerland, Norway, Luxembourg, Sweden and United States. The 5 lowest proportional impact countries were: Zambia, Indonesia, Mongolia, Uganda and Pakistan.

Furthermore, we have considered the rankings established using the: Environmental Performance Index (EPI), Ecological Footprint of Consumption (EF), Genuine Saving Index (GSI), Sustainability Assessment by Fuzzy Evaluation (SAFE), Proportional composite environmental (pENV) and Sustainability Society Index (SSI) in order to analyses the correlation and concordance among the different rankings.

In order to analysis this concordance we have used the Spearman's rank correlation coefficient ( $\rho$ ). This is a non-parametric measure of statistical dependence between two variables measure as ordinal numeric, which is rankings. In order to determinate this coefficient we use the following expression:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

where  $d_i$  are the differences between the ranks of each observation on the two rankings analysed.

The results of this coefficient show an overall concordance among five of the seven indicator ranks: our proposal, EPI, EF, GSI, SAFE, pENV and SSI. Concretely, the Spearman coefficient values are: 0.77; 0.65; 0.23; 0.71; 0.08 and 0.75, respectively. These results emphasize a clear concordance between our proposal and the EPI, EF, SAFE and SSI. However, the results are not concordance with the rankings obtained using the GSI and the pENV proposals.

## 5. Conclusions

The analysis and measurement of environmental countries performance is an emerge research subject in the last years. This novel line of research has motivated to develop a new proposal to measure the socio-environmental performance based on an Intellectual Capital approach.

The results allow to establish a ranking of the countries showing that Northern Europe countries and United States have greater socio-environmental capital potential, while some African and Asiatic countries occupy the last positions.

Comparing the ranking proposal in this paper with other indicators used in the literature we have verified that the results are concordance in more cases. However, the methods proposed in this paper have two clear advantages: first of all, we have used an objective procedure to assign weighting in the indicator elaboration while the other proposals use an un-weighted average. Second, we have determine a socio-environmental capital in monetary units that we can add to the GDP in order to calculate the National Intellectual Capital, measurement more suitable to measure the countries economic situation

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# The Role of Practice-Internships in Facilitating Insertion of Graduates on the Labor Market. Evidence from SPIN Project

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## Abstract

Specialty practice offers students the opportunity to apply - in a real business environment – the stock of knowledge accumulated in years of faculty study. In this way, a complete training is provided to students and their preparation for entering the labor market is enhanced. So, students can test their understanding, assimilation and application of the knowledge they hold in solving concrete problems of activity of a company or institution, forming their own communication and networking system with potential employers. The article shows how these principles - related to development of students' internships - were applied through a project co-financed with European funds "Modern practice to facilitate access to the labor market for specialists in Statistics and Economic Forecasting or Economic Informatics". Also, the author refers to a survey developed among students in the target group, aiming to reveal their opinion on Romanian labor market and its main problems.

**Keywords:** practice-internship, labor market, survey, target-group.

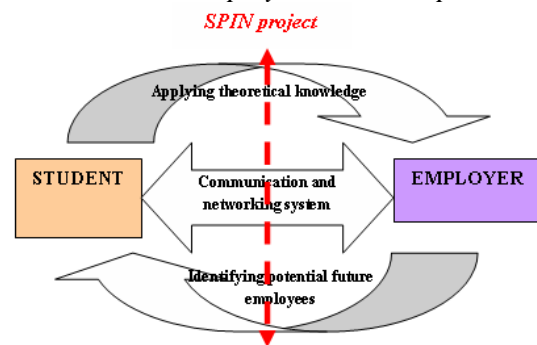
**J.E.L. classification:** C10, I21, I23, J20.

## 1. Introduction. Some characteristics of SPIN project.

Specialty practice offers students the opportunity to apply - in a real business environment – the stock of knowledge accumulated in years of faculty study. In this way, a complete training is provided to students and their preparation for entering the labor market is enhanced. So, students can test their understanding, assimilation and application of the knowledge they hold in solving concrete problems of activity of a

company or institution, forming their own communication and networking system with potential employers.

Figure 1. The role of SPIN project in student-employer relationship



Source: Adapted by the author after [1]

On the other hand, the company - as a potential employer and as a job-provider in the labor market as well - can assess students' professional and theoretical knowledge, their application and usage mode in a real economic climate. Thus, the company is connected to the academic training process of future employment candidates and provides feedback to improve the quality and efficiency of the training academic process.

The third part involved in the academic practice-internship can create and develop a partnership relation with the business community, can gather information to adjust the academic training process and forming the future professionals, in accordance with the real needs of the business environment and labor market. Universities will adapt and improve students' profile to fit better the requirements of companies on the professional profile of their employees.

SPIN project - "Modern practice to facilitate access to the labor market for specialists in Statistics and Economic Forecasting or Economic Informatics" (ID

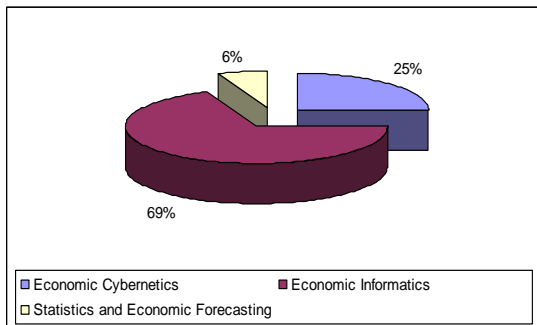


POSDRU/90/2.1/S/63784) is a project co-funded by European Social Fund through the Sectoral Operational Programme Human Resources Development 2007-2013. The project period covers 36 months from 1 July 2010 to 30 June 2013.

## 2. SPIN project development - in numbers

In the first two years of project-implementation (2010-2012) 681 students of the Faculty of Cybernetics, Statistics and Economic Informatics, from the Bucharest Academy of Economic Studies developed their practice-internships through SPIN project. To them were added 134 students of „Ovidius” University, Constanta, partner in the project. Most of the students in the target group were enrolled in Economic Informatics specialization (69%), a quarter of them belonged to the Economic Cybernetics specialization and 6% - were students in the Statistics and Economic Forecasting specialization.

Figure 2. Structure of target group students by specialties



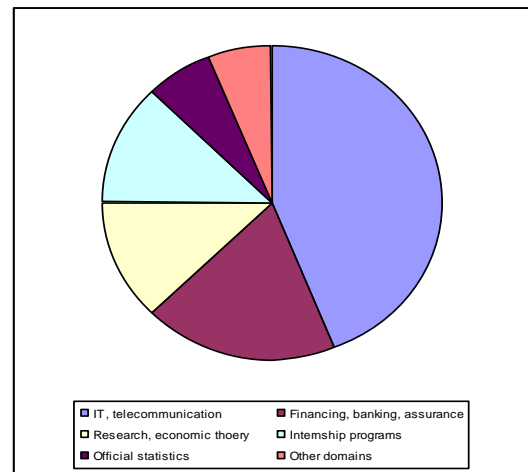
Source: made by the author based on SPIN data

In the first year of project-implementation 319 students of the Faculty of Cybernetics, Statistics and Economic Informatics- the Bucharest Academy of Economic Studies were included in the target group, developing their internships through SPIN project.

In the second year of project implementation the target group consisted of 362 students. In the second year of project implementation the share of students in specialization of Economic Informatics decreased comparing to the one in the first year. Contrary, the share of students in the other two specializations increased in the second compared to the first year of project.

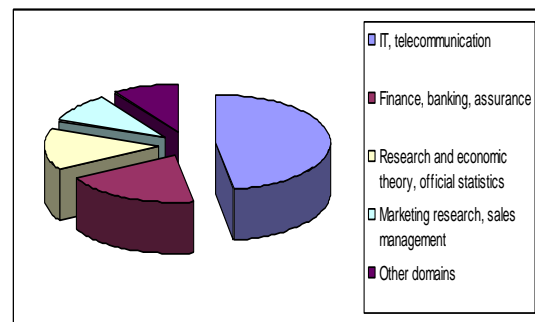
The practice-internships took place in 16 practice-bases (in 2010-2011) and in 21 practice-bases (in 2011-2012), organized in companies and public institutions which were activating in different domains, like: IT and telecommunication; finance, banking and assurance; research and economic theory, official statistics; marketing research and sales management; and others.

Figure 3. Structure of practice-bases by activity domains (first year of project implementation)



Source: made by the author based on SPIN data.

Figure 4. Structure of practice-bases by activity domains (first year of project implementation)



Source: made by the author based on SPIN data

## 3. Survey on the labor market in Romania

During the second year of implementation of the SPIN project, it was organized a survey among students in the target group, to characterize some aspects of the Romanian labor market, from the point of view of future graduates in economics. Among the issues on which students participating in the survey



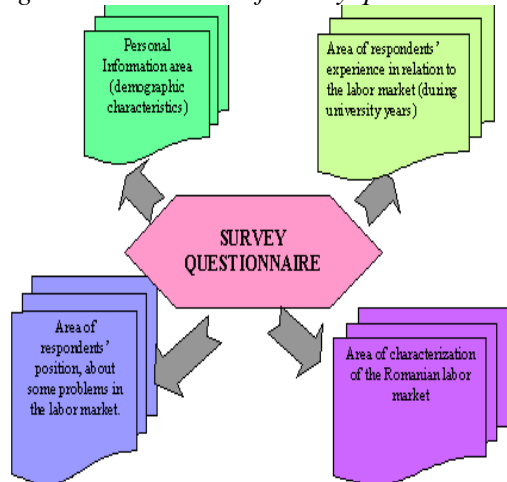
expressed their opinion there were: emigration process, the correlation between the quality of training process of future employees and job requirements, informal (illegal) work, discriminations existing in the labor market.

The survey questionnaire was developed by a group of experts of the SPIN project and posted on electronic collaborative practice-platform. The questions covered four areas:

- The area of respondents' personal information (demographic characteristics). The area of respondents' experience on labor market (during the studying years). The area of respondents' opinion on the labor market problems.
- The area of respondents' opinion on the young Romanian specialists' problems related to the Romanian labor market (characterization of the labor market in Romania).

- Area of respondents' position, availability in relation to some problems in the labor market: respondents' availability/intention to migrate abroad for a job according to their training, or for a job requiring a lower professional training, respondents' intention to develop an illegal work, respondents' position on various discrimination forms, existing, unfortunately, on the Romanian labor market.
- Area of characterization of the Romanian labor market - includes questions which identify respondents' opinion on pressing issues, reflecting negative aspects in the labor market in our country: the necessity of limiting the emigration phenomenon of young Romanian specialists abroad, the necessity of stimulating, motivating them to use and apply knowledge acquired in college to develop Romanian economy and society, in general; evaluation of emigration level for Romanian graduates, evaluation of the different types of discrimination on the Romanian labor market; assessing the size of illegal work in Romania.

Figure 5 Main areas of survey questionnaire



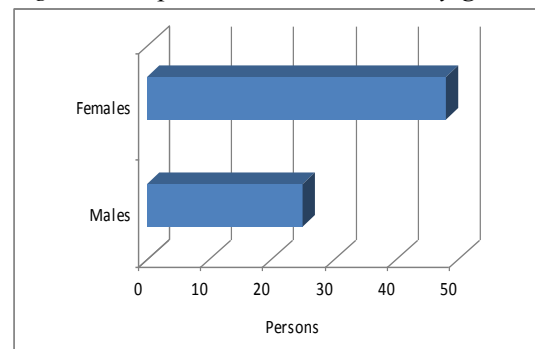
Source: made by the author.

Next we'll detail the four areas of interest covered by the questionnaire.

- Personal Information area: contains questions on respondents' gender, civil status, age, place of residence.
- Area of respondents' experience in relation to the labor market; it includes questions about: past or present existence of a full-time or part-time job, during their university studies, attending a study-stage abroad, membership in any student organization, dealing with any form of discrimination during university studies, usage of consulting services to facilitate employment / specialization / mobility

73 persons from the target group answered the questions in the survey questionnaire, students who held their practice-internship through SPIN project. Of these, 65.75% were female person (respectively 48 people), the remaining 34.25% being males (respectively 25 people). People with civil status "married" had an insignificant share in all those who completed the survey questionnaires (5,48%).

Figure 6. Respondents' distribution by gender

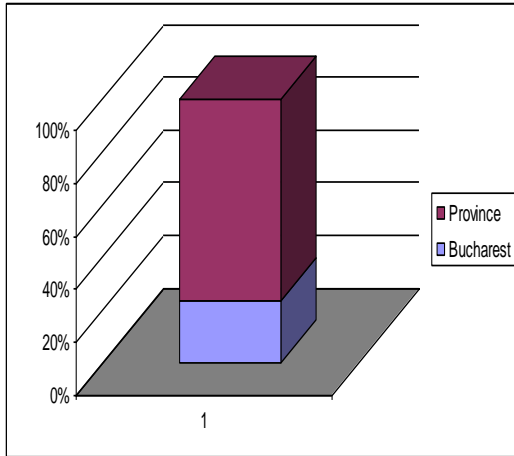


Source: made by the author based on SPIN data.

Almost a quarter of respondents were living in Bucharest (23.61%) before starting

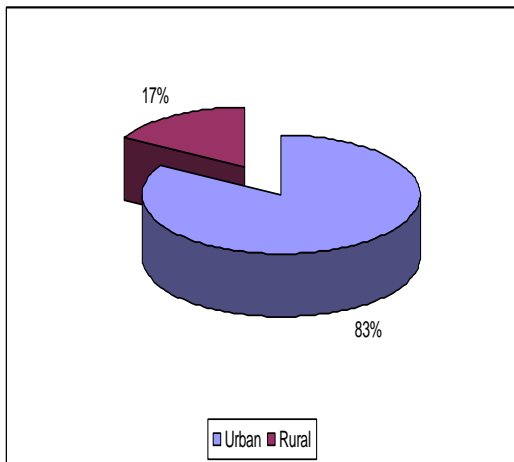
university, the rest were living in the province (76.39%). 5/6 of those surveyed were from urban areas (83.33%), the remaining 1/6 – from rural areas.

Figure 7. Respondents' structure by residence place



Source: made by the author based on SPIN data

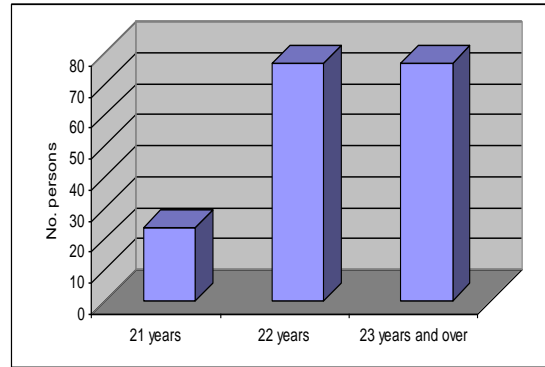
Figure 6. Respondents' structure by residence area



Source: made by the author based on SPIN data

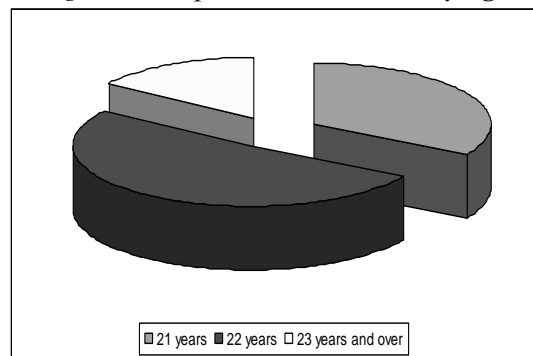
Regarding the distribution of respondents by age group - about 85% of them were 21 or 22 years old (33.33% - 21 years; 51.39% - 22 years), the rest were 23 years and over (about 15%).

Figure 8. Respondents' distribution by age



Source: made by the author based on SPIN data.

Figure 9. Respondents' structure by age



Source: made by the author based on SPIN data

#### 4. Conclusions

Labor market in Romania faces a number of problems, one of which is the employment and career opportunities in this market of young graduates of higher education.

SPIN Project provides, along with other similar projects, a potential recovery way of these problems, by involving students in the concrete activities of companies or public institutions. Thus, these students have the chance to verify the degree to which their theoretical knowledge can be applied to solve real situations in business environment. Project SPIN have offered this chance - until now – to more than 800 students from two universities, and by the end of the project, the target group will reach 1,200 students.

Also, through the survey conducted among the target group students in the second year of the project we achieved a better understanding of the main issues and difficulties of the labor market in Romania, from the perspective of higher education graduates.

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# The Impact of Budgetary Expenditures on Economic Growth

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## Abstract

*Economic debate about the proper size and role of the state is universal, from Adam Smith onwards. However, measurement, evolution and effectiveness of public spending is an empirical question rather delicate because it requires data, that at international level are still insufficient. The same reasons make this problem one of current interes of the economists. Growth remains one of the most intriguing topics in macroeconomics. This growth is influenced by several factors, one of them is very significantly, budget expenditures, by playing an important role in this process.*

**Keywords:** growth, spendings, influence, GDP

**J.E.L. Classification:** E21, E27

## 1. Introduction

When economists talk about growth, they refer to the improvement of indicators regarding quality of life, and this is possible through more efficient use of economic resources available to a country that can be quantified by increasing GDP per capita or real GDP growth.

So what leads to economic growth? It is tempting to assume that growth is determined solely by investment and therefore ultimately by savings. But experience tells us that investments will not cause long-term economic growth[1].

To encourage economic development, a state needs a number of tools: making direct investments because private sector does not provide an adequate amount, the provision of essential public services in order to ensure

minimum conditions for training and continuing economic activity, but also providing long-term investments, and last but not least, the obligatory funding of their own activities undertaken.

As defined by Iulian Văcărel, budgetary spending are "socio-economic relations in cash, which occurs between the state, on the one hand, and individuals and businesses, on the other hand, when using and allocating the financial resources of the state in order to fulfill its functions"[6].

These public expenses can be differentiate after a series of classification criteria: economic, functional, administrative, financial, after the role they play in social reproduction process or even after classification schemes established by international organizations.

Most recent empirical studies point out that the structure of budgetary expenditures made by functional classification, shows a broad and accurate picture of how their status can exert influence in order to stimulate the development process of an economy[3].

## 2. Current state of knowledge

There is a voluminous empirical literature that has dealt with the relationship between budgetary policy and economic growth.

Empirical research conducted in recent years have shown that no overall budgetary expenditure, but their structure, exhibit a true and fair view of how the state influences growth. Determine the structure of budgetary expenditure helps determine financial policy differences between developed countries, developing and transition countries and time evolution of weights for the various categories of public expenditure in the same state.

Also, the structure of budgetary expenditures is significant because, by detailing budget sendings in different categories and identifying their impact on economic growth can find additional information pon the use of government policies in order to stimulate economic growth process[2].

Considering all these aspects, Barro (1990) has grouped public spending, given their impact on economic growth in productive public expenditure (which have a positive impact on economic growth), unproductive public expenditures (which are neutral or have a insignificant economic growth), and other public expenditures (which have a negligible impact on economic growth).

*Table 1 - Classification of public expenditure according to their impact on economic growth*

Productive public expenditure	Unproductive public expenditures	other public expenditures
Education	Social insurance contributions	Other
Health	Recreation, culture and religion	
Justice and defense	Other economic activities	
General public services		
Transport and communications		
Housing, Environment and Water		

Sursa: Barro (1990)

In this way, we identify how each category has affected growth. First class, productive public spending, help stimulate real activity, while the other two categories lead to brake economic growth.

Public spending could have a direct impact on long-term growth if they materialized in goods entering the production function of economic agents (public infrastructure spending) or utility function of individuals[5].

But more important are the indirect effects of budgetary spendings on economic growth, due to their influence on private

capital formation, and influence on the productivity of private inputs in the production function. Regarding the effects of public spending on private capital formation there could be identified several good transmission mechanisms, such as the well-known crowding out effect of complementarity (Aschauer (1989), Agenor (2004) and Sala-i-Martin, Doppelhofer and Miller (2004), public infrastructure spending may be positive or negative - when their level is not optimal - use of private capital affect productivity in the economy), the effect on costs of adjustment (Turnovsky (1996 ) and Agenor (2006)) and the effect on the sustainability of private capital (Agenor and MorenoDodson (2006), Agenor (2008))[4].

Public expenditure could also influence productivity of private inputs of production functions, and therefore growth (Afonso and Alegre (2008)). On the one hand, public infrastructure could positively influence the productivity of private physical capital, as shown in theoretical studies, such as Caning and Pedroni (1999) or empirical studies such as Demetriades and Mamuneas (2004), Fedderke and Bogetic (2006) and Zou and others (2008). On the other hand, human capital productivity is heavily influenced by public education (Bils and Klenow (2000), de la Fuente (2003), Blanken and Simpson (2004), Creedy and Gemmel (2005)) and by public health service (Arora (2001) and Agenor (2008)).

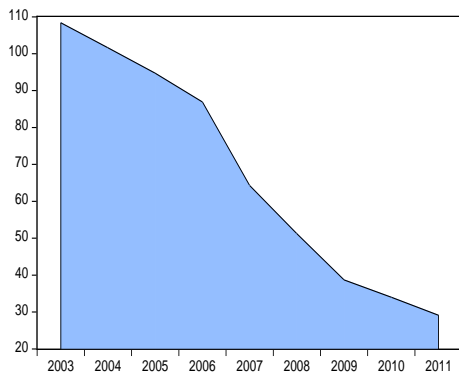
Moreover, budgetary spending on general services, national defense, public order and national security, housing and community facilities are "basic expenses" absolutely necessary to limit inefficiencies induced by various market failures and the functioning of the economy (Tanzi and Schuknecht, 2003).

### **3. Empirical aspects budgetary regarding expenditure and GDP**

To highlight the main features of budgetary policy, meaning budgetary expenditure, and gross domestic product features, the most relevant indicator of economic growth, we performed an analysis of the dynamics of the level reached by these two factors during 2003-2011.

In the chart below it is shown the evolution of budgetary expenditures recorded in the period 2003-2011, in Romania:

*Graphic 1 - Dynamics of public expenditure in the period 2003-2011*  
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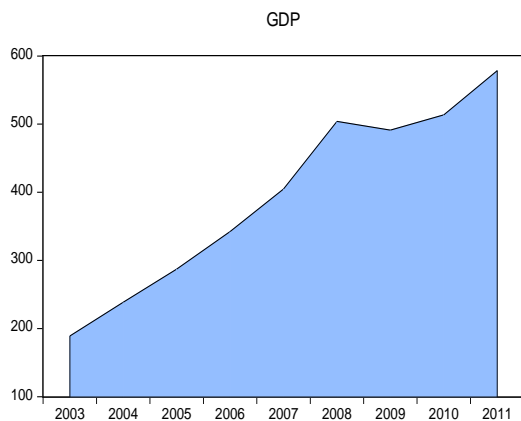


Source: own processing

Given the evolution of the economic crisis in 2009 and its expansion during the years 2010 and 2011, were required to take certain measures in order to ensure compliance with the commitments assumed by Romania for signed loan agreements with international financial institutions, agreements absolute necessary for Romania's economic stability. During the period, that 2003-2011, budget expenditures grew from 29,104,451 thousand Ron in 2003 to 108,481,950 thousand ron in 2008.

In the following is shown the evolution of GDP in the period 2003-2011.

*Graphic 2 - The dynamics of GDP during 2003-2011*



Source: Data processed using Eviews 5.0.

GDP, the most appropriate indicator of economic growth has increased during the entire period analyzed. GDP estimated for 2011 was 578,5 billion Ron in current prices, increasing - in real terms - by 2,5%, compared to 2010. This increase was due to higher volume of activity in agriculture,

industry and recreation activities. At this growth contributed, but in a smaller percentage sectors such as construction, trade, transportation and hotels and restaurants[7].

In the following figure we surprised the main budgetary expenditures statistics.

*Figure 1 - Description statistical time series budgetary expenditure*

Mean	67.65556
Median	64.30000
Maximum	108.4000
Minimum	29.10000
Std. Dev.	30.93094
Skewness	0.042353
Kurtosis	1.386537
Jarque-Bera Probability	0.978914 0.612959
Sum	608.9000
Sum Sq. Dev.	7653.782
Observations	9

The analyse of statistical series of budgetary expenditures shows the following:  
- the maximum value recorded for this series is 108.4000, the minimum value reached was 29.10000 and the average value was at 67.65556;

- standard deviation measures the dispersion of observations that make statistical series around its mean and has the value of 30.93094;

- Skewness, is a measure of asymmetry of the distribution around its average, recorded positive values, so the share of expenditure in GDP is situated above the average;

- Kurtosis, is a measure of the oscillation or register flatness distribution and has a value of 1.38, lower than 3, thus emphasizing that the distribution of statistical series is flat[8].

#### 4. The influence of budgetary expenditures on economic growth

To identify the degree of influence of budgetary spendings on economic growth in the period 2003-2011, we use the econometric model with the help of E-views 7.1 software. This will track the relationship between budgetary expenditure, representing



the independent variable and GDP, considered to be the dependent variable.

The econometric model used to determine the influence of spendings on economic growth in the period 2003-2011 involves using a simple linear regression, which has the following form

$$Y = \alpha + \beta x X + \varepsilon, \text{ where:}$$

Y = dependent variable, gross domestic product;

$\alpha$  = free term;

$\beta$  = independent variable parameter, budgetary spendings;

$\varepsilon$  = error term of equation.

In order to determine the impact, in the following table are shown the values recorded by the gross domestic product and expenditures during the entire period analyzed:

Table 2 - Evolution of economic indicators during 2003-2011 (billion Ron)

Year	Expenditure	GDP
2003	108.4	189.1
2004	101.6	238.7
2005	94.7	287.2
2006	86.9	342.4
2007	64.3	404.7
2008	51.2	503.9
2009	38.7	491.3
2010	34.0	513.6
2011	29.1	578.5

Source: own processing

Below are the results of the calculations based on program EViews 7.1.

Figure 2 - Parameter estimation obtained in E-views

Dependent Variable: GDP  
Method: Least Squares  
Date: 11/22/12 Time: 00:00  
Sample: 2003 2011  
Included observations: 9

Variable	Coefficient
C	688.7499
EXPDT	-4.351041

R-squared 0.964869  
Adjusted R-squared 0.959850  
S.E. of regression 27.45336  
Sum squared resid 5275.807  
Log likelihood -41.45193

F-statistic 192.2523  
Prob(F-statistic) 0.000002

	Std. Error	t-Statistic	Prob.
	23.11879	29.79178	0.0000
	0.313803	-13.86551	0.0000
Mean dependent var			394.3778
S.D. dependent var			137.0100
Akaike info criterion			9.655984
Schwarz criterion			9.699812
Hannan-Quinn criter.			9.561404
Durbin-Watson stat			2.021190

Consequently, the regression equation is:  $GDP = 688.7499 - 4.351041 EXPDT$ , so between the two indicators there is an inverse relationship, when costs fall, gross domestic product increases.

The value of the correlation coefficient between the two variables,  $R = 0.964869$  is close to a value of 1 which indicates that between GDP and the values recorded for budgetary expenditures there is a strong correlation, meaning, lower spending involve GDP growth occurs .

Adjusted coefficient of multiple determination ( $R^2 = 0.959850$ ) illustrates that 95.98% of GDP is influenced by the amount of expenditure. Since creditworthiness indicators have values close to 1, we can say that a simple regression model is chosen.

Because  $F = 192.2523$ , and Prob (F-statistic) is 0.000002 (a value lower than 0.05) this model is considered to be valid.

Coefficient estimated for budget expenditure is properly appreciated and has statistical significance (prob = 0.00000) while the standard error values has a small value (0.313803).

Durbin Watson is a statistical test that search the first-order correlation between errors. If the value of DW is greater than 2 (in our case  $DW = 2.021190$ ), then errors are correlated.



## 5. Conclusions

When we refer to the role that budgetary spendings plays in stimulating the growth process, it should be noted that significant is their structure. Therefore, grouping these expenses in productive spendings, unproductive expenditures and other expenses. Between these three categories of expenditure and economic growth there is a correlation, meaning, a positive correlation between productive expenditure and economic growth, a negative causal link between economic growth and unproductive costs and between other expenses and growth between there is a positive connection.

During the period 2003-2011, the link between economic growth and budgetary spending all highlighted by a simple linear regression equation, shows a negative correlation between them.

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## A Link of the Social Economic System in Global Economic Crisis

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### Abstract

*Ten years after Romania is passing towards the free market economy, Thomas Friedman exposing in his book Lexus and the Olive Tree the idea of electronic herd defining it as being formed by all those agents with no image who deal with shares, bonds and foreign exchange currency , by standing behind the screen of the computer everywhere in the world, moving with a mouse click money...,negotiating from home through the internet. This electronic herd may be growing but I believe that those who will know how to approach it without identifying with it, namely being innovative, have the greatest chances for success. The entrepreneurial can be a way towards success when you start to be well informed. This paper aims to bring to your attention the importance of developing the rural area to enlightening those who believe in their ideas and wish to get into the entrepreneurial world even into this rural area of our country. The founder of the bio economic theory Nicholas Georgescu Roegen surprises this situation writing The Law of Entropy does not help the economist to say exactly what is going to happen tomorrow, next year or over a couple of years[1]. The same as with ageing of an organism, the Law of Entropy through the economic process is relatively slow but it never ceases.*

**Key word:** business, rural development, entrepreneurial, environment, information society

**JEL classification:** L81, M13

### 1. Introduction

At the end of an essay full of morals Gerschenkron expressed his hope that by drawing up the plans of their industrial progress the countries will hasten to choose

ways they will be able to ensure low expenses and the increase of production for the welfare and happiness of the human being.

The firm as such, as considered a link of the social economic system and with a specific functioning came into being in slavery, and developed with the progress of society. The system of the market economy characteristic in one way or another for capitalism has raised the firm practically on the most important stage to the functioning of the mentioned system and it is being defined as a complex reality in a continuous change both within the national economy and mondo economy and globalization. Therefore we look at the firm as physical entity, juridical with its patrimony and organizational chard, functioning to obtain a higher profit in accordance with the legal provisions. It can be looked upon as a individualization of an economic agent within a market economy environment accomplished through its name and activity, symbols, brand, figurative elements and other distinctive signs, juridical personalization that enforces the registration of the firm in the Trade Register.

These may be arguments according to which as V. Madgearu states in front of the educational program must be the science of enterprises because all the branches of the commercial science focus on the same point: the research of trade enterprises, industry, banks and transportation. When we are referring at the enterprises especially in the rural area we have to bring into discussion the uncertainty.

Uncertainty can be described as the sum of all potential dangers around us or not. Uncertainty is the expression of the incomplete character, of information regarding the factors of conjugal influence and the consequences of their actions in time and space.

Which could be a definition as precise as possible of uncertainty? In spite of the fact

that uncertainty has got a considerable attention from the researchers in social sciences the degree of conceptualization and operationalization is different on each segment of social science.

The statute of uncertainty within the social sciences is an ambiguous one. The ambiguity of this concept has several sources. A first source is the fact that each sector of social sciences has developed a definition and a conceptual apparatus for characterizing uncertainty specific for the respective science. Therefore there is no unitary definition of uncertainty. One can speak of a series of uncertainties defined within different sciences: economic, psychology, sociology, theory of organizations, public administration.

The second source of ambiguity is the position granted for uncertainty within different theories or empirical studies that result from social sciences. Therefore, approaches that place uncertainty as independent variable (explanatory), approaches that place uncertainty as dependent variable (to be explained) or approaches that place uncertainty simultaneously as dependent and independent variable. Uncertainty as dependent variable has got little attention within social sciences. Within the economic sciences uncertainty is considered an independent variable because in shaping the behavior of economic agent's uncertainty is being considered a given variable that influences in an objective way the decisions of producers and consumers regarding the level of capital investments, placing the economies, setting up the institutions specific to the market.

Adam Smith (1776) in his book *The Welfare of the Nations* explained one of the sectors of the entrepreneurships by the well known explanation regarding the baker who makes bread not out of but in order to obtain profit. In this way the entrepreneur aims at obtaining profit.

Jean Baptist Say (1803) is considered the second economist after Richard Cantillon who brought an important contribution in the entrepreneur thinking in his work *Treaty of Political Economy*. Say places the entrepreneur in the center of economic activities both output and delivery of goods and services for consumption and in this way the functions of entrepreneurship are over

with those of the manager. Risk is being brought into attention by Say: any entrepreneurial activity has the probability of failure. The entrepreneur can lose reputation in some way or another [2].

Joseph Schumpeter (1934) has to be mentioned among the economists who brought a significant contribution regarding the theories of entrepreneurship. Unlike Say, he does not consider the entrepreneur as being the manager of the enterprise. He emphasizes innovation and combining the resources by writing that the entrepreneur must be strong enough to swim across the current of the society he lives in.

What distinguishes Schumpeter from his forerunners is the idea according to which the entrepreneur must not own wealth by all means, the accent is placed on innovation.

Peter Drucker (1985) states that entrepreneurship represents the coming into being of a new organization without taking into account the ability of the organization to back by itself. He makes a difference between the entrepreneur and management and entrepreneurship and the functions of management.

Specialists claim that the only certitude of the XXIst century is change, as these decades have been marked by the fastest and most spectacular changes in the history of human kind. Difficult to forecast, the transformations that took place can be found in all areas: technical, economic, social, IT, educational, cultural and political. One of the most important, but insufficiently captured and considered changes is represented by the situation of the SMEs in the front line of the development[3].

## **2. Features for entrepreneurial process in rural area**

The internet is full of information on the opening of a business and the same happens with the consultancy offices which have a decreasing price as you approach the National Office of the Trade Register and some of the smallest prices can be found even in juridical offices of consultancy.

Four years ago the entrepreneurs had to wait for 14 days to set up a business. Now they can open a business in 3 days if we consider that at a European level the average is of 14 days. The process has been made

efficient by the Government of Romania which decided towards this decrease of the period regarding the setting up of a firm starting from 14 to 10 and then 3 days by the complete digitization of the process.

On the O.N.R.C. site there are printed forms for all documents necessary to set up a firm. These documents can be filled in on line by the entrepreneurs without financial costs and with minimal time costs. However the physical presence for signature is necessary.

The entrepreneurs can pay on line the total sum in order to register the firm. The payment is possible starting with 2012. By enforcing this payment on line Romania is considered as belonging to good European practices ; in Hungary the setting up of a firm is done in 4 days, in Belgium the same and in Italy, Slovenia and Portugal in 6 days. The problem Romania has is not the duration of setting up a firm but the long period to dissolve, wind up a firm. The problem that appear here is that in the rural area the internet have quite big problem in implementation.

Practically speaking, besides the business plan we can make use of the feasibility study. This represents a less complex method and a more rapid one through which the opportunity in business is being analyzed from its viability. This study can help the entrepreneur to decide if the respective idea is worth or not to be taken into consideration. The study contributes to diminish the risk at which the entrepreneur is being exposed when turning into account the economic opportunities.

The main characteristic of the present society is being represented by the wish and necessity to look for good models and solutions in all domains of activity. In this way the fundamental problem in the output and agro food product consumerism is being outlined.

In spite of the fundamental problems strange inventions come up on the market. I will make reference to an article in Daily mail with the refrigerators presented in Las Vegas Fair. If those with television were not sufficient now, refrigerators can talk and have internet, twitter, web, telephone. It can even keep information on the life style of the user and give advice for good and sound products and networks. More than this, the

refrigerator can transmits by telephone when you go shopping with images from inside, even if some products are out of date or are missing.

In spite of the discoveries that surprise us and mark the history more or less, the resource called food or the opposite starvation are terms that we find more and more often starting with scientists to politicians. The importance and necessity of coming with new and efficient solutions is justified by the degradation of the environment, a consequence resulted as the continuous use of some procedures and means which do not tally such as keeping health and equilibrium of nature ecosystems, of exploring the resources offered by nature as well as directing the processes of agro food output [4]. On the other hand, the use and draining some sources of energy, raw materials and natural resources that have been used and still are as well as basis in putting into practice the technologies and procedures of output that have been put into practice lately.

The founder of the bio economic theory Nicholas Georgescu Roegen surprises this situation writing The Law of Entropy does not help the economist to say exactly what is going to happen tomorrow, next year or over a couple of years. The same as with ageing of an organism, the Law of Entropy through the economic process is relatively slow but it never ceases [1]. As a consequence its outcome becomes visible by the accumulation on long periods... it is curious that not even after this the political economy does not admit the role played by the natural resources within the economic process. And if the economy gives no alarm, very few states come with successful actions in this direction. Neither in our country is the situation different but there are too few projects at a national level with results that are worth taken into consideration.

Maybe the most mediated was the project Economy based on Knowledge that was to last until 2013 and which aimed at facilitating the participation of communities that had a disadvantage from the point of view of accessing information for society based on knowledge in accordance with the governmental strategy of integration within the European Union [5]. The project initiated by the Romanian Government through the

Ministry of Communication and Technology of Information, with the support of the World Bank has swallowed many funds and the outcomes are waited to reward the efforts. The project aimed at enlarging the access to modern technologies in info and communication and the improvement of knowledge in using the computer for the citizens of the selected communities, the development and promotion of e governmental services, modernizing the educational process as well as promoting the electronic commerce and adopting innovative solutions within the business environment. The results do not commensurate with the allotted sums, as there are many locations where the computers are not used and so the quality of life is not improving [6]. I draw the attention of the readers and authorities too on the rural environment because both the solution to overpass the present moment and the solution on the long run can come out of this.

With the second half of the last century the scientific and technical reforms have created an important ground to raise the material level of people and such an aspect was taken into consideration into the agro food sector.

The contemporary world was confronted with well known problems that belong to the problems regarding the intensity of consumerism for raw materials out of stock, sources of energy as such, the fight against agricultural pests, fight against starvation, a better economic and social order at planetary level [7]. Now we continuously speak about putting into practice new technologies such as Biotechnology a process in the agricultural domain which according to the Convention regarding the Cartagena Protocol is defined as any technical procedure where biological systems are used, alive organisms or their derivatives in order to modify products or processes with specific utility or the opposed current, organic agriculture that uses some management systems of production that first of all improves the quality and health of the ecosystem, of the biodiversity. Theses new solutions bring questions and uncertainties regarding possible impacts mostly negative on the environment.

Three centuries ago a famous pioneer of French gastronomy stated: tell what you eat in order to tell you who you are! That means

that food represents a fundamental act, vital and daily, a support of some social habits.

Along centuries man will have to face difficulties but now the stake will be greater and more important. In what way, as Claude Levi Strauss stated: food must be good to be eaten and to make us ponder; therefore food does not transit through a simple process our body but has some sustainable consequences on the human body, or regarding prosperity of the human being [8].

Therefore, we come to the idea that we must become more indifferent towards what we consume and inevitably will have to select and develop a process and an array of food products able to ensure the demand for food both locally, regionally and on a world scale. At the same time it must come with good effects on the human body. Such a complex process as Biotechnology is meant to be taken into account and as such the commerce with products and organisms modified genetically calls for attention too. The benefits brought by this technology are genuine.

If we manage to enlarge the degree of taking the European funds aiming at the objectives for such projects the Romanian economy will have a favorable trajectory no doubt.

While other states have an advanced stage of knowledge in the above mentioned domains, we had to develop as far as the advantage is being concerned, or knowledge and profound understanding towards the global problems as well as those involving the economic entanglements of trade with products modified genetically, standards and strategies of settlement applied or that could be put into practice within the commerce with genetically modified organisms; the assessment of some possible outcomes or economic financial results appeared with plants modified genetically and to whom too little attention is being given. The ecooperative.ro platform is developed within Lucian Blaga University Sibiu and aims at encouraging this type of commerce with bio products, with natural ones within the rural environment and to offer useful information to the inhabitants of these areas. However the effect will be stopped until the state grants more attention to this problem, until the internet is delayed in being adopted in all areas.

### 3. Conclusion

The Internet has redefined how businesses operate and has changed the way people work, with both Internet hardware and software prices' dropping to such a level that fast Web access is not only affordable but essential to business activity [9]. Case firms reported that they were using the Internet and associated technologies to varying degrees in order to reshape business processes, including, manufacturing, marketing and sales and human resource functions as well as administration.

The internet and www have inspired the entrepreneur of the world and have entailed a wave of creativity and the technology of information has allowed a series of new business models.

Nicholas Georgescu Roegen, 40 years ago wrote about this and those lines are updated: the consciousness of such truths will not determine man to become less impatient and bent towards useless demands. Only the most ferocious need can make man behave in this way.

### 4. Acknowledgements:

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## Economics and the General Scientific Criteria - a Critical Analysis

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### Abstract

*Our endeavour represents a critical approach that takes into account the analysis, from a critical perspective, of the sphere of economics as it was stated by the scholastic economic literature.*

*We also discuss how the concept of "economics" meets the general scientific criteria. Redefining economics will be the natural outcome when we will find that its sphere generates some of the issues raised by its scientific character critics.*

*Because we will reach the conclusion that it is not only the sphere of economics that makes it difficult to meet the scientific criteria, we will identify the rest of the causes that leave their mark on the scientific character of economics.*

**Keywords:** the definition of economics, economic methodology, scientific character criteria, necessary and sufficient attributes of economics, economic epistemology

**J.E.L.:** B40, B00

### 1. Introduction

At this time, a study having as its core objective the critical analysis of the concept of economics risks is to be considered obsolete from the moment the reader goes over the title. In a world where since 1968 the Nobel Prize in Economics has been awarded to winners whose work was carrying a very high level of abstraction, the analysis of how basic concepts used within the common language are defined and the potential need to redefine some of them, can be viewed as an unnecessary return to the origins, roots about which nothing new can be said.

Although in recent centuries the world has accumulated an enormous amount of knowledge within the field of economics,

many of the economic science's critics attack its status, opposing its theories - whether the theories' origins can be traced to Nobel laureates - some elements whose strength is diminished in relation to any distinction it opposes: facts. Often, apparently sublime theories have been rejected sooner or later in their daily confrontation. In this context, where even paramount theories are being demolished, can we speak of economics, as a science? The answer to the question above broadens the sphere of knowledge, regardless of its positive or negative nature.

### 2. The sufficient attributes of economics

An analysis of the common features of the definitions of economics finds that all of them consider economics a science that studies the economy - seen as a process which involves the human being. We can only reach the same conclusion, namely that from the logical point of view, economic activity undoubtedly implies human action.

Therefore, we can conclude that economics is a type of human action, understood as an act which has the human being as subject. Human action is therefore the proximate genus for the economy [1]. If identifying the proximate genus of the economy is relatively easy, the same cannot be said about the specific differences. The quoted definitions (as well as those not quoted) reveal the profound differences of approach: economics studies not only the causes and nature of wealth, but also the social relations and forms of human behaviour (as characteristics of the economy). The risks involved concerning the incomplete identification of specific differences (sufficient attributes) of the economy are major: the situation described in the scholarly literature as "methodological imperialism" is an example that clearly reveals what can happen if the methods designed for a field are applied to the sphere of another specific field. Methodological



imperialism assumes, in spite of the shortcomings involved, the deliberate use in a specific science of the methods belonging to another science. The negative effects can be the more powerful as the use of methods belonging to other sciences is not intentional, but occurs as a result of poor delimitation of the sphere of the science in which research is carried out. If an insufficiently outlined content of the economy is undesirable because it causes a very broad sphere of coverage for economics, the reverse situation is also not desirable, resulting in a sphere which is too narrow.

Dinga identifies the following sufficient attributes for economics:

- An economic act refers to the intervention of its subject in nature. In other words, through it a material exchange (of substance, energy or information) manifests or aspires to be achieved;
- An economic act involves the fourth Aristotelian cause, the final cause (*causa finalis*), or purpose, thereby distinguishing itself from the natural phenomena;
- An economic act involves an artefactual membrane of the acting subject against nature, i.e. the conscious representation of the act before its externalization.

In Dinga's opinion, it follows that, as an identification corollary of the three sufficient attributes described, economics is a sum of processes involving the human intervention in nature, with the purpose of carrying out the material exchange between the acting subject and nature through an artefactual membrane. Subsequently, Dinga identifies necessary attributes anew, generated by the existence of the economy, namely that the human being is the subject of the economic act.

If concerning the proximal genre of the economy we support the opinion of the aforementioned researcher, who embraces the idea stated by Von Mises [2] that economics is part of the wider family of human action, then in terms of identified specific differences (sufficient attributes) we support a different approach.

If an act, in general, represents a phenomenon of cultural nature that manifests itself by the exteriorization of an intent, and human action refers to any act with a human being as subject [1], then it follows the fact

that the subject of the economic act is the human being, and is not a feature of economics, but of its proximate genus represented by the human action. We also believe that the existence of an artefactual membrane and the existence of a final cause (purpose) are all attributes of human action, not representing specific differences of the economy. Human action is always and necessarily rational and results from acts of will [2].

As a result of the reasoning presented above, we consider that the economy is characterized by the existence of a single necessary and sufficient attribute, namely that the economic act involves the material exchange with nature. Therefore, the economy is, in our view, the type of human action performed for immediate or delayed intervention in nature for carrying out material exchange. Its aim is implicitly included in the identified sufficient attribute. Any human action which aims the material exchange with nature is therefore apodictically economic, being part of the sphere of the economy and therefore, of the object of study of economics.

By defining the economy in this manner, we can eliminate part of the criticism placed on the scientific status of economics. This study does not aim to discredit all of the criticisms inventoried above, having neither the space nor time to do it. It will, however, deal with one which is very often invoked, namely economic rationality. Given that rationality is seen as a specific difference to the economy by which mainstream economists identify and recognize each other [3], concrete facts often show that where "rational" economic behaviour would imply different types of reactions, they do not appear. Instead, acts considered irrational from the economic point of view always accompany human development. We believe the explanation is linked, as we stated before, to the use of the rational as a defining characteristic of the economy given that in fact it characterizes human action. In this context, rationality includes an axiological component. According to Clouthury and Hoque [4], the greatest failure of economics up to this point is precisely its incapacity to integrate the moral values. As society evolves, its scale of values changes and the moral code has an increasingly important

role. Meanwhile, if not seen through the narrow lens of economics, the seemingly irrational behaviour becomes absolutely rational, analyzed by placing rationality at the level of human action joined with moral values, because rationality can be, in this context, more or less important than these values that form a moral code. In this context, the image of disciplinary boundaries takes another form, creating the concept of interdisciplinary social science, with economics representing only one part of the picture [5]. One can observe that this issue of rationality is not a real one for the economy when the rational is recognized where it belongs, i.e. to the human action. Also, the claim that rationality is a methodological principle characterizing social sciences in general is not new. To support this idea, Popper [6] states that in most social situations, if not in all of them, there are elements of rationality. After Koertge [7], the methodological edifice built by Popper is based on two principles: rationality and situational analysis. The latter author states that even when there are situations in which certain actions seem irrational, by applying Popper's methodology, we cannot discuss the two principles, but only the model of analysis used.

Returning to the objectives, which we have set at the beginning of our study, we shall analyse the extent to which economics, as a discipline that has the previously defined term of economy as object of study, meets the scientific criteria. That is to say we will try to see if economics is able to explain and/or make predictions.

### **3. About the scientific character in general and particularly in economics**

From the array of definitions concerning scientific knowledge from the scholarly literature, we shall tackle, in the beginning, the one used by Paty [8] according to which science requires a causal and objective approach on reality. Both the apparent simplicity and the restrictive nature of the previously mentioned definition entail a number of comments. Thus, Paty proposes two criteria that must be cumulatively met by a discipline in order to be a part of the field of science:

- firstly – the causal approach of reality,

- secondly - its objective approach.

According to Dinga (2009), the logical condition of the scientific character is to ensure its veracity, which is achieved in practice by providing:

- Explanations,
- Predictive models.

Consequently, science must explain and predict, and the only approach that makes it possible to provide explanations, and by default, to understand, is the causal approach, as reflected in both definitions that were discussed. With reference to the reflection of an objective reality, major differences between the two approaches exist. While Paty considers objectivity as a prerequisite to the scientific character, Dinga [1] brings other shades by using veracity, a term with deep metaphysical "penumbras". An objective reflection of reality with 100% accuracy, says Pohoată [9], involves the perfect reflection of it, or this is neither possible nor desirable. A perfect reproduction of reality, even if it were possible, would not improve our knowledge in any way. We would only get a perfect duplicate – without any utility, we might add.

A critical analysis of certain economic terms based on philosophical foundations may seem, at a first glance, bizarre. However, we believe that in the given situation (and beyond) this is the only possible approach. When talking about reality one implicitly arrives within the sphere of metaphysics, where, given the multitude of well-grounded approaches which are often conflicting, we must take sides. We are not part of the unreserved supporters of the idea that there is no objective reality, the world being only a creation of our mind. Therefore, this is not the reason which determines us to assert that the reflection of an objective reality is not possible in science. But we do not support the approaches that consider the world exists independently, or may be reflected objectively. The Kantian approach is the path forward for us. Our analysis is based on the philosophical ideas of Kant [10] on rational knowledge masterfully described in the *Critique of Pure Reason*. We will try, in a few sentences, to synthesize a small part of these ideas, which we support.

Kant does not deny the existence of objective reality; quite the opposite, he supports it. However, he also states that it is beyond our possibilities of knowledge. We perceive it through our senses, thus the objective reality is filtered and filled with subjectivity. Nevertheless, even our (subjective) knowledge bears some signs of objectivity as it is attained in a predefined spatial and temporal setting, a priori. By a priori knowledge, Kant understands the knowledge acquired independently with any coming experience. Concerning this, he categorically states that by opposing apriorism, towards all that is practical, as far as it contains motives, relates to feelings, and these belong to empirical sources of cognition. The great philosopher is careful to warn us in time: there is no a priori knowledge *per se*. We can speak of a priori knowledge without reference to the immediateness of an experience only because there is an already consumed factual act from which a priori knowledge actually derives. In other words, a priori judgments exist but they are neither timeless nor spaceless [9]. Thus, we alter the meaning given to the term apriorism by Kant, using it to refer to the determined setting in which retrospective knowledge takes place, delimited by time and space as knowledge before any experience.

The objectivity mentioned by Paty as a prerequisite of the scientific character is, within the context of the previously mentioned ideas expressed by Kant which we adopt, only a form without substance. If we can experience reality only through our senses, our representations of it can only be a result of these subjective perceptions.

The logical condition of the scientific character mentioned by Dinga, veracity, which in general requires compliance with the truth, also involves a detailed discussion. The truth, as a concept of philosophical origin, may take a wide range of shades, from the absolute truth, generally valid anytime and anywhere, to Popper's [11] version of a statement that has not yet been falsified. Of course, from the assumed philosophical perspective we cannot agree with the version of pure and absolute truth as a requisite of scientific character, considering veracity an accordance with the truth (on the spur of the moment, apparently) envisaged by Popper. Hence, we support the idea that science in

general must generate a materialized explanation by transmitting the truths of the moment. We do not believe, however, that the knowledge of truth at a specific moment generates explanation and prediction. In other words, we believe that science, by reflecting the apparent truths necessarily generates explanation and only accidentally prediction.

Adapting all of this at the economics level, we believe that the scientific status it aspires to imposes its veracity and therefore the ability to explain, but not the one to predict. We shall detail this in what follows.

The economic explanation assumes, like any other logical explanation, a causal approach. Applying Kant's ideas within the realm of economics, we can adapt it: if the objective reality remains unknown or hidden to us, and knowledge is composed of a set of subjective representations of reality acquired through the senses, then the logical conclusion is that we cannot get to know (neither in economics nor in other areas) more than perceptible manifestations of this reality, that is to say phenomena. In order to explain a phenomenon, we must understand the causes which determine it and how each of them contributes to its manifestation.

Human action involves, as stated before, the existence of final causes, or purposes which both order and channel it. In other words, human action is governed by teleological causality while natural phenomena are governed by eutaxiologic causality. Human beings set their goals and create their means to obtain results in order to meet the intended purposes. Natural phenomena, on the other hand, have finality but no purposes, so it is impossible to talk about creating means in this case.

Economics, as a type of human action, has a specific purpose: the material exchange with nature. A characteristic of the human action in general, and hence of economics, is that the presence of the rational human subject in the process (rationality being necessarily defined at the level of the human action and having axiological character) distinguishes the sciences involving human action from those where the human being has only the role of an observer.

Being involved as a subject of human action, the human being bestows it with an evolutionary character. In this context, the following methodological invariants

underpinning the orthodox economic science [1] are not factually met:

- The invariance in relation to the initial conditions (universality);
- The invariance in relation to the arrow of time (reversibility);
- The invariance in relation to the quantitative accumulation (proportionality);
- The invariance in relation to the final causes (impersonality).

People are never indifferent about their research findings [12]. Human beings, as part of the object of study of economics, evolve throughout the process by changing the initial conditions (this is sometimes designated by using the term "Oedipus effect"). The human being cannot be restored to its original state, cannot be emptied of what he amassed along the way. Goals guide his entire activity and make him learn, and through it, to transform himself. And the transformation takes place in time, time therefore gaining a particular importance as the coordinate of social sciences. According to Hicks [13], any social science research involves a time coordinate, while all studies developed in the natural sciences field do not imply such a coordinate. The highlighted differentiation has extremely important consequences. According to Popper [6], a consequence is that social research is limited to setting trends which, even if confirmed for hundreds of years, can change at any time. Therefore, trends cannot be a credible basis for accurate predictions, while the natural sciences generate universal laws, which are not affected by the transformation of the researcher. According to the opinion of the aforementioned author, universal laws can therefore serve as the basis of predictions, while trends cannot.

Although methodological invariants create difficulties in the endeavour to offer economic explanations, we do not consider that they represent arguments for the impossibility of explanation in economic science. Where causality (either eutaxiologic or teleological) exists, it can theoretically be highlighted, and this represents an explanation. The higher the complexity of the phenomenon analysed the more difficult it is to reflect the causal influences in it, but the mentioned aspect depends on the instruments used and not on the logical conditions of possibility. Therefore, economics can provide explanations and thus it meets this condition

of scientific character to the same extent as all other sciences.

In terms of the predictive ability of the economy, in our opinion this criterion is not met, not because economics is not a science, but because accurate prediction is, at least in the social sciences field, logically impossible. We will offer arguments in the following paragraphs.

Given the changing nature of the economy and other human activities, due to the inclusion of the subject within the object of study, the economic explanation refers to longer or shorter periods of the past, or at most, as a limit, of the present. If the methodology used allows for the accurate identification of the analysed phenomenon's causes and their influence, these explanations may be true for the analysed period. If they are contradicted by other theories on the same subject, and for the same period, which are more solid from the logical point of view, the explanations are rejected and cannot be used in any way. But assuming that they are not denied, they still cannot support explanatory models. Their use for prediction is not logically possible since they are built to characterize a certain situation from the past that will never occur in the future, because of the variance of the initial conditions. By using these models the future can be predicted, assuming that the same initial conditions considered in the past will also appear in the future, but knowing that it will never occur in the economy. More than eighty years ago, Morgenstern [14] argued that prediction is not possible in economics; it is self-defeating and thereby the more reliable a prediction, the faster it will generate adaptation from the economic subject and, consequently, it will destroy itself. Some recent studies conducted on U.S. capital markets support the idea of Morgenstern, showing that reaching certain limits of the indicators created for these markets, which previously showed the imminent change of a trend, currently reflects exactly the opposite situation, i.e. the continuation of the trend [15]. In conclusion, these trends can only underlie certain predictive models that generate probabilistic predictability. In the sciences of human action this is the only type of predictability which is logically possible. No social science

cannot or will not ever make predictions with the accuracy of physics [16].

Nevertheless, natural sciences and economics are different, we believe, in terms of their predictive ability. Although, both may, logically, be able to make universal valid predictions in invariant initial conditions, only the first of them objectively benefits from these conditions. Having said all this, even if natural sciences benefit from the invariance of initial conditions, these conditions are known, by us as researchers, only through our own senses, thus, incomplete. Ergo, we strongly believe that even natural sciences cannot account for accurate and generally valid predictions, only seldom.

#### 4. Conclusions

At the end of this study, we conclude that economics, along with other sciences of human action meets the scientific character condition of explanation, but does not meet the one of prediction. In this context, we consider that Friedman's [17] assertion that states positive economic science should provide a system of general rules that can be used to make predictions represents an impossible goal for the economic science due to the lack of any type of logical basis.

The need of a paradigm framework applicable for social sciences, different from the one applicable to natural sciences (see also [18]), focusing on the concept of evolution and its derivatives, emerges as a natural consequence of our study.

Another conclusion of our study agrees with the idea that the purpose of economics is the entropic exchange with nature [19].

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**Section II**  
**Business Economy and Administration**

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**Subsection 2**  
**Marketing – Management**

## Perceptions and Preferences of Cultural Services Consumers

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### Abstract

*Cultural services' importance can be highlighted by the complexity of the needs satisfied and the advantages they offer to the national or urban development.*

*In this context, the paper supports the necessity of adjusting the cultural services to the audiences' wishes, by revealing the perceptions and preferences of Bucharest youngsters regarding the services provided by different types of cultural institutions.*

*The study presents the results of a focus group among nine students of various specializations. Thus, young people prefer theatre performances instead of other cultural services, as opera, operetta and ballet and they seem quite receptive to unconventional play setting or to an original interpretation. Moreover, they would like to attend to cultural services in the company of their friends, when they want to get out of the daily routine.*

*The paper ends by reinforcing the qualitative research conclusions and the managerial implications.*

**Keywords:** cultural services, qualitative research, perceptions, preferences, Bucharest market

**J.E.L. classification:** M31

### 1. Introduction

Public services are an important pillar of the tertiary sector, as they are satisfying various types of needs, from the elementary level to the most elevated ones. Among these, cultural services hold an important position, due to the fact that they may offer,

along with a high-value consumption, positive emotions and spiritual delight.

Moreover, cultural industries have a major advantage, as they can lead to increased urban competitiveness, employment, and economic growth. [8]

Therefore, their providers have begun to realize the necessity of implementing certain tools or conducting marketing activities in order to maintain, at least, loyal customers' databases or to attract, in best cases, new ones. Nevertheless, these objectives may be achieved if customers' needs or requirements are known and satisfied.

At the same time, cultural consumption can be interpreted as a process leading both to present satisfaction and to the accumulation of knowledge and experience affecting future consumption [11]

Basing on these considerations, the paper aims to identify how the young students' perceive cultural services offered by various institutions on Bucharest market, and what are their preferences regarding this type of performances.

### 2. Literature Review and Research Premises

In the international literature there may be identified multiple studies focusing on the audience and its characteristics or composition. Thus, the typical cultural consumer is a well-educated, high-income professional [7], having his/her taste for high-art built by his/her family since the childhood [3]. There is no doubt regarding the fact that the cultural consumption is not only a matter of choice, or relationship to a wider consumer group, but it is connected to deeper patterns of socio-economic status and occupational background. [6]



According to some other scientific demarches, the audience may be seen as a demand function for attendance at cultural events, integrating several explanatory variables, as: the own price, price of substitute entertainments, consumer income, and quality characteristics of performances [11]. However, some of these variables (e.g. the qualitative characteristics of events: who is appearing, what the critics have said, what works are being performed) are likely to dominate price in determining demand. [11]

Along with these studies, there have been conducted also more complex research, getting deeper into the cultural consumption and the consumers' behaviour issues.

Therefore, aspects as spectators' satisfaction, motivations or perceptions got, one by one, the attention of researchers. All these may be interrelated, as they are basing on the value offered by cultural institutions to their audiences. This is important, especially because “the creation of the best, unique customer value is considered as a basis for most marketing decisions, as the main factor that increases a competitive advantage and ensures customer loyalty.” [4]

Hence, it seems that customers' satisfaction does not result from a systematic analysis of the individual elements of a theatrical event (e.g. the actors, the play), but from an overall judgement on the interpretation of a given play. [1]

Other value determinants, in the case of theatre services, include the performance of actors, play, theatre attainability, locker-room service, direction, and atmosphere of the theatre, which are ranked higher than the diversity of the repertoire, theatre installation, parking convenience, system of season-ticket, the opportunity, provided by the theatre, communication with actors, and directors. [4]

However, these cultural performance „ingredients” have to meet customers' different motivation of attending a cultural service, which may have one or more of the following dimensions: spiritual, sensual, emotional, intellectual, or social one. [12]

Besides these aspects, there are also some other issues of interest, as preferences or emotions of spectators. Thus, it is useful for cultural institutions' managers to know that positive and negative emotions had a direct and significant effect on respondents'

likelihood of recommending the core service, but no direct effect on recommending the secondary service offer. [9]

All these scientific demarches are valuable, as they offer clues about what consumers want, expect or feel when attending to a cultural show, so that providers to adjust their policies to their audiences' patterns. However, most of these studies have in common the fact that they were conducted among all types of spectators, irrespective of their profession, age or income.

In this context, the necessity of knowing how distinct segments of consumers perceive the cultural offers and what they prefer to attend to, why, when and with whom, should be highlighted. From these multiple segments, the youngsters are of great importance, as they can be the heavy users of cultural performances in the future and they can influence the characteristics of future services in this field.

### 3. Research methodology and findings

The study's purpose is to identify the perceptions and preferences of Bucharest students of various specializations (including technical, economic, political-administrative, architectural or theological ones). The group is formed of nine young persons that are 20-23 years old. The respondents were selected by applying a selection questionnaire and the research instrument was the conversation guide.

The decision of using a qualitative approach – in fact, a focus-group – is basing on the fact that this type of research is concerned with process, rather than simply with outcomes or products [2]. In this study the stress is on how respondents see various aspects related to cultural services and not on how many of them perceive or prefer the performances one way or another.

The discussion focused mainly on the following debate topics:

- motivations of attending or not a cultural show;
- main sources of information the audience uses;
- cultural show viewing habits;
- factors influencing audience's attitudes on cultural services.

According to Wiid and Diggines, qualitative research is the collection,

analysis, and interpretation of data that cannot be meaningfully quantified, that is, summarized in the form of numbers. [13]

Therefore, the resulted ideas will be accompanied by respondents' original answers. The following paragraphs are presenting the analysis and interpretation of collected data within the focus-group. The phrases are preceded by the main objectives of the research.

▪ *Motivations of attending or not a cultural service*

Respondents choose to watch a cultural show, when they want to spend their spare time with friends, in a pleasant and funny way. They are willing to go to a theatre play rather than to the opera, operetta or ballet. Most focus group participants justify their preference for theatre, primarily through the strong emotions that actors are passing to the audience, but also through the non-verbal communication, which is much easier to understand than in other cultural services.

Secondly, as the majority of the group mentioned, the decision for attending a theatre play is supported by the reputation and prestige of various Romanian actors or plays, the theatre genres' diversity or the non-conformist approach specific to some new cultural institutions. In addition, in some respondents' opinion, the intense competition among theatres on the Bucharest market lead both to an increasing promotion of cultural offer, especially among young people, and to the perception that theatre plays are organized in a professional manner.

Instead, opera or ballet performances are seen by some participants as for spectators who have "cultural finesse and maturity", for the "older ones", or for those who go out of habit, just because in the past they were familiar with this type of service. Moreover, the state cultural institutions are associated with poor management and lack of professionalism because of their ownership.

“For example, last time I went to the Russian ballet ... the element that spoiled the atmosphere was the music, there was no timing, there was something wrong with the speakers ... I felt the need to leave the room”

“I guess it happened within X institution ... Anyway ... It's an institution supported by the City Hall.”

“Unfortunately all institutions like this one tend to the same thing.”

Thus, the group of respondents is divided into two categories. Those in the first category attend rarely to cultural performances of opera, operetta and ballet, because they "are more difficult to digest" than theatre plays and because they have a more classic approach that does not fully fit their age: “theatre is probably more accessible for our age, while the opera and operetta less accessible ... because of our times, of the trend for listening to other types of music.”

Those in the second category would like to go more often to such events, but there are some obstacles, such as lack of friends in the entourage who to like this type of cultural services, the difficulty of purchasing the tickets or even the high prices.

▪ *Main sources of information*

A first source of information used by the young participants in the focus group is the Internet, which reveals them details of the date and time when a certain play takes place, as well as information about actors, directors, and even reviews of theatre performances and critics' opinions. At the same time, the respondents use as sources of information free distribution weekly magazines, which detail the cultural and entertainment programs.

However, the greatest importance is given to the recommendations of acquaintances, because “if a friend comes to you and says *I've been to this play and it's great*, it matters a lot”. This confidence may increase, especially because “it happens in many groups of friends to find young people, who are students at the theatre, and they are more informed and they can guide you to a particular play, or to their plays.”

▪ *Attending habits*

Most respondents consider that they are not going to the theatre as they would like, either because they do not have enough spare time, or because tickets must be reserved and purchased at least two weeks before running the play, the day of the show being less likely to find seats in the hall. Several times, the respondents mentioned that higher prices of the new plays may be a reason of not attending to a cultural show. Therefore, they would not refuse an invitation to the theatre from a friend or a free ticket distributed at an event for students.

The majority of the group chooses to watch a play after a period of monotony and in order to get out of the daily routine: “When we are getting bored, when we do not want to watch TV, or to navigate on the Internet, or when we get bored with school.” Only a few respondents said that they would go to the theatre with friends for their anniversary or in order to celebrate a special event, especially if it continues with a night out at the club.

Although within the interviewed group there are a few persons that associate the consumption of theatre or opera services with the formal context of a school organized event, most of the respondents attend to cultural performances accompanied by friends. In most cases, the decision on the play to be viewed or the date of attendance to the cultural event is not taken by one person as the leader of the group, but it can belong to any individual of the friends group, depending on their preferences or sources of information.

A part of the interviewed group uses to choose those plays that take place in unusual locations such as terraces, cafes and bars. These young people appreciate the more relaxed atmosphere, both the possibility of consuming a soft drink or smoking a cigarette and the proximity to the stage and the actors. In addition, as one respondent stated, the plays are more challenging, and sometimes they involve interaction between audience and actors. Although these non-conformist places are characterized as “lacking a certain formalism, having an extra flexibility ... offering social space”, other respondents find that such performances have certain drawbacks, including congestion, noise, poor visibility or lack of comfort.

▪ *Influencing factors of spectators’ attitude regarding cultural services*

Respondents felt that general attitude towards cultural services is favourably influenced by both the spectators’ sensitivity and inclination towards arts and culture and their education received in the family or at school.

“The taste for those (cultural services) ... is either educated or taught in school or at the university in this field ... you have an entourage of friends who introduce you into such an environment ...”

“Either you inherited it ... or education is still in the family ... maybe your parents are teachers ... maybe they are actors or art lovers.”

In addition to these factors that influence the attitude towards cultural services, the respondents mentioned some aspects specific to the performance or to the institutions providing the services. The first category includes: building / auditorium, the actors, or the novelty of the piece. In the second category there may be included: the reputation of the cultural institution, prices or even the repertoire.

According to several respondents, conducting some theatre plays within community cultural centres in the province adversely affect their attitude towards these services, as unconsciously they are associating the performances with “communism, with something old, conservative”. Moreover, some theatres in Bucharest have sound and lighting problems, which leads young people to prefer small rooms that offer better visibility and warm and pleasant atmosphere.

The actors’ awareness and popularity contribute to respondents’ attitudes towards cultural services: “in opera and operetta there are actors that I do not know, in the theatre I know them ... and maybe because we are more prone to the cinema, and ... the theatre actors - some of them can be found also in the cinema and, on this basis, I make the selection”.

There is a unanimous opinion in the group on the good reputation of the main theatres in Bucharest. In some other cultural service providers’ case, over time, there was spread negative news, leading to negative perceptions among some respondents.

It can be noticed, therefore, a weak influence of the institution’s reputation on young people’s attitude towards cultural services.

#### **4. Conclusions and managerial implications**

An important result of the research is that young people prefer theatre performances instead of other cultural services, as opera, operetta and ballet, mainly because they feel they are experiencing a warm and pleasant atmosphere, full of emotions and easy to

decode. This finding is consistent with previous international research, according to which theatre is live, dynamic and about people. [12]

Moreover, the respondents consider that an unconventional play setting and an original interpretation are attractive, even if there may be identified minor organizational problems. This result may be seen as a completion of other studies that reveals how, as a group, students seem to have a marked preference for light entertainment and a minimum amount of critical perceptiveness, on one hand, and an increased acceptance of contemporary theatre compared to older spectators, on the other hand. [7]

Therefore, these aspects, along with the ascertainment that cultural products both encourage audience participation and provide entertainment [10] should be in the attention of cultural institutions' managers. All these may lead to a unique approach of cultural service's marketing mix, which can offer the provider both a clear positioning in consumers' mind and a distinct and favourable image.

In this demarche, the managers should take into consideration the fact that cultural consumption is particularly time-consuming, as this explains both the acute competition for audiences in the cultural sector and the tendency to concentrate cultural consumption in the home, thus cutting out travel time. [5]

This is why the managers should ensure a higher accessibility of the cultural show but also of the tickets reservation system, on one hand, and associate the performance with an unprecedented and out-of-pattern experience.

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## National Culture Influence over the Organizational Culture in Romania

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### Abstract

*The present paper aims highlighting the characteristics of the organisational culture concept in Romania.*

*In the first part of the paper, we have presented the importance of organizational culture theory through a literature review; we described the factors that have an impact on it.*

*In the second part, we developed ideas about the national culture of Romania, the national frame and how this affects the organizational culture, and we presented its peculiarities.*

**Keywords:** national culture, Romanian culture; organizational culture;

**J.E.L. Classification:** D23, L22, M14.

### Introduction

The organisational culture term comes from the national one. We can define the national culture through the collection of customs, civilization and achievements of a period. All the knowledge available to society at a time, dissemination of material and spiritual civilization of people are other influences on the market. Basic attributes of any organizational culture is coming from the particularities of national culture.

National culture influences organizational culture also through the founders and leaders.

They belong to a national framework, and their impact over the organizational culture proves the power of the national culture dimensions on the organizations.

People working in an organization, influence and contribute on shaping and changing organizational culture through their values, beliefs, and habits learned from the family, education and social background influence the national dimension of the area in which a person lives and operates.

### Theoretic aspects regarding organizational culture

The national culture of people and the organizational culture and the management practices of the companies within the respective national environment represent two interdependent dimensions, between which there are complex and discreet relationships that could be easily proved and explained.

There are several factors influencing e organizational culture:

a) company's history – as longer history of the company is stronger their organizational culture is;

b) size – usually, successful organizations have better formalized structure and more structures;

c) owners or founders – their beliefs and values influence the organizational culture, the mission, the objectives and strategies of the organization;

d) organization's management and staff;

e) purpose and objectives;

f) dramatic events - merger, liquidation, integration of production;

g) basic business and technology;

h) location;

i) environment;

j) national culture, customs and social standards of that country.

Organizational culture is a powerful force, even is not always easily to determine. It consists of shared values, beliefs, symbols and behaviours, personal decisions and actions. Its purpose has a strong impact over the success of a company.

Geert Hofstede defined the organizational culture as: “the collective programming of the mind that distinguishes the members of one organisation from others”. [4]

On the one hand, culture can be considered the context within all the members of a society function and, on the other hand, can be considered the one that defines the pathways of the entity.

Culture creates a shared space for the team members and helps in a transparent way the uncertainty regarding the interpretation of the events and actions, offering a common language to everybody. Its purpose is to produce a point of order, to confer unity and continuity.

Being aware about an organization’s culture is critical to its functioning; the cultural factor has a substantial impact on the management’ functions stock and the manager’s actions.

It is much easier for employees to embrace and swear by values of the organization when the culture is stronger.

Into an organization, the culture is the equivalent of an individual’s personality. Different elements are composing it, like unwritten rules, language that are facilitating the communication between organization members and social and ethical standards of behaviour.

The research on corporate culture shows that individuals perceive it as having unique features, which are quite lasting in time.

Although the individual perception over the phenomena in the objective world could vary acutely much, the perception over the organizational culture meets the same belief. In other words, the individuals with a different level of culture or from different hierarchical levels tend to agree on the important aspects of the culture.

More accurately, the organizational culture represents the binding that keeps the organization together, encourage employees to provide most of their potential, and stimulates them in order to commit to the company and its performances. [Wilderom, 2004].

Schein (1985) argues that the culture draws the behaviour of a group exactly as the nature or character draws the peoples’ behaviour. In this regard, culture is for a group what nature or character represents for an individual.

The main features of the organizational culture are a) innovation, b) attention to details, c) results-orientated, d) aggressiveness, e) team-orientated, f) people-oriented, g) stability.

The seven dimensions are specific for organizations in different fields (Chatman & Jehn, 1994) and also from international companies (Hofstede et al., 1990). According to Khan, Usoro and Majewski (2010) four elements are composing the organizational culture of a) support-oriented, b) innovation-oriented, c) coordination-oriented, and d) rules-oriented while McLean (2005) believes that fundamental dimensions of organizational culture are creativity and innovation.

The regulations imposed by the organizational culture dictate what is desirable or undesirable, relevant or objectionable behaviour within an organization, in its absence the affect seriously the optimal functioning of the organization.

### **Romania’s national culture overview**

Romania is currently living the experience of complex changes turbulent and often contradictory at all levels of society including all types of organizations.

History perceives Romania as one of the strongest survivors. With a record under invasions and occupations, Romania has undergone social and economic changes and became EU member.

Even though, Romania is for fifty years in a forced industrialization process, there are still people who keep their peasant nature, conservative and believe natural walk according to fundamental assumptions and beliefs manifested through legends, myths, heroes, superstitions and ancient symbols of old times.

For the Romanians, time can be still considered ahistorical, with an abstract nature. Time and nature merge unbreakably on the rhythms, not on artificial rhythms imposed by the business world. Thus, understanding the importance of time for an organization could become difficult.

Such as the Manole Master, people have learned to accept that what they assemble could be destroyed at any time and which, as the Mioritic hero, was desperately seeking to make sense of their fate.

Other cultural values that influence people are the “Phoenix bird” and the “Ancestors Wolves”. Like them, the people is willing to struggle to revive from their own ashes and create a new world.

These are the deepest values and beliefs that Romanians bring with them in the organizations.

While the country tries to leave behind the communist past, current attitudes and traditions are still reflecting part of the turbulent history.

The consequences of the communist indoctrination years can not be ignored:

- The belief that there must be someone “up there” to take decisions, to rule and judge what is good or evil, therefore, significant deficiencies in communication, feedback;
- Fear, active mainly on the subconscious level, that if someone openly express their personal opinions, that one would have to bear serious consequences, hence arises the suspicion, secrecy;
- Lack of confidence in spoken word, always is looking for more hidden meanings;
- The need, almost sickly of oppression in front of decision makers;
- Distorted belief that everyone should be equal in the general misery.

Fortunately, on the conscious level, the Romanians know that these beliefs are counterproductive and strive to find new meanings and possibilities for change.

The years of difficulties determined the Romanians basic mentality and their sense of reality, through modest attitudes and behaviours coupled with orthodox Christian beliefs.

Although, first the Romanians may seem edgy or unresponsive, they are among the most friendly and hospitable people of Europe, with big hearts, a rich cultural heritage and an incomparable sense of humour.

### **Organizational Culture in Romania**

Although there is a wide variety and complexity of trends, we can, however, identify two distinct types of organizational culture in Romania today:

- Bureaucratic Culture, typical for state ownership companies, firms undergoing privatization, former state companies in the post-privatization period, autonomous administrations, educational institutions and health condition patronage, military institutions;
- Entrepreneurial Culture, in development, standard for private firms formed after 1989.

### **Bureaucratic culture**

Bureaucratic culture can be characterized as strong, arrogant, focused inwards the system and highly politicized.

The vast majority of organizations with such cultures do not have well-defined strategic and operational plans in real mode

The reluctance for planning of any kind, with negative implications on performances both on long and short term derives mainly from the central planning period when the belief was that no matter how much they plan, the results will not be correlate with the plans. Central planning was acting like a serious brake in the way of rational and strategic approaches, especially in the way of effective implementation in organizations.

In the same way, the lack of confidence, motivation and involvement, the lack of responsiveness to lifelong learning, promoting creativity and innovation, the lack of risk-taking and responsibility for their actions, lack of concern for all “key customers”, are all elements which constitute barriers against cultural adaptation to contextual variations, which are becoming more and more vague and complex in the Romanian economy.

This cultural immobility has determined dramatically reduce the performances of bureaucratic organizations with negative repercussions for the entire Romanian economy: high inflation and unemployment, high taxes, very high prices reported on wages with serious consequences for living standards.

More than anything, it emphasizes a strong need for promoting real values and their proper hierarchy because crossing this culture shock, people do not know anymore what is necessary or not, what is their apparent impression of an organization and what is the purpose and direction of the activity they perform.



In the cultures with bureaucratic nature, also exists a significant difference between the set forth values and real actions.

The hope is that there is a traditional respect for professionalism, which has a wide range of propagation and can cause a positive power source to promote concrete changes.

For now, this positive value leads to adverse relations between members of the organization and an attitude of apathy towards work, with a disastrous impact on productivity.

The feeling of helplessness of the employees regarding the decision-making processes and actions in the pyramid structures, heavy, rigid, unsuited, on the need for flexibility and change merged with the unconscious fear of trust the collaborators and communicate openly and honestly with ancestral method of interpretation of time led to apathy. This is the best Mioritic practice, which can be the expression of a broader attitude towards understanding and developing and affirmation possibilities outside the bureaucratic systems.

### **Entrepreneurial culture**

Nowadays entrepreneurial culture crystallizes especially in private companies, founded after the creation of free market mechanisms in Romania. This phenomenon is possible because increasingly more people leave the bureaucratic institutions looking for achievements and prosperity, meaning and direction.

The vast majority of new entrepreneurs is not yet prepared. With enough knowledge, available capabilities, we can create a coherent and strategic insight, or dynamic adaptation to the external environment.

Instead, they have a contagious enthusiasm, and they fully commit to their firms have a strong intuition of direction and sense towards where their organizations should focus.

As well, the company informs the personnel, enthusiastic about the “intuitive” visions regarding their development with enthusiasm to thus causing a sense of belonging, of involvement and participation in the company’s problem solving.

If the basis of the beliefs and values begins to shape and systematically structure, yet we can not say that there is a constant concern for the setting of realistic goals and creating

strategies and concrete action plans in these companies.

However, the moment of greatest importance is the effort to create new meanings through the assistance of such values as respect and consideration for customers, employees and communities, concern for quality products and / or offered services, creativity, contribution and dedication, courage, openness and personal development together with the company’s success.

Talking about the new entrepreneurial culture, we can say that confidence took the place of the feelings of helplessness and participation replaced the lack of control in the individual actions Fear began to disappear due to open recognition of the fact that errors are part of human nature and providing opportunities deciding, acting taking risks and responsibilities.

This way, the pride of belonging to the company’s community, usually having a founder-owner as hero behavioural model, combines with the appearance of self-esteem and for all members of the system, works as positive incentives for performances achievement for the most profound results and most subtle levels of entrepreneurial culture, with a negative impact on productivity and quality of all activities.

Lately, several features appeared in Romania, premises of the organizational culture that may be pointed out by:

- greater emphasis on quality of work as a result of the requirements imposed by a competitive economy;
- the attention that companies offer to human resources quality;
- greater emphasis on the quality of work as a result of requirements imposed by a competitive economy;
- attention to professional level, technical work and motivation;
- methods taken from the western economy as well as internal marketing in order to increase the reliability of organization’s employees;
- insert the principles of the work group and rewards;
- increase the importance given to working conditions, health and older age;
- formation of strong links between career development and expansion of the company;

- concerns about stimulating the innovation for better financial results and a better image on the market.

### **Conclusion**

As a result of this review of organizational culture in Romania, we have tried to highlight the impact of the national culture, the cultural heritage, but also of the communist and post-communist era, the economic growth and EU accession, on the organizational culture.

Also, we can state that Romania has created a basis for future development of strong cultures, strategically adequate and adaptive, which shows that, in Romania, the phenomenon is possible, stimulates joint efforts and boost confidence in the future.

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# Highlights on the Concepts of Promised Services, Delivered Services and Customer’s Expectations

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## Abstract

*The concept of services is a more complex one than people actually understand because there are many difference between goods and services.*

*The objective of the paper is to introduce the reader in the world of services by highlighting the relationships between the promised services and the delivered one.*

*Customers are the key of any business and this thing also happens in the services area. That is why a customer should receive the services promised and not something else.*

*The delivery of services represents a complex process where employees have the most important role.*

**Key words:** services, delivery, promises, gap model.

**J.E.L. Classification:** M31

## 1. Introduction

In a world dominated by incertitude and risks, the service sector has known a huge development becoming one of the most important factors contributing to the GDP of any country.

The sale of a service is a more complex one than the sale of a good. Due to the fact that services have special characteristics like intangibility, heterogeneity, perishability, the service provider has to come up with more efficient strategies.

The service are is a huge one, it comprises services from the financial activities, transportation, hospitality wholesale, retail, education.

When buying a service the customers receive a promise from the service provider and they expect that promise to be fulfilled

but many times the delivery of the promised services is different.

They key between the promise of the service and the delivery of the service lies in the employees. They are the ones that make promises, they are the ones delivering services and they have to come up with solutions in case something wrong happens.

Unfortunately, service providers do not know exactly what customers expect and that is why they have to understand clearly how important it is to deliver what customers expect.

Many people discuss about the differences between goods and services but services require more specific attention, attention given especially to the relationships that exist between the promised services and the delivered ones.

We have to understand that the delivery of a service does not necessarily mean that the customer receives what he has been promised.

## 2. The key role of promised services

Companies that want to have revenues must treat customers as they deserve. The most important objective of any business should be to satisfy customer’s needs.

The sale of services is not the same as the sale of goods and companies must understand exactly what customers need.

In order to know what customers need, what they expect, it is necessary that companies perform researches periodically.

Services are intangible and due to this thing the offer of a company appears to look in a way but what is delivered to customers, sometimes, is not what has been promised.

The promised service is the service that the customer expects to receive from a company after the acquisition has been made.

For example, we can take the case of a customer who buys a tourist service from a travel agency. He has been promised certain levels for the accommodation, flight tickets, tickets to museums, driver. But when the tourist gets to that location it turns out that things are different and it is not what he has expected. The service was delivered but not how it has been promised.

Because company communications about services promise what people do and because people's behavior cannot be standardized like physical goods produced by machines, the potential for a mismatch between what is communicated and perceptions of actual service delivery is high.[1]

Sometimes, consumers make up their promises even from the how the offer is presented on the company's website, in different magazines or tourist guides.

Broken promises can occur for many reasons: overpromising in advertising or personal selling, inadequate coordination between operations and marketing, and differences in policies and procedures across service outlets.[1]

What we have to understand is that a broken promise can have consequences on long term and sometimes it is better to prevent them from happening than to fix them.

When talking about the intangibility of services we have to take into consideration other tangible elements that can define the services. Among these tangible elements we find the location, the equipments, how employees are dressed.

Companies may use concrete clues to communicate the service performance by highlighting the quality of equipment and facilities and by emphasizing employee characteristics such as qualifications, experience, commitment, and professionalism.[2]

The ones making the promises are the employees who most of the times are found guilty if something wrong occurs.

Service employees are so important to customers and the firm's competitive positioning because the frontline [2]:

- Is a core part of the product. Often, the service employee is the most visible element of the service element, delivers the service, and significantly determines service quality.

- Is the service firm. Frontline employees represent the service firm, and from a customer's perspective, they are the firm.
- Is the brand. Frontline employees and the service they provide often are a core part of the brand. The employees determine whether the brand promise is delivered.
- Affect sales. Service personnel often are crucially important for generating sales, cross-sales, and up-sales.
- Determine productivity. Frontline employees have heavy influence on the productivity of frontline operations.

Between customers, employees, the company there are different interactions.

All of these interactions require relationships between customers, companies and their social surroundings, and managers need to proactively address stakeholder interests to achieve improved efficiencies and ensure growth.[3]

As we have mentioned the case from the travel agency, employees can handle the problem with the disappointment of customers so that the customer will continue to buy services from the travel agency.

Some important researchers from the services field have introduced the concept of Customer Gap in order to make it easier for providers to understand what differences appear when a customer expects a certain service and how it perceives it.

It is all about the satisfaction of the client. The level of customer satisfaction is the result of a customer's comparison of the service quality expected in a given service encounter with perceived service quality.[4]

When discussing about satisfaction we also have to take into consideration the concept of quality. The quality of a service brings satisfaction to customers.

Service quality is a form of attitude representing a long-run, overall evaluation, whereas satisfaction represents a more short-term transaction- specific judgment.[4]

The delivery of quality services is a key factor in fulfilling the promises made to the customers.

The importance of keeping a promise is crucial for companies because they show customer how much they value them and on the long run it helps creating a strong relationship between the two entities.

If promises are kept customers tend to have confidence in the company by

becoming loyal customers and it is harder to switch the service provider. As a consequence a relationship is created between the two parts.

### 3. The delivery of the expected services

As we have mentioned previously, customer receive a promise from the service provider but what counts in the end is the delivery of that promise, but there are cases when the service providers deliver the wrong services.

Customers tend to become loyal to a company when they have a good image about it.

The image that a company creates will be determined by the nature of the service, how the company is organized, its culture, employees and the users. This means that the management and delivery of the entire service package needs to be carefully coordinated.[5]

According to William Ouchi theory Z the relationships created in a company can be of great help for its activity. These relationships should be not only between employees but also between employees and managers.

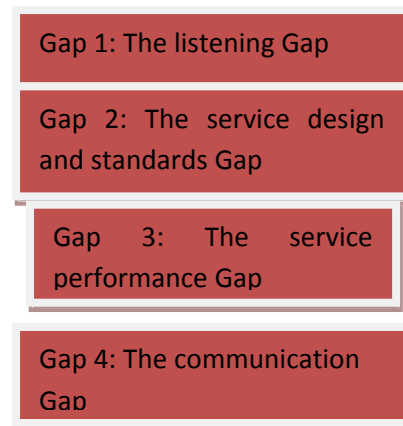
The delivery of the services must take into consideration the customer expectations. There have been so many times when customers have been promised a certain service and the company has had a different view on what they have to deliver.

Customer expectations should be researched in order to have satisfied customers. They are beliefs about the service delivery that serve as standards or reference points against which performance is judged.[1]

The model of the Customer Gap covers the best way possible the differences that appear when discussing about the expected service and the perceived service.

The gaps are divided into[1]:

Figure 1. The gaps Model



Source: Own Processing

The overall idea behind these gaps is that if companies do not understand what customers expect from the services they provide than they will fail by delivering the wrong services.

The gaps take into consideration not only customers by the employees, the importance of having motivated employees.

The key to closing these gaps would be represented by the fact that companies know exactly what customers want, need and desire.

Companies from the services area should take into consideration the Gaps Model when establishing strategies for activity of the company. It is always good to have a pattern that has been well researched and that can offer an efficient perspective.

Unfortunately, many companies either do not have enough liquidities to invest in researching the consumer's behavior either they believe that their offer is the best and covers what customers want.

Companies that want to continue activities in the business environment must be interested in delivering quality services and having satisfied customers who increase their revenues.

There is a profound connection between the quality of a product and service, customer satisfaction and company's profitability. The higher levels of quality have as result higher levels of customer satisfaction, sustaining in the same time higher levels of prices and costs (sometimes) smaller.[6]

This connection demonstrates companies that in order to be profitable they must satisfy customers by delivering high quality services as they had promised.

As we have mentioned earlier, employees play an essential role not only in promising services but also in delivering those services to customers.

The delivery of services is highly related to employees. When customers are not satisfied they can go and complain about their problem to the employees that sold the service.

Due to the fact that customers do not interact directly with a company but with its employees it is necessary to have a close relationship between customers and employees. A relationship based on efforts made by both entities.

Employees need to solve all the complaints and when they are motivated at the workplace they manage to fulfill their tasks efficiently.

The motivation of employees can come not only from receive a certain amount of money as salary but also from motivations that are related to the development of the individual as a professional.

Solving customer complaints is not an easy job because employees have to follow the company's policy related to complaints and they have to take into consideration the fact that a customer that is not satisfied can switch the service provider.

Another issue that can be taken into account would be the existence of a guideline that presents all the steps that have to be followed when delivering services. Guidelines give employees more confidence.

#### 4. Conclusions

The complex process of the sale of services takes into consideration making a certain promise to the customer when buying the service and delivery what the customer is expecting at the end of the process.

The situations when such thing does not happen are seen even more today and that is why service providers must understand that knowing customers needs is the key to having loyal customers.

On the whole, we must state that the companies which deliver exactly what customers expect are the ones that will continue their activity for many years.

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## The Metaphorical Representation of Economic Crisis in the NBR Speeches

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### Abstract

*The paper is a content analysis of speeches and interviews from 2011 and 2012, available on the web site of the National Bank of Romania (NBR). The economic crisis as a topic in speeches, the voice of NBR charged with authority and legitimacy in a choir (sometimes turning into an uproar) of speeches on this issue and the argumentative and persuasive role of metaphors are the three main pillars in our approach. An additional explanation about the way in which we relate and are invited to relate to economic crisis is provided by the selection and display of metaphorical categories associated with it. Furthermore, these categories offer evidence on behaviour we display, individually or institutionally in our effort to deal with the crisis.*

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**Keywords:** content analysis, metaphor, economic crisis

**J.E.L Classification:** M31, Y8

### 1. Introduction

Every time we hear, speak or write the word crisis, it bears something almost magical. Besides the fact that it can activate a wide range of meanings, in a broad sense (appendicitis crisis, life crisis, family crisis,

moral crisis, economic crisis, global crisis etc.), it also can amplify or even generate crisis. In the marketplace, the story of a bank going into a real crisis because a powerful voice mentioned the word crisis in relation with this bank is not just an anecdote to be told in a middle of a course. Psychologists and doctors also have numerous such examples. Therefore, the term *crisis* is a difficult one to handle even at the discourse level.

The study of metaphors associated with the term facilitates the clarification of meanings attributed to crisis, but more specifically it underlines the way we relate to it, the way we think and behave in a crisis. Lakoff and Johnson (1980, p. 4) claim that claim that „metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.”

Terms such as *abstract*, *business-like language*, *inanimate* or *technical jargon* are often associated with economic discourse. Fukuda (2009) states that “on one hand, the assessment of the current economic conditions [...] cannot be implemented without abstract reasoning. On the other hand, we can perform abstract reasoning more easily by using the main mechanism of a metaphor” and retains McCloskey’s conclusion (1985: 79-86) that “no economist can speak without metaphors”.

The expression “language corrupts thought” is typical for metaphors, especially as they have the power to mould and change our perception of reality. Even more, “new metaphors have the power to create a new



reality. If a new metaphor enters the conceptual system that we base our actions on, it will alter that conceptual system and the perceptions and actions that the system gives rise to” (Lakoff and Johnson, 1980, p. 146). Also, it has been proven in more recent approaches that metaphors can be used as a type of ideological weapon serving to frame political or economic issues (Lakoff, 2004).

In this context, attention given to the ‘voice’ of NBR by analyzing speeches and interviews available *on the web site of the National Bank of Romania* does not require any further justifications. The voice of BNR in Romania especially through the voice of its Governor, Mugur Isărescu is full of authority and a legitimacy which is hard to attain by other voices. He is highly acknowledged both by the general public and specialists. A simple exploration of the level of trust (regardless of sources or the interests behind them, even if neutral) published in the last twenty years or a random scanning of the reactions in the trade press produced by the declarations of the NBR officials will bring important evidence regarding the power held by what we call here the voice of NBR.

Thus, in this paper we aimed to explore both metaphors in speeches and interviews used between 2011 and 2012 (available on the website of NBR) and a conceptual metaphorical mapping. This is the time of crisis when hopes of overcoming it are intertwined with warning messages of its deepening. The authority and legitimacy of the voice which launches them, and gives them more power in both providing a better understanding of reality and also in generating better adapted actions towards what we generically call economic crisis.

## 2. Methodology

Conceptual metaphor analysis developed by Lakoff and Johnson (1980), Lakoff (1992), refers to „mapping” a metaphor between a source and target domain. When we say that the economy is a living organism, we create a link between an abstract domain (target domain – *economy*) and a more concrete, more distinguishable one (source domain – *living organism*). Thus, we understand that *economy is fed with, grows, suffocates, breath* etc. The example illustrates also the distinction between generic-level metaphor

(economy is a living organism) and a specific-level metaphor (economy is human or human behaviour).

Studies on business language and more specifically on metaphors have gathered both linguists and economists and have generated models more or less similar to conceptual metaphorical mappings (Peattie, Gruszka and Frischherz, 2012; Rojo and Orts, 2010; Kövecses, 2010; White, 2004; Charteris-Black and Ennis, 2001).

In our research, we have used taxonomies of Lakoff and Turner (1989) and Moreno Lara (2008), as they were adapted to business field in a model developed by Ana María Rojo López and María Angeles Orts Llopis (2010). The model comprises three generic-level metaphors and a number of sub-categories:

- A. Metaphors based on *the Great Chain of Being*
  - Object
  - Building
  - Natural force
  - Supernatural force
  - Human behaviour
  - Illness
  - Celebration
  - Living being (animal or plant)
  - Machine
- B. Metaphors based on *image-schemas*
  - Verticality
  - Source–path–goal
  - Container schema
  - Journey
- C. Metaphors based on the *metaphor Actions Are Events*
  - War
  - Competition game
  - Show business
  - Medieval tournament

## 3. Data selection

A selection of 22 texts has been used in our study (speeches, opening address, presentation outlines and presentations) posted on the website of the National Bank of Romania between January 2011 and October 2012. Just texts have been used excluding PowerPoint presentations. The Governor of NBR Mugur Isărescu is the dominant voice in the 16 texts.

The crisis is not the main topic of each of the 22 texts. But all the texts have been written and presented to the general public in years of crisis, under the wind of crisis and with references to it. In these speeches, metaphorically speaking, the crisis is a stage, an actor, a producer, a driver, a script writer, or a combination of all of these. Not even the public is a mere viewer.

All 22 texts (17 from 2011 and 5 from 2012) were downloaded from the website of the NBR and then copied into a document. Each author read and selected metaphorical expressions of the corpus. After comparing the three lists, 181 metaphorical expressions were retained, 148 from 2011 and 33 from 2012. Each metaphorical expression was analysed and coded according to the nature of source domain, the context, the type of motivation. For example, the expression „mother banks which cannot be so generous” has been included into the sub-category „human behaviour”, a category which following the Rojo and Orts (2010) model belongs to the generic-level metaphor based on the Great Chain of Being. The expression „traps of the period before the crisis” involved a double inclusion into subcategories *container schema* and *machine*, and a double inclusion to the generic-level metaphor based on the Great Chain of Being and in generic-level metaphor based on Image-schemas.

Also, the meaning of use of each metaphorical expression was the criteria according to which the metaphors were categorized into positive, negative or neutral.

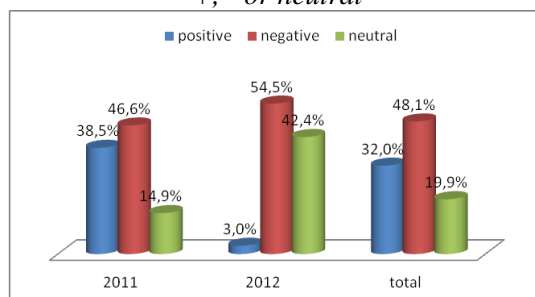
#### 4. Results

The first remark should be made that the analysis, coding and, in case, a double coding of metaphorical expressions, resulted in the growth of their number from 181 to 245 as could be observed in the table below.

In terms of the meaning of use of metaphorical expressions, the negative one is dominant. Taking into account the economic context dominated by crisis, the result is foreseeable. What could surprise (or be more a source of worry) is the difference between 2011 and 2012. The number of metaphors used positively has decreased significantly in 2012 in favour of negative or neutral ones. We could state that in 2012 the discourse of

NBR has become more prudent and pessimist. Graph 1 shows this differentiation.

Graph. 1 Metaphor distribution by meaning +, - or neutral



The analysis of metaphors using the Rojo and Orts (2010) models showed a clear preference for the first generic-level metaphor, called the Great Chain of Being (Lakoff and Turner, 1989). Table 1 presents percentages by category in the total corpus and in each corpus of 2011 and 2012.

Table 1. Percentages of the three types of metaphors

Generic-level metaphor	corpus 2011	corpus 2012	corpus total
Metaphors based on the Great Chain of Being	61,0%	66,0%	62,0%
Metaphors based on image-schemas	29,2%	14,0%	26,1%
Metaphors based on the metaphor Actions Are Events	9,7%	20,0%	11,8%

First category of metaphors, the Great Chain of Being, is based on the cultural model developed by Lakoff and Turner, (1989), adapted by Rojo and Orts (2010). The source domain is defined by the attributes and behaviors of natural beings that are organized into following hierarchy: humans, animals, plants and complex and natural objects. Table 2 containing the distribution of metaphors by sub-categories, illustrates preference for analogies with *Human behaviour* (25,31%), *Machine* (14,29%) and *Illness* (8,98%). Percentages are calculated by relating to the total number of records (total 245).

Table 2. Metaphors based on the Great Chain of Being

Metaphors	corpus 2011	corpus 2012	corpus total
Object	8	7	15
Building	1	3	4
Natural force	6	2	8
Supernatural force	2	1	3
Human behaviour	53	9	62
Illness	20	2	22
Celebration	0	1	1
Living being (animal or plant)	2	0	2
Machine	27	8	35
<b>Total</b>	<b>119</b>	<b>33</b>	<b>152</b>
<b>TOTAL</b>	<b>195</b>	<b>50</b>	<b>245</b>

Second generic-level metaphor based on Image-schemas, gathers metaphorical expressions for which the source domain is structured by concepts such as destination, journey, objective and also additional elements such as: direction, trajectory, speed, vehicle, rhythm, topography, space, container etc. (Rojo and Orts, 2010). In the analysed corpus, this generic-level metaphor unites a much smaller number of expressions (26,1% out of the total recorded expressions) and there is no explicit association with the sub-category Journey. Expressions, such as, *ups and downs*, *slowness of growth recovery*, *the trajectory of sustainable relaunch* or *central banks ended in a trap* have been included into first three sub-categories as illustrated by table 3

Table 3. Metaphors based on Image-schemas

Metaphors	corpus 2011	corpus 2012	corpus total
Verticality	29	1	30
Source–path–goal	21	4	25
Container schema	7	2	9
Journey	0	0	0
<b>Total</b>	<b>57</b>	<b>7</b>	<b>64</b>
<b>TOTAL</b>	<b>195</b>	<b>50</b>	<b>245</b>

Third generic-level metaphor based on *Actions Are Events* is the least represented in the corpus. Metaphor *Actions Are Events* „allows us to conceptualize financial activities as certain events” and „the metaphors of the three events share some features or elements, such as a high degree of competitiveness, a certain spirit of aggressiveness and the search for victory or fame” (Rojo and Orts, 2010, p. 3306). Sub-category *Show-business* is of American origin in the earlier mentioned model. Results in table 4 reflect a certain affinity with the language and spirit of competition, sometimes war-like, and a total absence of analogies with elements from *Show business* or those typical for *Medieval tournament*.

Table 4. Metaphors based on Actions Are Events

Metaphors	corpus 2011	corpus 2012	corpus total
War	8	4	12
Competition game	11	6	17
Show business	0	0	0
Medieval tournament	0	0	0
<b>Total</b>	<b>19</b>	<b>10</b>	<b>29</b>
<b>TOTAL</b>	<b>195</b>	<b>50</b>	<b>245</b>

## 5. Conclusions

An exploration of crisis-related language does not bring possible solutions to solving the crisis, not even clues. It does not bring spectacular results, in fact, it is foreseeable for the tone and meaning of metaphorical expressions to be in a time of crisis more negative or even neutral, as the voice of NBR has already been acknowledged for its balanced way of tackling difficult economic topics.

The analysis of metaphorical expressions offers remarkable analogies, which are provided by discourses, and the way in which these discourses help us in getting closer to economic reality and, especially, in getting us with specific answers to this reality. Language corrupts thought but also our actions. Here, *to corrupt* could have a positive as well as negative meaning.

As the analysed corpus gathers discourses, opening addresses, presentation outlines and occasional presentations at different public events, it is foreseeable that the audience be that of a general public with limited competence in the field of economics. Language full of metaphors is a good clue of the kind of attention the speaker gives to the audience and to the content of the message. For example, a wording such as „(in Romania) in the traffic on the banking highways and road, there have not occurred big accidents, and only a few small ones and with no serious consequences” allows a quick insight into a piece of reality which otherwise would require a couple of graphs and tables and, at least, few explanations of the symbols used.

The source-domain used by the speaker offers clues on his/her interests and experiences and also bears a strong cultural hallmark. Further development of this investigation would require a sociological perspective. Still, if we come back the first generic-level metaphor based on the *Great Chain of Being*, it is not the same if analogies lie within *Human behaviour* or *Supernatural force*. As metaphors have the power to create reality, it is good to see the dominance of metaphors in sub-categories *Human behaviour*, *Machine* and *Illness*. Behaviours could be changed, diseases cured, machines are human creations which could be optimized. To the contrary, dominance in *Supernatural force* or *Natural force* would exacerbate even more the so-blamed spirit of contemplation. Voices of a historians, sociologists and anthropologists could offer a couple of possible explanations for the absence of analogies in *Journey*, *Show business* and *Medieval tournament*. Analogies in *War* and *Competition game* stand out as they were predominantly used in the positive and neutral sense. „*Last bastion of defense*”, „*risk maps*”, „*guardian of macroeconomic stability*” or *casino capitalism* are analogies which invite to calm, respect towards some institutions and to acquiring behaviours which probably facilitate crisis facing and its overcoming.

These are mostly optimistic conclusions. Pessimists and critics have the right to some serious objections. The limitations of this study lie in the fact that the corpus was not large. The target audience of this corpus is

also quite limited and not always the main decision maker in economy. (Professors of economy analyse economy even more seldom and can take decisions which could be important at the macroeconomic level. They also face the crisis.). The analysed corpus is dominated by a single voice that of the governor of NBR even if it is an extremely important voice. The model applied (Rojo and Orts, 2010) has the Anglo-Saxon cultural pattern and by adoption also a Hispanic one. Sometimes, local colour could not be represented in this model (ex. *collectivization of sovereign risk*). Analysis and coding are inevitably subjective processes. The authors’ perceptions can sometimes distort the selection of metaphor meanings.

Therefore, the study offers few research paths, brings out new questions and invites us to the adjustment of the model in the future analysis of a larger and more representative corpus.

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# Seafarers’ Employment Procedures in Crewing Companies

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## Abstract

*This paper presents the case-study of seafarers’ employment procedures applied at a Romanian crewing company. The observations made are completed with employment practices in other world regions.*

**Cuvinte cheie:** employment, seafarers, human resources management, maritime transport

**Clasificare J.E.L.:** J39, J41, J53

## 1. Introduction

Through activities of recruitment and employment the crewing companies makes arrangements to identify human resources with work potential for owners with whom they collaborate. Crewing companies hire seafarers in the interest of ship owners who require these services. In order to be employed, recruited seafarers must meet minimum competency requirements established by international regulations and those set by ship owners.

## 2. Research methodology

This paper presents the procedure of seafarers’ employment as observed at a crewing company from Constanta during March 2010. The observation time period was of one month. Beside the noted observations, the research methods consist in interviews made with the General Manager and the Recruitment Assistant, related to the employment procedures. The crewing agency was established in 2008 and is a small size company with Romanian private ownership. The number of office employees is below ten. The seafarers’ database at the moment of observation was over 75 recruits.

At the request of the General Manager,

the name of the company remains confidential. The conclusions of the observations and interviews are described below.

## 3. Seafarers’ employment procedures in Romanian crewing companies

After finding a potential ship owner (the client that has ships and needs manning), the representatives from the case-studied crewing company informs the owner of all the details concerning the competences of the person to be employed and if the owner confirms the acceptance of employment, there are required data about ship type, voyage and approximate period of boarding. There are also requested and received other information that should be known by seafarers regarding the employment conditions. Following, after the CV selection and hiring interviews, the candidates will perform a complete medical visit to an authorized medical center. If the medical test results are considered satisfactory by the shipowner it follows the confirmation from both the employer (shipowner) and employee (seafarer) of boarding acceptance under the established conditions.

From this point starts the legal steps of hiring and the human resources department is responsible for sending the letter of employment confirmation.

When the letter is sent to the employee the payroll office must be informed on the modality of wage pay: by monthly payments or by payment on board.

Promptness of wage payment or of other amounts such as transportation costs is a vital element of shipowner - seafarer relationship because the seafarer expects the payment is performed regularly in a bank account or directly to the onshore family. It is therefore very important to have a proper flow of information between the human resources

department and the payroll office regarding the status of seafarers. Depending on how wages will be paid, the payroll office must know the date on which the salary is paid and any subsequent amendments regarding salary or other expenses resulting from increases or decreases of annual salary, salary increases resulting from promotion to senior positions, promotions, payments during shore waiting for finding a ship, sick pay, payments for conducting courses at the company's request, vacation pay, studies pay to obtain requested IMO certificates, bonuses payment for additional qualifications, pension schemes or transport costs.

Once the seafarer was hired the next step is to appoint him/her on a ship. The biggest responsibility of the HR department is to maintain a complete and adequate crew on each ship.

Before the development of E-era one of the most effective ways of allocating crew was preparing the individual records that indicate the date of boarding and disembarking of each ship. These sheets were arranged in the space allocated for each vessel for those who were on board. Similar facilities existed for those who were on leave, those in training, the sick, etc., so that the human resources department had at any time a correct picture on staff and could decide when and where would be the crew change.

The introduction of computers led to an increase in information that is at reach of human resources department. With the help of computer programs can be selected staff by age, experience on various types of ships, preparedness, leave and effective leave until the date is needed to be prepared a new crew exchange.

The seafarer is ready to embark after is checked the availability and validity of seafarers' documents and after is made a training specific to the ship or voyage. When appropriate, the company makes arrangements for obtaining the flag acts.

For each employee is made a training related to work safety. The records signed for confirmation of training are then stored in the file of each employee. A copy of the employee file or of the updated modifications from the personal file is sent to the master of the ship, at boarding. The master must update the information in the crew file aboard at every crew change.

Another important task of the HR department is to select personnel to be sent aboard ship for crew exchange and to make all necessary formalities regarding both crew exchange and repatriated seafarers. Any crew change must be economical and efficient.

Fig.1. Employee's documents checking list

EMPLOYEE'S DOCUMENTS CHECKING LIST		
Name of the employee:		
Completed by:		Date:
Document	Val	abil
	ity	
<input type="checkbox"/> Employment form		
<input type="checkbox"/> Seaman book		
<input type="checkbox"/> Certificate of competency		
<input type="checkbox"/> Graduating certificates for trainings		
<input type="checkbox"/> Endorsement attesting the issue of a certificate of competency according to STCW Convention		
<input type="checkbox"/> IMO training according to available job		
<input type="checkbox"/> Physical examination certificate		
<input type="checkbox"/> Passport		
<input type="checkbox"/> 2 photos passport type		
<input type="checkbox"/> Characterization rom previous job		
<input type="checkbox"/> Work contract		
<input type="checkbox"/> Boarding contract - commitment statement		
<input type="checkbox"/> Job description		
<input type="checkbox"/> Occupational safety sheet		
<input type="checkbox"/> Medical record		
Signature _____		
Human Resources Manager		

Source: Analyzed crewing agency



Changes must be made with the maximum number of crew members at the same time to benefit from reduced travel expenses and to reduce the effort made to prepare these exchanges. Crew exchanges must be performed as close as possible to the place where crew was recruited to minimize costs.

Unlike land-based personnel, most seafarers are reimbursed travel expenses to and from the ship or shipowner has its own ways to solve this problem. Such expenses associated with travel must be approved by the Human Resources Department prior to payment. Each company has a system of expenditure control and therefore all expenses that can be recovered by seafarer must be noted in the employment contract in order to avoid litigation. This is part of the company policy and most likely is the result of negotiations between owners and unions.

New employees must be trained to perform their duties effectively. There is a philosophy that systematic and progressive training combined with continuous education is a sound investment as will attract people who want to be trained and will help create a stable and motivated crew.

Another particular company policy is the decision to promote on merit rather than on seniority. In this case, decisions have to be based on subjective assessments. Promotion on merit may have one disadvantage compared with the old idea of promotion by seniority. Today there is less stability and young officers change their employing company frequently. The company is not able to make a good assessment of potential if young officers change companies too often [1]. Large number of individuals who leave too soon seafaring at the case-studied Romanian company lead to not justified training expenditures and indicates that the promotion was not selective enough.

#### **4. Employment practices in other world regions**

Different recruitment practices are adopted in different world regions and some of them can be considered discriminative. For example, the recruitment and training experienced by Asian women are significantly different than in the case of European women. Asian women depend

upon friends and relatives for information and rely mainly on crewing agents, not only for recruitment but also for training [2].

Women in Western Europe, North America and other developed countries are evidently better supported with information and infrastructure to seek employment opportunities. Crewing agencies are relatively better regulated and make profit primarily by charging the employing shipping companies rather than individual seafarers. Seafarers from these countries usually have clearly defined posts, are employed under specified terms and conditions, and their typical contract length is 4-6 months. Some companies have begun to adopt progressive policies to encourage women's participation in this sector. In contrast, many crewing agencies in Asia, Eastern Europe, Africa and developing countries in other world regions make huge profits out of the seafarers. A common practice is to charge each new recruit for their return airfare, medical examination, seafarer's book, visa and an administrative fee [3]. The bigger and better regulated crewing agents in Asia and Eastern Europe tend to have a steady pool of seafarers for their main clients and these seafarers are trained or retrained before they sign on ships. In this case, there is usually no charge incurred for the seafarers. But there are many small and less sophisticated crewing agents which often charge seafarers, in violation of accepted standards and legislation, for their service and overcharge for substandard training. In the Philippines, according to a study conducted in 1998 on seafarers employed in a major cruise company based in Miami, it is typical for a seafarer, woman or man, to pay an agency fee of 45 000 – 60 000 pesos (1200-1500 USD) to get a job on a cruise ship. The money is said to cover the return trip airfare with an open return ticket, the seafarer's visa and the medical exam totalling 1100-1300 USD. The difference goes to the agent.

Many seafarers therefore were already deep in debt before they even arrived on ship. In many cases, discriminative standards were set for women. In the Philippines, a major “manning agency” refused to accept application from “any women of 35 years old or above”, whereas the maximum age limit for men was set at 50. Age recruitments for

women are much stricter than those set for men. Maximum age limits and minimum years of service in hotels or restaurants (12 months in most cases) are usually set to ensure that the industry gets a young, energetic but experienced workforce. In the Philippines, the age limit for men to be employed on cruise ships is 40 years old, while for women is 29 [4].

Typically, the length of the contract is four to six months for women from developed countries, and 9-12 months for women from developing countries. For the same post, women from developing countries are consistently paid much less than those from developed countries [5].

## 5. Conclusions

The tendency of development new types of employment contracts is given the fact that there is no security or stability of employment and hence will result in a high turnover of staff, which will have significant implications on maritime organizations [6].

In this paper were presented standard hiring procedures applied by one of the many Romanian crewing agencies. Based on the observations made on-site, at the office of the crewing agency, we can conclude that the employment procedures are not discriminative like in other cases of crewing agencies described in chapter four of this paper.

Nevertheless, there are crewing agencies in Romania that unjustifiably demands return airfare, seafarer's book or administrative fees, at least at the moment of initial registration of seafarer in the agency's database. Other agencies send obligatory the seafarers for medical examination only to specific medical companies. The occurrence of such agencies is encouraged by the fact that national regulations are not yet restrictive in this domain.

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## Management Joint Stock Company by the Unitary

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### Abstract

*According to article 137, section III, subsection I of Law no.31/1990 republished, joint stock company is managed by one or more directors, their number is always odd. When there are more administrators, the law necessarily implies that we are in presence of a board of directors. In an imperative forms in paragraph 2 from article 137 states that joint stock companies whose annual financial statements subject to audit legal obligations are administered at least by 3 directors.*

*Regarding the appointment of directors, provided that this power is ordinary general meeting of shareholders, except the first directors, who are appointed by the association. While performing office administrators may conclude an employment contract with the company and if they have been appointed by the company's employees, their individual employment contract is suspended during the mandate.*

**Keywords:** Management, Administrators, Society, Unitary system

**Classification J.E.L.:** K4 - Legal Procedure, the Legal System, and Illegal Behavior

### 1. Introduction

Administrators can be revoked at any time by the ordinary general meeting of shareholders.

If unjust dismissal occurs, the administrator is entitled to payment of damages. In case of vacancy of one or more manager positions if the articles of association do not provide otherwise, the Board shall appoint provisional administrators until the ordinary general meeting of shareholders.

### 2. Rules on the organization and functioning

If the company does not censor any shareholder may apply to the court authorizing general meeting of the shareholder who made the request or by another shareholder. Where a limited company is held by managers from Conferral of management most board members will consist of non-executive directors (those who were appointed directors).

Also, by memorandum or by decision of the general meeting of shareholders may provide that one or more members of the Board should be independent. The Management Board shall elect from among its members a Chairman of the Board, which is appointed for a term not exceeding its administrator mandate.

The President may be revoked at any time by the Board, and if the President was appointed by the general meeting he may be revoked only by it.

The articles of association may stipulate that the chairman of the board is appointed by the ordinary general meeting which appoints the board. Mainly, the board chairman coordinates, see to the proper functioning of the organs of the company, and reports on the general meeting of shareholders. If the president is temporarily unable to perform his duties during such inability status Board of Directors may assign another administrator serving as president.

The Board may create advisory committees consisting of at least two board members are responsible for conducting investigations and making recommendations to the Board in areas such as audit, remuneration of directors, managers, auditors and staff, and the nomination of candidates for various positions.

The law requires that at least one member of each so created committee shall be

independent, non-executive director. Audit committee and the remuneration shall consist only of non-executive directors. At least one member of the audit committee must have experience in the application of accounting principles or auditing.

In the case of joint stock companies whose annual financial statement are subject to audit legal financial obligations, creating an audit committee of the board of directors is required. At the initiative of the President of the Board of Directors shall meet at least once every three months, with the agenda set judiciously.

The Board may also be convened at the reasoned request of at least 2 of its members or the CEO. In this case, the agenda is set by the authors of the request. President must act on such a request.

Convening the meeting of the Board will be sent to administrators in sufficient time before the meeting date, time may be established by decision of the Board. Notice shall include the date, location meeting will be kept and agenda. On items not listed on agenda decisions can be made only in emergencies. The articles of association may impose more stringent conditions on the issues covered in this paragraph. At each meeting they will prepare a report which will include the names of participants, the order of deliberations, decisions, number of votes and dissenting opinions. The minutes shall be signed by the Chairman and by at least one other administrator. Directors and auditors and, where appropriate, internal auditors can be summoned at any meeting of the Board of Directors, meeting at which they are required to attend. They are not entitled to vote, excluding directors who are also directors.

The Board may delegate the management of the company of one or more directors, appointing one of their CEO. Directors may be appointed from among the directors or outside board of directors. If the articles of association or by a resolution of the general meeting of shareholders provided that, chairman of the board of a company may be called the general manager. In the case of joint stock companies whose annual financial statements subject to audit legal financial obligations, delegate management of the company is obligatory. Director of the joint stock company is only the person to whom

powers have been delegated the management of the company.

Any other person, regardless of technical job title in society is excluded from the rules of this law on joint stock company directors.

The directors are responsible for taking all measures related to the management company within the objects of the company and subject to the exclusive powers reserved by law or the articles of association board of directors and the general meeting of shareholders.

The organization of the Director may be by memorandum or by decision of the Board.

Board of Directors is responsible for the supervision of directors. Any administrator can request information on directors management of the company. Directors will inform the Board regularly and comprehensively on the operations considered undertaken. Directors may be removed at any time by the Board.

Board of Directors represents the company in dealings with third parties and in court. In the absence of stipulations to the contrary in the articles of association, the board of directors represents the company through its Chairman. The association chairman and one or more directors may be authorized to represent the company acting jointly or separately.

Such a clause is enforceable against third parties. By unanimous agreement, the directors representing the company acting jointly may authorize only one of them to complete certain transactions or types of transactions. Board name registered with the commercial register of persons authorized to represent the company, stating whether they work together or separately.

They submitted to the Trade Registry specimen signatures. Members of the Board must exercise its mandate faithfully in the interest of society. Board members must not disclose confidential information and trade secrets of the society to which they have access in their capacity as directors. This obligation is even after leaving office administrator.

It shall be liable to the company for damages caused by acts done by directors or employees, the damage would not have occurred if they had exercised their duties of imposed supervision. Directors shall notify the Board of any irregularities found during

their duties. The directors are jointly and severally liable with their immediate predecessors if, being aware of irregularities committed by them shall not censor or, as appropriate, internal auditors and financial auditors. In societies that have more administrators responsible for the acts or omission not extend and administrators who made the record, the record board decisions, their resistance and warn about it, in writing, the auditors or internal auditors and financial auditor. Administrator who has a certain operation, directly or indirectly, interests against the interests of society has to notify about this the other directors and the auditors or internal auditors and not take part in any deliberation regarding that transaction.

Administrator has the same obligation if, in a given transaction, is known to be interested spouse, relative or his affinity to the fourth degree inclusive.

### 3. Conclusion

This article has not proposed a comprehensive analysis of legislative changes to the legislative changes in the field incidents - analysis, given the volume of legislation do not think that change was possible in the structure of the article - only an introductory presentation of them. I believe that the current regulations, especially regarding the companies and retailers in general due to the multiple changes to the existing legal framework, will provide numerous analyzes and interpretations in practice and jurisprudence.

As far as I'm concerned, I believe that the regulations discussed in this article would be useful to take effect at a much longer period of time to enable the traders knowledge and understanding of the changes. However, I appreciate that most of the amendments to Law no. 31/1990 and Law no. 26/1990 to be welcomed, leading to elimination of many differences in practice and in the literature on previous interpretation of these two acts, and to achieve transparency on institutions already established or newly introduced.

### 4. References

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26/1990 on the Trade Register, re - published in the Official Gazette No. 955 of November 28, 20062.

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## Theoretical and Practical Considerations Relating to the Definition and Legal Protection of Know-how

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### Abstract

*English expression know-how has been known and used for the first time in U.S. since the early twentieth century and has been used in Europe in 1967.*

*Congress of the International Association for the Protection of Industrial Property, held in Mexico City in 1972, know-how has been defined as "the knowledge and experience of technical, commercial, administrative, financial or otherwise are applicable practical to operate a business or a profession execution".*

**Cuvinte cheie:** know-how, trade secrets, unfair competition

**Clasificare J.E.L.:** K2 - regulation and Business Law

### 1. Introduction

According to art. 1 para. 3 letter. f of Decision. 4087/88 of 30 November 1988 the European Commission [1], know-how is "a set of non-patented practical information, resulting from experience and testing transferor franchise (the franchisor), information which is secret, substantial and recognized". Know-how can be defined as "a skill that has been achieved by practicing skills and knowledge gained from experience, for a person who wants to save time and money ready to pay a certain amount for to use.

### 2. Legal protection of know-how

English doctrine includes know-how within the concept of "information",

which includes a significant class of data not intended for advertising, starting relating to inventions (without being subject to patent protection) and ending with controversial information about an individual's private life, among whom believe they are even birthday.

In French law undisclosed information or trade secrets are defined as "a process, a recipe (manufacturing), know-how, business information and so on, which are used by a company in carrying out its activities contribute the competitiveness and kept confidential.

"The laws in force in France are protected by trade secret three: know-how, trade secrets and confidential business information. In Swiss law, trade secret as the technical know-how including fall immaterial property rights and are characterized by some authors as "exclusive rights incomplete". In a judgment of the Supreme Court of Switzerland show that "commercial and technical secrets consist of information that can influence business results of businesses so that they would not be known or available to the public and not to holder of disclose only for a legitimate.

Japanese law, that information constitutes a trade secret, it must: not be in the public domain, to be useful as marketing or technical information and be kept as a secret, and German law, trade secret protection is regulated by the law on prevention of unfair competition that distinguishes between trade secrets and business and technical secrets, especially where no legal effect.

One of the most modern and current

legislation in the field of economic espionage in U.S. law adopted in 1996 (Economic Espionage Act), section 1839 defines broadly, trade secret as including "all kinds of information engineering, economic, technical, scientific, business and financial virtually everything that human activity contributes to the most important areas of activity ". Although the Paris Convention for the Protection of Industrial Property does not list know-how among the objects of industrial property specialist in the legal literature of our country, valued specialists is considered an object of industrial property in the new creation associated industrial products.

In Romanian doctrine, know-how was not given a uniform definition so that some consider "a generic term for all marketable intelligence that can be licensed", sometimes defined as "the creation intellectual consists of a set of solutions and/or new knowledge applicable to industrial, proprietary, and in principle communicable secret ", or" a set of technical knowledge, unpatentable and patentable but unpatented, for the production, operation, maintenance or development and commercialization of products or technologies or processes functioning". Also, another author defines know-how as "intellectual creation represented the totality of knowledge and new solutions, secret, substantial and identified, owned by a merchant useful in industry, trade and services, for which the manifest their desire to transmit, under certain circumstances, third parties " and, according to other data definitions, know-how can be regarded as" a set of technical and technological information concerning the product or manufacturing process considered as a whole or as separate parts, but their material "or as" a mastery skill and practice gained through knowledge gained from experiences accumulated for a person who wants to save time and money is willing to pay a

certain sum". Romanian legislator has taken the term know-how, which defined it as "all formulas, technical definitions, documents, designs, networks, processes and other similar items, which are used to manufacture and sell a product" [2].

From the above definition we consider that the Romanian legislator distort, in part, of the term by including designs that have specific protection or the exclusion know-how as part of the franchise in services, ignoring at the same time, forming the qualitative aspect of information know-how, making them virtually unlimited range. At the same time, we believe that the proposed definitions Romanian doctrine are consistent with those used in Decision no. 4087/88 of the European Commission and believe that it had acquired and Romanian legislator, thus respecting the obligation of harmonization of legislation, since the adoption of the Government Ordinance no. 52/1997 on the legal status of the franchise has produced some critical reactions from investors. As can be seen from this definition know-how has a broad sense, it may include, for example, methods and/or financial information, commercial and administrative, some patentable or not. Know-how is a confidential, disclosed that, whatever its nature, can only be protected by trade secret and includes "all types and forms under which the scientific, technical, economic, financial, engineering or business, including patterns, drafting, draft programs, formulas, prototypes, methods, designs, techniques, processes, procedures, programs or codes, whether tangible or intangible and whether and how they are composed, memorized or stored- physically, electronically, graphically, photographically or in writing if: their legal owner has taken reasonable measures to keep such information secret and that the information gained economic value, independent actual or potential, because



it is not generally known or easily publicly accessible by ordinary means".

Law no. 11/1991 regarding unfair competition [3] defines trade secret as "information, in whole or in exact connection of its components, is not generally known or easily accessible to people in rural normally dealing with this kind of information and acquires commercial value in that it is secret, and the owner has taken reasonable under the circumstances, to be held in confidence, trade secret protection operates as long as the conditions set out above are fulfilled.

This provision has been made under Art. Article 39. 2 of Section VII (protection of undisclosed) Agreement on intellectual property rights issues related to trade (TRIPS) [4], which states that "individuals and businesses will be able to prevent the information being lawfully under their control to be disclosed to third parties, or acquired or used by them without their consent and in a manner contrary to honest commercial practice, provided that such information:

- Is secret in the sense that in their totality or the precise configuration or assembly of their components, they are not generally known to the person dealing belonging environments normally the kind of information involved or not easily accessible;

- Have a commercial value because they are secret;

- Have been subject to reasonable provisions, depending on the circumstances, intended to be kept secret, the person lawfully in control of it. "

Also Art. 2 letter. e par. and the Agreement on trade relations between the Romanian Government and U.S. Government [5] states that "each Party shall provide, in law and practice, legal for citizens and companies, in order to prevent disclosure, acquisition or use of trade secrets by others without his consent in a manner contrary to honest commercial practices, to the extent that such information:

- As a whole or in the precise configuration and assembly of its components is not generally known or easily identifiable;

- Has an actual or potential commercial value because of not being generally known or readily identifiable;

- Has been subject to reasonable steps under the circumstances to be kept secret.

### 3. Conclusion

Holder know-how has two actions, namely: an unfair competition action that can be used against competitors and action in tort, common law, which can be used against other people than competitors. Obviously, in both cases the conditions necessary to be general tort liability: there is damage, the existence of a fault, the existence of a causal link between the wrongful act and the damage and the existence of the fault that caused the injury. Wrongful act is in violation of commercial usage involving secrecy and force to industrial activities of a person and the damage is the loss of its privileged situation was conferred owner know-how.

### 4. References

- [1] Published in the Official Journal of the European Union no. L 359 of 28 December 1988, p 46. Decision judged to be a regulation of franchise operations, was adopted in addition to art. 85 (3) of the Treaty of Rome in 1957 which contains provisions relating to competition in the European Community countries. According to art. 189 of the Treaty of the European Economic Community, Commission decision is "binding in its entirety act to designated recipients." Currently in force is Regulation no. 772/2004, adopted in Brussels on 27 April 2004 and published on the same date, in the Official Journal of the European Union no. L 123/11.
- [2] Article 1 lit. d of Government Ordinance no. 52/1997 on the legal status of the franchise, published in the "Official Gazette", Part I, no. 180 of 14 May 1998.
- [3] Published in the "Official Gazette", Part I, no. 313 of 12 June 2001.

- [4] Published in the "Official Gazette", Part I, no. 360 bis of December 27, 1994. It was called TRIPS Agreement and forms Annex 1C to the Agreement Establishing the World Trade Organization, done at Marrakesh on 15 April 1994.
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## Modern Leadership by Applying a Crisis-Adjusted Management

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### Abstract

*The paper “Modern Leadership by applying a crisis-adjusted management” is a scientific approach that tackles a current issue, much discussed and assessed from many viewpoints and interests. To substantiate this issue, it is necessary to have a general view over the global context of the economic crisis, its social, economic and political effects, whilst highlighting a set of principles and policies that create the foundation for a management used by modern leadership in times of crisis.*

**Key terms:** good leadership, management, performance, crisis

**J.E.L. classification:** H12

### 1. Introduction. Current context

The origin of the financial crisis must be traced to the effects of the massive trans-border cash flows and the wider use of derivative financial instruments. The growth of a "shadow banking sector" which is very poorly regulated has become apparent in the last decade. Banks have entered in a game of creating financial products which, apparently, have not been very well valued as risks.

European financial regulations which were adopted along with the European adherence do not contain measures to prevent such crises, and the Central European Bank and public powers, until they became involved in financial markets, realized that their role had shifted. The importance of monetary policies was severely damaged along with the extension of the prerogatives and the means of action of central banks. The European financial regulation falls between the national rationality and the need for an

international coordination. A national anchor is an advantage in the event of an asymmetrical shock, especially when not all savings are affected to the same extent.

Nevertheless, if the shock is symmetrical, the interdependence of markets requires European and international coordination. This led to the appearance of a wide range of problems regarding the financial system's role in the economy, in particular, the role that regulating authorities must play and the need for a material transformation.

The crisis has brought the issue of regulation into question. The short-term answers will prevent a future crisis, until a new focal point emerges, but counts are long-term solutions, those that make the international financial system more stable. In spite of all the changes and interventions, the crisis was suppressed but not stopped.

The crisis can be analysed from two perspectives: in terms of differences and of similarities. In the first case, the economic mechanisms that led to the current situation and the means by which this situation could have been avoided must be analysed. In this way, certain measures that prevent the appearance of a future crisis similar to the present one can be taken. But this will not prevent the outburst of another type of crisis.

The current global crisis is defined by the complexity of influences: social, political, economic, cultural influences. Closely related, without an effective management, these influences can degenerate into massive conflicts between citizens and the leadership, between various public institutions or even between states. Economy is important also in the light of the profound transformations that it might bring about in the social sphere. When the values of modern society disappear, the old certainties come back in force: the nation, culture, religion, and race.

The problems that every state faces can be considered true cultural and political threats against the state's identity and operation. With the erosion of the safety of existence, we turn to social politics.

As a result of globalization, the impact of the crisis has spread to the entire global economic system, in cascade, but the crisis was handled on the basis of each country's resources or on the economic levers employed by the leaders of each country. Therefore, countries with a strong economy, with political stability and effective management experienced a slow decline and maintained an acceptable limit. On the other hand, politically-disunited nations, without an economic maturity, felt the effects of the crisis and the pressure of negotiations with the powerful, which had severe effects and led to the enforcement of limits and restrictions.

There are several troubling aspects of the new international order, but the most important aspect is that these changes are felt at all levels and at a very fast pace. This commotion is a premise for instability. Sudden changes can bring about impulsive actions – terrorist attacks, secession riots, nuclear threats.

There is a marked asymmetry between the transmission of positive and negative shocks. Thus, the positive shocks from the US have not spread to Europe or to the rest of the world, while negative shocks have spread very fast. The financial and economic crisis in America has spread rapidly to the rest of the world, Europe entering into economic recession. By attempting to stabilize internal financial entities and revive the economy, leaders from Western Europe have invested huge amounts of resources in internal financial structures, have nationalized a large part of the banks and have reduced taxes to stimulate economy since industrial production dropped (for example, in developed European countries such as Germany, France, United Kingdom, Italy and Spain, there have been drop-outs of up to 20-25%), and the unemployment rate, the lack of confidence of consumers and the feeling of insecurity among citizens has increased in the majority of EU countries.

The analyses of those who try to understand the causes and manifestations of the current global economic crisis target not

only its negative effects but also the possibility of serious changes in the evolution of human societies. There are some experts who even claim that the current crisis is a turning point in the evolution of human kind.

## **2. The social, economic, political effects of the crisis**

The current situation equally affects the economic and social politics, without any clear difference in the impact of each of these. Internal and external evolutions that indicate the need for change cannot be approached as issues subject to an objective analysis and intellectual debate because a defensive political reaction may emerge. Economic security must be approached as an important component of national security, which defines the state of the economy grounded on prosperity, legality, balance and stability and based on principles of market economy, expressed by the lawful order ensured by economic, political, social, legal and other types of actions. It must be understood in terms of the social and economic relations whose existence and manifestation are ensured by the functioning of the economy and in terms of the overall economic interests and needs (by guaranteeing the basic principles of market economy, property, loyal competition, natural resources, ecologic balance, economic development, economic freedom, financial system, banking activities, social protection, scientific research and national technology.

The world crisis has brought instability on the market, and the situation will separate strong leaders from weak leaders. In the case of America, the crisis has compromised, although only temporary, the efficiency of global promotion of the capitalistic American economic model. Gerald Celente, the famous world political analyst and founder of the Trends Research Institute, claims that the expression that history repeats itself, especially if people do not draw the necessary lessons from it, is completely true. *“The 1929 crash resembles the Great Economic Recession*

from 2008. Like it or not, we have very clearly the premises of the first Great War from the 21<sup>st</sup> century. Thus, the riots generated by imminent poverty and the lack of food will lead to wide scope social tensions, very similar to those that led to the breakout of the second World War, and the social inequalities and collapse of the middle class will accelerate and perpetuate the current crisis. The war has already begun. *It is not the classical gun and bayonet war. The defeated and the winners take their seat at the table of negotiations, the stakes being the pieces of the puzzle by which the world can be shaped in a model on which the strategic capacities, resources are displayed. Only those with a correct view of the bigger picture will remain at the table.* Social conflicts have spread and aggravated, and one important factor which caused this situation is poor communication of the grounds for political, economic and social decisions, common at regional level, needed for reducing or stopping the effects of the crisis. In this context, social actions directed against decision-makers have become more violent, terrorist manifestations have a wider range of action; the arming programme has continued with the same fury, the consumption of narcotics is in continuous growth.

The crisis has also beneficial effects: the materialization of the economic power of each country, the countries learn from their mistakes and they identify new solutions of growth, sometimes alternative solutions in various sectors. Therefore, Romania, as a mainly rural country, with a semi-qualified working force, could identify the high potential of agriculture, since its arable area is 12.6% of the arable area of EU countries. To this we add hill and mountain grazing lands ideal for natural and healthy feeding of animals. Agriculture can be an answer to the crisis. Other sectors with a high capacity

of growth and regeneration identified are: tourism, transport on the Danube from or to other European countries. Although other solutions have also been identified, they cannot be effective because: there is no technological support, effective management and sales markets; the workforce qualification is poor, we are facing the emigration of elites and problems with infrastructure, in particular road infrastructure, problems with health and education systems, corruption and inefficiency of administration, especially local administration, the absence of a national project that unites political forces and the population.

Another positive effect, this time at a European level, is the leaders' solidarity in managing and limiting the effects of the crisis. The conclusions of the EU summit constitute the stance of solidarity of the leaders of the main member states of the European Union in managing the current financial and economic crisis, underlining the idea that the concerted actions and inter-state coordination constitute an essential part of Europe's economic recovery strategy. However, the specific conditions in the realities of each member state have led, also within this coalition, to negotiations that have generated political tensions and limit situations that led to insufficiently grounded decisions taken whose consequences, often times, were not the estimated ones. The IMF states that *“Political leaders have often been taken by surprise by the virulence of the crisis and have given in to national reflexes”*. Turning a blind eye to common strategy cannot help restore a feasible approach of the crisis. For example, the unsuccessful attempt of many western governments to resolve the financial crisis, through the omission of an essential element – capital globalization (nothing is more globalized than capital). The example underlines the conception that by applying an individual, uncoordinated approach, the efforts to restore the system will fail.

Moreover, the current international financial crisis is the first important test for the euro currency, as multi-national currency; on the one hand it can contribute to the consolidation of the institutions of the European and Monetary Union, however it can also generate a series of risks, to which other member states must find adequate answers (Sopanda, 2006)

### 3. Leadership and good practices

Leadership is nothing more than the direct and immediate form of exercising political power. The notion of power necessarily implies a relationship between two parties: the one who governs and the one who is governed. Each of these parties of the leadership relationship has an inherent political and social behaviour, influenced, determined and related to the other party. This is why leadership involves constraint, authority, domination, violence - all these are legitimate in a democratic society, but must not be confused with these. If constraint and domination are instruments of power, leadership involves objectives which the people have agreed upon and which are subordinated to the notion of “*common good*” or “*general interests*” by modern political theory.

According to Plato, a good leadership must not be confused with democracy, Plato asserting that *to govern is to exercise the art of leadership, but art implies, in this context, political, sociological, economic, administrative and, first and foremost, legal procedures, techniques, instruments and methods used by every leader* (Deaconu, 2003, 10). In line with these, we sustain the idea that a good leadership is effective management of public business by generating a set of rules, in order to promote and strengthen the society’s values targeted by individuals and groups. Therefore, the first premise for a good leadership and its political dimension which we relate to the idea of legitimation of leadership is that those in power must exercise it not to their private and biased interest but to the interest of those from which they have this power for a temporary period, but under certain conditions. The main rules that must be

observed are: clear communication, establishment of priorities, measurement of the progress in terms of objectives and feedback.

There are many causes to the current global crisis, one of them being the lack of coordination in the global financial system. The system needs coordination and the solution to this problem is not necessarily economic but political. The global financial system has become a sort of a casino game, in which very few individuals play huge amounts of money and depends on some mathematical models, and those who take decisions, political actors, are not always familiarized with these models or they do not know them, that is why many newly-created active rules are rapidly removed or changed. But the main cause for the financial crisis was the abundant liquidity generated by the world central banks (FED, BOJ) and the desire of oil and gas-exporting countries to limit the rise of the currency.

Referring to its massive spread and to the perspectives of the global crisis, Philip Stephens, in the Financial Times issue from October 9, 2008 emphasized the uniqueness of this crisis and identified the reasons behind this allegation, namely: the atrocious ferocity of the crisis and its geographical spread. For the first time, by comparing the similarities and the differences of world crises, he noticed that “for the first time, the epicentre has been in the west”. Until now, the crisis appeared in other parts of the world - Latin America, Asia, Russia. Now, the deflagration appeared on Wall Street, which has contributed decisively to the erosion of the moral authority of the West. „Yet the big lesson is that the west can no longer assume that the global order will be remade in its own image. For more than two centuries, the US and Europe have exercised an effortless economic, political and cultural hegemony. That era is ending...” says Philip Stephens.

Leaders that can provide the feeling of security and capable of modelling a new self-conscience are in great demand because the process of generating a common vision on the direction that a state must take may require a vast re-valuation at all levels - individual, group, department and institutional level. The idea of “orientation towards the interior” involves two parallel processes - a vision on the future and a

detailed analysis of the crisis. The extension of the terms of leadership could help stimulate a long-term approach and limit the speculative activities that go beyond the scope of arbitrage, to limit the short-term measures and the race for profit by speculative attitudes of management service providers.

The political class has undermined, unconsciously or not, in one way or another, any attempt - good or bad - to come out of the crisis. The split and disorganization at this level has also spread to the population who, affected by the less successful effects of Government policies based on the support and aid granted by world financial institutions and on the experience of leaders with vision, reacted, on some occasions, with violence. The rescue operation must be initiated in a conscientious manner; by reforming the weak points that facilitated the outbreak of this crisis and which represent the main problem, clear and immediate. To do this, international policy-makers must become trustworthy. Moreover they must be aware and understand that everything that has an essential role in the financial mechanism and must be rescued with an emergency intervention during a financial crisis requires regulatory measures when there is no crisis, so that governments/states do not assume excessive risks.

The policy of preventing the transformation of the financial crisis into an extended economic crisis, the protection of economic interests of the population (power to buy, bank loan repayment capacity, preservation of working places), and ensuring social security, maintaining the investment attractiveness of Romania in the context of the crisis, and the exploitation of the opportunities specific for the current context must also exist among the good leadership policies in force in Romania. Furthermore, the favourable conditions for continuation of the economic convergence process must be ensured.

The main effects felt at global level were negative. However, the most prevalent effect of the current global crisis is social and political, not economic, and, although the crisis is in full swing, it cannot be assessed because only a part of the ideological consequences of the crisis are visible. The following are apparent: the general mistrust

in the operation of financial institution, chaos in the financial system with repercussions on the social and political sphere, massive infusions of external funds which have led to the adoption of anti-social measures, the impact on sectors of the economy (industry, health, social insurance, etc.). The primary objective of authorities must be to reduce the risk of contamination of other institutions or financial markets. To fulfil this objective, the fundamental role of the authorities is to minimize the moral risk in the private sector and the financial risk for tax-payers, which derives from any financial support measure.

Subject to the conditions brought about by the crisis, there is a need to accelerate the rhythm of reforms, to mobilize national economies, and to favour the production sector for overcoming the crisis. Employers must be able to contribute to the management of the crisis. Although the crisis is difficult for any sector and many companies were forced to adjust, the time has come for employers to be more outspoken. It is true however that in some fields it is not a question of recovering losses from the last years, but resolving much older problems, the time has come that traits such as conservatism and traditionalism learn to adapt.

By its nature, on the medium or long term, a financial imbalance at a global scale requires new ideas, the reconfiguration of society and a redistribution of power so that, even after its effective disappearance, post-crisis management must be a real political choice, but with a restrictive mandate that governments must conscientiously assume. The large economic players are facing an aggravated fatigue of social tensions and populism. At the end of the crisis, the economic positions from various countries must be redistributed in order to obtain a major re-balance of the world (for example, Asia that experienced an exocentric development, will continue to grow, although more in its production capacity than in fields such as infrastructure).

The existence and experience of the current world economic crisis will facilitate the emergence of new political philosophies, either in the form of theory or explanatory applications. To analyse the manner by which different crises influence ideological theories requires a correct knowledge of the



mechanisms of crisis, of past history and of the social context in which the geographical particularities have emerged.

The main challenge of governments, on the long run, is to adjust to the principles that guide the reform of the international financial system, in particular, regarding: transparency, improvement of the security accounting regulations, ensuring rational outsourcings rational from a private perspective but socially inefficient for a proper regulation of markets, companies and financial markets, ensuring the integrity of financial markets (market manipulation and fraud) and strengthening the cooperation between world financial institutions by modernizing the IMF and World Bank leadership structures.

Financial institutions who faced problems due to the financial crisis either were declared in a state of bankruptcy, or they were withdrawn from the stock markets and then taken over, partially or fully, by other banks or groups of banks. On a short-term, the solution is to find solutions that help investors and consumers regain their confidence.

#### 4. Conclusions

Fighting the crisis, the measures for overcoming the crisis and slowing down its effects depend, to a great extent, on the strategic initiatives that politicians, leaders of decisive power in the international economy adopt and by the levers that they have available or that they build to achieve the desired objectives. The results of overcoming the crisis will depend on the available economic levers. This availability has become the primary criterion in analysing the capacity of one state to acquire a more favourable geographical position. The impact of the current economic crisis on the global power relations and the changes that will appear in this game of power will be strongly influenced, even decisively, by the geo-economic processes, as a profound motivation and as the final impact of geopolitical activities. The resolution of the current problems depends on maintaining the leadership of western powers, as the management failures might alter the global balance of power relations in favour of other parts of the world.

It would be risky to try to make a forecast of the future world situation. This would lack any logical, political or economic foundation, since there are multiple possibilities of evolution of the world policy and the possibility that a break might appear in the current trends that might shift the current course to another direction. It is possible that only an approach based on a social preview might allow us to identify some potential scenarios, by asking ourselves what opportunities will open in the world geopolitics and considering that the future of humanity remains open to political creativity and philosophies.

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# The Economic Value of Human Capital

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## Abstract

*The human factor created by physical work and/or intellectual property of all existing material, is unequivocally active value of any work, ie human capital translates into different activities, specialized or not, it creates these individuals.*

*History of the term human capital has experienced over time a series of ups and downs, as agreed or rejected by academia and the political class. Although known affirmation and its conceptual structure only after the seventh decade of the twentieth century, the term human capital has been used long before the economy.*

**Keywords:** knowledge, capital stock, human capability

**J.E.L. Codes:** J24

## 1. Introduction

Qualitative dimension of human factor involves highlighting certain aspects of its culture and civilization level and training, which is an expression of the special efforts made by the family and society, which have the effect of potentiation of human physical and intellectual skills. Reflecting on the readiness and training together with the permanent concern to raise these levels is a necessity to conduct any activity.

„This can be interpreted as meaning that anyone can perform unskilled labor, but not mutually valid, meaning that anyone can perform and skilled labor” [1].

To implement the latest achievements of science and technology requires a thorough training workers with a broad cultural horizon, able to wield and master modern tools of production.

Under these conditions, improving skills and abilities and is presented as a prerequisite condition to achieve a modern productions,

while essential factor to increase work efficiency and productivity growth. Qualitative dimension of human factor led to the concept of human capital, which summarizes all the knowledge and professional skills from the education and experience derived from the work.

## 2. History

As noted Kiker in 1968, "Two methods were used to estimate the monetary value of a human being: procedure and the production costs capitalized earnings".

The first method consists in estimating the net costs of "production" of human beings in its development, excluding costs of "maintenance" of it, Sir William Petty and Ernst Engel being among promoters.

The second method is to evaluate the present value of past and future earnings of individuals, J. Shield Nicholson and Alfred Foville the most famous economists who have used this method. Without offering a way to estimate the value of human capital, Adam Smith in *The Wealth of Nations* defined as elements of capital generally useful skills and knowledge of the human being regarded as a machine associated with both costs and the ability to produce exchange earnings. Similarly, Léon Walras and Irving Fisher argued that other economists of the early twentieth century, the inclusion of human skills available among shareholders.

Therefore, human capital individuals are precisely those skills that are characteristic of them and remain the same in any social environment, can be exploited in the labor market in exchange for economic resources of any kind. Basically, human capital consists of educational capital that highlights the skills acquired in training individuals and outside the school and biological capital consists of physical abilities of individuals, often summarized by health.

Human capital has developed as a concept in economics, which is seen mainly as an estimate of a person's ability to produce income through work. An individual's abilities and skills require a higher labor force, implying a higher payment for selling it; salary increases with level of education, as demonstrated by human capital theory.

To reflect the difference in salary just different levels of education and training is required very strict condition, the perfect functioning of the labor market. Labor demand must recognize the different levels of knowledge and skill just in their structural proportion.

Here is a condition subsidiary namely that educational provision should be perfectly suited to labor market demand. In addition, a higher level of education implies greater flexibility in adapting to specific labor market conditions, thereby avoiding the risk of unemployment.

### 3. Evolution of the concept

Economists concern for the role of education in shaping skills necessary to carry out any activities in a work process dates back a long time. “Quality populations or stock of knowledge available to them - notice Lionel Robbins - is of great significance in causing influences economic development. Without tangible skills to use them are likely to be unprofitable, and the incentive to invest depends much technical knowledge typology”[2].

John Locke denied the old faith of the ideas immanent philosophy, arguing that the human mind is the vision of the world as a tabula rasa. All or nearly all differences between human beings are due to education and social environment .

Thus Adam Smith, believed that “the difference between the special characters, for example, between a philosopher and an ordinary man in the street seems to arise not so much from nature, as in ordinary habits and education” [3].

Also Ricardian theory of value, the omission rarity influence of different types of qualifications can be taken as plausible only if all differences between people are similar differences in educational investment.

Mercantilist theory followers recognized the importance of special qualifications, such

as for example, the military, government officials, and so on, but did not pay attention to the general education population. “Reading, writing and arithmetic is very necessary for those whose business requires such qualifications, but where human existence is independent of these arts, they are dangerous for the poor who are forced to get their daily bread by their daily toil,” it stated in a writing time. Further education was emphasized insignificance general idea: “nothing is easier designed or invented more destructive to the interests and principles of a nation entirely dependent on manufactures and commerce, but to give education the lowest class of the population, which Why would condemn her to the purposes for which it was born”[4].

Mercantilist current followers he believed that most of the people have to work hard with low wages to produce goods needed for the upper class. General education would undermine the position of masters, causing turmoil and social unrest. “To make society happy and people easier to handle in different circumstances, it is necessary that the greatest number of people to be ignorant and poor. Welfare and happiness of every State and Kingdom requires that the working poor have no more knowledge than his strict occupations” [5].

With classical economists perspective on education has changed radically.

In the second book of the Wealth of Nations, Adam Smith included spending on education and training, investment and found that their results, skills acquired and united all members of society, is one of the forms of fixed capital. “The acquisition of such talents - wrote Smith - by maintaining beneficiary during education, study and discipleship, is always a real expense, which is a capital fixed and realized in the person of. Those talents, as part of his destiny, so too, are a part of the destiny of society to which he belongs. Improved dexterity of the worker can be seen in the same light as a machine or instrument of trade which facilitates and enhances the work and, while it costs a certain expense, return that expense with a profit” [6].

As shown, the genesis of the idea and postwar human capital theory were already well defined in the work of Adam Smith. Economic importance of a trained workforce

has become one of the essentials of classical political economy.

McCulloch, one of the authors considered reactionary and insensitive to the problems of industrial workers interpret decajul between advanced and backward countries as a result of differences in education. “Great importance is attributed to uniform and fair - wrote McCulloch - effective machine that man has built to help in its work, but he himself is the most important of all cars and each increase skills and dexterity is added to the purchase most significant consequence” [7].

Another British economist, Nicholson tried to measure the magnitude of the human factor in the national capital, in a paper published in the first issue of the Economic Journal. He has argued that investment in human capital is necessary or not, but developed the problem of classification and significance of human capital. He also explained the issue of economic profitability and revenue investment in people. Besides, the association ROI human factor in labor productivity gain was already suggested by Adam Smith. Additional income of a person because of his skills and general and specialized qualifications are assigned in vast majority of research in the field of investment in education and training. This is actually the most common meaning attributed to the concept of human capital in current professional literature.

In any case, the ground for a theory of human capital was prepared. Instead these concerns in a systematic body of theory had to wait several decades.

Human capital theory initiated by representatives of the new school in Chicago, all Nobel laureates in Economics contains a theoretical vein-slogan: Man most precious wealth of a country, but also significant differences theoretical development.

The most intense theoretical systematization early concerns the role of education in economic development have belonged to Theodore W. Schultz. Schultz's ideas were the foundation on which to build the theory of human capital between 1960-1970. Along with Theodore Schultz, one of the promoters of this theory include Jacob Mincer and Gary Becker. Each of them addressed priority issues of human capital, but they made important contributions in

other areas of economic research. Postulating individual rationality, Schutz and his colleagues have treated education as investment spending to increase labor productivity and thus economic growth, unlike Gary Becker who was more focused on the study of the relationship between human capital and labor income, ie the study variations in income according to education level of individuals.

It is basically subject to human capital theory, whose remarkable statement is made by Becker in 1964. The essence of the theory is simple: income individuals grow substantially depending on their level of education. Becker has generally limited its approach to human capital analysis of educational capital, highlighting the costs associated with investing in training, and the relationship between school and post-school investment.

Contemporary conceptualization of human capital made the old methods of estimating the monetary value of human beings may not be suitable for measuring human capital stocks, both at micro as well as macro level. In recent decades, analyzes on human capital have begun to define him as the educational capital as a result of the impact of human capital theory. Educational capital is presented in two distinct forms: on the one hand are skills acquired through participation in formal education systems, knowledge attested by diplomas, on the other hand are any other knowledge and skills acquired during life through their own efforts.

There is no doubt that education, training and research and development have a primary role in the installation process of sustained economic growth. Traditional growth factors: natural resources, physical capital stock, labor and possibly technological progress is often argued that they were gradually substituted new determinants: information, knowledge, high technology and connect to computer networks. In this context, knowledge and skills, new knowledge workers skills that are embedded in human capital, returned and brought back to current human capital theory. As nations become concerned with international competitiveness and technological change have increased, new products and manufacturing processes,

rapidly succeeding, innovation and general dissemination of new technologies, Schumpeterian regained significance. But this time, the entrepreneur generating factor is not traditional, but a wide range of skilled workers, knowledge workers, as he called Peter Drucker, who turns introducing new technologies and business organization into a learning organization. In this context, physical capital is substituted increasingly frequent publication we are told in economic and non-economic, human capital and knowledge capital.

With over two decades ago David Landes wrote: “The core of the whole process of industrialization and economic development is intellectual: it is to acquire a body of knowledge and application of the technique, ie ways of doing things”[8]. In fact, the famous economist would only emphasize how evolved the modern economy and reiterated rather old idea in economic research, namely that development is largely the result of people's aspirations and intellectual abilities in conditions of freedom and these aspirations and intellectual abilities are caused not only by genetic inheritance as educational and cultural emulation.

Human capital theory developed at the intersection of several concerns, some residual oriented examples of neoclassical growth theory, others focused on determining the economic value of education and finally last category aiming to investigate factors wage differences. Strictly speaking, there is a theory of human capital, such as we find in the literature synthetic formula from which to infer how education in human capital.

#### **4. Objections to the theory of human capital**

Human capital theory over four decades dominated Western economic thinking on education. Basically, this is the essence of a new branch of economics, namely economics of education. Excesses theorizing human capital attracted criticism, most baseless and void swollen fashionable ideologies. Considered the most significant grouped by target objective and scope are critical argument against the concept of human capital and critics of the theory of human capital as a whole.

As such, critical theory in general, of course, propose and refute the concept, as, criticism and refutation proposed concept, even partial, of the theory.

The best known criticism of the concept of human capital came from the authors, human development index, Amartya Sen and Mahboub El Hag [9]. The literature has proposed two alternative concepts to the human capital ie human capability and sustainable human development.

The concept of human capability not dispute the economic importance of education and health, but “not just consider capital items. They are concerned that investment in human capability, with its economic and non-economic” [10]. According to Amartya Sen, the concept of human capital, accelerating human role as a tool for increasing production capacity. Human capability emphasizes the role of education and health enhancing human capability, human role as a tool for human benefit, which is a goal. Undoubtedly, the concept of human capability and human capital are interconnected and independent, but this is not their equivalence.

Increase production capacity necessarily indicate an increase in human capabilities, but if progress factor production capability is an increase in the level of education, the concept of human capital is primarily concerned with improved living standards or income resulting from productivity growth in May high. The concept of human capability does not deny this, but believes that without an increase in living standards, education helps people to read and communicate with others, to defend their rights in court, to choose a more scientific and acquire self-respect and respect for others.

Amartya Sen has asked the question: if the ultimate goal of economic growth is not a human being? If the human being is the ultimate goal of economic growth, how can the progress of the material to become more important than human development?

In essence, the human capability consists of a set of circumstances and methods of achieving them. Some of these cases have a minimum requirement as food, housing, preventing diseases or epidemics, while others are more complex, with social functions, such as, for example, self-esteem, participation in public decisions, capacity to

appear in public without shame or feel free to choose.

The concept of human capability theory behind the formulation of sustainable human development, which “does not deny the importance of economic development and its role in improving living conditions, but requires that economic development be different and give people alternative elements, a development whose results could enjoy as nutrition and better health care, a safer life, protection against crime and violence, a better access to knowledge rest period, political and cultural freedoms and the need for participation the work environment in which people live”[11].

It is true that the idea of the human person approach only economic asset or capital item is an exaggeration, human life has value only higher order can not be approximated in a formula to update future net revenues. “It is not possible admiration for virtue (as a value) - Adam Smith - are of the same type which express admiration when we are impressed by a beautiful building or a good project”.

Human capital theory has not proposed to tabuize economic dimension of knowledge, skills and abilities, intended only to make a tool for assessing and explaining the differences between wages, focusing on the role of education and training for individual welfare. What is more, it uses a concept ideologically neutral and put a price on the value of free individual choices.

Therefore human capital theory has not been exempt from criticism, coming from the most significant promoters of human development, but also from sociologists. First they shared a kind of holism economic, human capital theory complained that focuses only on the economic dimension of education and acquisitive spirit of Western consumer society that is increasing material values set. The latter challenged fully human capital theory because this theory is a complement to the neoclassical theory of economic growth and at the same time, a tool for analyzing income distribution.

Human capital theory has not been and is not an alternative to neoclassical growth theory, but a complement to it. As such, and was incorporated into mainstream economics heritage, but not without controversy and criticism. The concept of human capital itself has sparked much discussion. Even among

advocates of human capital theory, there is a pretty broad question, still unfinished, the magnitude and measurement of human capital.

In other news, human capital theory has emerged as a theory of economic growth itself. True, its initiator, American economist Theodore Schultz sought to counteract “myopia” physical capital such as the Harrod-Domar model resulting from, revealing the importance of investing in education and health. But Schultz thought in the context of Keynesian theory and postkeynesienilor impasse with their full employment of labor and pseudo-explanations of poverty in underdeveloped countries, such as those provided by experts autointitulații MIRD and “economic development”.

“Create conditions for the labor factor to be active and creative is a socio-economic problem facing all countries in the contemporary world. Effectiveness of government management and governance quality must be assessed in terms of results in the use of labor resources of the country” [12]. What can governments of poor countries, instead forced to adopt policies to investment in stock of physical capital in terms of labor oversupply and predominance of agricultural economy is to stimulate increased investment in education and health of citizens.

## 5. Conclusions

Belief that the human factor is paramount role in economic development is a long time. It was somehow reinforced by an entire literature on human capital. However, empirical evidence were needed that the idea of strong connection between human capital and economic growth to gain public credibility, which can not be quantified, there is economic analysis, once said, one of the supporters of positivism.

In the context of enlargement so-called knowledge society, public discourse and academic research on the role of education and training in economic growth has gained momentum. Theme human capital seems to be out of academic attention during the stagflation of the developed countries, the attention moved toward the effects of the crisis and the external debt of developed

countries. Others were emergencies last century: macroeconomic stabilization, structural adjustment and privatization. In general, the research orientation during that period was focused on the identification of a stable macroeconomic framework for growth, namely the construction and revitalization of institutions.

In the knowledge economy does not matter capital equip workers but skill level, ability to adapt to rapid technological change and its innovative capacity. Therefore, education, training, knowledge management and health of the workforce are factors that contribute to economic growth.

In fact, many theoretical and empirical studies have found a strong positive correlation between human capital and the social and economic performance of a country. In the current global economy, the primary role they have high technology, manufacturing automation and managerial skills, most analysts consider development. These trends determine the importance of reducing labor costs as a source of competitive advantage for developed countries. Higher qualifications are more important, mobility, performance management, capacity to absorb new technologies and the application of research and technological development in the economy and society, and the ability to achieve product / service quality differentials.

Human capital is the main determinant of economic development and formal education in schools, possibly obligatory, is the essential source for creating human capital, in other words, nothing easier for a country's development. In other words, policymakers should adopt rules of general education requirements and will get what Kuznets called modern economic growth. In that case, why are not all developed nations? Probably not the right things in this manner. The close correlation between economic development and human capital is not a causal relationship. That the developed countries of the world have impressive human capital stock does not mean that because the existing stock, registered economic and social progress. Human capital can be an important factor for economic development, but it is not the most important. Its role is not linear and unilateral. Human capital stock has preceded economic development of developed

countries today. As Peter Bauer argued, education and health are prerequisites for economic development, but rather components and effects of complex and lengthy process that is developing.

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## Antisocial and Prosocial Effects of Media Content

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### Abstract

*More and more people nowadays cannot stand without watching or hearing their TV, internet, newspapers, cell phones, radio, media players and more other devices that are their main important source of information, entertainment and more others. The problem discussed in this article is about the media content and what are its effects upon the stakeholders especially the viewers of this mass media channels, and what is selling best. What should be forbidden out for their interests and the well being of the viewers, and who can tell what should be allowed to see and what is not. A very important thing is the freedom of speech and how it is interpreted by media, and it is a good rating worthy of destroying people's life.*

**Cuvinte cheie:** antisocial, prosocial, media content

**Clasificare J.E.L.:** M31

### 1. Introduction

It has never been clearer than in this information age that people respond to written and verbal messages in an endless mixture of ways and that the ways a sender presents information impacts the emotional response and behavior of a receiver. [15] And people, especially those who are very easily influenced, and in this category we might include those who are not educated and, of course, the youth. Media exposure is an important determinant of prosocial and antisocial behavior. We receive information through such a variety of devices, as they can be called the black boxes, for instance TV

sets, PCs, laptops, cell phones, tablets and many other kinds of gadgets, that unfortunately instead of determining us to have a proactive and better interaction in social life, we are influenced to have a more isolated life and a sedentary one. No one can deny that nowadays these technologies bring people together, no matter the distances, country or time zone, but unfortunately only online, or virtually not face to face. And usually to transmit the exact message it is much better to be transmitted face to face, as not only the voice or the tone of the voice can be important, but also the nonverbal language. When training, 55% of communication is nonverbal, 38% is vocal and only 7% is words, as trainers need to be aware of nonverbal communication, body language is an amplifier to what you are feeling. [13] It is also true that through these technologies, the information is transmitted often instantly or even in real time. This may lead to breaking the right of privacy, as in the case of an accident, the family might find out from the news about their beloved one, instead of receiving this information from the legal authorities.

### 2. Antisocial and Prosocial Effects of Media Content

Our social environment has been changed by the mass media, as it influences our lives, beliefs, culture, habits, values and it seems that we have less and less time for family and friends, to get together in a real location and to interact face to face, as it is much easier to reach more of them through email, phone call, text messages, facebook account and further more. As we know media plays a very important role in our lives, in the way that we think, act, behave. We can sincerely say that

sometimes it is actually ruling our lives. It might make us the wealthiest and happiest persons in the world, but at the same time make others the most unhappy. The competition for a better rating is fierce and shocking news are watched by most of the audience of the TV channels, web news. In other words violence and shocking news attract audience and number of hits on web sites, that are directly related to the position that is gained by the mass media communicators, and the capability to attract organizations to promote their products or services through them. Not only mass media can be made responsible for the excessive violence, but also movies, video clips, video games, computer games and others.

Research evidence has accumulated over the past half-century and consequently has shown that exposure to violence on television, movies, and in video games increases the risk of violent behavior on the viewer's part, just as growing up in an environment filled with real violence increases the risk of violent behavior. The new means of communication, like the internet and television that break the old boundaries of family, neighborhood, and community that might have protected our youth to some extent in the past, but not totally. The intensive development of newer and easier means of communication have not really introduced new psychological threats to our children, but they have made it much harder to protect our offsprings from the specific threats, that were brought by free information that can be found on this mass communication and have exposed many more of them to threats that only a few of us might have experienced before. [7]

A number of long-term studies were conducted to determine if media violence was having antisocial or prosocial effects on humans. So five major results came from these studies [2]:

1. Catharsis Theory – suggests that rather than be harmful, violence in the media actually has a positive effect on society. The central assumption of the Catharsis Theory is that people, in course of daily life, build up frustrations. The goal to aggression increases accessibility of aggressive thoughts, and that after goal-fulfillment, accessibility of aggressive

content is reduced. The notion of catharsis of aggression refers to a possibility that when one experiences an aggression-related negative state and then performs an aggressive act, this would reduce that negative state and thereby also reduce further aggression. These studies show that fulfilling the goal to aggression reduces accessibility of aggressive conducts and the likelihood of aggressive behavior. [4]

2. Aggressive Cues Theory – refers to the fact that exposure to aggressive stimuli will increase physiological and emotional arousal, which will increase the probability of violence. There is a strong association between Internet addiction and aggressive behaviors, as well as the moderating effects of gender, school, and depression on this association. Aggressive behavior in childhood and adolescence is a risk factor for violent behavior in adults. The influence of mass media has been addressed as one of the most important factors for adolescent violence, and also violent video games have also been reported to have a negative impact on social and emotional functioning in adolescents. The Internet is one of the most widely accessible media in the world with characteristics different from previous media. [9] We can talk here about participation, interpersonal interaction with other humans that can be complete strangers and who might not want the best for the young ones, the ease of finding all kind of information that many times is not the most accurate one, or the true one and parents cannot always monitor their kids as they would like to.
3. Observational Learning Theory – it concludes that people can learn by observing aggression in media portrayals and, under some conditions, model its behavior. Media violence centers on acts of physical aggression, observational learning theory suggests effects on users' propensity to engage in physical aggression. The inherent normative component that by presenting aggression as successful and legitimate, normative beliefs about aggression would be influenced that could also increase the propensity to engage in other forms of

aggressive behavior.[11] On the other hand social learning theory suggests that individual differences in criminal behaviors depend on several key principles of learning, and the probability of engaging in crime and deviance is higher for people who differentially associate with others who engage in deviance or elicit favorable attitudes or definitions toward such, who are more exposed to models of criminal behavior (directly or symbolically) from salient others, who define the act as desirable or justified, and who anticipate a reward rather than a punishment as a result of the act. [14]

4. Reinforcement Theory – the assumption of this theory is that media portrayals reinforce established behaviors viewers bring with them to the media situation. Not only VIP's, leaders that appear on mass communication channels can influence young generations, but also video sharing websites like YouTube can have an important impact, source of information and power of example. Alcohol and aggressive media messages are frequently seen by adolescents and can be influential towards alcohol use by establishing alcohol expectancies. Findings suggest that YouTube videos about alcohol and also aggressive behavior or conduct can be very easily imitated, and have far reach and displayed almost entirely negative outcomes, modeling dangerous behaviors. YouTube videos may have more influence compared to traditional media, as they are user-generated rather than commercially produced. [10] As it is worldwide known that movies with product placement or commercials are made and it is paid to present in not a realistic way, the product or service, but showing only the benefits. As in the case of the immigrants, that we can firmly state that they are the real ambassadors of a country, and not the ambassador, who have to behave and follow strictly the conduct of that country. Common people get in contact with the immigrants, who become the image of their native country. Like the commercials, some of the immigrants might not reflect the true and realistic

image of that country, the values, the true nature or in other words the material and nonmaterial culture, and people who have unpleasant encounters with them, are very likely to generalize thinking that all the natives from and in their country behave and act in the same way. Resulting an decrease of tourists and people willing to visit that country.

5. Cultivation Theory – it considers that in the symbolic world of media, particularly TV and movies, shapes and maintains audience's conception of the real world. TV violence watched in the third grade correlates with aggressive behavior at age 19. An experiment was deployed to see what is happening when television is introduced into a community, and it was discovered that a significant increase in the number of aggressive behaviors was demonstrated in this study that compared similar Canadian communities with no television (Notel), one channel (Unitel), and multiple channels (Multitel). Unfortunately children spend more time with media than in any other leisure-time activity except for sleeping. Another important issue is that both teenagers and adults are firmly convinced that media cannot influence them in any kind. [17]

On one hand it is cheaper and a very easy alternative, not only for children, but also for their parents, instead of going outside to play, to have their kids in the house and keep a close eye on them, but on the other hand, not always what the offsprings hear, see on television or do on internet can be supervised by the parents. Even computer games can influence the behavior of a person, especially the young ones.

Previous researches have shown that playing violent video games increased aggressive tendencies, but playing a prosocial (relative to a neutral) video game reduced the hostile expectation bias and decreased the accessibility of antisocial thoughts. Playing video games is becoming more and more popular, not only at children, but also young and middle-aged adults who spend more and more time playing video games. [6] During the economic crisis when the unemployment rate is bigger, the sales of video games increased surprisingly at the first glance, but if we study the exact activities of playing a

video game is much cheaper than other forms of entertainment and also a big time consuming.

Worldwide more than 1000 people a day under 25 die as a result of a traffic crash, remaining the leading cause of death among young people. Several studies have found a relationship between video game playing and traffic related risk taking. Young drivers' risky driving behavior can be predicted before they have obtained their actual driver's license and thus before they pose a risk in traffic for themselves and for other people. [1] Unfortunately, it is not legal and in the spirit of the human rights, not to give someone a driving license because he or she likes to play racing video games, as it means that the authorities have to survey the young ones and not only to see if they played such games. The only thing that can now be done is to do prevention campaigns that will have to target those who easily are taking risks, or probably in the near future to allow only games that will have a conduct in respecting the life of the others and the laws.

Mass media is nowadays more powerful than ever. If two decades ago, the messages that were transmitted to the population were controlled and censored, nowadays sometimes it is practically impossible to do this. Much of the alleged guilt may be upon the internet. In the 90's the mass media channels were only the television, newspapers and radio, we can include here also books and movies. The viewers, readers considered the information from those sources the true ones, but unfortunately sometimes it was difficult for them to lay their hands on them. These days, because of the internet we can find a lot of information, too much for some of us, but this information does not come for free, as we ourselves we must see which information is true or not, and we have also to filter the information. We might add that now we have the freedom of speech, but what is true and what is not, is upon our shoulders. A good example is when you read on a forum about a hotel or restaurant to which you want to go. It is very possible to find positive and negative impressions about that place, some might be true, others not. Always we have to ask ourselves who has to benefit from that good or bad impression. If it is a good impression,

it is very likely that an employee has posted that comment, instead of a bad one, we might have in mind that the competitors of that hotel or restaurant might be the authors, of course, we should not exclude the case of real customers that in good faith posted those comments. The problem can be solved if those who post comments are obliged to bring evidence that they have been there and even some video footage or pictures. The main issue here is that the power of media can be very dangerous if it falls in the hands of those who are not preoccupied with the best interest of the people, and intentionally let the truth slip by. Companies, multinational organizations, corporations, politicians even presidents can be raised by mass media, but as media can raise some of them, it can also make others fall, and always being impartial or unbiased. The editorial in leading mass media has been shown to significantly affect stock prices and not only, so we can also speak about the evolution of media effects theory [12]:

- a) Direct Effects - Media assumed as all-powerful; audience as passive recipients
- b) Minimal or Limited Effects Theory - Most common impact of media communication was reinforcement, not change
- c) Cultural Studies – Neo-Marxist - Media seen as powerful agents for ideological hegemony by ruling elites & capitalism. Assumed major effects.
- d) Political Economy - Media seen as part of political & economic structure; agents of powerful institutions & capitalism. Assumed major effects.
- e) Political Economy – ‘Public Sphere’ Theory - Media is a public forum for all. This view widely dismissed as ‘romanticized’ and naïve.
- f) Cultural Studies – ‘New Audience Research’ - ‘Ethnographic turn’ introduced recognition of audiences as active interpreters of texts and texts as polysemic. Shifted focus to audiences & viewed media as less influential.
- g) Synthesis of Views/Integrated Theory - Media are influential, but through a matrix of factors including audience education, race, sex, religion, etc, access to alternative discourse (e.g. family, peers) diversity of media.

At present, it is safe to say that other several researches have established several correlations between media violence and humans' tendencies towards it. People with aggressive tendencies tend to prefer violent programming more than those without them. Some studies find a correlation between exposure to violent programming and aggressive behavior. However, that correlation may be due to a variety of spurious factors that have not been adequately eliminated. [16] Unfortunately what is forbidden is more attractive to the viewers, and so the rating grows and that channel gains more money from advertising companies. We should bear in mind not only violence, but also nudity, sex, racism and behavior that are not proper and normal. In our point of, the values, beliefs are upside down and what normality represents, and who says what is normal and not. Normality is given by the many, the same thing happened years ago when beliefs, culture and attitudes changed in a radical way. Individuals that will seek their 15 minutes of glory, will always want to volunteer no matter if sometimes they make fools of themselves.

Viewing aggression in the media may increase similar behavior in real life or, alternatively, forms of aggressive behavior or that are different than the aggression portrayed. Media watchdogs, parents, and politicians should be more focused not only on the effects of viewing physical violence, that is very easy to be spotted, but also aggressions that are more subtle and indirect and consequently escapes the scrutiny of parents, ratings board, and other regulatory bodies. [3]

Other researches examined the hypothesis that exposure to prosocial media promotes prosocial outcomes. Repeated encounters with prosocial media may yield long term changes in personality through the development and construction of knowledge structures. Thus, the media does not only increase the likelihood of aggressive and violent behavior, but could be also effectively used to improve social interactions. [5]

### 3. In conclusion

Media channels have to find interesting subjects to show in order to have a very good rating and consumers watch, hear or read their products. Who can be blamed upon the content of the media? The people that are watching this kind of news or the mass media that is transmitting it, constitute a weakness chain, that unfortunately we will never be able to escape from it, as it is commonly known that good rating brings more and more publicity contracts. The real problems that people have are neglected, and if we draw the line to see after each and every big scandal the value of information, and the conclusions that can be drawn after it, we realize that it was only a waste of our time, not bringing any kind of added value. More over it makes us stay and wait in front of the black box no matter if it is a TV set, a PC, laptop or cell phone, when other things can be done. At the same time, we are more affected by the dramas of those who we see on TV, than those from our own families, and unfortunately there is spent more time with the online friends than with friends and family that we can interact face to face.

Instead of conclusion, we might say that all of the factors presented above and also media which is in fact our window with the world, with the international, national political, social environment can determine us how to think, act, behave and unfortunately we take it for granted not wondering or questioning that the information which is transmitted to us is the truth or not. That is why I want to give a very interesting quote: "They must find it difficult.... Those who have taken authority as the truth, Rather than truth as the authority! – G. Massey, Egyptologist" [8]

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## Brand and Marketing Communication

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### Abstract

*In the global era, building a sustainable competitive advantage it's hard and difficult. People wants to eat and dress with distinctive products, and the producers, from reason of costs and profitability, offer goods and services which are more and more standardized, but are offered as being distinctive from the rests, and which goes in all the world's corners. But what can determine people to make choices? Between the answers that marketers often give us is brand, that symbol which is the core of entire marketing communication process, the essence of the messages concerning products, services, or organizations, messages that are transmitted by the enterprises or other entities on the market.*

*Developing a marketing strategy it's a complex process, and in this process marketers must develop a brand positioning, must create and manage brands. In this paper, we try to underline the importance of brand in marketing communication.*

**Key words:** marketing, strategy, brand, communication, positioning.

**J.E.L. Classification:** M31

### 1. Introduction

Considered an intangible element of product and, in the same time, a very important component of marketing communication system, the brand is a guide for consumers in the purchasing process and has a strong impact on sales and profit of any enterprise.

Developing and sustaining a brand positioning is a difficult and complex process, because involves many players, mobilize all organization's resources and demands responsibility in all organization's activities.

### 2. Marketing Communication: Conceptual Elements

Any enterprise has some economic and social objectives, indicating the goals that must be reached, such as maximizing profit and satisfying the customers' needs. Near these objectives, the strategic management involves to design the strategy, which allows engagement of entire firm potential towards on achieving the goals, considering the permanent modifications of environment.

Today, more and more organizations are trying to transform their business to become more marketing-oriented.

The market strategy is a basic component of general strategy of the enterprise, and specialists appreciate that the process of designing marketing strategy is the central point of marketing programming. An adequate market strategy is that which allows making a good selection of market segments, to who is addressed an appropriate product, offered in the most appropriate place, on the appropriate price, and promoted in an appropriate manner, in such a way to achieve the marketing goals [1].

Conform to this opinion, it can be observed that marketing communication policy, as element of marketing-mix, contributes to achieve generally and marketing objectives of the enterprises.

From commercial communication, which aimed to differentiate categories of audience for a commercial purpose, to corporate communications, which aimed several categories of public-audience, not only potential consumers, but suppliers, partners, financial community, local community, mass-media representatives etc., all these initiatives have established a marketing purpose and contributes to create, to improve, to strengthen or to repair the image of products or organizations.

The concept of marketing communication



is complex and there are many approaches concerning its meanings.

The specialists consider that communication notion is more large and complex than the communicational or promotional instruments that composed promotional mix, element of marketing mix. In marketing communication there are some important aspects that must be considered, such as the communication system, process, and program. On this opinion, the promotional mix includes: advertising, direct marketing, sales promotions, public relations, personal selling [2].

On other opinion, the process of marketing communication is approached both as a planned initiative by the communicator and a purposeful act of consumption behavior by the audience. Marketing communication is an initiative, an act of imparting or transmitting information towards to an audience composed by active participants, a transaction. On this opinion, the following terms defined different important aspects in marketing communication [3]:

- Marketing communication, in the singular, means “communication for a marketing purpose”;
- Marketing communications, in the plural, means the transactional processes by which such communication is or is not achieved;
- Marketing communications mix describes the entire range of actions by means of which an organization can initiate the exchange;
- Marketing communication initiative describes either a single corresponding tactical action of a firm or the purposeful act of consuming the resulting message or sign on the part of an individual”.

On other opinion, marketing communications involves: marketing communications system and process, marketing communication theory and marketing communication tools. These tools can be used in the communication by promotional nature (advertising, sales promotion, public relations, marketing events, sales force, direct marketing) or in the communication by continuum nature (brand, package, design) [4].

In our days, the majority of individuals and organizations want to communicate, so, as a great brand specialist said: “...today,

communication itself is the problem. We have become the world’s first over communicated society. Each year, we sent more and receive less” [5].

We live in a communication world and we remember harder the messages which we are received.

### **3. Brand: intangible element of product and marketing communication tool**

In marketing policy, brand is very important at least two considerations: on one hand, brand is an important reference on product policy, and on the other hand, brand is an important reference on communication policy.

In marketing approach, the product concept is defined by the following components [6]:

- Corporal (tangible) elements, such as dimensions, quality, structure, contain, weigh, density etc.;
- Incorporeal (intangible) elements, such as name, brand, legal protection (trade mark), price, service etc.;
- Communications on product, which means all information and actions concerning the product’ presentation and toward to determinate and stimulate acquisition;
- Product’s image, which means what consumers know and think about the product.

As we can see, brand is an element related to product in three ways: as an intangible element, as element of communication, and as component of image.

In the process of new product development, marketing specialists must take some important decision, and one of the most difficult decisions is to give name and to design the brand.

Considering specialists’ opinion, some of the most powerful names are those that combine well with a visual treatment to create a memorable brand icon, and for a good name they recommend the following criteria [7]:

- Distinctiveness, which means having a “presence” of a proper noun;
- Brevity, which means to be short enough to be easily recalled and used as a

nickname;

- Appropriateness, which means to be a reasonable fit with the business purpose of the entity;
- Easy spelling and pronunciation;
- Likability, which means that people enjoy using it;
- Extendibility, which means to suggest a visual interpretation or lend itself to a number of creative executions;
- Protectability, which means to be trademarked and to be safe and valuable in the long run.

In the process of marketing communication, brand is a component of the communication mix.

Considered as a continuously communication tool, brand has an important position in communicational strategy of the enterprises. The relationship between brand, product and image is very strong: the image is created through communication process, brand gives and expresses product identity, brand name suggests the product's image, buying a product means to buy a brand [8].

So, the product image, as a component of product concept is created in the communicational process, and is indispensable related to brand.

#### **4. Brand and Communication Strategy of the Enterprise**

As a final objective in strategic marketing step, the marketing strategy must give the answer for some complex demands of modern society, such as:

- Extremely rapid movements of business environment;
- Increase of national and international competition;
- Respect for marketing ethics [9].

In the strategic marketing approach, the marketing strategy is a logic system of the activities that an operational unit can achieve the marketing objectives and reflects the fact that the strategies applied on target-markets and positioning are based on differentially advantages of the enterprise. Basic strategy is based on marketing segmentation and targeting, positioning, satisfying consumers' needs through quality, value and services and creating the competitive advantages [10].

The communication strategy is a component of marketing strategy and global strategy of the enterprise, and can be commercial or corporate.

The steps to adopt a commercial communication strategy are the following [11]:

- Analyzing the announcer marketing situation (several aspects, such as: market situation, announcer activity, product or brand characteristics, power and image), competition, consumer, previously communication activity, diagnostic-marketing);
- Brand positioning;
- Determining the communication objectives (in quantitative or in qualitative terms);
- Defining communication target (consumers and other publics);
- Choosing the communicational axle (the idea of the message);
- Determination of financial budget;
- Elaboration of communication mix;
- Measurement and control.

As we can see, the brand is an important element in the process of the elaboration of communication strategy, being present in several steps of this process.

#### **5. Brand Positioning**

Brand is defined as ...”a term, a sign, a symbol or any combination of these elements, which allows identifying the offer of an enterprise, purposing to be differentiated by the competitors offers [12].

As we can see, one of the most important functions of a brand is to differentiate products.

A brand creates value for consumers, on one hand, and for the enterprise, for the other hand. For consumers brand is a quality guaranty, give meaning for products and favorite the products' recognition, and for the enterprise brand has a commercial and corporate value, being her image.

Brand strategy allows getting five major advantages for enterprise [13]:

- Better identification for products;
- Legal protection;
- Identification with a certain quality level;
- Better targeting;
- Possibility to realize association with

product’s history.

The capital of a brand, the brand equity, depends on its notoriety (spontaneous and assisted), consumers’ fidelity, the perceived quality and image [14].

Some specialists consider that the process of development brand positioning strategy can be approached from two perspectives [15]: on one hand, is an approach which underlines how a brand is similar to competitors’ offering on some dimensions and superior on other dimensions, and, on the other hand, is another approach which focuses on how the distinguishing features of the brand create abstract benefits that can be linked to targeted customers’ goals.

The first approach is important mostly when a new brand is introduced to the market and consumers try to relate it to brands and product categories that are familiar, and goes from choosing a category and a point of difference (which can specify the superiority of this brand to other brands within a frame of reference).

This opinion underline that usually, in the process of choosing a point of difference, marketers prefer benefits that reflect an existing consumers’ belief and, based on that, the authors consider that a value position may be represented by the following equation:

$$\text{Value} = (\text{Functional Benefits} + \text{Psychic Benefits}) / (\text{Monetary Costs} + \text{Time Costs}).$$

On the same opinion, the second approach is used to enrich and deepen a brand’s position by situating it in the customers’ lives. This requires determining the abstract meanings associated with consumption of a particular brand or the general category, and the specialists refer to brand essence and category essence. This process consists in a progressive examination of the abstract implications of a brand’s features, going from its’ attributes.

On this opinion, the two perspectives are complementary rather than competing, and both are important in developing and sustaining a strong brand positioning.

In strategic marketing an important tool used is the triangle of positioning. To be selected, products must be differentiated between them through an attribute. This difference must correspond to a competitive advantage, and in relationship with customer’s expectations.

The differentiation is important because allows consumers to identify benefits of brand.

Usually, for most brands there is a single point of difference which represents a single benefit, but there are situations when a position is based on multiple benefits.

Some specialists consider that, even the marketers look mostly for the functional benefits identified by customers, in addition to the product, there are six other types of goals customers can use for activating brands. These seven categories of goals represent the ingredient for needs cocktail [16]:

- Product category – what (which means that brands are activated based on the strength of their link with the category name);
- Time of use – when (moment of day, season etc.);
- Place of use – where (the place where a product can be consumed, because of availability or convenience);
- Application – why (which means the role that customer seeks to give the product or service);
- Attributes – use (the specific functional features);
- Emotional benefit – feel (in many situation we look for emotional benefits);
- Experiential benefit – experience (experiences can be sought in order to attain a certain state of mind or simply in order to do particular things during a period of time).

So, from this point of view, the activation of brands (what) is linked with situation (when, where), function (why) and benefits (use, feel, experience).

Some specialists consider that are several key questions the positioning statement must answer [17]:

- Who is the target for brand use (target goals)?
- Why should the brand be considered (to what category does the brand belong and what goal does it allow the target to achieve)?
- Why should the brand be chosen over other alternatives in the competitive set ((what point of difference is offered in relation to other options on the marketplace)?

- How will choosing the brand help the target members accomplish their goals (the links between the brand’s point of difference and the target’s goals, drawing on an understanding of brand essence and category essence)?

Basically, positioning is a product’s definition, going from its most important attributes, attitudes or symbolic values perceived by the consumers.

As positioning variants specialists recommend: consolidating the actual position, maintaining leadership, positioning of a follower, identifying and occupying new position, repositioning the competition etc. [18].

## Conclusions

The relationship between brand and marketing communication is very complex.

In commercial communication, a powerful brand can be a product or a service which cannot be replaced in the consumers’ mind.

On one hand, brand positioning is transmitted to public through communication process. On the other hand, brand is an element of product. Consumers are informed about products through communication process and buy products associated with brands. The image of products is brand.

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## A Model for Assessing the Influence of Lifestyle on Brand Equity

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### Abstract

*A strong and successful brand has become the goal of many organizations, especially in the current socioeconomic context. The conceptual framework developed to achieve this goal sums up several viewpoints on content and measurement of brand equity. Depending on the perspective on brand equity, there are several relevant approaches: customer-based, financial or owner-based brand equity. The approach used in this article is the one proposed by Keller.*

*Benefits associated with a strong brand equity are vast, especially as brand equity has grown to be one of the most important assets of a company. Thus determining factors that have a significant influence on each dimension of brand equity proves to be essential for the success of demarche to build brand equity. A strong determinant but still insufficiently or only partly taken into account is consumer lifestyle.*

*The aim of this paper is to develop a model that provides an integrated conceptualization of lifestyle in building brand equity. .*

**Key words:** brand equity, customer-based brand equity, lifestyle

**J.E.L. classification:** M31

### 1. Introduction

Human needs, under the action of various societal factors, turn into desires. These desires are essentially unlimited, while

resources necessary to meet them are limited. In the current global socioeconomic context, people's income is considerably reduced. As a result, consumers are becoming more cautious with consumption choices they make. In other words, people will pay increased attention to all purchasing decisions. As an indirect consequence, strong and successful brands will not be affected by the economic crisis. Thus, organizations must engage in the process of building and sustaining a strong brand equity.

The conceptual framework of brand equity is vast, but a short review of the literature outlines three basic approaches: the financial perspective [1], the employee-based perspective [2], and the customer-based perspective [3]. The most used and wide accepted is Keller's customer-based brand equity. Given that literature reached some consensus on the phenomena-the value added to a product by consumers' associations and perceptions of a particular brand name [4] - we also admit that Keller's model is best suited for evaluating the impact of lifestyle on brand equity.

Although it is a consumer-centric approach, Keller's conceptualization does not take into account the main factors that are influencing the dimensions of brand equity. One of the most suitable and comprehensive factor is lifestyle. We propose a model showing the interaction between lifestyle components and dimensions of customer-based brand equity (CBBE).

### 2. Definition and dimensions of CBBE

A brief review of brand equity literature

reveals a glut of definitions and dimensions for brand equity. Even if a holistic perspective regarding the concept remains a challenge for specialists, most of them seem to agree brand equity refers to the value added by a brand name to a product. Keller establishes the concepts' coordinates, arguing that it represents “the differential effect that brand knowledge has on consumer response to the marketing of the brand” [5].

The first and most important aspect deriving from this definition is that brand equity refers to consumers' perception, to what they feel and think about the brand in question, rather than some kind of objective indicators. Brand knowledge stands for the entire complex of brand associations consumers connect with the brand at issue. These associations are well established in long term memory.

In order to build and measure brand equity, Keller proposed a sequential four steps process, translated into fundamental questions that consumers ask about a brand:

1. Who are you?
2. What are you?
3. What about you? What do I think or feel about you?
4. What about you and me? What kind of association and how much of a connection would I like to have with you?

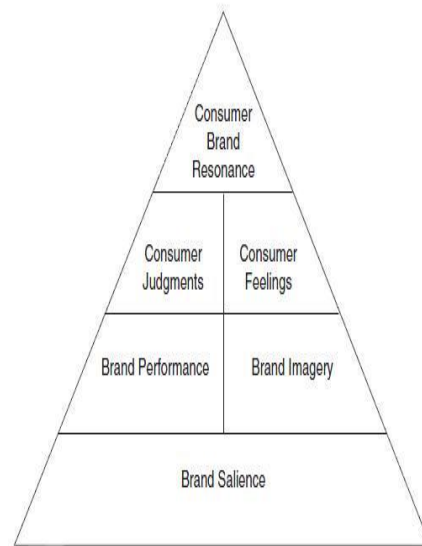
The way brands must answer these questions can be structured in a six box pyramid containing the dimensions of brand equity. Graphical representation of model components and their sequence is found in Figure 1.

Brand salience describes various aspects of consumer awareness of the brand. It refers not only to matters of recognition, recall or top of mind, but also to points of parity shared with the product's category.

The process of building brand meaning involves creating brand image through two major categories of brand associations related to performance and imagery. The first one refers to functional properties of the brand in terms of intrinsic product characteristics, while the second one deals with intangible characteristics of the brand in terms of

extrinsic properties of the product.

Figure 1. CBBE Pyramid



Source: Keller (2001), *Building customer-based brand equity*, p. 12

All the aforementioned actions are materialized in emotional or logical consumer responses. Therefore, customers' opinions and evaluations form brand judgments, while emotional reactions to the brand form brand feelings.

The last block of the pyramid represents the ultimate goal: attainment of a high identification level between consumer and the brand characterized by a harmonized and harmonious relationship. So brand resonance deals with the degree to which psychological connection occurs, and also to the level of action component deriving from this bond.

Building a strong brand is a very complex process that requires a successful completion and fulfillment of each step mentioned. Even a seemingly harmless error can sometimes lead to cascading events with damaging consequences. Therefore, factors that can influence consumers' perceptions should be given special attention. One of the most comprehensive factors is lifestyle, another widely debated subject.

### 3. Lifestyle conceptual framework

Lazer is credited to be the pioneer who created the connection between lifestyle and

marketing [6]. He pointed out lifestyle patterns, emerged and developed as a result of living in society. In other words, lifestyle is the full set of individuals’ interactions with the environment. It determines market reactions of consumers, but can also be influenced by them.

From this point forward, many authors tried to redefine the concept and establish the fundamental components of lifestyle, but the most comprehensive work belongs to Izeki [7].

In his view, lifestyle is the sum of daily life patterns deliberately and voluntarily chosen and applied throughout the individual’s life [7]. So, “the actor” is aware of the pattern he follows, the adopted behavior not being involuntarily and automatically formed and learned.

The key dimensions used to measure lifestyle are values, life visions, aesthetic styles and life goal [7].

#### **Values**

Values are usually referred to as desirable goals transcending every situation people encounter and serving as guiding principles in life. In order to be used as instruments for predicting consumer behavior, they are considered abstract classifications that are helping people to position themselves in society, giving meaning to some objects. Moreover, values are broader in scope than attitudes.

#### **Life visions**

The way people look at life can be presented in a structured manner by means of life vision concepts. In essence, it represents the perspective people take on some major issues in life, their opinions and attitudes.

#### **Aesthetic styles**

Life aesthetics refers to the growing significance of aesthetic perceptions in processes of consumption. Usual activities performed by people are becoming more and more the subject of beauty and art appreciation, thus worldly forms of consumption can be expressive and playful. The focus on life aesthetics is a consequence of living in a postmodern society [8].

#### **Life goal**

Values tend to vary among individuals and

those stated are not necessarily those applied in extraordinary situations or in every day contexts. This reversal in the system of values occurs because people generally have a central life interest which outperforms all other areas. All other components of lifestyle are closely correlated with this life goal that serves as a guiding principle in life and therefore affects the individual’s interaction with the environment.

After the magnitude gained in the literature, many voices argued that lifestyle should replace demographic variables or even become the new mean of social stratification at the expense of social class. But in order to reveal accurate and comprehensive results, this approach requires conjugated studies regarding these concepts, not the replacing of one with the other. Therefore, we argue that any lifestyle research demarche should include demographic factors.

Possibilities of using lifestyle in marketing are vast, as it can provide useful information for a wide range of decisions adopted by companies. For example, it can be used for market segmentation, to create promotional strategies, to position new products and reposition existing products, or to develop new product concepts. Associated benefits become apparent when we consider the financial and image consequences that a company would incur if it were to adopt wrong strategies because of insufficient or misleading information.

## **4. Lifestyle influence on CBBE**

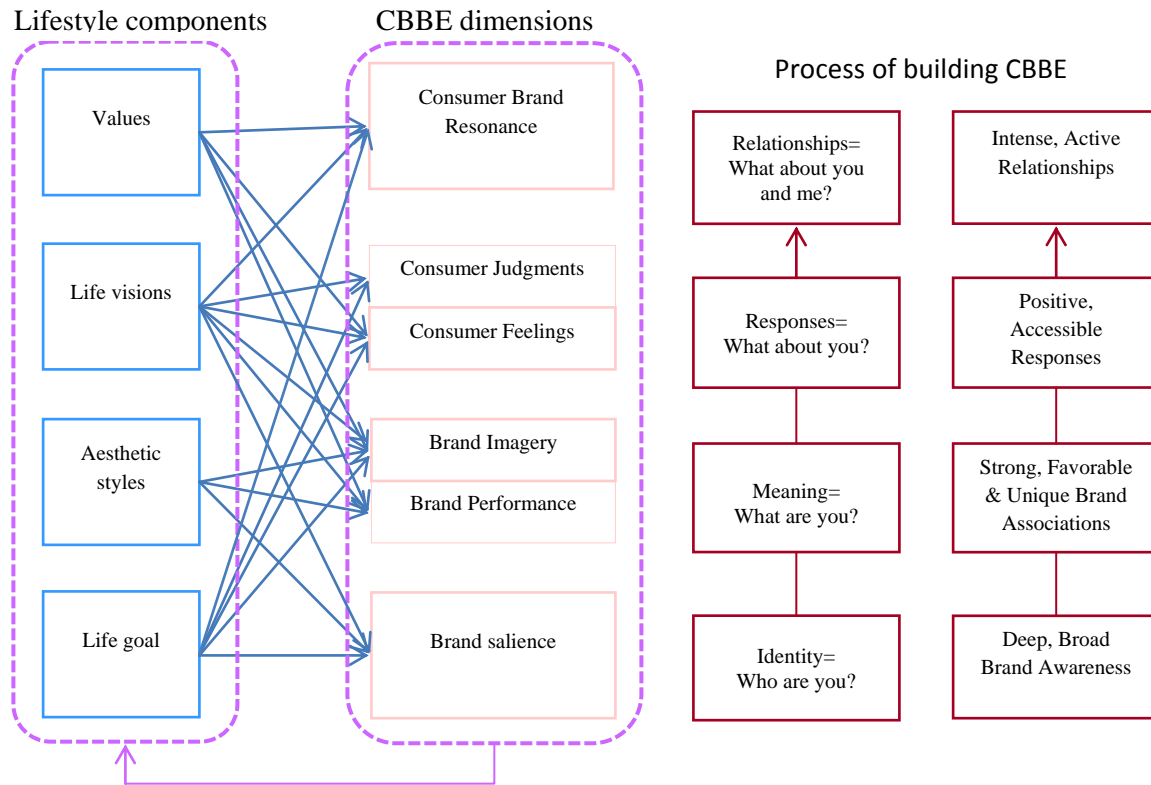
As mentioned in Sections 2 and 3, both lifestyle and brand equity are complex multidimensional concepts that hold a major influence for organizations. Thus providing an integrated view to facilitate building a strong brand equity proves to be necessary. The proposed model to show the influence of lifestyle on customer-based brand equity components is presented in Figure2.

In the first block we present the influencing factor and in the second block the influenced factor. Alongside these, one can observe the stages of building brand equity



process together with the expected results.

Figure 2. Model of lifestyle influence on CBBE



Source: Created by authors

For easy explanation of the links presented in the model we will take each dimension of brand equity and show how such interactions can occur.

In order to achieve the right brand identity an organization has to create **brand salience**. Life goal leaves an imprint on brand awareness because according to the central interest of life, people may not be interested in a product, or in brands from a product category. Also, they can disregard the consumption context of the brand. For example, a spiritual person whose life goal is the fulfillment of God’s Will may not be interested in expensive products or is possible to disagree with drinking in bars. Therefore, brands have to be relevant for people’s life goals.

Aesthetic style preferences also have an influence on brand salience since it involves specific consumption situations. Moreover, perspectives people take on some major aspects of life can affect brand awareness

because of their position on major points of attention in contemporary society. For example, a non-feminist woman might be disturbed by the idea of buying a product for both sexes from one location addressed exclusively to women.

Creating strong, favorable and unique brand associations requires establishing a brand meaning through brand imagery and brand performance. **Brand performance** is mostly influenced by aesthetic styles, life visions and values. Although functional attributes and benefits are liable objective, consumer perception on them is rather subjective, varying from style to style and from different visions. In this sense, a hippie could grant attention to aesthetic details of a product (color, shape, size) and might even ignore primary characteristics, while an efficiency-centered person, admirer of classical realism, is rather interested in fundamental features, or in product reliability and durability.

**Brand imagery** is the only dimension of brand equity influenced by all lifestyle components. Motivating these functional relationships of the model is apparent from the theoretical percepts accepted as definitions for lifestyle components.

The way customers feel or think about a brand is structured in **brand judgments** and **brand feelings**. The emotional centered perspective is influenced by values, life goals and life opinions. The interaction between values and emotional reactions with respect to the brand was often studied in literature, research findings showing significant correlations between these aspects [9]. The way people look at life and their major interest also affects their feelings for a brand. Let us assume that in the example with the efficiency-centered person we add cold relationships with family. We can say there are extremely low chances for this person to develop excitement or social approval towards a brand, because of the created psychological framework. On the other hand, she might have strong feelings of security and self-respect.

The rational centered perspective bears influences from life visions and life goals. The aforementioned example is also eloquent for this case because the person involved will evaluate more carefully quality and superiority drivers of a brand.

In the process of building a strong brand, brand managers must achieve a strong **brand resonance**. This is an essential condition because consumers must be aware of the potential outcomes of developing a relationship with the brand. As a result, consumers' values, life goal and life visions are the core elements of lifestyle that have a significant influence on brand resonance. For example, the predisposition to buy the new Iphone 5 is the sole outcome of a superior brand resonance for Apple. This emerges from the way Apple is related to each individuals' own values, life goal and life visions. In this example the extrinsic evaluation of the Apple brand has only a small influence compared to the intrinsic evaluation of the brand.

According to Keller, value emerges from

an unique chain of events [10]. Therefore, the marketing program investments associated with building a strong brand will have a positive impact on customer mindset. Such investments will have different outcomes regarding the customer mindset, that are influenced by each individual consumer lifestyle. For example, integrated marketing communications campaigns will have a different outcome when referring to a group of sedentary persons versus a group of active persons.

## 5. Conclusions

Brand equity is one of the most important assets of a company. Building, measuring and managing CBBE are complex activities that are difficult to enforce. For a better understanding regarding the influence of lifestyle on brand equity and how this affects the strategic process of building a strong brand, we created an integrated model. The proposed model is particularly useful for brand managers, offering a strong support for decision making. It offers a coherent and integrative response about what the brand should do and represent in order to perfectly fit in consumers' lives. In conclusion, this framework suggests some considerations that have been otherwise overlooked by past research.

On the other hand, model's functional connections may have different significance levels. Also, the interactions between components are not considered. Therefore, additional research is necessary for testing the model and refining the associated conceptual framework.

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## Particularities of Euromanagement in the Current Context

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### Abstract

*In a Europe of controversy, due to deep changes: economic, social and political crisis, current prospects of international and intercultural management find their best application in Europe's territory, continent also called the "nation - states" that developed over time and where we find a great cultural diversity influenced by a series of factors such as economic, social, cultural, religious etc.*

*The aim of this article is to highlight the peculiarities and prospects of euromanagement on the European continent, of competitive economic mechanisms, freedoms, but also of restrictions imposed by decisional factors in obtaining economic performance.*

*The results of this article are intended to be paths and directions to take for improving the decision-making system in the European space in order to maximize profits and increase competitive capacity.*

**Keywords:** euromanagement, euromanager, European model, diversity

**J.E.L. Classification:** F15, F6, F5.

### 1. Introduction

Compared with other international economic areas, the European space is characterized by multiculturalism.

"Europeanization is a set of mutations in all areas (economic, administrative, social,

scientific, educational and political) that leads to a pronounced internationalization of its activities within, exploiting its specific competitive advantages." (Nicolescu O., 2001)

Europeanization is a complex and difficult process, long lasting; it is the foundation and development of *euromanagement*. (Macarie F., 2005)

The content of euromanagement was defined by Gordon Shelton (Shelton G., 1992) as:

- management practiced in Europe differs from management in other parts of the world and is based on common requirements and values in European Union countries that include specific competencies to cope with the EU context;

- all national management styles in the European Union and their synthesis is based on comparative studies.

*Euromanagement* is difficult to be analyzed, defined and characterized because it addresses in a particular way the organizational, managerial and operational problems resulting from the typical European context.

Another approach on euromanagement is offered by Keith Thurley and Hans Wirdemus who stresses that "*structures of behavioral management are primarily based on EU strategies and regulations.*" (Thurley K. and H. Wirdemus, 1992)

We can say with certainty that euromanagement is constantly expanding and developing, that many European organizations require such a concept to

establish interconnections and mutual transfers of knowledge and experience worldwide.

In terms of diversity and multiculturalism, to effectively lead the European entities one must know and promote the basic elements which are to support at all levels the collaboration between people and groups and nations.

## 2. Euromanagers vs. euromanagement

To the appearance of euromanagement corresponds the appearance of a distinct category of managers namely the *euromanagers*. Euromanagement will be used in management practice on the following levels (Macarie F., 2005):

- managers of multinational and national private organizations highly integrated in EU economy through relations of supply, sales, finance and personnel. To achieve positive financial results they will need to know and preponderantly apply euromanagement manifested thus as euromanagers;

- managers of private organizations that operate exclusively or predominantly in a national space but are forced to partly use euromanagement elements because through the scale of economic operations developed they fall under the EU regulations and strategies;

- entrepreneurs and managers of small private organizations whose activities are carried out only in a local area in a given country.

**Among the basic features of the euromanager** may be included:

- the competence to relate to the European environment and to understand its multicultural, political and economic specific;

- the ability to conduct activities that transcend national borders;

- the flair to motivate and entail staff regardless of its cultural values to achieve organizational objectives;

- orientation towards the human person.

- product orientation;

- lower degree of formality

In the conditions of the current economic crisis euromanagers must address sensitive issues related to the modernization of the decisional system, optimizing organizational structures and human, financial,

informational resources on current requirements (Ghiculescu R., 2010) and to adapt their leadership style to the new mutation that appeared in society and apply new management techniques and tools.

Bloom, Helen; Calori, Roland; De Woot, Philippe in the work *"Euromanagement, A New Style for the Global Market"*, point out some landmarks on the managerial capacity of euromanagers:

- dominates international cultural diversity which is a source of knowledge and creativity;

- leads in a participatory manner so employees are fellow workers and subordinates;

- assuming the social role;

- strategic thinking - it requires long-term planning and forecasting;

- pays attention to the youth, respect for individuality, recognizing the role of women in society;

- has a global vision with international strategies.

Euromanagement is not only a regional, continental vision, but requires an international orientation of its ability to establish links, to be a system open and adaptable to new changes.

This complex process of Europeanization, conducted over a long period, which has the effect of creating a new economic environment, sets the basis for the development of Euro management. The following elements lie at the foundation of this new type of management: (Laura Tanasoica, 2009)

- the need for innovation in the field of management practices caused by the complex changes due to the acceleration of the Europeanization process, reflected in the flows of labour force, products, services, etc.

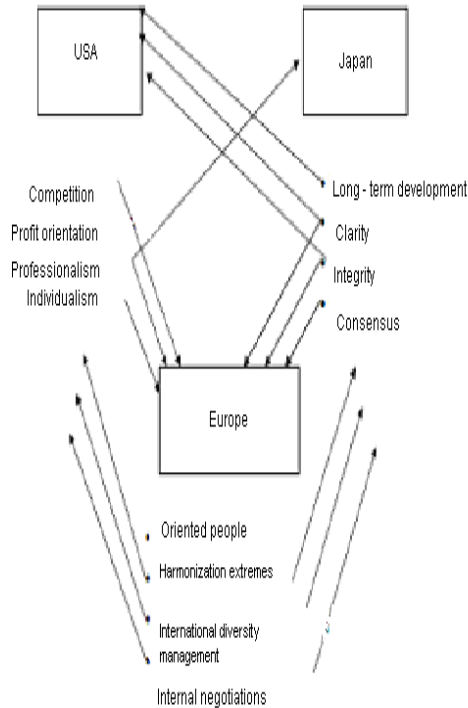
- the regulations and political situation, the economic and social decisions adopted by the management of the EU, the elements that become operational through the management of companies;

- the experience and efforts of European managers to carry out euro management, thus creating a series of identical or similar management practices in the EU states that is reflected in the establishment and development of business relations and partnerships;

- the practice of transnational companies to develop European centres in view of planning and coordinating activities carried out by their branches in Europe.

Interconnections and mutual transfers of knowledge between different regions are shown in the following figure:

Figure No. 1



Source: Bloom, Helen; Calori, Roland; De Woot, Philippe, *Euromanagement, A New Style for Global Market*, Kogan Page, London, 1997, page 73.

In figure 1 we can see that the European model of management is the binding agent between international management models, manifesting interest for quality, competition, professionalism and diversity.

As a result of the globalization phenomena, management of the economic entity had to adapt to this complex process thus gaining greater freedom of movement on international markets.

Economically competitive have proven to be the three poles of economic power: the North American (NAFTA), the Asian (Japan and China) and the European (European Union).

In such a competitive context, defining a European model of management in a global

economy depends on the capitalization in synergy of all positive influences, from the micro and macro-economic sphere, from that of the social, political, cultural specific to each country member of the EU as well as from transeuropean structures that already exist or will be built in the future. (Mihuț Ioan, 2005)

### 3. Conclusions

We can certainly say that euromanagement can not be analyzed in the context of one culture, it is in a vast process of gradual consolidation, and it presents specificity compared to the Japanese or North American management.

In order to become competitive with the American and Japanese management, the European management must harmonize the degrees of formalization and decentralization, to grant more attention to setting long term objectives that look at the economic development at an European level, supports reforms in Eastern Europe, which will attract the economic and social stability etc.

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# Method of Equilibrium Solution Determination for Ports Operators in Competition Environment

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## Abstract

*In our paper, an approach is proposed for determination of equilibrium solutions for several ports operators who are competing among themselves for cargo, i.e. under oligopoly. This approach is a combination of the methods from microeconomics and operations research (non-linear transportation type optimization problem).*

**Key words:** ports operators, competition, oligopoly, transportation type problem, points of cargo transshipment.

**J.E.L. classification:** C61, D43

## 1. Introduction

In spite of sufficiently deep development of modern competition theory during the last decades [1], some problems concerning its practical realization still now open. Methods of microeconomics used for competition modeling [2, 3] have mostly qualitative character and can't to be implemented in practice immediately. In our opinion, at present there exists a gap between conceptual recommendations for development of competition strategies of enterprises and practical implementation of these strategies. In particular, methods of operations research are used insufficiently in development of different strategies of competition. To demonstrate the possibilities of operations research for solving above problem we propose an approach for determination of equilibrium solutions for several competing transport companies. This approach is based on the combination of the methods developed in microeconomics (competition theory, firm theory) [2, 3] and in operations research (transportation problem type optimization) [4].

## 2. Main results

The problem under examination is formulated by the following way. Let us consider  $n$  sources with homogeneous cargo and  $a_i$  is the amount of the cargo at the  $i$ th source,  $i = 1, 2, \dots, n$ . This cargo must be delivered into  $m$  destinations and  $b_j$  is the demand for the cargo at  $j$ th destination,  $j = 1, 2, \dots, m$ . Cargo must be transported through  $r$  intermediate points of transshipment (e.g., ports terminals).

Denote by  $x_{ik}$  the amount of the cargo to be transported from the  $i$ th source to the  $k$ th point of transshipment (PT), and by  $y_{kj}$  the amount at the cargo to be transported from the  $k$ th PT to the  $j$ th destination.

In the situation described above may arise a competition among PT for the cargo to be transshipped. In this competitive struggle may participate actively the transport companies, as well. We assume that there are only two transport companies. First of them provides transportation from the sources to set of PT, and second one from set of PT to the destinations.

Let us evaluate the profit of transportation process participants obtained them for transport and transshipment of cargo through the  $k$ th PT. For both transport companies this profit equals to

$$\sum_{i=1}^n p_{ik}^{(1)} x_{ik} + \sum_{j=1}^m p_{kj}^{(2)} y_{kj}, \quad (1)$$

where  $p_{ik}^{(1)}$  ( $p_{kj}^{(2)}$ ) is profit per unit of cargo obtained by 1<sup>st</sup> (2<sup>nd</sup>) transport company for transportation of cargo through the  $k$ th PT.

As for profit obtained by  $k$ th PT for cargo transshipment, it is given by

$$\sum_{i=1}^n [(\pi_k - d_k \sum_{i=1}^r x_{ij}) x_{ik} - c_k x_{ik}], \pi_k, d_k > 0, \quad (2)$$

where expression in the square brackets is profit obtained by the  $k$ th PT for transshipment of cargo delivered from the  $i$ th source; expression in the round brackets is so-called demand function [2];  $\pi_k$  is maximal price for transshipment of cargo at the  $k$ th PT;  $d_k$  is a parameter which determines the demand's elasticity for the  $k$ th PT (i.e. it shows reduction of price with the growth of transshipment volume);  $c_k$  is cost for transshipment of cargo unit at the  $k$ th PT.

Hence, taking into account (1), (2), the total profit of transport companies and the  $k$ th PT is

$$\begin{aligned} \Pi_k = & \sum_{i=1}^n p_{ik}^{(1)} x_{ik} + \sum_{j=1}^m p_{kj}^{(2)} y_{kj} + \quad (3) \\ & + \sum_{i=1}^n [(\pi_k - d_k \sum_{i=1}^r x_{ij}) x_{ik} - c_k x_{ik}], \\ & k = 1, 2, \dots, r. \end{aligned}$$

We assume that following conditions hold true:

$$\sum_{k=1}^r x_{ik} \leq a_i, i = 1, 2, \dots, n; \quad (4)$$

$$\sum_{k=1}^m y_{kj} = b_j, j = 1, 2, \dots, m; \quad (5)$$

$$\sum_{i=1}^n x_{ik} \leq w_k, k = 1, 2, \dots, r; \quad (6)$$

$$\sum_{i=1}^n x_{ik} = \sum_{j=1}^m y_{kj}, k = 1, 2, \dots, r; \quad (7)$$

$$x_{ik}, y_{kj} \geq 0, \forall i, j, k. \quad (8)$$

It is supposed also that condition

$$\sum_{j=1}^m b_j \leq \sum_{i=1}^n a_i$$

is fulfilled.

The problem of equilibrium solution determination of oligopoly under consideration is reduced to the maximization of the functions (3) in respect of the variables

$$x_{1k}, x_{2k}, \dots, x_{nk}, y_{k1}, y_{k2}, \dots, y_{km}$$

(for each  $k$ ) under conditions (4)-(8). The specific feature of this quadratic optimization problem is that variables

$$x_{i1}, x_{i2}, \dots, x_{ir}, y_{1j}, y_{2j}, \dots, y_{rj}$$

may be depending on each other (in particular, they may be mutually independent) because of competition among PT-operators. This circumstance must be taken into account under determination of the equilibrium solution in competitive environment described above. For example, more simple solution for the *Cournot* type equilibrium we get if the following conditions hold true

$$\begin{aligned} \frac{\partial x_{ik}}{\partial x_{il}} = 0, \frac{\partial y_{kj}}{\partial y_{lj}} = 0, k \neq l; \\ \frac{\partial y_{kj}}{\partial x_{il}} = 0; k, l = 1, 2, \dots, r; j = 1, 2, \dots, m. \quad (9) \end{aligned}$$

In this case it is needed just to solve  $r$  quadratic optimization problems: to maximize the functions (3) under conditions (4)-(9).

More complex analysis of this oligopoly includes the possible reaction of competitors (i.e. PT - operators) for determination of optimal plans of transportation and transshipment, i.e. abandon the all constraints (9) or part of them. For example, in the frame of our approach it is possible to determine the *Stackelberg* type equilibrium solution when some of the operators of PT assume that competitors will behave themselves as the *Cournot* oligopolists.

Another possible solution of the oligopoly is agreement among all PT - operators and transport companies about maximization of their total profit

$$\begin{aligned} \Pi = & \sum_{k=1}^r \Pi_k = \\ = & \sum_{k=1}^r \left\{ \sum_{i=1}^n p_{ik}^{(1)} x_{ik} + \sum_{j=1}^m p_{kj}^{(2)} y_{kj} + \right. \\ & \left. + \sum_{i=1}^n [(\pi_k - d_k \sum_{l=1}^r x_{il}) x_{ik} - c_k x_{ik}] \right\} \end{aligned}$$

under conditions (4)-(8).

### 3. Conclusions

The approach proposed in our paper shows that methods of operations research may effectively be applied for more constructive analysis of competition among enterprises acting on the same market. In the further investigations, it allows to study many other models of competition of oligopoly type based on combination of optimization models and methods of microeconomics (e.g. competition among several industrial enterprises manufacturing the similar products on the same market).

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# Criticism of the Concepts of Offer and Price Within the Strategic Management

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## Abstract

*The concepts of offer and price implicitly influence the theory of strategic management. Their dynamics within the strategic management induce a number of features that may be objectionable or can give rise to a number of new approaches, which are aimed at completing the rationality of this science. The approach regarding the analysis of several basic economic concepts from a strategic perspective aims at repositioning their place within the strategic management, providing them with wider applicability.*

**Keywords:** strategic rationale, share offer, strategic performance, strategic perspective.

**J.E.L. Classification:** M21, O12, L10

## 1. Introduction

The concept of price is very complex because the price includes the tenderer's financial perspective, the buyer's financial cash flow, the dynamics between them (as an exchange relationship), the valorization level of the object of exchange from both perspectives and the dynamics of the other market factors regarding the object of exchange.

The concept of offer does not refer only to the quantity of products or services offered by an organization, as defined by microeconomics [1]. In a strategic sense, by offer we must also understand something more than a brand, more than a sum of synergistically enhanced competitive advantages, more than a marketing mix.

## 2. Criticism of the concept of price from the strategic perspective

At the same time, the price is very flexible in time and space, both conceptually,

showing spatial and temporal comparability, as well as regarding the changeable temporal and spatial meaning (we may talk about past prices, current prices, expected/estimated prices or regional prices, international prices, local prices, transfer prices, etc.).

From the perspective of strategic management, the price can be seen as:

Level 1: a strategic object (pricing strategies)

Level 2: a strategic basis (volume strategies or price differentiation strategies)

Level 3: a form of assessing strategic performance (the price is used for calculating all outcome indicators)

Level 4: a way of positioning products and even organizations on the market [2].

As a strategic object, the price should be characterized by adequacy, flexibility and comparability, since price strategies aim at highlighting the organization, the products or services provided in relation to the customers and competitors. The criticism we are making regards the fact that sometimes the price is seen as a factor of manipulating the perceptions of both consumers as well as competitors [3]. In this situation, the price loses its scientific consistency.

When seeing the price as a strategic basis, we must separate the volume strategies (cost leader) from the differentiation strategies. In the first case, the price is the concept which validates the volume strategy, because it is not enough for the organization to record cost savings in order to become a leader; the price must also be reduced and competition must be focused on price for the strategy to generate effects [4].

In the case of price differentiation, the price is the object of the strategy. From this perspective, the price has to fulfill two functions:

-The message function: for the customers and competitors, the price must embody the value expression of the offer;

- The reaction function: the price should represent the organization's instrument of attack or counterattack against the competitors' actions [5].

For these reasons, the concept of price sometimes becomes contextually changeable.

As a form of assessing strategic performance, the price is part of several indicators amongst which the turnover is the most important, because it is used for calculating market shares and thereby it is included in the strategic portfolio analysis models. Also, through income, the price influences the profit and, consequently, the strategic decisions. Thus, the price takes on a reductionist character in relation to the main result indicators used within strategic management. The only criticism we can make of this is that price volatility interferes with the need for decisional stability and certainty and, because of the reductionist character, volatility transfers to the decision-making level, which may lead to increased uncertainty. This affects the sustainability of the concept of price, which will depend on the sustainability of the decision.

As a way of market positioning, the price is the main inductive component. The positioning process has two components: an inductive component, defined as the organization's persuasion act of placing the offer in a favorable position and a perceptive component, defined as the consumer's act of decoding and responding in relation to its purchasing profile [6].

As a consequence, when regarded as a way of market positioning, the price must meet the following requirements:

- Must have inductive capacity, which means communicating the value and utility of the offer (even a higher value), while transmitting ideas of transactional equity (the idea that the price is fair in relation to the structure and quality of the offer);

- Must have comparative ability, which means highlighting the uniqueness of the offer against competition;

- Must have decoding potential, which means that people must easily perceive the position of the offer that is intended to be highlighted;

- Must fit the consumer's purchasing profile, in other words must be correctly positioned in relation to its expectations and solvency.

If these requirements are not met (and this often happens in practice), there is a criticism potential of the concept of price, since its opportunity and applicability become limited.

Therefore, within the strategic management, the price is a basic tool of organizational competitiveness; from this perspective, it can play four strategic roles:

- The price that creates competitive value, if the offered quality/offered price ratio is unique;

- The price that adds competitive value, if the offered quality and price/expected quality and price ratio is supra-unitary;

- The price that preserves the competitive value, if the offered quality and price/expected quality and price ratio is unitary;

- The price that reduces the competitive value, if the offered quality and price/expected quality and price ratio is sub-unitary.

### **3. Criticism of the concept of offer from the strategic perspective**

In the strategic sense, we believe that the concept of offer should include all these and perhaps even more, namely the business/organization itself and all that it contains. Some organizations (especially international corporations) have understood this issue and are making efforts in order to highlight the identity of the company as an identity of the company's offer, but their approach is not always consistent and strategically integrated.

The major argument in favor of this view is based on the consideration that the competitive advantages of an offer are underrepresented on the market by the product or service embodying them, deterring the strategic approach of the organization from reaching the desired performance or effect. Sometimes the practical efficiency of the strategy is questioned precisely because what the organization provides on the market does not reveal the strategic effort it is based on to the consumers or competitors. How can the quality and professionalism of the employees be seen as a competitive advantage unless we highlight it? How can the use of quality technology and raw materials be seen unless we highlight it? How can people see that price reduction is a

consequence of an effective cost management and not a marketing trick? Even if they are supported by marketing actions, products and services (namely the offer in the classical sense) fail to highlight these things [7].

The strategic management theory uses the concept of strategic product/strategic offer in order to refer to the offers aimed at achieving strategic goals at market level, such as the market positioning of the organization, obtaining a technological/innovational advance, occupying a particular niche.

Even if it is interesting within the strategic language and it aims at giving a certain role and a certain strategic weight to the products or services concerned, such a concept may have negative connotations in the following ways:

- It admits by exclusion the fact that the other offers do not have a strategic role, in other words the other offers do not require a specific strategy, which is wrong;

- Many companies are organized by products or product-market couples and considering some of them to be of strategic importance creates important hierarchies with negative motivational effect for those that are responsible for the other so-called non-strategic offers;

- The focus on strategic offers risks leading to ignoring the existing problems regarding the other categories of offers;

- Some practitioners have wrongly caught up the idea that the models and concepts of strategic portfolios and strategic groups refer only to some product-market couples, namely those exhibiting a special strategic role. In fact, these models of analysis take into account all the categories of products and rank them strategically, without excluding the strategic connotation from any category;

- Marketing strategies argue that some offers have a higher impact potential and this requires creating dedicated offers for the strategic segments and market needs. [8]. In fact, this regards a tactical, not a strategic tendering level, since the intention is that of a quick competitive impact;

- We cannot preserve the strategic status of a product throughout its life cycle and therefore such a title is pretentious.

We believe that we can associate at most one tactical role to certain products or offers, a role which is integrated in a product

strategy encompassing the entire assortment structure of the organization, as it is organized in ranges and lines of products/services.

In this context, we believe that the expression of strategic intent or strategic rationale of an offer would be more appropriate. The strategic rationale of the offer refers to the reasons why an organization's offer is structured in a certain way and offered on the market in a certain way and a certain amount.

In other words, it is the very strategy regarding the organization's offer of goods and/or services. Microeconomic theory reveals a number of factors that influence the size of the offer. The question is whether they include the offer strategy (the strategic intent or rationale of the offer) and, if so, which are the influence relationships and how do we quantify them.

Our answer is affirmative and we believe that the influence relationships that can arise can be quantitative or qualitative, depending on the nature of the strategic rationale (quantitative or qualitative).

When the strategic rationale is quantitative, in order to highlight the relation individual offer – total offer – strategic rationale, we shall use an indicator called share offer, which is an indicator whose calculation method is similar to that of the market share, but which uses the volume of the offer instead of the sales volume. The share offer is not an outcome indicator like the market share because one does not sell the entire offer provided on the market. Yet, it expresses the organization's strategic intent/rationale regarding the tendering policy.

Thus, we foresee the following situations:

- The strategic rationale leads to the increase in the share offer: this is the situation where the organization plans to dominate the market by increasing the offer.

- The strategic rationale leads to the preservation of the share offer – involves the maintenance of the volume of the offer proportionally with the volume of the total offer and applies when the organization wishes to retain its current market position.

- The strategic rationale leads to the reduction in the share offer - involves the reduction in the volume of the offer proportionally with the volume of the total

offer when the organization wishes to withdraw from certain markets because of the low profitability or in order to redirect the resources towards another direction.

The influences can be quantified through the variation in the share offer. The calculating formula is as follows:

$$\Delta Co_i = Co_{i1} - Co_{i0} = \left( \frac{Vo_{i1}}{Vo_{t1}} \times 100 \right) - \left( \frac{Vo_{i0}}{Vo_{t0}} \times 100 \right) \quad (1)$$

where:

-  $\Delta Co_i$  - is the variation in the share offer between moments t1 ( $Co_{i1}$ ) and t0 ( $Co_{i0}$ ) of an organization "i"

-  $Vo_{i1}$  and  $Vo_{i0}$  – represent the volume of the individual offers at moments t1 and respectively t0 for the organization "i"

-  $Vo_{t1}$  and  $Vo_{t0}$  – represent the volume of the total offer at moments t1 and respectively t0

1. If  $\Delta Co_i > 0$  - the strategic rationale leads to the increase in the share offer. This situation can also occur when the organization "i" is the only one that increases the volume of its offer and when other organizations increase the volume of their offers, but the growth rate of the volume of the offer of organization "i" is higher than the growth rate of the volume of the total offer.

Figure 1 Example of calculation in the situation where the strategic rationale leads to the increase in the share offer

Indicator	Values at moment T <sub>0</sub>	Values at moment T <sub>1</sub> (only organization "i" increases its offer)	Values at moment T <sub>1</sub> * (other organizations also increase their offer)	Variations between	
				T <sub>1</sub> and T <sub>0</sub>	T <sub>1</sub> * and T <sub>0</sub>
$Vo_i$	10,000 pieces	11,000 pieces	11,000 pieces	10%	10%
$Vo_t$	120,000 pieces	121,000 pieces	130,000 pieces	0.83%	8.33%
$Co_{i0}$	8.33%	-	-	-	-
$Co_{i1}$	-	9.09%	8.46%	-	-
$\Delta Co_i$	-	<b>0.76%</b>	<b>0.13%</b>	-	-

Figure 2 Example of calculation in the situation where the strategic rationale leads to the preservation of the share offer

Indicator	Values at moment T <sub>0</sub>	Values at moment T <sub>1</sub> (organization "i" does not increase its offer and the total offer does not change either)	Values at moment T <sub>1</sub> * (the offer of organization "i" increases proportionally with the total offer)	Values at moment T <sub>1</sub> ** (the offer of organization "i" reduces proportionally with the total offer)	Variations between		
					T <sub>1</sub> and T <sub>0</sub>	T <sub>1</sub> * and T <sub>0</sub>	T <sub>1</sub> ** and T <sub>0</sub>
$Vo_i$	10,000 pieces	10,000 pieces	11,000 pieces	9,000 pieces	0%	10%	- 10%
$Vo_t$	120,000 pieces	120,000 pieces	132,000 pieces	108,000 pieces	0%	10%	- 10%
$Co_{i0}$	8.33%	-	-	-	-	-	-
$Co_{i1}$	-	8.33%	8.33%	8.33%	-	-	-
$\Delta Co_i$	-	<b>0%</b>	<b>0%</b>	<b>0%</b>	-	-	-



Figure 3 Example of calculation in the situation where the strategic rationale leads to the reduction in the share offer

Indicator	Values at moment $T_0$	Values at moment $T_1$ (version 1)	Values at moment $T_1^*$ (version 2)	Values at moment $T_1^{**}$ (version 3)	Values at moment $T_1^{***}$ (version 4)	Variations between			
						$T_1$ and $T_0$	$T_1^*$ and $T_0$	$T_1^{**}$ and $T_0$	$T_1^{***}$ and $T_0$
$Vo_i$	10,000 pieces	11,000 pieces	10,000 pieces	9,000 pieces	9,000 pieces	10%	0%	- 10%	- 10%
$Vo_t$	120,000 pieces	144,000 pieces	130,000 pieces	120,000 pieces	109,200 pieces	12%	8.33%	0%	- 11%
$Co_{i0}$	8.33%	-	-	-	-	-	-	-	-
$Co_{it}$	-	7.64%	7.69%	7.5%	8.24%	-	-	-	-
$\Delta Co_i$	-	<b>- 0.69%</b>	<b>- 0.64%</b>	<b>- 0.83%</b>	<b>- 0.09%</b>	-	-	-	-

As shown in Figure 1, when the organization "i" is the only one increasing the volume of its offer, the variation in the share offer is higher (0.76%) than in the situation where other organizations also increase the volume their offer, but the growth of the volume of the offer of organization "i" is higher than the growth rate of the volume of the total offer (0.13%).

2. If  $\Delta Co_i = 0$  – the strategic rationale leads to the preservation of the share offer. This occurs if the volume of the offer of organization "i" and the volume of the total offer do not change, or if the increase/decrease in the volume of the offer of organization "i" is similar to the increase/decrease in the total offer. We may note that the variation in the share offer remains null regardless of the situations presented.

3. If  $\Delta Co_i < 0$  - the strategic rationale leads to the reduction in the share offer. This situation occurs when:

Version 1 - the growth rate of organization "i" is inferior to the growth rate of total offer

Version 2 – the offer of organization "i" is constant and the total offer increases

Version 3 - the offer of organization "i" decreases and the total offer is constant

Version 4 - the decrement rate of the offer of organization "i" is higher than the decrement rate of the total offer.

We may note that the higher are the differences between the values of the individual offers from one period to another in relation to the total offers, the more

significant is the value of the share offer, whether it is positive or negative.

#### 4. Conclusions

Criticism that can be made regarding the concept of price from the strategic perspective can be summarized as follows:

- The conceptual applicability and opportunity of the price tends to become limited if it does not fulfill its function in terms of positioning the offer;

- Price volatility interferes with the need for decisional stability and certainty. This affects the sustainability of the concept of price, which will depend on the sustainability of the decision.

Summarizing the criticism that can be made regarding the concept of offer shows that:

- The meaning of the offer must be broadened, since at the moment it is characterized by low consistency and reduced opportunity from the strategic perspective;

- The strategic meaning of the concept should be more rigorously determined; otherwise, its applicability and dynamics can be relative.

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# Unemployment Lessons from the Crisis and the Way Forward

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## Abstract

*The year's economy shows an increased unemployment rate, decreased housing values, descending stock markets, decreased interest rates, products' prices impossible to control from the consumers' perspective. In the last five years, they have felt the pressure of the crisis' effects which affected their behavior, stability and standard of living.*

*This paper tries to look at the employee as a consumer and to underline the severe unemployment situation since the crisis has started and its effects on the economy. The employee is the most loyal consumer of the company's products and services, the consumer of its financial resources, its material resources, its benefits.*

*Organizations rethink the way they engage with their employees because they are the key factors of the economy, regardless of its level of economic development. In the end, the paper also provides some useful guidelines regarding methods of managing unemployment situations, both from management and employees' perspective.*

**Key words:** Consumer, Crisis, Economy, Employee, Unemployment

**J.E.L. Classification:** E24, J6, J21, N3.

## 1. Introduction

Since the start of the global crisis, the consumer has started taking responsibility, more than that in 2012 he's saving his money and spending it with a much more carefulness than before. The post-crisis consumer has the power to behave as the leading actor of the economy by making thoughtful decisions regarding his consumptions.

The financial crisis had a large number of negative effects on the global economy and one of the most severe ones is the increased rate of unemployment. This had a huge impact on the economic situation of our country and led to a considerable decrease of population standard of living and a depressed new-graduated generation. In particular, a large number of employees have lost their jobs or had difficult times of finding one. Taking this into consideration and given the fact that Romania did not provide any positive perspectives, they severally decided to emigrate to other countries.

Depending on institutional arrangements, in particular about flexibility in entry and exit from work, unemployment rate is a more or less coincident anti-cyclical indicator, falling with recovery and rising with recession. If labor use is not too flexible, unemployment may be lagging behind the cycle, with a reduction of unemployment only after a period of trustworthy recovery and dismissal tide well after the high GDP peak, if at all. In this case, temporary slow-down may be overwhelmed without unemployment increase [1].

## 2. The crisis and the unemployment situation

The employees are not only the ones that actively contribute to the implementation of innovative strategies, but also the ones that sustain the business.

The workforce can be the competitive advantage of an organization, which provides it visibility on the market and ensures this way the success, the performance and finally contributes to the economic growth. This being given, employees are searching for those employment relationships that invest in their personal growth [2].

Next to this, they usually search for

stability, career opportunities, fair paid salaries, but when unemployment situation appears, the balance is broken and when this happens to a large scale, it affects the entire economy. One of the consequences is the fact that this workforce will leave the country searching for any external employment possibilities.

In the last four decades, Romania has lost 50 billion euro due to the fact that more than 3,5 million Romanians emigrated. The main reasons for this massive movement are the lack of career opportunities, the lack of opened jobs, the high value of taxes, the low value of the paid wages and the decreased standard of living. Two of the more affected, and in the same two of the more important fields, are education and health services – only in 2011, almost three thousand physicians have left the country in order to work in countries like Germany, Great Britain, France. Moreover, a third of Romanians would emigrate if they had the chance to do so [3]. To mention, this is a phenomenon that has always existed in our country, but has been severely enhanced by the crisis context.

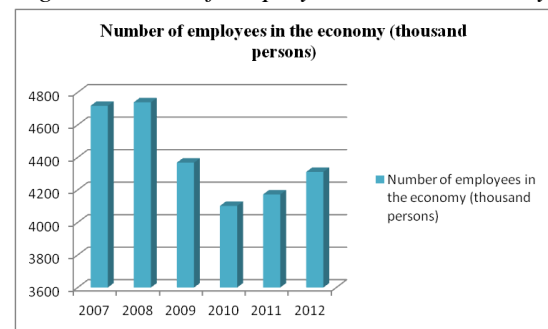
Some data retrieved from the annual statistical bulletin [4], provide useful information, with respect to the employment/unemployment situation in our country and explain the basis of the fact that people would search for a place to work in other more developed countries with a more stable economy, which leads to severe economic consequences for Romania. The youth unemployment rate in our country is 23.4% and this costs us 1.2 billion euro on average every year, but this is a problem that most all European countries are facing during the acute financial and economic crisis [5]. It has been estimated that a 1 per cent increase in adult unemployment will be matched by a 2 per cent rise in unemployment among young people [6]. Unfortunately, during the crisis period employers don't protect the youth and tend to follow the principle of “last in, first out”.

From 2008 the number of overall employees has constantly decreased until 2011, when slightly started to increase again, as per figure no.1. In contrast, the number of unemployed has increased starting with 2007 until 2010, when decreased until present, as it can be observed in figure no. 2. Finally,

figure no. 3 shows the situation of the unemployment rate and the vacancies rate. As it can be observed, the unemployment rate follows the same trend until 2010, when started to decrease; regarding the vacancies rate, this has constantly decreased until 2011, when increased, but again decreased in 2012.

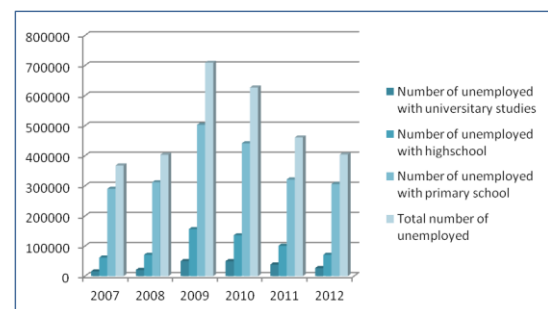
In the light of these worrisome statistics, the government should recognize its role and assure as small gaps as possible between its commitments and its real actions. Creating opportunities for the youth to participate in the decision-making of the Government and private society proves to have a strong effect over this period of transition and also reduces the risk of losing already trained, educated employees.

*Fig.1 Number of employees in the economy*



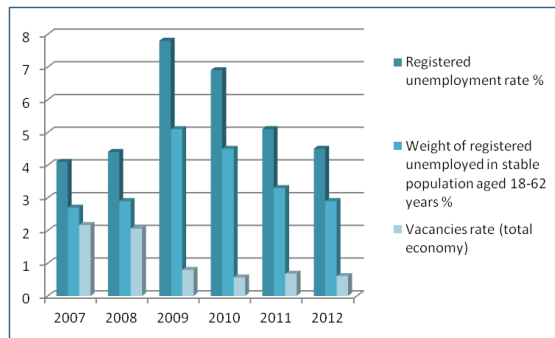
Source: realized by the authors, based on [4]

*Fig.2 The situation of the total unemployed as per the education level*



Source: realized by the authors, based on [4]

Fig.3 The situation of the unemployment rate and the vacancies rate



Source: realized by the authors, based on [4]

### Effects of the unemployment

The experience of unemployment alters, on average, people's set-point levels of life satisfaction. People were less satisfied in the years following unemployment than they were before unemployment, and this decline occurs even though individuals eventually regain employment. Furthermore, the changes from baseline are very stable from the reaction period to the adaptation period--individuals who experience a large drop in satisfaction during unemployment are very likely to be far from baseline many years after becoming reemployed.

One question is whether the unemployment event is the main source or has the main causal role for this lasting effect on individual life satisfaction.

Although this possibility cannot be ruled out entirely, several findings cast doubt on it. First, prior to unemployment, individuals who would eventually become unemployed reported high life satisfaction, and did not show evidence of lower levels that would likely result from other problems such as alcohol, dysphonia, and so forth. Furthermore, even individuals whose satisfaction dropped dramatically after unemployment showed some rebound toward baseline--not the pattern we would expect from a downward spiral due to internal causes. Thus, we believe that the present evidence is most readily interpreted in terms of the effects of unemployment on long-term life satisfaction [7].

Furthermore, the unemployment has negative effects on the birth rate, as the higher the unemployment duration is, the longer will take the transition to motherhood,

especially at earlier ages [8]. This, together with the emigration, leads to a significant decrease of

the population number, aspect that has a negative impact on the economic side.

A negative impact will be observed, from an emotional perspective as well. The individual will go through some important emotional changes that could affect his attitudes and behavior more or less, depending each one's character, system of values or expectations.

Unemployment produces adverse psychological symptoms (anxiety, depression) and utilization of health services, and when they are available, are increased substantially. Some individuals may be able to cope better with the stress of unemployment than others. People with strong support systems and greater self-esteem seemed to experience less unemployment stress [9]. Moreover, this has devastating effects on individual well-being. Unemployment substantially reduces an individual's satisfaction levels with his main activities and finance, while it substantially increases his satisfaction level with leisure time. Among the unemployed, non-pecuniary factors, such as job prospects, health and social relations show a significant impact on individual well-being, along with household income. In particular, better job prospects greatly increases the satisfaction levels in all domains of life [10].

More than that high levels of youth unemployment are a source of concern because of the profound impact unemployment has on young people's lives. Research on the psychosocial consequences of unemployment is extensive. Studies of young people show that unemployment leads to a reduction in self-esteem, diminished levels of wellbeing, and frequently isolation from peers [6].

Moreover, regarding the young unemployed people, but the other age segments as well, one must underline some more levels that are affected. Next to the above mentioned aspects, practically the unemployment affects not only the individual level, but also the society level and even the country level. Thus, elevated unemployment imposes significant **costs on the individual** (less consumption, expenditure of retirement savings, erosion of skills – less useful talents,

alteration of long-term plans and personal development, denial of education opportunities for children, affecting mental health), **the society** (severe restrictions on immigration, less volunteerism and higher crime), and **the country** (higher payments from state and governments for unemployment benefits, food assistance and medicaid, governments are no longer collecting the same levels of income tax as before - forcing the government to borrow money or cut back on other spending - perhaps exacerbating the bad economic situation, and finally not only do companies face less demand for their products, it is also more expensive for them to retain or hire workers [11].

### Employees' personal crisis

The crisis has affected the employee as individual as well. The personal image he has created suffered modifications, because of the unsecure context and lack of motivation and trust. This is an aspect that is valid not only for the employees that kept their jobs during the crisis, but especially for those who became unemployed. Most of these individuals no longer tried to invest in their skills and competencies, although the crisis context practically provides the opportunity for the best to step in front - an opportunity that allows talents to make performance. Indeed, the competition is high, but opportunities are great and performance can be reached, even by the young generation. The attention must be directed to the ones that can make performance and simply did not have the chance to find an appropriate place to work.

Although the labor market is placed in the center of the economic crisis, this competitive background that the economic crisis in Romania has created pushes the employee to be more flexible in terms of self-development, facing a lifelong learning. This refers to all the employees, regardless of the hierarchic level they activate on, including high management level. The crisis has affected this level as well, as managers had to face the severe market situation and to find innovation strategies for facing the competitors – from here the complexity of the level itself, as it assumes a high responsibility towards the companies'

services or products and its employees. The crisis actually revealed in some situations the strong personal brand that the companies had and how did it support the people to step in front.

Moreover, the employee should use its personal brand that is successfully considered a competitive advantage. Thus, providing the company the necessary tools not only to differ from the competitors, by transmitting what best represents it and creating a positive image for the potential consumer, but also by stimulating the competitiveness and increase of trust. Also, a strong personal branded employee involves more in getting the best results and the company will also win, as always the distinctive element pulls in front the one that "wears" it [12].

While implementing smart cost effective solutions for their businesses to overcome the economic crisis most managers develop strategies to diminish the loss of their profitable employees and avoid spending extra money into training an inexperienced new-comer. The company is more interested into investing in such employees, encourages them to become better and better until they can perfectly identify themselves with their work, company's goals and values. We believe that the financial crisis will reveal only businesses with such a thoughtful spending; this is why there is now better time than now for the employee to grow his personal brand within the company and not to follow a path of personal crisis.

The question that arises is whether our Government is taking any opportunity to enhance the quality of the labor market which has a significant impact on the quality of life of the employee. The labor market picture of Romania describes too many sub-standard jobs, jobs that don't provide living salaries, no health "assurance" but only a high risk of mobility between jobs or employers. Unless the Government will make sure that its policies and priorities are set to upgrade the standards of the Romanian employee and cross a line under which job quality does not fall, the entire population will suffer of depression. Depression has become the "illness" of our era, although it is not yet recognized as an illness. This "illness" can be replaced by productivity only by upgrading workers' skills and creating career paths for them.

Thus, the effect of the current crisis which impacts the global economy has the strongest echo at an individual level raising a “personal crisis”.

### A necessary crisis?

The global crisis gives an opportunity to rethink the pattern of global development and recharges the labor market with “quality jobs” [13]. As well, some predictions agree that 60% of the best jobs in the next 10 years haven't even been invented yet [14]. Yet Romania is having great difficulties in creating measures of stimulating private investments and external demand in order to produce more and better jobs and reduce its work deficit.

The Government' attention should be given to increase investments to sectors that are more employment-intensive and to facilitate the export of these goods that are produced on the internal market. By this mean we are responding to the crisis situation by letting the global trading system grow the employment rate.

### 3. Conclusions

The danger of unemployment happening right now is the long-term period before the employee can get hired again, and the question that arises is whether our Government is taking any opportunity to enhance the quality of the labor market which has a significant impact on the quality of life of the consumer - employee.

Also, the management has a very important role in successfully managing the unemployment situation, by finding those solutions that prevent the company from being affected by the effects of the crisis and taking advantage from the opportunities that the market provides – this can also lead to creating new opened positions within the organization and this way to decrease the unemployment level.

Given that the employees support differently the unemployment situations, the managers are to be able to identify those that are at risk for psychological and physical problems and adopt an appropriate behavior

in order to prevent these affections or at least to be easier to be managed – this is an aspect that is worthing for further studies.

Furthermore, events such as unemployment can have a long-lasting influence on people's set-point level of satisfaction. Many young entrants to the labor market find themselves highly unmotivated after finishing their graduation because the demand for their inexperience work is low or doesn't exist at all. It is necessary to acknowledge this situation and at the same time to encourage placing this unemployed creative youth force at the center of Government's attention.

Some people adapt quickly, whereas others never seem to return to initial levels. Thus, because adaptation is not inevitable, an important goal for future research will be to elucidate the factors that speed adaptation to unpleasant events and prolong reactions to pleasant events.

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**Section II**  
**Business Economy and Administration**

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**Subsection 3**  
**Finance and Accounting**

## Corporate Governance Practices: Transparency and Disclosure – Evidence from Bucharest Stock Exchange

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### Abstract

*In Romania requirements of corporate governance occurred relatively recently compared to other European countries. The delay is explained by the slow steps taken on the political, legal, economical and social levels. However, the Romanian companies began to realize the need for corporate governance, especially in the context of voluntary corporate governance requests made by Bucharest Stock Exchange for listed companies.*

*Our study consists in determining the degree of transparency and disclosure for the companies listed on the BSE as well as in drawing of analytical conclusions regarding the corporate governance practices in Romania, compared to other European countries.*

**Keywords:** corporate governance, transparency and disclosure score, Bucharest Stock Exchange

**J.E.L Classification.:** M14,M21

### 1. Introduction

The corporate governance concept has emerged and developed in the last century, being influenced by economic environments based on family property, bank capital, institutional investors or joint stock companies, environments activated by the scandals that have occurred over time. (Guinness -1986, Poly Peck International-1989, Maxwell-1991, BCCI-1991, Enron-2001, Allied Irish Bank- 2002, WorldCom-2002, Xerox 2002, Merrill Lynch-2002, Parmalat-2003/2004, Andersen-2001/2002). All these financial scandals

emerged on a fond of seemingly consolidated financial state companies, but accounting data were deliberately manipulated by the managers to deal with auditors in order to provide credibility to investors.

Surprisingly, these moments of crisis have had a beneficial effect on identifying ways to improve corporate governance, corresponding to the next stage in the evolution of the economy.

Amid the recent financial crisis has become urgent to reform the institutional architecture of national capital markets by adopting effective market regulations, along with the development and implementation of measures to stimulate the development of the corporate sector. Thus, a key element in improving economic efficiency and establishing an attractive investment climate consist in best practices of governance (corporate governance).

Developed countries were the first who fastest realized that need financial transparency is a requirement for successful corporate governance. .

### 2. Corporate Governance in Romania

Once the benefits of corporate governance practices have been understood and assimilated, also in emerging developing countries have began to adopt "the best practices" in corporate governance especially because this need is felt acutely with the changes required by the transition to a market economy.

However, the assessment of corporate governance framework in emerging countries requires more than taking corporate governance models that work in developed countries. It must be made the transition from institution of governance based on

relationships towards institution of governance based on rules. This transition is difficult because of possible expropriation would affect individuals and groups engaged in power conflicts at economical and political level. [10]

In 1999 OECD Principles of Corporate Governance were developed and these represent today the only set of principles generally accepted in the world, being recognized as one of the 12 pillars of international financial stability. OECD principles have served as benchmarks to assess a collection of national corporate governance. They focus primarily on traded companies, but also contain issues related to large shareholding companies, but are not listed.

Today there can be identified approximately 180 codes, global codes characterized by a high degree of convergence in terms of their content [1]

In 2001, the OECD with the support of USAID, developed a specific program to improve corporate governance in Romania. The OECD/USAID views envisaged by the program were pointing out the following objectives: (i) evaluate corporate governance in Romania; (ii) offer a set of key recommendations for improving corporate governance in Romania and bring it closer

to the international standard of the OECD Principles; (iii) identify needed technical assistance in the area of corporate governance; (iv) improve the understanding of present corporate governance practices in Romania, informing the international community about progressive national reform

Initiatives; and (v) facilitate full Romanian access to the ongoing international dialogue on corporate governance. In conducting the assessment and program formulation, the *OECD Principles of Corporate Governance* was considered the benchmark (OECD, 2001). [9]

The key recommendations constituted a comprehensive agenda for reform, including legislative changes, enforcement, institution building and private behavior/capacity building. [4]

The Bucharest Stock Exchange marked the first trading only since 1995. Only in 2001, BSE created for admission to BVB, Class Plus ("the more transparency") and adopted the first code of corporate

governance. Listed companies could promote Class Plus only after fully taken in their Constitution Acts the Code of Corporate Governance issue. This process is not expected success because only one company has required promote at Class Plus level.

In the next years, BSE has created Corporate Governance Institute, which is committed to educating issuers ranked in terms of promoting appropriate standards of corporate governance, and has been an active participant in finding the best corporate governance practices, contributing to adoption White Paper on Corporate Governance in South Eastern Europe countries.

In 2008, BSE has adopted a new Corporate Governance Code, which is based on the OECD principles of corporate governance. Code came into force from the financial year 2009 and is applied voluntarily by companies traded on the regulated market operated by BSE. Companies that decide all or part of its adoption must submit annually to BSE a statement of compliance or non-compliance with the Code of Corporate Governance (Declaration "apply or explain"), stating recommendations were actually implemented and how is the way of implementation.

BSE Code of Corporate Governance is similar to those adopted by other EU member states and provides new compliance recommendations which are important for executives and boards of directors of Romanian companies. BSE considers the Code as having suppletive character comparing to other Romanian rules applicable to trade companies on the regulated market (for example, Law 31/1990, Accounting law, Capital market law and so on).

### **3. Research goal, methodology and data**

The objective of our research is to evaluate the level of importance given to corporate governance principles in the Romanian economy. Data source is represented by Declaration "Apply or Explain" that companies voluntarily report to BSE in 2012. If companies do not prepare such a statement, the our data source will be represented by the investigating of official information published by the companies

listed on BSE (Annual reports of the directors, the Financial Statements or any other information presented on the company's website).

At the end of 2012, there are 106 companies listed on BSE which are classified into four categories: I Category (count 28), II Category (count 52), III Category (count only one company) and Unlisted Category (count 26). We take in our study **81 companies** because we removed from the sample the unlisted companies.

Declaration “Applies or Explain” contains a total of 51 questions of which 50 relate to actual corporate governance practices and one question refers if the company conduct or not activities of Social and Environmental Responsibility.

In order to asses the compaired conclusions at the European or international level, we have reclassified these 51 questions contain in Declaration “Apply or Explain” into four investigated area, according to Standard and Poor's methodology to asses a corporate governance score.

Structuring questions contained in Declaration “Apply or Explain” on the 4 areas are as follows:

1. Ownership structure: 10 questions
2. Investor relations: 10 questions
3. Board and management 20 questions
4. Financial disclosure: 10 questions
5. Corporate social responsibility: 1 question

#### 4. Results

The represented of responses conducted by listed Romanian companies on these four areas of corporate governance is present in Figure 1. The main conclusions consist in:

a) The BSE-listed companies adopt codes and principles of good corporate practice in percent of 61% of the total number of these principles.

b) A percent of approx. 54% of corporate governance principles on corporate governance structures are adopted by companies included in the sample.

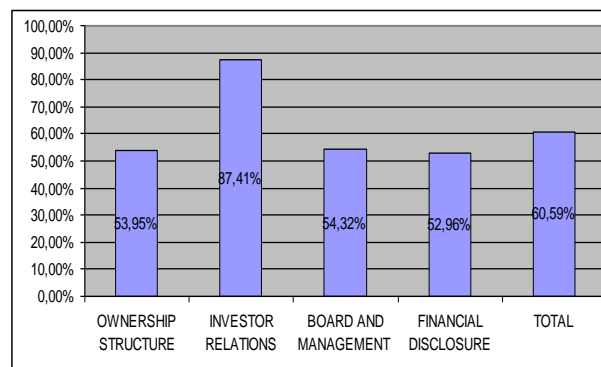
c) A majority share namely a percent of 87% of corporate governance principles on relations with shareholders / investors are adopted by listed companies.

d) A percentage of 54% of corporate governance principles for the board and

management are adopted by companies included in the sample.

e) A percentage of 53% of corporate governance principles are adopted on the financial disclosure by companies included in the sample.

*Fig. 1 PERCENT OF ADOPT THE BSE' S CORPORATE GOVERNANCE PRINCIPLES*



Source: Own prelucrations

Among the detailed findings of the study we highlight some of them

#### A. Ownership structure

1. Transparent ownership structure is directly reflected by the preparation and voluntary reporting of "Apply or Explain Declaration by BSE listed companies. Only 55 of the 81 listed companies, agrees to provide transparent as the company comply with best practice corporate governance, representing over 2/3 of the total (68%).

2. A number of 44 listed companies representing 54% of them have their own Corporate Governance Code to describe the main aspects of corporate governance. In Croatia, for example, only 33 per cent of enterprises, which is on the stock market have Code of Corporate Governance. [8]

3. Among the 44 listed companies that affirm they have a Corporate Governance Code only 39 of them (ie 89%) post Statute / Regulation of Corporate Governance on its website for other listed companies, this statement remains only in words and not in reality.

4. The same 44 companies affirm they have their own Corporate Governance Code, also affirm that the Statute / Regulation of corporate governance defined corporate governance structures, functions, powers and

responsibilities of the Board of Directors and the executive management.

5. To strengthen the results of the previous paragraph we find that corporate governance structures of the 44 reporting company that has its own Code of Corporate Governance are also posted on the company website.

6. Of the 44 companies that affirm they have their own Corporate Governance Code, a total of 41 companies, representing a percent of 93% of total present in the Annual Report of Corporate Governance in a chapter describing all relevant events related to corporate governance, recorded in the previous financial year.

7. Only a total of 32 companies out of 44 companies reporting that their own corporate governance code, disseminated website internal operating rules and essential aspects for each board / committee specialty, representing a percent of 72% in sample of these companies and only 40% in total listed companies.

## **B. Investor relations**

1. A number of 60 companies listed representing a percentage of 74% state that respects the rights of holders of financial instruments issued by it, providing them fair treatment and subjecting approval of any change in the rights conferred in special meetings of their respective owners.

2. An average of 73 of the 80 listed companies representing a percent of 89% published in a section of its website carrying details of Annual General Meeting.

3. A total of 63 companies in the listed or about 78% of companies listed on BSE have developed and proposed to Shareholder Meeting the procedures for an orderly and efficient works of Shareholder Meeting

4. A total of 69 of the companies listed representing a percent of 85% BSE listed companies have disseminated on a dedicated section on its website, the shareholder rights and the rules and procedures for participation in the Shareholder Meeting.

5. A total of 73 companies from those listed representing a percent of 90% of those listed on the BSE ensure timely information (immediately after the Shareholder meeting) to all shareholders, through the dedicated section of its website to the decisions taken at

the Shareholder meeting and detailed results of the vote.

6. A total of 74 companies (representing a percent of 91% of BSE listed companies) have a specialized department or an individual relationship with investors.

## **C. Board and management process**

1. Two tier system of administration is highlighted by a percent of 14% among BSE listed companies (only 11 of the 80 companies are administrating in this way). The vast majority of listed companies (about 84%) have a unitary system of administration.

According to research by Vitezic (2006) [8], in Croatia for example, there is no company managed in two-tier system in 2006 while in Europe a percent of 77% of companies have a dual system of administration

2. In the case of 61 companies (a percent of 75% from BSE listed companies) the Board shall meet at least once per quarter to monitor activity, representing at least 4 times a year.

In Croatia, for instance Board Meetings frequency is 5.8 per annum while the European average is 8.7 per annum [8]

3. Board members permanently improve their knowledge through training in corporate governance for the 57 companies of the 80 listed (representing 70% of cases).

4. Only 53 of the 80 companies listed on BSE, representing a percent of 66% hold a Board structure that ensures a balance between executive and non-executive members (and in particular independent non-executive directors) such that no individual or small group of individuals can dominate.

5. Regarding the independence of Board members, only 46 of the companies listed representing a percent of 57% of total listed companies have a sufficient number of independent members.

Analysis by Maier (2005) [6] showed average percentage related the board independence varied on a scale ranging from 1.5% in Germany to 81.3% in Switzerland.

6. In just over half of the BSE listed (approx. 52%), the Board uses committees support / advisory committees to examine specific topics.

7. Only a number of 20 companies in sample (in 25% of cases) there is a Nomination Committee in the company. In other cases the nominations are done by the members according to the Board of Directors or by the shareholders.

According to the European average, 71% of companies have a nomination committee.

8. A total of 31 companies representing a percent of 38% from sample have a Remuneration Committee consists exclusively of non-executive directors. According to the European average, 94% of companies have a remuneration committee.

9. Only a number of 29 companies representing 36% of sample present a company remuneration policy in the Statute / Regulation of Corporate Governance. The result is well below the European average according with a percent of 94% from companies disseminate a remuneration policy. But the results consist for Romania is above Croatia where only 20% of companies disseminate such information.

10. In a number of 43 listed companies listed (representing a percent of 53% in total) Board of Director has adopted a procedure to identify and appropriately resolve situations of conflict of interest.

#### **D. Financial disclosure**

1. A majority share of 96% in total sample disseminate through a special section on its own web financial calendar, annual reports, half and quarterly reports. In other words a number of 78 in the total of 81 BSE listed companies achieved such information dissemination and for two companies listed on BSE namely BUCOVINA HOUSE MOUNTAIN CLUB (BCM) AND UZTEL SA (which is in legal reorganization) we not found some kind of dissemination on the company website.

2. Regarding the dissemination in the English language of the information which are subject of reporting requirements, the number of companies do this is reduced to less than half of the sample.

The percentage of companies which disseminate in English language the current and periodic financial information representing a percent of 42% (a number of 34 in the BSE listed companies).

3. Half of listed companies prepare and disseminate financial reporting according with IFRS.

4. Half of listed companies promoted at least once a year, meeting with financial analysts, brokers, rating agencies and other market specialists, in order to present financial elements relevant investment decision.

5. In less than half of the sample there is an Audit Committee. (In case of 38 companies representing a percent of 47% in total). The result is well below of the European average of 94%. But compared with Croatia as an emerging country, the percentage is higher. Here the average percentage of companies that have an Audit Committee is 20%. [8]

6. In the companies which have an Audit Committee, in 92% of cases, it is composed exclusively of non-executive directors and has a sufficient number of independent directors. Only in 3 case of 81 companies, this requirement is not met. These companies are: Dafora SA, Rofarma Brasov and Santierul Naval Orsova SA. in which either include the executive administrator or include a not independent administrator.

#### **E. Corporate social responsibility**

The last require from Declaration “Apply or Explain” is about if company conducts the activities of Social and Environmental Responsibility. A number of 62 companies in sample, representing a percent of 77 % in total, affirm at this time (2012 our note) that has conduct such activities until now.

Similar research conducted in Romania by Popa et al (2009) [7] also by using as sample the BSE listed companies reflects [8] that in 2007 and 2008 the percent was of 44 % representing the BSE listed companies which disclose at least one type of information about environment, social responsibility or sustainability.

Comparing our findings with those of a study by Popa et al (2009), we found that the percentage of companies making CSR practices increased in 2012 at 77 % from approx. 44% (2008) representing the percent of companies which disclose information about CSR.



## 5. Conclusions

The globalization of capital markets, the competition for fundraising also requires greater adoption of standards and procedures of corporate governance internationally recognized. This aspect is particularly important for emerging economies and those in transition, which typically have recovered the credibility for investors.

In Romania, the principles of corporate governance were taken at a conceptual and regulations level since 2000. The first Corporate Governance Code was adopted in 2001. In 2008, it was replaced by a new Corporate Governance Code, which is based on the OECD principles. The new code is applied voluntarily by companies traded on the regulated market operated by BSE. Our research has revealed the level of Romanian BSE listed companies adhere to the principles of corporate governance internationally recognized and integrated into the Corporate Governance Code of the Bucharest Stock Exchange. The results reflect the degree of adoption of principles of good practice in percent of 60%, related results at the end of 2012. The results have improved significantly since 2008, with the adoption of the Code of Governance by BSE, and voluntarily requested to the companies traded on the regulated market operated by BSE.

Although progress in this regard, many of the Romanian corporate governance practices are well below of the EU average or even below average record for other developing countries.

## 6. Acknowledgements

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# Financial Accounting Reports: Their Importance in Managing SMEs

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## Abstract

*The main objective of this study is to investigate the views of managers of small and medium entities regarding financial reports and their usefulness in decision making process. The information is obtained from the research of secondary (selective bibliographic research) and primary sources (qualitative research based on individual discussions).*

**Key words:** financial accounting reports, managers, SMEs.

**J.E.L. classification:** M41

## 1. Introduction

Studies show that small and medium-sized private enterprises in Romania have the highest share in the Romanian economy, playing an important role in the social and economic life of any country, being the basis of the economic development. The SME sector has the highest growth prospects, being the most profitable sector. SMEs have certain features seen from the managerial perspective, so usually this is done by the manager who is also the administrator and associate/owner.

The responsibility of conducting financial activities in a company lies with that company's administrators. The manager, ever since the company is founded, has to fulfil certain accounting and fiscal obligations, which require him, in accordance with the law, to organize and manage his own accounts in separate compartments led by a chief accountant with higher economic education or to conclude contracts providing services to a company in the same field.

In order to achieve the strategic business planning [2], the manager has at his disposal the financial - accounting instrument, namely

financial - accounting reports. Financial - accounting reports are the ways used by economists/accounting specialists to transfer information about the financial position and financial performance of a business to both managers and external users of such information.

”In the context of SMEs, the accounting information is crucial as it can help the firms manage their short - term problems in critical areas such as costing, controlling expenditure and managing cash flow, by providing information to support monitoring and control” [3].

The financial – accounting information provided in a timely manner, is of a great importance for the managers, for the decision making process and for an appropriate exercise of the managerial control.

“Knowledge about the informational needs of the users of the financial statements may serve as an influential factor to encourage the SMEs to improve their financial reporting” [5].

## 2. SMEs under Taxation and Accounting

In Romania, the field of SMEs was mainly regulated by Law 133 of 1999 [10], substituted by Law 346 from 2004 [13], regarding the stimulation of private entrepreneurs for the creation and development of small businesses. According to this law, small and medium-sized enterprises operating in the production of goods and services are defined according to the annual average number of staff.

SMEs are defined as companies with less than 250 employees, who are independent of the larger companies. In addition, they have an annual turnover of 50 million or total assets of up to 43 million Euros. The European Commission's definition of SMEs defines three categories of SMEs: micro enterprises with less than 10 employees;

small enterprises that have between 10 and 49 employees and medium enterprises that have between 50 and 249 employees. Micro-enterprises were subjected to special regulations. The novelty in terms of the way of taxation was made by Government Ordinance 24 of 2001 regarding the taxation of micro enterprises [11], approved by Law 111 of 2003. The tax is calculated by applying the rate of 1.5% on the total amount of quarterly income derived from any source. This facility was suspended in the financial year 2010, and GEO (Government Emergency Ordinance) 117 of 2010 reintroduced this means of taxation [14]. It is considered that micro enterprises benefit from an advantageous tax regime, owing to the state budget, in 2012, a tax of 3% of the income. The Fiscal Code provides some facilities for the micro enterprises, such as a deduction from the taxation basis of the following revenues: revenues from the costs of the stocks of products; revenues from service - execution costs; income from production of tangible and intangible assets; incomes from operating subsidies; incomes from provisions and adjustments for depreciation or loss of value; proceeds from the repayment or cancellation of some interests and / or late payment penalties that were non-deductible expenses in calculating the taxable income and incomes that come from compensation from insurance/reinsurance companies, for the damages caused to stocks or to the tangible assets.

In order to opt for the payment of the income tax of the micro enterprises, during one year, economic entities must meet at the end of the year, cumulative, 4 conditions: a) realization of revenues other than those in the fields of banking, insurance and reinsurance, capital market or gambling; b) they are economic entities with one to nine employees; c) the realized income does not exceed the equivalent in RON of EUR 100,000; d) their social capital is possessed by other persons than the State or local authorities.

According to GEO 37 of 2011 [15], legal entities which registered a net turnover below the equivalent in RON of EUR 35,000 and an amount of total assets with the equivalent in RON of EUR 35,000 in the previous financial year were given the opportunity to opt for a simplified system of accounting.

According to the law, a simplified system of accounting comprehends a basic set of rules regarding the assessment and recording of patrimonial elements using a simplified chart of accounts and presenting them in the annual financial statements. Financial statements include the simplified balance sheet and profit and loss account taking into consideration the relevant Community provisions.

### **3. Financial - Accounting Reports Used in Decision Making Processes**

Financial-accounting reports represent the link between the producers of accounting information and the decision making factors, and in order to take correct and efficient decisions the manager must have at his disposal well summarized information which will help him formulate objectives and analyse results. Financial-accounting reports help managers to notify the states of financial equilibrium/ disequilibrium, it helps them appreciate the performances of the entity that they manage, focusing their attention towards their key points to follow.

The way in which accounting reports are prepared and presented facilitates their users' degree of understanding and perception. The effectiveness of the managerial activity depends on the efficiency of the activity of professional accountants. The economic and accounting information should be as comprehensive, complete, objective and regularly provided in a form that allows making quick and accurate decisions, to be reported to the management in the shortest period of time, it should be accurate, relevant and have the lowest possible cost.

The accounting reports and information necessary in the managerial decisions are provided by two main sources: a) financial accounting: balance sheet, income statement, cash flow statement, statement of changes in equity notes and the audit report, b) management accounting: budgets, dashboard, board scores and other internal reports on administration. Accounting information can be analysed and presented in a way that provides the management with a more detailed image focused on the financial situation, in order to facilitate decision making. The decisional interest of the manager differs from one company to

another or from one activity object to another, so that accounting reports can be presented differently. The way in which financial reports are prepared facilitates the managerial decision making.

”Etymological, the financial administration means a good management, reasonably management. Therefore, is essential a deep and continuous analysis of the various resources’management from an enterprise for its maintenance and development in a high competitiveness environment” [7].

#### 4. Research Methodology

The aim of the present paper was to know the perception of managers on the usefulness of financial-accounting reports in their decision making. In order to know all details about the perceptions and opinions of managers we opted for the qualitative research method called semi-directive in-depth interview.

This direct communication technique represents a free conversation, a dialogue, a semi-directive communication which involves the formulation by the researcher of questions with the aim to find out from the interviewed persons, in detail, opinions, perceptions, attitudes regarding the topic, in order to discover the main reasons of its behaviour [6].

The research from primary sources is a qualitative research based on individual discussions with the managers of 8 SMEs from Brasov, Romania. The discussion group was formed of 8 managers of SMEs in Brasov, with different fields of activity (3 entities being in the production field: M1, M2 and M3; 2 entities working in the commerce field: 1 in retail trade – M4, and 1 in wholesale – M5; and 3 entities providing services: transport – M6, healthcare – M7 and constructions – M8), 4 women and 4 men, aged between 30 and 60 years with different professions. The group of SMEs was selected according to certain variables: turnover, number of employees and total assets.

For an efficient research we designed a questionnaire for the selection of potential respondents and a list of topics that were addressed in the semi-directive in-depth interview.

In the development of the selection questionnaire it was considered to include some questions that would lead to the inclusion in the research of some representative subjects for the existing objectives, namely managers from SMEs. The analysis of the information collected by the semi-directive in-depth interviews was based on the content analysis – the specific method of analysing qualitative data.

The covered topics from the interview are transposed into objectives and concern: 1) financial - accounting information and its usefulness in the decision making process/types of financial - accounting information required by managers; 2) financial-accounting reports used by managers; 3) accounting services and their quality; 4) accounting and fiscal rules applicable to SMEs.

#### 5. Research Objectives

Through this study we aimed at investigating the way in which financial reports used by managers of small and medium-sized entities are understood and perceived.

The main objectives of the qualitative research are to: 1) identify categories of financial and accounting information required by managers as being indispensable in the leading process of an economic entity, 2) knowing managers' opinions regarding financial-accounting statements and their usefulness in decision making, 3) perception of managers regarding accounting services, 4) knowing managers opinions on taxation and accounting rules applicable to SMEs.

#### 6. Research Results

The responses obtained from the semi-directive interview depend on the skill level of the manager, his experience and the field of activity of the entity.

”The better use of accounting information obviously takes place in situations where the company managers have a certain level of technical qualifications, which does not tend to predominate in small companies” [4].

Regarding the first theme, *identifying the categories of financial - accounting information required by managers*, the given responses show the role of financial-

accounting information in achieving the objectives related to control, management analysis and planning.

Accounting information is useful, according to the managers, as long as it is processed according to the strategies and objectives pursued by these and as long as it is not presented in its raw and standardized form. In the opinion of most managers, the information must first of all be updated; secondly it must clearly present the transactions that these have developed over an administrative period of time and last but not least, the accounting information must be available at the right time (exactly in the moment they need it).

Accounting information is considered relevant and useful for production planning, to find the economic and financial condition of the entity, to have control over the management or to communicate in the relationships with the bank. The nature of the information required by managers is dependent on the objectives and tasks pursued by them. Providing accurate and timely accounting information is essential for the management of a business either large or small. The pieces of financial - accounting information considered by managers as being useful in the decision making process are, in order of their preference, the following: information concerning the incoming and outgoing cash on categories of activities; the correlation between the size of the profit and cash flows; information concerning the liquidity of the entity; information concerning the calculation of the production cost; the influences of the selling price on revenues and costs; tax incentives they can benefit from or legal ways to reduce taxes owed to the state.

Managers' responses regarding the second issue under discussion, *knowing managers' opinions regarding financial-accounting statements and their usefulness in decision making*, reveals that first of all they prefer not standardized, complex reports with summarized information presented according to the objectives that they pursue at a certain period in time. The reports, in their opinion, must be printed monthly in form of brochures. The brochure, named “Monthly financial-accounting report” must contain financial-accounting information from different spheres of activity, information as

the one mentioned in the previous topic, presented as suggestive as possible using tables or graphs.

Regarding the third theme under discussion, *perception of managers regarding accounting services*, there have been formed a series of opinions presented as follows. Accounting services, in their opinion, should be diverse, ranging from document processing, accounting, identifying the nature of a transaction, financial and fiscal reports, analyses, up to legal information and advice. 75% of the respondents believe that accounting services should be outsourced both for financial reasons and for reasons of assuming responsibility of the service provider.

“Accountants can provide value added services to their small business clients to help them to improve their business performance” [1].

Responses concerning the forth topic, *taxation and accounting rules applicable to SMEs*, indicates us the extent to which managers are aware of the regulations applicable to the SMEs sector. Accounting and taxation regulations are hardly known by managers, they believe that knowing such regulations is not a matter of their concern. Instead, they have high expectations from the professional accountants claiming from them deep knowledge of the laws as well as guidance regarding taxation and accounting benefits/facilities that the business can benefit from. Only two of the eight respondents claimed to have a vague idea regarding accounting and taxation legislation applicable to SMEs.

## 7. Research Limits

Because the sample is composed of a limited number of managers - accounting information users and beneficiaries of financial and accounting reports, the generalization of the results is restricted. Results cannot be extrapolated to all managers in Brasov/Romania. Because most interviews were conducted in managers' offices, there were interruptions caused by their work, which resulted in the fragmentation of exposure and possible loss of information.

## 8. Conclusions

The conclusions and results obtained from the study carried out provide a general overview of the relevance of financial accounting reports and how they are perceived, understood and used by managers of small and medium sized companies in Brasov.

In order to assist management decisions, the accounting information must be accurate, verifiable and delivered in a timely manner. Managers require a sincere application of accounting and tax rules and information should be provided regularly (at least once a month), so that it can be used in the decision making process.

They do not agree with annual reporting (via the balance sheet and income statement) of the information regarding the financial position and performances of the entity that they manage. Decision makers direct their attention mainly towards non-standard situations and reports, tailored to the nature of their work, objectives and their duties; they prefer simplified reports that use a more accessible language and appropriate terminology for their managerial knowledge.

Managers propose an easy to follow and verify accounting and financial reporting, presented in the form of brochures containing financial- accounting information from various spheres of activity and leading the decision maker to save time and money by focusing him towards pieces of investment which would improve the economic performance of the financial entity.

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## Financial Innovation: Adverse or Positive Effects?

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### Abstract

*Financial innovations, as process innovations, next to product innovations are vectors of the financial liberalization. The expected effect of the financial innovation is the economic growth, through the diversification of the possibilities of investments in the global real economy.*

*The present paper aims to present and analyze the characteristics, dynamics and complexity of financial innovation and to identify, in the context of the present financial crisis, the effects induced both on the mature financial markets and the emerging markets.*

*The analysis performed in the present paper indicates that the degree of impact the present financial crisis has on different economies of the world depends on the vulnerabilities of each economy but also on the degree of exposure to innovative financial assets that proved to be toxic.*

**Key words:** financial innovation, crisis, innovative financial assets

**JEL Classification:** G01, F62

### 1. Introduction

In the last few decades, financial innovation has been under the close attention of many researchers trying to explain its causes and to advance different hypotheses about its impact [22, 13, 2, 7, 12, 21].

Economists use the word “innovation” to describe shocks to the economy as well as the responses to these shocks. Innovation includes the acts of invention and diffusion (or adoption) of new products, services or ideas [14].

The *imperfections in the market* prevent participants in the economy from efficiently

obtaining the *functions* they need from the financial system. This leads to financial innovation. A financial innovation represents something new that reduces costs, risks, or provides an improved product/service/instrument that better satisfies participants' demands. A very important aspect of the financial innovation is its adoption and spread, its diffusion across an industry. Broadly speaking, financial innovation is the act of creating and then popularizing new financial instruments as well as new financial technologies, institutions and markets. Financial innovations can be grouped as new products, new services, new "production" processes or new organizational forms or into *product* or *process* innovation, with product innovations exemplified by new derivative contracts, new corporate securities or new forms of pooled investment products, and process improvements typified by new means of distributing securities, processing transactions or pricing transactions.

The standard explanation for financial innovation is that it helps correct some kind of market inefficiency or imperfection. Other important motivations for financial innovation are to lower taxes or to avoid the effects of regulations.

Financial innovation literature is abundant but even so, the empirical studies that test different hypotheses or otherwise provide a quantitative analysis of financial innovation are extremely few. There were numerous attempts, but things seem to be hard to prove, mainly because the effects of the financial innovation are hard to be separated from the effects of other factors.

Some empirical work has been performed. Even if it is not perfect, it offers some insight on the hypothesis set by researchers. For example, Tufano [20] and Carrow [3] have studied the incentives of investment banks to



innovate, focusing on the market shares they capture and the underwriting spreads they charge on new types of securities.

Another significant empirical study is that of Kaminsky and Reinhart [9,10] that analyze a wide range of crises in 20 countries, including 5 industrial and 15 emerging ones. In their study, Kaminsky and Reinhart notice that in many cases banks and other intermediaries were overexposed to the equity and real estate markets and about a year later on average a banking crisis occurred. In another study of the relationship between financial liberalization and financial fragility, Demirguc-Kunt and Detragiache [6] study 53 countries during the period 1980-1995. They find that financial liberalization increases the probability of a banking crisis.

## **2. Factors that stimulate financial innovation**

In an incomplete market, not all states of nature can be spanned, and as a result, parties are not able to move funds freely across time and space, nor to manage risk. Allen and Gale [1] consider a particular form of market incompleteness, in the form of short sales restrictions, as motivation for innovation by parties seeking to share risk. They show it may be optimal for firms to offer multiple classes of claims generating value from different investor preferences and needs.

There are a few structural conditions considered by the general innovation literature [4, 5] to encourage innovations:

1.*the market power of enterprises* - This hypothesis originates with Schumpeter [16], who argued that market power is necessary to permit firms to generate sufficient returns from innovation because there are many problems connected to the use on new ideas. Obtaining the finance for research and development is often required for successful innovation.

2.*the size of enterprises* - This hypothesis also is identified with Schumpeter[16]. A larger size of an enterprise is necessary to allow the firm to accommodate the economies of scale inherent in R&D facilities, which are necessary to yield innovations. Still, the very heavy regulated large companies limit innovative activities.

3.*technological opportunity*

4.*appropriability* - a productive new idea will be rapidly copied by rivals and thereby such ideas should be protected.

5.*product market demand conditions* - A larger market will provide a greater return to a successful innovative effort. Still, authors such as Scherer [15] suggest that smaller firms, with only modest levels of market power, may be more likely to be rapid innovators, because of the competitive pressures that are absent in the "quiet life" world of monopoly.

The size of the company was always considered to be an important factor to be taken into account when talking about financial innovation, being considered that the smallest, weakest firms, who face the most constraints, would be the most likely to innovate [17, 18]. Even if in general cases, small firms are more likely to innovate, in the case of financial innovation, empirical data does not support this hypothesis.

Information asymmetry is one of the factors known for the innovation generation effect. In order to have access to more financial information, during the 19th and 20th century different financial innovations came into being.

Allen and Gale [1] consider a particular form of market incompleteness—in the form of short sales restrictions—as motivation for innovation by parties seeking to share risk.

Globalization and increasing volatility are often regarded as drivers of innovation. Globalization exposes firms, investors and governments to new risks (exchange rates or political risks) and enables capital raisers to tap larger and more diverse populations of potential investors. A variety of innovations are attributed to attempts to meet the needs of specific investor clienteles. Authors like Smith, Smithson, and Wilford [19] document the increase in the volatility of interest rates, exchange rates, and commodity prices, and draw a link between this increase in riskiness and financial innovation.

Even if the factors that influence the financial innovation are often mentioned in the specialized literature, a complete analyze is seldom found. Campbell [2] is one of the authors that has been preoccupied by the environmental factors that have encouraged financial innovation. One of the main problems of his „list” is that he focuses only on the *levels* of environmental factors and

neglects *changes* in environmental factors. The main factors he identifies are:

1. *Underlying technologies:* Telecommunications and data processing allow financial market participants to measure and manage their risk exposures more efficiently and effectively, as they permit the gathering of information, its transmission, and its analysis. IT and improvements in telecommunications (and more recently the Internet) has facilitated a number of innovations (not all successful), including new methods of underwriting securities, new methods of assembling portfolios of stocks, new markets for securities and new means of executing security transactions.

Another technological dimension that is important for finance is that of intellectual technologies, such as the Black-Scholes option pricing model or the capital-asset-pricing model (CAPM). Advances in these technologies will, again, permit a wider range of innovations. Many new forms of derivatives were made possible because business people could have some confidence in the methods of pricing and hedging the risks of these new contracts. Without the ideas developed by Black, Scholes, Merton and many others, many developments in derivative products would probably never have occurred.

2. *Macroeconomic conditions:* Changing and unsure macroeconomic contexts create uncertainties and risks and therefore offer the starting impulse for innovation. Greater instability is likely to be associated with a faster pace of innovation.

3. *Regulation (legal environment).* Regulation is a two-edged sword. Normally having the purpose of setting strict rules to all participants on the market, the regulatory frame can stimulate some of the participants on the capital market to find new ways of avoiding rules. This way, a strict regulatory context can conduct to financial innovation. Regulations limiting cross-border flows are sometimes credited with stimulating certain equity swaps, which enable foreign investors to hold an economic interest in equities they would find difficult to own.

4. *Taxes:* Taxes are often considered to be a major “imperfection” of the market. Higher levels of taxation will likely yield a larger flow of innovation as the higher taxed parties

will seek ways of reducing their taxes. “The major impulses to successful innovations over the past twenty years have come, I am saddened to have to say, from regulation and taxes”[13]. Innovations stimulated by the high level of taxes decouple economic ownership or exposure from legal ownership (governance and tax implications.).

5. *Other influences:* Traditionally, the intellectual property protection system has not been considered important for financial innovation but Tufano [20] shows that imitation of some innovations is rapid and a regime of intellectual property protection could encourage greater innovation. Lerner [11] documented financial patenting activity in the late twentieth century (455 patents between 1971-2000). He notes that although the level of patenting activity has been modest, it increased markedly after a 1998 judicial decision (the State Street Bank case) that allowed for business method patents. Lerner also studies the patenting activity of investment banks and finds that it was positively related to the size of the investment banks and to the extent of their indirect academic ties. He also finds, however, that the direct involvement of academic institutions or of academics themselves in financial patenting was not related to finance-related research productivity of the institutions or the individuals.

6. *Interactive effects:* The categories above may interact.

A significant change in any of the major environmental categories is considered by Miller [13] as a factor that could generate a wave of innovations like those of the 1970s and 1980s. These waves were generated by the *changes* in telecommunication and data processing, by the rise in levels and variance of interest rates, by the end of the fixed exchange rates regime or the major intellectual innovation (such as the Black-Scholes model).

### **3. Financial innovation – structural cause of the present financial crisis?**

Financial innovation can have detrimental effects. There is evidence that financial innovations are sometimes undertaken to create complexity and exploit the purchaser. If we only look at the crisis that has started in

2007, securitization and subprime mortgages may have exacerbated the problems that already were latent. There is evidence that in the long run financial liberalization has been more of a problem than financial innovation. For example venture capital and leveraged buyout funds to finance businesses are financial innovations that have had a significant positive effect.

Financial innovation has allowed many improvements in the environment and in global health. On balance it seems likely its effects have been positive rather than negative but, even if one important aspect that has made the object of research in the field of financial innovation has been the **net impact of financial innovation** and most authors agree on the fact that innovation has both positive and negative impacts on society, they do not seem to be able to reach a conclusion regarding the *net* impact of financial innovation. Some say that nothing is more dangerous than a good idea and conclude that innovation's benefits are not very clear while Merton [12] takes the opposite viewpoint: “Financial innovation is viewed as the “engine” driving the financial system towards its goal of improving the performance of what economists call the “real economy.”

Henderson and Pearson [8] provide striking evidence that financial innovation can introduce complexity to exploit uninformed investors.

One sustained attack on financial innovation is that specific innovations contribute to high levels of market volatility and to outcomes like market crashes, the most common example being the impact of portfolio insurance trading on the stock market crash of 1987.

Also, the derivatives market has been the site of battles between those who see innovation as a good or bad influence on social welfare. During the present financial crisis, even if the global market has significantly decreased (the dramatic decrease of the market indexes, of the capitalization and of the shares bought and sold show it), still, the positions on the derivative instruments OTC has increased.

We are going to analyze the evolutions registered during the financial crisis (2007 - 2010) both on the mature capital markets (such as USA, UK, Japan, Germany, France,

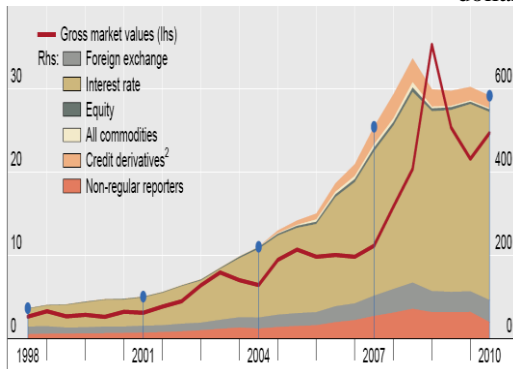
Italy) and on the emerging ones (Greece, China, India) and we'll try to prove that financial derivatives have become, in the first place speculative instruments, real toxic assets, contrary to the initial role of means of protection against risks.

The effects of the financial crisis can be noticed in a dramatic fall of the market capitalization at the end of 2008. In the USA case, before the burst of the crisis in 2007, market capitalization has reached its maximum level at about 20,000 billions USD (an increase of 652% in comparison with 1990). In the first year of the crises the market capitalization went down with about 8,000 billions USD. The markets in Germany, France and Italy had very similar evolutions, the market capitalization going down about 50% in 2008 in comparison with 2007. The structural problems of the financial system of Greece are reflected in the decrease of the market capitalization with 300% (from 264.9 in 2007 to 90.3 billions USD in 2008), the market not being able to come back not even in 2010.

In the emerging markets 'case the evolution is different and the growth rhythm of the market capitalization is amazing. For example, if in 1995 the market capitalization in China was of 42.1 billions USD, in 5 years its value was 14 times bigger, reaching in 2000, 581 billions USD. In 2007 the market capitalization's value was already 11 times bigger than in 2000, reaching a historical maximum of 6,226.3 billions USD, immediately after suddenly falling (in the crisis context) in 2008 to 2,793.6 billions USD. The reason for such an evolution is found in the immaturity of the financial market and in the interest that speculators showed for such emerging markets considered having very big growth potential.

Figure 1 - Evolution of global OTC derivatives market

-notional amounts outstanding, in trillions of US dollars-

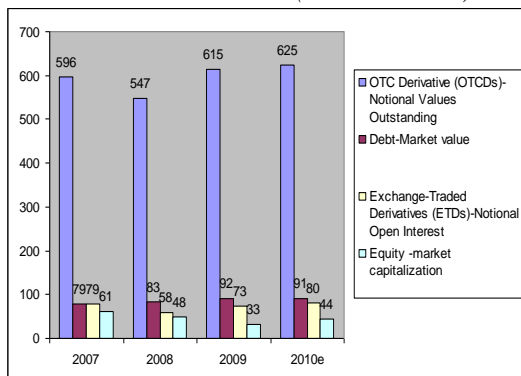


Source: BIS - Triennial and semiannual surveys, Positions in global over the counter (OTC) derivatives markets at end-June 2010, 2010:1

From our point of view, the dialectic relation between globalization and instability gives a particular shade to the duplicity character of the derivate financial instruments. So, on one hand they have as purpose the investors ‘protection against the instability that affects prices, interests and exchange rates and on the other hand these new financial instruments are at their turn a factor of instability increasing the risk potential as speculators prefer these instruments.

Figure 2 shows the major discrepancy between the OTCs and the other markets (Debt, ETDs, Equity) during the financial crises we are going through: at the end of 2010 the value estimated for the OTCs was 625 trillions USD while the value estimated for the equity market was of only 44 trillions USD.

Figure 2 - Mainstream View of Global Financial Markets (USD trillions)



Source: Bank for International Settlements, Quarterly Review, December 2010

The label of „toxic assets” can be applied to a vast number of financial instruments that were innovative products, the most eloquent being the *credit default swaps (CDS)*. In only ten years from the moment they appeared, the market of the credit default swap reached 54.6 thousands billions from the moment they appeared, the market of the credit default swap reached 54.6 thousands billions dollars, while the GDP of the global economy in 2007 was of 54.3 trillions dollars and the added capitalization of all companies listed on Wall Street was at the end of June of 50.5 trillions dollars. One reason for the credit default swap instruments market going double as value from one year to another is that a buyer of protection doesn’t need to have the debtors, being enough to bet that a certain debtor is not going to fulfill its obligations, paying the premium to the seller and waiting. Actually, most of the CDS contracts are bets on the debtors’ capacity of paying their debts.

In this context, the fear of the credit default swap market going down increases and the authorities of the credit default swap market going down increases and the authorities’ decision to regulate this market and make these contracts more transparent can increase the market’s’ pessimism.

## Conclusions

The contemporary financial markets are continuously changing, their dynamics being generated on one hand by the tougher market competition and, on the other hand by the regulations that generate the counter reaction of the market, seen in the financial innovation.

Financial innovation allows dividing risks into its components and changing the components on different markets, facilitating the economic activity and resources allocation. Still, it leads to an increasing complexity of the financial transactions and of the channels of risk diffusion, creating completely new financial scenery. Financial innovation has prospered in the international field, stimulating markets globalization.

The institutional investors (like hedge funds) that have their transactions based on the high liquidity of the capital markets, but also on the excessive use of debt, developed

a lot and lead to an increased risk of credit on the financial markets. The big number of product innovations capable of satisfying almost any need of the investors, the development of complex financial instruments not very well understood by those that owe and sell them and last, but not least important, the tight connections between different financial markets, the tight

The financial crises that begun in 2007 demonstrates that the lack of regulations of the shadow banking sector, the use of innovative financial products just for speculative purposes, along with the effects of financial contagion of the financial markets that emphasize system risks over the national borders can have catastrophic financial effects.

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## Which Is More Efficient in Fighting Tax Evasion: The Carrot or the Stick? A Cross-Country Comparison around the World

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### Abstract

*Regardless of the economic development status, type of government or citizens' trust level in tax authorities, tax evasion is a ubiquitous phenomenon across societies and a proof that people tend to display the same behavior all around the world. As tax evasion hinders economic growth and affects the provision of high quality public goods, tax authorities try to mitigate taxpayers' tendency of dodging taxes by implementing either deterrence-based or reward-based strategies.*

*The present paper offers some insights into the strategies used by tax authorities in different countries around the world to fight tax evasion and highlights the most cost-efficient and cutting edge ones.*

**Key words:** tax evasion, taxpayers, tax authorities, carrot and stick strategies.

**JEL Classification:** G02, G28, H26.

### 1. Introduction

In dealing with taxes and regulations, taxpayers display two major types of behavior: compliance, as in full payment of levies to the state, either voluntary or enforced [8]; non-compliance, as in diminished payment (i.e., tax avoidance) or no payment (i.e., tax evasion) of levies to the state [5]-[6]. While the nature of compliance is determined by dimensions like trust in authorities or power of authorities, the nature of non-compliance depends on legal matters: tax avoidance is based on using loopholes

into the law, thus being legal; tax evasion refers to deliberately breaking the law, thus being illegal. The difference between the two types of non-compliant behavior is expressed in a witty manner by Denis Healy, a former British Labour politician: “The difference between tax avoidance and tax evasion is the thickness of a prison wall”.

Whether this wall stands between evaders and honest taxpayers or whether it turns into financial punishments will be tackled in the remainder of the paper.

### 2. General aspects concerning tax evasion

The phenomenon of tax evasion comprises any act in which a taxpayer knowingly breaks the law in order to pay no taxes, thus treating money belonging to the state as his own. It comes in various forms, depending on the category of taxpayers. When referring to *ordinary taxpayers*, evasion usually consists of fare dodging, buying goods or services without invoice (especially hiring self-employed for home improvement), not reporting additional income to authorities, or moonlighting.

In the case of *economic entities*, the following activities are classified as tax evasion: buying goods or services without invoice, not reporting additional income to authorities, not keeping records of cash transactions, not releasing invoice/receipts after a sale, moonlighting, establishing headquarters in tax heavens, depositing money in off-shore bank accounts, forging accounting and bookkeeping records to claim losses or VAT refunds, and the list goes on.

According to Alm, Martinez-Vasquez,

and Schneider (2004: 16) [1], as part of the underground economy (i.e., shadow economy, black market), tax evasion is defined by activities linked to: *monetary transactions* involving legal sources, such as unreported income from self-employment, salaries, wages, and assets from unreported work related to legal services and goods; *non-monetary transactions* involving legal sources like barter of legal services and goods.

Tax evasion activities steer every year billions of dollars from the official economy towards the shadow economy. According to tax expert Richard Murphy (2011: 17) [9], the value of tax evasion at global level reached US\$3.1 trillion in year 2011. By steering money which would rightfully finance state budgets, tax evasion mitigates the quality of public goods provided by the state. In addition, it hinders economic growth by encouraging disloyal competition of evaders with respect to honest taxpaying businessmen.

As there will always be taxpayers who cooperate no matter the level of taxes, there will always be taxpayers who evade and face the risk of bearing the punishment if caught. Therefore, the goal is not to completely eliminate tax evasion (which is a utopia), but to bring it to a level at which it does not significantly affect the course of the official economy.

Achieving the abovementioned goal depends on the strategies tax authorities apply when dealing with taxpayers. The type of strategies depends in turn on the interaction climate between tax authorities and taxpayers. Authors Kirchler, Hoelzl, and Wahl (2008) [8] talk about two types of interaction climates, a *synergistic* and an *antagonistic* one. The synergistic climate is characterized by mutual trust and respect between the two parties, authorities display a “service and clients” attitude towards taxpayers and, as result, taxpayers cooperate and comply voluntarily. At the opposite end, the antagonistic climate is characterized by mutual distrust, authorities believing taxpayers evade whenever possible, treating them as potential evaders, displaying a “cops and robbers” attitude. As a consequence, taxpayers feel persecuted by authorities and consider themselves entitled to conceal incomes. Generally, the strategies which fit

for a synergistic climate are rewards (i.e., *carrots*), while the appropriate strategies for an antagonistic climate are deterrent ones like audits, fines, and prosecution (i.e., *sticks*). In addition, antagonistic strategies generate the highest costs for tax authorities, because it takes a lot of time, financial resources, and staff to implement them. More details on these strategies along with the country specifics are provided in the following.

### **3. The carrot or the stick? Strategies in fighting tax evasion worldwide**

The literature on the carrot and stick approach developed from Becker’s [3] theory of crime according to which compliance level remains unchanged when a decrease in audit probability (i.e., the *carrot*) is balanced by an increase in the severity of the expected punishment (i.e., the *stick*). Later on, research on conditional audit strategies shows positive behavioral outcomes when compliance is rewarded by mitigating audit probabilities and non-compliance is punished by increasing audit probabilities or penalties [7]. Moreover, after studying the effects of punishments and rewards on cooperation, Andreoni, Harbaugh, and Vesterlund (2003: 894) [2] come to the conclusion that using only reward strategies and leaving no room for punishment may be a mistake.

Nevertheless, from one end of the world to another, tax authorities choose between carrot and stick strategies to fight tax evasion.

#### **3.1. The Australian Taxation Office (ATO)**

Since 2001, the ATO has been using an interesting stick strategy against evaders. Tax agents assess the activity of tax advisors known for the tax evasion practices they recommend to clients. All their clients are black listed and frequently audited until they comply. The stick strategy has turned out to be very efficient, as several times black listed clients have contacted authorities themselves to announce they have changed advisor and asked to be erased from the list [4]. ATO is no stranger to carrot strategies like: providing fiscal assistance for startup companies through which tax agents raise awareness concerning the need for voluntary compliance; establishing public-private



partnerships with local entities.

### 3.2. The Brazilian “Lion”

Despite the fact that it numbers only 25 million registered taxpayers out of 190 million inhabitants and that fiscal legislation changes frequently, tax evasion in **Brazil** is estimated at 16% of GDP and compliance level is higher than in any other country from Latin America. These positive results are due mainly to the Brazilian tax authorities known as the “Lion” – from their official logo, whose employees are considered among the best in collecting fiscal revenues and recovering overdue taxes. The “cops and robbers” attitude is expressed by one of the Lion’s officials: “The role of the tax authority is to let taxpayers know that we are keeping an eye on them and that they should do the right thing” [19].

Having a staff numbering 12,000 employees at federal level, Brazilian tax authorities make use of both tough and cutting edge deterrent strategies against tax evaders ranging from installing beer kegs in breweries, flying in helicopters above millionaires’ mansions to size up properties, or even conducting armed raids in places known for evasion activities during operations coded “Black Panther” or “Delta”.

While the Brazilian economy increased by 2.7% from last year, revenues collected by tax authorities increased by 10.1%. The efficiency of the Lion has become so famous worldwide that state officials from Chile, Tanzania, and China travelled to Brazil to learn the *modus operandi* of the Brazilian tax agents.

In accordance with the deterrent strategies used in the field, the sanctions for tax evasion stated in the Brazilian law are imprisonment from two to five years and paying back the overdue levies plus 20-75% penalties applied to the overdue amount. Despite the Lion’s high efficiency, 65% of Brazilians are dissatisfied with its strategies, due to the fact that European officials ensure a higher compliance level by implementing less drastic and costly methods.

### 3.3. Internal Revenue Service (IRS)

The **US** government takes steps in implementing the Foreign Account Tax

Compliance Act (FATCA) at global level starting with January, 1<sup>st</sup>, 2013, to stop American taxpayers from committing tax evasion overseas. This initiative came after the management of the Swiss UBS bank (the biggest private bank outside the US) had confessed of assisting several Americans in committing tax evasion in 2009 and consequently paid 780 million Euros to avoid prosecution.

According to FATCA (which contains up till now over 400 pages of norms and regulations), financial institutions outside the US have to obtain and report information to the IRS regarding the deposits and accrued interests of American citizens. Non-compliant institutions would incur 30% fines applied to the value of their dividends. As an answer to these measures seen as draconic, many private banks from Singapore, Hong Kong, and even Germany have denied American citizens the right to open a bank account. Considering that banking costs are extremely high (88-90% of revenues in Singapore, 70% in Switzerland), implementing FATCA would lower even more the bankers’ profits.

Through its Whistleblower Office, the IRS grants the “Informant Award” to anyone helping in catching tax evaders, which consists of up to 30% of the recovered taxes [13].

### 3.4. The Kingdom of Morocco against evasion

The records of the **Moroccan** tax authorities show that 65% of the economic entities registered as income taxpayers (around 115,000 entities) declare zero profit or loss to avoid taxation. To put an end to this practice, authorities introduced the stick of higher audit probabilities. Namely, tax law has been modified in the sense that entities will have to prove the economic status they claim. Tax agents will match documents filed by entities with documents from official archives and intensify audits, provided inconsistencies are identified.

Another change in the tax law states that economic entities will pay a discriminating income tax of 15% (compared to the previous 30%) if they generate revenues up to 375,000 US dollars. Moreover, the law provides tax amnesties for entities making efforts in

clarifying financial situation under the new law (i.e., carrot strategies). Surprisingly, after the new law entered into force, 13,200 small economic entities (which account for 75% of all economic agents) declared profit [15].

### 3.5. The Spanish “Carrot Rebellion”

The link *carrot*-tax evasion comes to life under a funny **Spanish** version in order to aid evaders, according to some economists. To save his theater from bankruptcy due to extremely high taxes imposed on show tickets (i.e., 21%), a theater owner from the Spanish town of Bescanó sells carrots instead of entrance tickets. The reason is simple: carrots are classified as a staple, so the owner pays only 4% in taxes instead of 21%. The initiative has rapidly gained the support of local mayor and media who dubbed it “the Carrot Rebellion” [18].

### 3.6. Swiss approach to evasion

**Switzerland** has one of the highest levels of tax morale (i.e., intrinsic motivation to pay taxes) in the world [6]. Nevertheless, the country has “encouraged” capital inflows from all over the world due to tax exemptions, low interest rates, and banking secrecy (i.e., not discarding the identity of the account owner and the deposit value), being considered also a tax heaven. Swiss authorities justify this situation based on their federal tax law. There is a legal distinction between tax avoidance and tax evasion, as compared to other states. Tax avoidance is not a criminal act, it involves not paying taxes or declaring incomes below real value and is sanctioned through fines. Tax evasion is a criminal act and consists of actively trying to conceal income (e.g., forging accounting books) [20].

For the moment, Switzerland has signed tax treaties enforcing information exchange with more than 30 countries, in order to avoid being black listed by the OECD as a tax heaven which fosters tax evasion. Based on these treaties, Swiss authorities have to assist other states in cases of tax evasion and suspicions of tax avoidance.

### 3.7. The Romanian National Agency of Fiscal Administration

According to official estimates, in **Romania** tax evasion amounts 20-35% of GDP or 18 billion Euros. If compliance level would rise annually by 1%, the state budget would increase with 500,000 Euros. In their attempt to diminish non-compliance level, Romanian tax authorities applied both the carrot and the stick strategy. The first type of strategy consisted of mitigating levies for taxpayers complying before the deadline or increasing awareness on voluntary compliance through national campaigns. Such campaigns like the one in 2009, called “ANAF gets out on the street”, increased voluntary compliance by 15% as compared to 2008.

The second type of strategy consisted of intensified audits in locations vulnerable to tax evasion (i.e., border points, harbors, commercial centers), fines, prosecution, and imprisonment. Because the second type of strategy proved not to be that successful, some state officials proposed even the introduction of a whistleblower’s law, but until now the idea hasn’t gained too many supporters.

### 3.8. Tax evasion in the United Arab Emirates (UAE)

Levying taxes on income (i.e., wages, salaries, corporate profit) is not a defining element of the **UAE** fiscal policy as over 60% of state revenues come from the oil industry. With very few exceptions (i.e., social security for both employers and employees; profit tax on banks, and oil companies), there are no other taxes levied on economic activities, therefore the country is considered a tax heaven. Nevertheless, being aware of the limited oil resources under their administration, Emirati tax authorities do not exclude the possibility of levying taxes on consumption in the nearest future.

Although a tax heaven, authorities confront themselves with tax evasion and, in order to mitigate it, they toughened legislation by increasing imprisonment periods up to 20 years as compared to previously stated periods of five years [21]. The newly adopted tax law brings also good news (i.e., *carrots*) for evaders: if plaintiffs (i.e., state, private companies) are returned the entire defrauded amount, evaders are to

be released immediately from prison.

### 3.9. Pakistani strategies

Although the **Pakistani** Federal Bureau of Revenues has made a lot of investments in its infrastructure (i.e., new headquarters, computers, software), the activity of tax agents has not become more efficient [11]. Moreover, these changes generated a drop in the audit probability, inefficient application of the tax law, and adjustment of revenues in order to report higher profits. As a consequence, compliance level decreased from 65% (2011) to 39.5% (2012). The ratio tax levies to GDP also decreased from 9.8% (2011) to 8.2% (2012) given that the ratio of taxpayers to inhabitants reached the minimum level of 1.5%. The majority of taxpayers don't comply, therefore the value of direct tax evasion exceeds 100% compared to indirect tax evasion which reaches 30%. The highest tax evasion is registered in sectors like agriculture and real estate. Among taxpayers, the wealthiest evade the most. For example, in 2011, over 700,000 rich taxpayers were found to pay no tax on their wealth. In theory, tax evasion is punished with the stick of prosecution or fine. In reality, the only sanctions imposed on evaders are insignificant fines as no evader was ever prosecuted until now [14]. According to specialists, one solution for increasing compliance level would be changing the fiscal policy focus from indirect taxation to direct taxation.

In order to improve efficiency, starting with the 1<sup>st</sup> of January 2013, Pakistan will implement the stick under the form of a whistle-blowing law. Thus, anyone providing reliable information to catch tax cheats will receive 40% of the recovered revenue.

### 3.10. The Chinese method

In order to lower shadow economy, which reached 20% of the GDP in 2011, **Chinese** authorities are accustomed with using the stick. Severe fines are applied to evaders: delayed payment is punished by applying a daily interest of 0.05% on overdue amount; depending on the non-compliance reason, fines can reach 50-100% of the evaded amount [12]. Tax evaders also face death penalty, by far the most drastic strategy of all

[17].

## 4. Conclusions

The present paper focuses on carrot and stick strategies implemented by tax authorities around the world to mitigate tax evasion. The behavioral pattern in question is displayed by many taxpayers rejecting opinions like the one of US Supreme Court Oliver Wendell Holmes: “I like to pay taxes. With them I buy civilization” [16].

The nature of the chosen strategy depends on the type of interaction between taxpayers and tax authorities, with carrot strategies being more suitable for synergistic climates and stick strategies for antagonistic climates.

The sample pool offers interesting insights as countries selected for the analysis cover different facets of variables like type of government (democracy/monarchy/socialist régime), status of economic development (developed/developing), trust level in tax authorities (trustful/distrustful). As a general overview, developed states with a prominent synergistic climate (i.e., Australia, Switzerland, USA) balance the two types of strategies, thus lowering compliance costs. At the other end, developing countries prone to an antagonistic climate (i.e., Brazil, Morocco, Romania) implement harsh stick strategies thus increasing compliance costs.

All in all, the most efficient fight against tax evasion is obtained not by implementing unilaterally either carrot strategies or stick strategies but by establishing a synergy between the two.

## 5. Acknowledgments

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## Statistical Analysis of Emerging Capital Markets

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### Abstract

*This article presents an exhaustive analysis of the normal distribution assumption in terms of emerging capital markets. The accuracy of such assumptions is fundamentally contested by the results of empirical analysis. In addition, this paper is also a conceptual debate between classical theory represented by Efficient market theory and Chaos theory, which is a revolutionary interdisciplinary approach of high impact and relevant practice.*

**Key Words** : Efficient market theory, Chaos theory, financial crises, normal distribution, emerging capital markets

**JEL Classification** : G10, G11, G15

### 1. Introduction

This article aims to highlight the limits of normal distribution assumption in emerging capital markets analysis. For decades, efficient market theory was the epicenter of modern finance despite some obvious inaccuracies. Thus, reasoning that financial assets prices appear to follow a random walk, it is considered that their daily variation is a random value following the normal distribution. Efficient market theory argues that financial assets prices invariably fully reflect all available information and instantaneous adjust to the arrival of new information. Nevertheless, emerging capital markets particular characteristics are in sharp contradiction with the concept of market efficiency. The empirical analysis provided by this study is based on daily prices covering the period 1 January 2007 to 31 January 2012 for the most representative Bucharest Stock Exchange indices, namely BET, BET-C and BET-FI. Chaos theory provides a more realistic and suitable alternative to normal distribution assumption,

such as “fat tailed distributions”. Regarding the analyzed period, none of the Bucharest Stock Exchange indices has recorded a normal distribution.

In the literature, phenomena are classified either random or deterministic. Pronounced antagonism between these two features highlights the gap between unpredictability and perfect predictability. For decades, it has proceeded from the premise that there is no other alternative. However, under the terms of the global financial crisis, the framing in a radical pattern is no longer a viable alternative, not even at the conceptual level.

The empirical analysis provided by this study is based on daily prices covering the period 1 January 2007 to 31 January 2012 for the most representative Bucharest Stock Exchange indices, namely BET, BET-C and BET-FI.

Unequivocally, the extreme movements in stock prices over the period under review have raised serious suspicions about the normal distribution assumption in the case of emerging capital markets, such as Bucharest Stock Exchange. In fact, a significant contribution to highlighting the limits of normal distribution assumption is due to the financial crisis periods which is characterized by severe financial imbalances and anomalies.

### 2. A theoretical approach

In terms of capital markets modeling and prediction, a turning point was represented by the efficient market theory. This theory was widely accepted since the early 1970s led to a sharp conceptual revolution. In fact, efficient market theory is perceived as the cornerstone of modern finance. The basic idea is that a capital market in which prices always “fully reflect” available information is called efficient. In other words, it is not possible for an investor to outperform the market over the long-term, because stock

prices always incorporate and reflect all relevant information. Technically, in an efficient capital market, no investment strategy can earn excess risk-adjusted average returns, or average returns greater than are warranted for its risk (Barberis and Thaler, 2003).

In his paper "Random Walks in Stock Market Prices" published in 1965, Eugene Fama suggested that: "an efficient market is defined as a market where there are large numbers of rational, profit-maximizers actively competing, with each trying to predict future market values of individual securities, and where important current information is almost freely available to all participants". He also concludes that: "In an efficient market, competition among the many intelligent participants leads to a situation where, at any point in time, actual prices of individual securities already reflect the effects of information based both on events that have already occurred and on events which, as of now, the market expects to take place in the future. In other words, in an efficient market at any point in time the actual price of a security will be a good estimate of its intrinsic value." (Fama, 1970).

The opposite of this approach is the chaos theory and its profound implications. Chaos theory analyzes complex, unpredictable, nonlinear dynamics and the behaviour of sensitive systems, such as capital markets and especially emerging capital markets.

In addition, chaos theory is an attempt to demonstrate that order does exist in apparent randomness. Novelty of chaos theory is that antagonistic features such as chaos and order, determinism and randomness, smoothness and roughness, perfect and imperfect structures can exist simultaneously in an unconventional and avant-garde theoretical approach. The quintessence of chaos theory is that local randomness and global determinism can coexist to create a stable, self-similar structure known as fractal (Peters, 1994).

Mandelbrot known as the "father of fractal geometry" proposed a completely different perspective on this issue. In his book "The (Mis)Behaviour of Markets: A Fractal View of Risk, Ruin and Reward", demonstrates rather conclusively that Gaussian normal distribution of financial prices has been subject to oversimplification

to make the data fit in the model, because of "fat tails", concentration and extreme events. This leads to the conclusion that a collapse of stock markets prices occurs more often than a normal distribution suggests.

Liquidity is a concept of significant importance analyzed by chaos theory. The efficient market theory does not mention at all liquidity. This aspect is very important considering the fact that the most dramatic crashes were caused by the lack of liquidity. As a consequence, a lack of liquidity constrains investors to accept any price whether it is fair or not (Birău, 2011a).

The concept of liquidity has a special connotation in the context of emerging capital markets. This particular typology of capital markets is distinguished by certain characteristics such as: high volatility, the existence of bubbles, panic, speculation, anomalies, high-risk investment opportunities, high returns, a low level of liquidity, exchange rate instability, reduced capitalization, diversification benefits for investors in developed markets, strong correlation with developed capital markets, reduced number of transactions, insufficient development of financial instruments, and many others also (Birău, 2011b).

### 3. Empirical framework

The normal distribution, used to analyze changes in stock prices, requires that price changes are continuous (Ellerbroek, 2005). The normal distribution or Gaussian curve is a symmetrical distribution which follows a bell shaped curve. The bell shaped curve is characterized the highest frequency in the center and decreases on either side. Mainly through the prism of this aspect, there is a insignificant probability that extreme events to occur compared to some other distributions. Nevertheless, the current global financial crisis is an undeniable proof that extreme events are much more frequent. Dramatic financial events followed by severe capital market crashes occurred relatively frequently in the last century, reaching maximum intensity between 1929-1933 (The Great Depression), in 1987 (Black Monday) and between 2000-2002 (DOTCOM crises).

Statistical analysis can be used only if stock price changes are assumed to be normally distributed. More specifically, this

assumption has been validated over the time in order to apply efficient market theory. The fact that stock returns are not normally distributed is a certainty empirically proven. However, this issue is deliberately ignored in order to maintain the assumption that stock returns follow a random walk. If continuity of stock price is not assumed, statistical analysis used by efficient markets theory is unnecessary.

The empirical analysis is based on daily prices covering the period 1 January 2007 to 31 January 2012 for BET, BET-C and BET-FI indices.

In the analyzed period, the trend of Bucharest Stock Exchange indices was strongly downwards, in strong correlation with financial crisis, as it can be seen in the figures below :

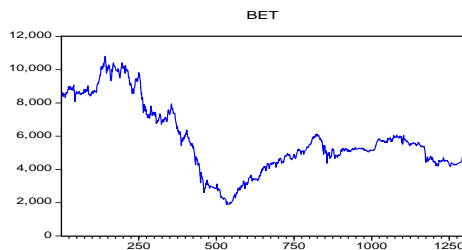


Figure no.1 The trend of BET

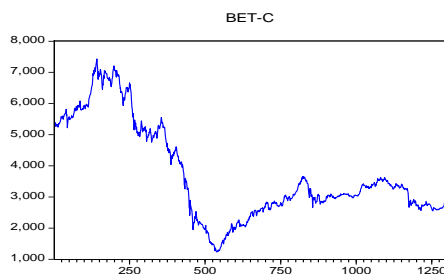


Figure no.2 The trend of BET-C

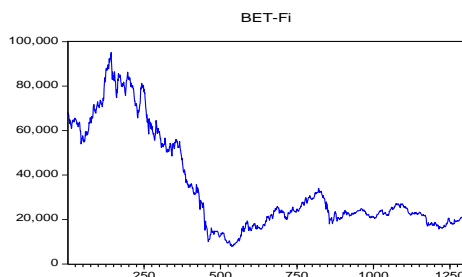


Figure no.3 The trend of BET-FI

The daily returns were calculated using the log-difference of the Bucharest Stock Exchange indices, namely BET, BET-C and BET-FI, as

follows :

$$r_t = \ln\left(\frac{p_t}{p_{t-1}}\right) \times 100$$

where p was the closing price.

The Log-return calculated for BET, BET-C and BET-FI for the period 1 January 2007 to 31 January 2012 is illustrated in the following figures :

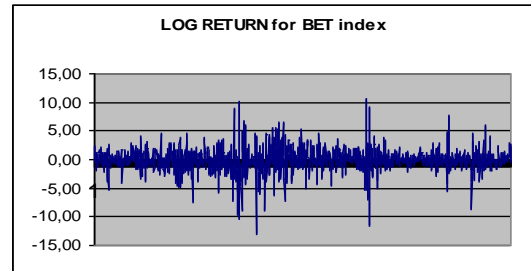


Figure no.4 The Log-return calculated for BET

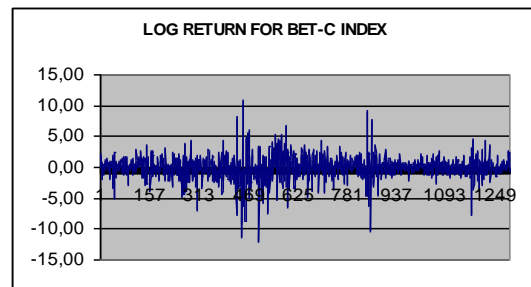


Figure no.5 The Log-return calculated for BET-C

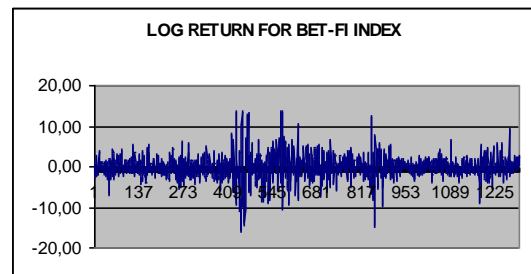


Figure no.6 The Log-return calculated for BET-FI

The global financial crisis that was caused by U.S. subprime mortgage crisis affected all the capital markets in the world. However, its impact was more pronounced in the case of emerging capital markets, such as Bucharest Stock Exchange.

The main statistical properties, specifically Skewness and Kurtosis, suggest that historical data analyzed in this article is non-normally distributed. In statistical terms, skewness is a measure of asymmetry of the distribution of a data series around its means. The skewness of a symmetric distribution is zero. In conclusion, in the case of normal



distribution, the skewness is null. Positive skewness suggests that the distribution has a long right tail, while negative skewness implies that the distribution has a long left tail. Kurtosis measures the peakedness or flatness of the distribution of a return data series. The kurtosis of a normal distribution is 3, any other value having profound implications in the context of emerging capital markets. Thus, if the kurtosis exceeds 3, the distribution is peaked (Leptokurtic) relative to the normal. In the opposite, if the kurtosis is less than 3, the distribution is flat (Platykurtic) relative to normal.

Further, the histogram of the analyzed indices are reflected below :

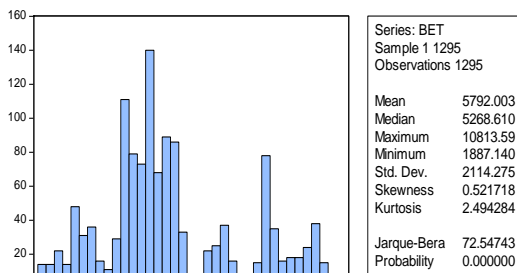


Figure no.7 Histogram for BET

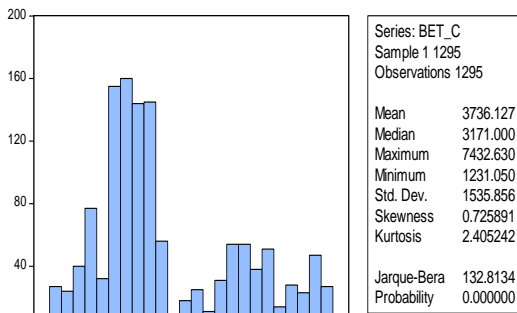


Figure no.8 Histogram for BET

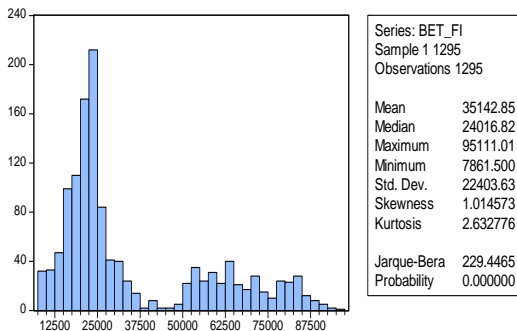


Figure no.9 Histogram for BET

To highlight more clearly the limits of the

normal distribution assumption in terms of emerging capital markets, especially in the context of the current global financial crisis, frequency polygon is used below for each analyzed index :

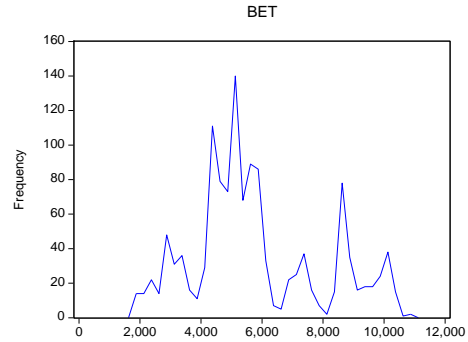


Figure no.10 Frequency polygon for BET

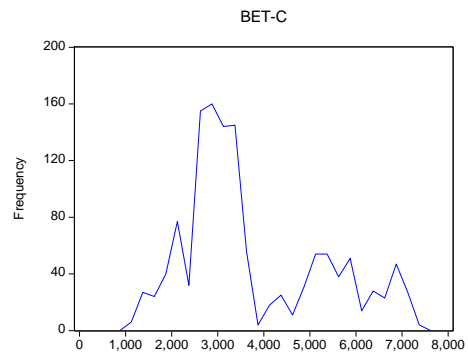


Figure no.11 Frequency polygon for BET-C

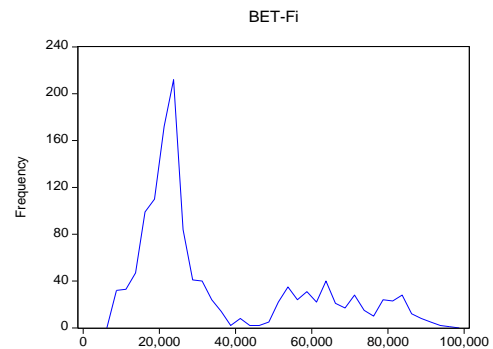


Figure no.12 Frequency polygon for BET-FI

#### 4. Conclusions

Normal distribution assumption in terms of emerging capital markets is unrealistic and questionable. Empirical analysis conducted in this article revealed that historical data previously analyzed in this article is non-normally distributed. The main statistical properties, specifically Skewness and

Kurtosis suggest that dramatic events such as financial crises are more frequent than normal distribution assumption allows.

Accordingly, efficient markets theory is not an accurate theory of capital markets, especially in the context of turbulent events such as the current global financial crisis. An effective alternative to classical approach is chaos theory. In this case, normal distribution assumption is not a viable option.

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# The Role of Higher Education in a Nation's Economic Development

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## Abstract

*The need often arises to explain and control, as much as possible, those phenomena and processes in the economy that can reflect more or less favourable situations. For that purpose, a range of efficient instruments are devised to help us explain the existing situations and eliminate (or at least reduce) the undesired effects that may arise in a given economic context.*

*We have employed econometric models to evince the role of the public higher education sector in generating economic growth and, based on this, to prove the need for further sustained public funding of higher education.*

*The change of mindset regarding the participation of the private environment in the funding of higher education in Romania is the first step that should be taken in order to build awareness that a properly funded higher education will generate progress across the board in the long run.*

**Keywords:** higher education funding, economic development, human capital.

**JEL Classification:** I22

## Introduction

The human capital is among the foremost factors that have had a decisive contribution to the economic success of developed countries. Economists belonging to the human capital school of thought, such as Becker [1] and Denison [2], have supported the idea that investing in education is productive, as it generates not only

individual, but social benefits as well. Denison proved that around 25% of the per capita national income growth in the US can be credited to the extended duration of education of the American labour force. Many studies later revealed statistical evidence to support the importance of the education level in the development of national economies.

The link between human capital and all the other production factors used in economics – the information society and human economics, technical features, the quality and efficiency of the production of goods and services – has become an axiomatic truth of the modern world, to the effect that no strategy for economic growth and development could succeed if it ignored or downplayed its importance.

## 1. Methodology outline

We have employed econometric models to evince the role of the public higher education sector in generating economic growth and, based on this, to prove the need for further sustained public funding of higher education.

The econometric models can also be used to analyse certain aspects of the economic reality, such as: identifying and measuring the delayed effect of some socioeconomic factors, anticipating the evolution of some phenomena, synthesized by a set of variables, systematic, seasonal or cyclic variations that may accompany their evolution, simulating and forecasting socioeconomic processes, identifying and measuring the action of some dichotomous, alternative or binary variables.

The purpose of multiple regression is to highlight the relation between a dependent (explained, endogenous, resulting) variable and a set of independent (explanatory, factorial, exogenous) variables.

The general, synthetic form of the multiple regression model, at the level of a general group, is:

$$Y = f(X_1, X_2, \dots, X_k) + \varepsilon,$$

where  $f$  is the function expressing the dependence of resulting variable  $Y$  on factorial variables  $X_i$ , when the parameter values are not known.

## 2. Results obtained

The models were tested for the period between 2000 and 2009, the input data being: the Romanian GDP (gross domestic product – dependent variable), the GDP allocated to education (independent variable), the number of students per 100,000 inhabitants (independent variable), and the amount allocated to the basic funding of the public higher education system (independent variable).

For the data in the table below, we are trying to identify the dependence of economic development/growth, materialized in the growth of the country's GDP, on the variables of GDP allocated to education, Students/100,000 inhabitants, and basic funding of the public higher education system.

Table 1 The evolution of the GDP, GDP allocated to education, number of students, and basic funding between 2000-2009

Year	GDP bn lei	GDP allocated to education (%)	Students/1 00,000 inhabitants	Basic funding of public higher education
2000	2457,54	3,2	250087	380,00
2001	3609,71	3,4	255162	477,49
2002	5263,47	3,6	336141	633,15
2003	6974,92	3,3	354488	847,26
2004	9084	3,2	360590	1.041,38

2005	11413,4 8	3,4	294087	1.181,34
2006	13362,7 7	4,2	331330	1.680,73
2007	15967,6	5,5	363923	1.947,30
2008	19315,4 1	6	392981	1.950,04
2009	27550,2	6	391212	1.947,62

Source: INSSE data taken from the Romanian Statistical Yearbook, 2000-2009.

An analysis of the MS EXCEL data yields the following results:

### SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,970084
R Square	0,941063
Adjusted R Square	0,911594
Standard Error	2327,212
Observations	10

ANOVA				
	df	SS	MS	F
Regression	3	518861364,2	172953788,1	31,93434
Residual	6	32495507,33	5415917,889	
Total	9	551356871,6		

Coefficients	Standard		t Stat	P-value
	Error			
Intercept	-8692,03	6290,883667	1,381686048	0,216313
Education GDP Stud/1000000	3777,934	1228,462503	3,075335015	0,021793
loc Basic funding of PE	-0,01026	0,025394123	0,403892438	0,700293
	7,372967	2,112751876	3,489745783	0,012987

## 3. Conclusions

1. The model

$GDP = -8692,03 + 3777,934 \text{PercGDPEdu.} - 0,01026 \text{Stud}/1000000 \text{inhab.} + 7,37 \text{BasicFundingForPE}$  is valid with a probability of 99%,  $F = 31,93 > 8,65 = F_{critical}$

2. The strong link between the variables  $R=0.97$  and 94% of GDP can be explained by the other variables.

3. Only the *PercGDPEdu.* and Basic Funding for PE have a significant influence on the GDP  $t = 3,07 > 2,26 = t_{critical}$  (with a probability of 95%)

$t = 3,48 > 3,25 = t_{critical}$  (with a probability of 99%)

An increase by one unit in the GDP percentage allocated to education leads to an increase by 3777.93 units in the GDP and an increase by one unit of the basic funding for higher education leads to an increase by 7.37 units in the GDP, respectively.

Romanian universities are making more and more efforts to cope with the increasing challenges of an unstable socioeconomic environment in the context of a precarious budget funding, but societies' developmental problems can largely be solved, in the long run, by actions targeting education. The positive effects generated by tertiary education in the field of socioeconomic growth and development, progress, and civilization would not be possible in the absence of proper higher education funding.

The change of mindset regarding the participation of the private environment in the funding of higher education in Romania is the first step that should be taken in order to build awareness that a properly funded higher education will generate progress across the board in the long run.

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## VAT Revenues in Romania: An Econometric Approach

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### Abstract

The purpose of our paper is to model the VAT revenues of Romania as a function of different macroeconomic variables that might be proxies for the VAT base, i.e. the gross domestic product, the adjusted gross domestic product, the final consumption and the final consumption of households. All time series data were processed in Matlab and several strong correlations were determined statistically.

**Key words:** value added tax, econometric modelling, consumption, tax base, tax rate.

**J.E.L. classification:** H12, H25, H30.

### 1. Introduction

The Value Added tax is not laid upon the whole value added within a country, but it merely is a tax laid upon final consumption. But the effective tax base of VAT doesn't coincide with final consumption (part of the final consumption isn't taxed while part of the intermediary consumption and part of the investments are taxed). The VAT affects the intermediary consumption and the investments of public administrations (which aren't registered for VAT purposes), but it also affects the intermediary consumption and the investments of VAT exempted firms (those that benefit from the exemption regime for small enterprises). If certain categories of goods and services don't allow deductions, the VAT payers (registered for VAT purposes) are also affected.

The effective tax base of VAT (denoted  $B$ ) may be expressed as follows:

$$B = CF_x + CI_{xn} + I_{xn}$$

where:

$CF_x$  = the final consumption of taxed goods and services;

$CI_{xn}$  = the intermediary taxed consumption for which the tax cannot be deducted;

$I_{xn}$  = the taxed investments for which the taxes cannot be deducted.

When a uniform VAT rate is used, the hypothetical VAT is obtained by applying the  $t$  rate to the effective tax base:

$$\begin{aligned} TVA_h &= CF_x \times t + CI_{xn} \times t + I_{xn} \times t \\ &= (CF_x + CI_{xn} + I_{xn})t = B \times t \end{aligned}$$

When multiple VAT rates are used, in order to determine the hypothetical tax, it's compulsory to break-up the tax base as a function of the different existing rates.

$$TVA_h = \sum_i^n TVA_{hi} = \sum_i^n B_i \times t_i$$

where:

$TVA_{hi}$  = the hypothetical tax for the  $i$  rate;

$B_i$  = the tax base for  $i$  rate;

$t_i$  =  $i$  VAT rate;

$i = \overline{1, n}$ ;

$n$  = the number of existing rates.

The hypothetical VAT may be determined by applying the implicit VAT rate upon the total base ( $m$  = the weighted average rate):

$$TVA_h = B \times m$$

$$\text{where } m = \frac{\sum_i^n B_i \times t_i}{\sum_i^n B_i} = \frac{\sum_i^n B_i \times t_i}{B}.$$

An important increase of VAT revenues may be obtained through the increase of VAT taxation rate if consumption isn't strongly affected. It's very little probable that the increase of prices determined by the increase of the VAT rate would lead to a significant decrease of consumption and of the tax base (a boomerang effect is very unlikely, so that through an increase of the quotas, the VAT revenues wouldn't increase).

## 2. Literature Review

The VAT has always been an interesting and debatable subject for the specialists of the domain but the relevant literature is scarce. Trying to measure the evasion through VAT, Nam C.W. et al. have estimated the VAT base using macroeconomic variables taken from national accounts data [6][7].

Jenkins G.P., Kuo C.Y., Shukla G.P. discuss three approaches to the estimation of the VAT base: aggregate approach, sectoral approach and input-output approach; they insisted upon simulations based on the input-output model [3]. Tuan Le Minh [5] also applied the input-output modelling for estimating the VAT base and for forecasting VAT.

The VAT revenues have been modelled linearly by Olexa, as a function of the adjusted gross domestic product, a lagged VAT, some seasonal filters and dummy variables [8]. Legeida and Sologoub modelled the VAT as a function of the tax base, using the adjusted gross domestic product [4].

In the World Bank Model [1] the weight of the VAT within the gross domestic product is estimated as a function of the VAT tax base, the VAT standard tax rate and the difference between the maximum and minimum VAT rates. The increase in VAT tax basis and rates leads to an increase of VAT revenues, but the difference between the maximum and minimum VAT rates has a negative impact upon VAT revenues.

Slobodnitsky T. and Dracker L. have constructed tax base approximations using national accounts data for VAT revenue forecasting in Israel [9].

## 3. Methodology and Data

Our study focuses on the econometrical modelling of Romania's VAT receivables through simple and multiple linear regressions. The study uses a data basis constructed with the help of Eurostat quarterly data for the 1998-2011 time period, comprising 48 observations for each independent variable and for the dependent variable as well.

The quarterly data for the dependent variable of Romania's VAT receivables were processed using the Matlab software.

Firstly, we obtained several simple linear econometric models, of the form:

$$y_t = ax_t + b + \varepsilon_t,$$

where:

$y_t$  = VAT receivables (million euros) <sup>not</sup> VAT;

$x_t$  = several independent variables;

$\varepsilon_t$  = residual variable

The independent explanatory variables are the gross domestic product of Romania, the adjusted gross domestic product (gross domestic product plus imports minus exports), the total final consumption and the final consumption of households. Moreover, the dependent variable may be modelled as a function of an independent variable but through a second degree polynomial (parabolic regression) having the form:

$$y_t = ax_t^2 + bx_t + c + \varepsilon_t.$$

Furthermore, the linear multiple econometric model is considered to be of the following shape:

$$y_t = ax_{1t} + bx_{2t} + cx_{3t} + \varepsilon_t,$$

where:

$y_t$  = VAT receivables (million euros) <sup>not</sup> VAT;

$x_{1t}$  = Gross Domestic Product,  $x_{1t}$  <sup>not</sup> GDP;

$x_{2t}$  = Imports,  $x_{2t}$  <sup>not</sup> I;

$x_{3t}$  = Exports,  $x_{3t}$  <sup>not</sup> E.



#### 4. Results and interpretations

The computation of the estimators of the models' parameters was done with the least squares method, resulting in simple and multiple regressions, for the VAT quarterly receivables of our country, denoted VAT.

For the first regression we chose the gross domestic product (GDP) as the only independent variable.

$$\text{VAT} = -0.8364 + 0.07538 * \text{GDP} \quad (1)$$

Regression (1) is a simple regression with an  $R^2$  of 0.9511, denoting the strong correlation between the VAT receivables as a dependent variable and the gross domestic product as an independent variable. The interpretation of this regression is as follows: at an increase of one unit in GDP, the VAT receivables would increase by 0.07538 units on average.

For a better approximation of the taxation base of VAT we should further take into consideration imports (I) as they also partially represent a part of the effective tax base, and we should exclude exports (E) as they don't represent a part of the effective tax base. The results obtained through the Matlab estimation of a multiple linear model are the following:

$$\text{VAT} = -175.54 + 0.0295 * \text{GDP} + 0.0984 * \text{I} + 0.0359 * \text{E} \quad (2)$$

and the correlation coefficient for this model is  $R^2 = 0.9508$ . The parameters of the model are significant and we may notice a linear correlation coefficient very close to 1, which further confirms the strong relationship between the independent variables and the dependent VAT. When GDP increases with one unit (1 billion euros), the VAT receivables increase on average with 0.0295 units (0.0295 billion euros) if the other independent variables (I and E) don't change their value.

Model no (2) may be re-specified by replacing the three independent variables with a single independent variable, which is the adjusted gross domestic product, denoted AGDP.

$$\text{VAT} = -187.061 + 0.0686 * \text{AGDP} \quad (3)$$

The  $R^2$  is 0.9488, which stands for a strong correlation between the two variables. The relationship between VAT and AGDP is direct, as a one unit increase in AGDP determines an average increase of 0.0686 units in VAT.

The research was continued by explicating VAT revenues as a function of the final consumption, denoted FC.

$$\text{VAT} = -227.894 + 0.10118 * \text{FC} \quad (4)$$

GDP includes the gross fixed capital formation of companies, which usually isn't included in the effective tax base of VAT. VAT does not tax the final production of a country; instead VAT mainly taxes final consumption. Furthermore, we've considered a new simple linear correlation model, by expressing VAT as a function of the total final consumption (FC). The  $R^2$  is 0.9488 for model (4), pointing out a strong correlation. The VAT is explicated by the FC and a one unit increase of FC determines an average increase of 0.10118 in VAT revenues.

Instead of the total final consumption we may use the final consumption of households (FCH) as an independent variable. Actually none of the FC or the FCH does overlap the effective tax base of VAT (a part of the FC isn't taxed, while a part of the intermediary consumption and of the investments are taxed). Model (5) estimates VAT revenues as a function of the FCH.

$$\text{VAT} = 9.40459 + 0.13194 * \text{FCH} \quad (5)$$

This time the correlation coefficient is a little bit higher:  $R^2 = 0.9608$ . According to (5), a one unit increase in FCH determines an average increase of 0.13194 units in VAT.

Furthermore, by modelling VAT revenues through a parabolic regression of the FCH, we obtained the following equation:

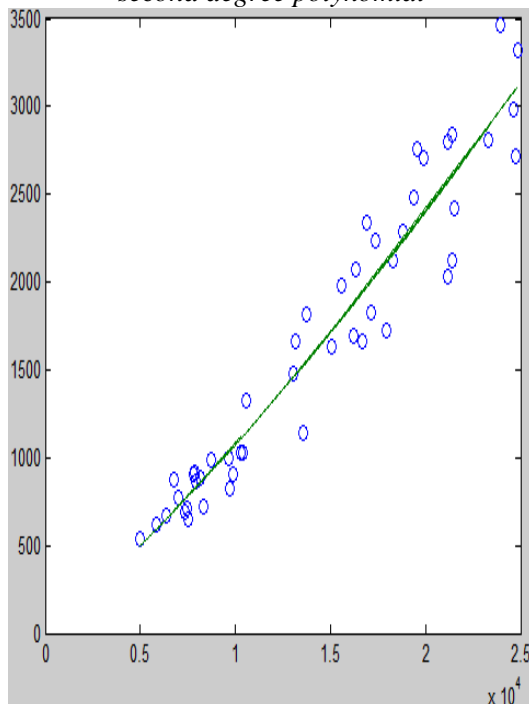
$$\text{VAT} = 0.0000010327 * \text{FCH}^2 + 0.101297602 * \text{FCH} - 38.028924 \quad (6)$$

and the correlation coefficient  $R^2$  is of 0.924544.

When plotting this second degree polynomial model (6) in Matlab we may notice that the original experimental FCH values are marked with bubbles and the regression curve is also represented. The

quarterly values of Romania’s FCH are represented on the abscise axis while the quarterly VAT receivables are represented on the ordinate axis.

Figure 1. Representation of VAT receivables as a function of FCH through a second degree polynomial



Source: Authors' processings in Matlab

These estimations reveal the dependence degree between VAT receivables and certain macroeconomic aggregates which represent proxies of the tax base.

## 5. Conclusions

The linear econometric modelling based on Eurostat data has estimated the VAT revenues of Romania as a function of the potential tax base. The obtained results highlight the significant relationship between the VAT revenues and the macroeconomic aggregates used as an approximation of the VAT tax base (the GDP, the adjusted GDP, the final consumption and the final consumption of households).

Although our models estimated the tax base of VAT, the evolution of VAT revenues is also influence by the evolution of taxation rates. This represents one of our future research objectives.

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# Credit Market as a “Mirror” of the Economic System: A Disequilibrium Approach

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## Abstract

*We investigate through an econometric approach the credit market and the factors that interact with it. Our investigation tries to put into discussion the main macroeconomic determinants of credit market in Romania. Our approach is chiefly centered around essential macroeconomic variables related to industrial output, interest in banking industry, as well as to stock market aggregate indicators. This paper's results show that disequilibrium models can be used to properly model and describe, in the medium and short-run, the behavior of the credit market as a whole, by taking necessary precautions.*

**Keywords:** disequilibrium models, co-integration, stationarity and non-stationarity, credit market.

**JEL Classification:** C62, G17, O16.

## 1. Introduction

The credit market appeared and developed in Romania after 1989. The appearance and the boost of the private sector of the national economy, as well as the increase in household incomes have determined a serious demand for financing, which was mainly satisfied by the financial-banking sector through non-governmental credit. Although initially limited, its development became significant after 2000, when the economic growth, combined with the favorable perspective of accession to the European Union, as well as the constant improvement of the internal macroeconomic environment as a result of a well-planned mix of economic policies represented factors which led to an unprecedented growth in non-governmental credit.

This article focuses on the credit market in Romania, in particular during the period 2001-2010. Econometric methods are used to highlight the evolution of this market in the general macroeconomic context as precisely as possible. The main innovation is represented by the estimation and validation of a disequilibrium model for the Romanian credit market.

The article has the following structure: in the first part we deliver a comprehensive overview of the literature in the field of disequilibrium models. Main results are briefly presented, together with the reasons behind the choice of explanatory variables in each paper. The second part is a short description of the theoretical model. We explain our choice to use stationary data and to proceed with the model's estimation in first differences

## 2. Literature review

The disequilibrium models were used relatively recently by many authors for analyzing certain national credit markets: Barajas and Steiner [2] for Colombia, Peru and Mexico, Ghosh and Ghosh [4] for Korea, Indonesia and Thailand, Hurlin and Kierzenkowski [5] for Poland, Nenovsky et al. [7] for Bulgaria, Baek [1] for Korea, Pazarbasioglu [8] for Finland, Vodova [9] for the Czech Republic. We will present briefly the results of these studies.

Ghosh and Ghosh [4] use a disequilibrium model to investigate a potential credit crisis in three Asian countries: Indonesia, Korea and Thailand during the period 1997-1998. Credit crisis is a situation when interest rates do not lead to a balance between the demand and the supply of credits, and the aggregate volume of credits is restricted by the supply,

meaning that there is a rationalization of quantity.

The authors assume that the real supply of credits depends on the following variables: i) the real interest rate compared to the cost of resources (the latter is estimated according to the rates for deposits); ii) the current output as a measure of the companies' reimbursing capacity; iii) the commercial banks' real capacity to grant loans. In its turn, the real demand for credits is determined by the follow-

### 3. Theoretical framework of the model

A disequilibrium model involves the estimation of two functions, one related to the demand for credits, the other to credit supply. The two sets of independent invariables have to be distinct and to include variables that determine supply and demand from an economic perspective. It is considered that the minimal of the two values represents the level of credit equilibrium on the market. The theoretical framework of this group of models was presented for the first time in the article of Maddala and Forrest [7]. In order to formalize the described method, the following linear regression equations are given:

$$D_t = X'_{1t} \beta_1 + u_{1t}$$

$$S_t = X'_{2t} \beta_2 + u_{2t}$$

where  $D_t$ ,  $S_t$  represent the demand, respectively the supply in period  $t$ , the vectors  $X_1$ ,  $X_2$  represent the exogenous variables that influence the demand, respectively the supply of credits, and  $u_1$ ,  $u_2$  represent the residuals. Then, the level of equilibrium of the market at a given  $t$  moment is established by:

$$Q_t = \min(D_t, S_t)$$

This assumption is reasonable, as if demand is higher than the supply, then the excess demand remains unsatisfied, and in the opposing situation when supply is higher than the demand, the excess supply remains uncovered. In brief, disequilibrium hypothesis means that the short side of the market prevails at some moment in time, and the price of the quantities involved does not adjust itself to an equilibrium level. If both residuals are independent and normally distributed, then one can calculate the vector of structural parameters; the method of maximum likelihood (ML) estimation is used.

ing variables: i) the real interest rate; ii) the current output, in order to evaluate both the demand for working capital and as an indicator of future output (calculated as an average in the periods  $t-2$ ,  $t-1$  and  $t$  in order to reduce endogeneity-related issues); iii) the production gap, measured as a deviation of the current industrial production from its long-term trend; iv) stock market prices (as a proxy for expected output); v) inflation, as a general indicator of the macroeconomic environment.

As shown in Kierzenkowski and Hurlin[5], the best approach is to use stationary time series, otherwise, in the case that there is no co-integration between the unobservable variable and the corresponding set of explanatory variables, a fallacious identification of regimes could appear. In fact, lack of co-integration relationship means that residuals in both equations are non-stationary, and therefore we get non-convergent estimates of the structural parameters by using the standard ML function.

Usually, if a time series is non-stationary, in most cases stationarity is achieved by differentiation. Therefore, we will test our variables for the presence of the unit roots and we will proceed accordingly. In fact, we will estimate a disequilibrium models in levels, where all involved time series are stationary. As a result of these considerations, we propose the following model:

$$\Delta D_t = \Delta X'_{1t} \beta_1 + \varepsilon_{1t}$$

$$\Delta S_t = \Delta X'_{2t} \beta_2 + \varepsilon_{2t}$$

$$\Delta Q_t = \min(\Delta D_t, \Delta S_t)$$

where  $\Delta D_t$ ,  $\Delta S_t$  represent monthly growth rates of demand and supply. As above, the residuals are assumed to be stationary and independently and normally distributed.

### 4. The empirical disequilibrium model for the credit market in Romania

In the sequel, we shortly describe the variables included within the empirical model, together with their motivation for such a choice. The estimation results are also presented, and some comments on their relevance from an economic viewpoint are made. Finally, we draw some practical considerations on the credit market evolution and we indicate some future research directions re-

lated to the empirical disequilibrium model.

#### 4.1. Description of the model

In order to estimate and subsequently validate the disequilibrium model in Romania's case, first we have to establish the regressors' vectors. The regressors must be macroeconomic variables that have a great impact on either credit demand or credit supply. In the sequel, the letters L or DL used a prefix to a variable stand for natural logarithm or first differences of natural logarithm of the respective time series.

To this end, for credit demand we take into consideration the following vector (in the sequel, the letters L or DL used a prefix to a variable stand for natural logarithm or first differences of natural logarithm of the respective time series):

$$X_1 = (L\_DOBC, DL\_IPI, DUMMY)$$

where:

- **DOBC** is the expected nominal lending rate of the commercial banks, calculated as the average of the lending rates in periods  $t-2$ ,  $t-1$  and  $t$ ;

- **IPI** is the manufacturing output index, as a *proxy* for the general economic activity.

- **DUMMY** is a variable that represents the exogenous character of the economic crisis, and it is equal to 1 for 2009m1:2010m12 and zero otherwise. The rationale behind this as follows: the first quarter of 2009 marked the beginning of the economic crisis from a macroeconomic standpoint, the gross domestic product registering a fall of 6.1% in annual terms.

The regressors' vector for credit supply is as follows:

$$X_2 = (DL\_IPI, DL\_CAIM, DL\_CB, DUMMY)$$

where:

- **IPI** - is the same as above, seen as a measure of borrowers' capacity to repay their debts;

- **CAIM** – as a *proxy* for lending capacity of commercial banks, in million lei. The time series was computed bank total liabilities (both in lei and foreign currency) minus required reserves capital minus cash in vault;

- **CB** is the overall Romanian market capitalization, and it is calculated as the sum of RASDAQ capitalization and Bucharest Stock Exchange capitalization. This time series is given in nominal terms.

The dependent variable is **DL\_CNG**, where **CNG** is non-governmental credit, *id est* the aggregate loans of commercial banks to households and companies.

All data, are expressed in logarithms from the period 2001-2010, with a monthly frequency (120 observations). **CAIM** and **CNG** are in real terms, deflated from nominal values by applying the consumer price index. All series are from National Bank of Romania, except for industrial output index, whose source is the United Nations Commission for Europe. This index represents the monthly level of manufacturing output, with 2005 as base year.

Finally, we have to highlight the fact that the majority of the studies in this field used the gross domestic product as a *proxy* for the general level of economic activity. Nevertheless, we chose manufacturing production index based on the following reasons:

- monthly frequency of the data, which is available for all the other time series, except for GDP;

- in the analysed period, on average, loans to companies account for 70% of the overall non-government credit. This is a strong argument in favour of our choice, since the manufacturing output could heavily influence both credit demand and credit supply.

#### 4.2. Preliminary considerations

As shown in our paper [3] there are two arguments in favor of existence of disequilibrium (that is, the adjustment of the lending rate is insufficient in order to “clear” the credit market):

- first argument lies in the fact that the correlation between the monthly changes of the reference interest rate of the central bank and the corresponding changes of the spread between the lending rate and the reference rate is generally negative;

- the second arguments is the shape of the empirical density of the annual growth rates of non-governmental credit, which is a “summation” of two Gaussian bells.

The next preparatory step is to perform unit root tests for both level and first difference time series used in this paper. We tested the five variables in level involved in our model for the presence of unit roots and we got the results presented in table 1. We should note that the tests were also per-

formed for trend an intercept, as well as only with intercept.

*Table 1. Unit root tests for L\_CNG, L\_DOBC, L\_IPI, L\_CAIM, L\_CB (without exogenous variable)*

Null Hypothesis: L\_CNG has a unit root  
Exogenous: None  
Lag Length: 3 (Automatic based on HQ, MAXLAG=12)

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	2.247547	0.9941
Test critical values:		
1% level	-2.585050	
5% level	-1.943612	
10% level	-1.614897	

\*MacKinnon (1996) one-sided p-values.

Null Hypothesis: L\_DOBC has a unit root  
Exogenous: None  
Lag Length: 9 (Automatic based on HQ, MAXLAG=12)

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	-1.945392	0.0498
Test critical values:		
1% level	-2.584375	
5% level	-1.943516	
10% level	-1.614956	

Null Hypothesis: L\_IPI has a unit root  
Exogenous: None  
Lag Length: 1 (Automatic based on HQ, MAXLAG=12)

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	1.333995	0.9537
Test critical values:		
1% level	-2.584707	
5% level	-1.943563	
10% level	-1.614927	

Null Hypothesis: L\_CAIM has a unit root  
Exogenous: None  
Lag Length: 0 (Automatic based on SIC, MAXLAG=12)

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	6.400623	1.0000
Test critical values:		
1% level	-2.584539	

5% level -1.943540  
10% level -1.614941

Null Hypothesis: L\_CB has a unit root  
Exogenous: None  
Lag Length: 0 (Automatic based on SIC, MAXLAG=12)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	2.694018	0.9983
Test critical values:		
1% level	-2.582734	
5% level	-1.943285	
10% level	-1.615099	

\*MacKinnon (1996) one-sided p-values.

We observe that the only variable which is stationary, at a significance level of 5%, is L\_DOB; thus it can be used in levels in our model<sup>1</sup>. All the other variables should be differentiated in order to get the desired stationarity. Repeating the augmented Dickey-Fuller test on first difference time series DL\_CNG, DL\_IPI, DL\_CAIM and DL\_CB leads to the rejection of null hypothesis (existence of a unit root) for both 1% and 5% significance level (Also, the results of these additional tests are available upon request from authors of this paper).

### 4.3. Estimation's results

In order to use the ML method, we first used the OLS method to obtain the initial values of the structural parameters (the coefficients in demand and supply equations, as well as the two standard errors). The following table shows the estimation of the initial demand equation:

*Table 2. Initial estimation of credit demand equation*

Dependent Variable: DLOG(CNG)  
Method: Least Squares  
Sample: 2001M01 2010M12  
Included observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob.

<sup>1</sup> All statistical estimations were performed with software package Eviews 5.0

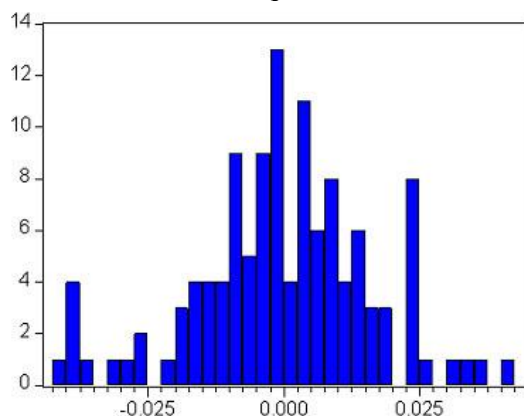
LOG(DOBC )	-	-	-	-
	0.009559	0.003913	2.443087	0.0161
DLOG(IPI)	0.171098	0.081017	2.111891	0.0368
DUMMY	0.031698	0.004029	7.867676	0.0000
C	0.054236	0.012292	4.412441	0.0000
<hr/>				
R-squared	0.357425	Mean dependent var		0.019171
Adjusted R-squared	0.340807	S.D. dependent var		0.020410
S.E. of regression	0.016571	Akaike info criterion		-5.329561
Sum squared resid	0.031853	Schwarz criterion		-5.236645
Log likelihood	323.7737	F-statistic		21.50790
Durbin-Watson stat	1.858959	Prob(F-statistic)		0.000000

Series: Residuals	
Sample 2001M01 2010M12	
Observations 120	
Mean	-1.12e-17
Median	-0.000728
Maximum	0.040939
Minimum	-0.042323
Std. Dev.	0.016361
Skewness	-0.277418
Kurtosis	3.346443
Jarque-Bera Probability	2.139325 0.343124

The nominal interest rate has the expected sign; the credit demand decreases as the lending rate increases and, of course, there is also the converse relationship. The industrial production has a significant coefficient at a 5% level of significance, and this shows that demand is more determined by the interest rate than the general macroeconomic climate represented by the current output. Finally, the coefficient of dummy variable is significant, showing the negative impact of the global crisis on credit demand in Romania.

The errors of the equation are normally distributed, as it is demonstrated by the Jarque-Bera normality test in the below table. So, one of the basic assumption in order to use ML method is fulfilled.

Table 3. Normality of errors in credit demand equation



As to the credit supply regression, the following table shows the OLS estimation.

Both lending capacity and industrial production have the expected sign; nevertheless, the latter's coefficient is only significant at 5% level. The market capitalization index has a statistically significant coefficient only if we take into consideration a higher level, namely 10%. This fact actually shows that the impact of the stock market transactions on real economy tends to be more or less insignificant. Once again, the *dummy* variable exhibits a negative coefficient, certifying the negative influence of global crisis on credit supply.

Correspondingly, the normality of errors is assessed through Jarque- Bera test.

In order to get ML estimates of our model, we wrote a program in Eviews 5.0, which delivered the following final results.

The final estimate is quite surprising, as only nominal interest rate and lending capacity (together with *dummies*) keep significant coefficients. The other explanatory variables do not have significant influence on the non-governmental credit.

Moreover, the sign of industrial output in demand equation is negative. The rationale behind this fact is that an increase industrial production allow for a greater part of financing needs to be satisfied from internal resources of companies, thus avoiding the need of borrowing funds from the commercial banks.

As a robustness check on our model, we repeated all the above steps with a different sample, namely 2002m1:2010m12. This sample does not include the year 2001.

This time the results are somewhat differ-



ent. Firstly, we can observe that the industrial output becomes significant at a level of 5%, in supply regression. The insignificance of market capitalization disappears, if we take into account a level of 10%. Another fact is that the coefficient of lending capacity is lesser than the corresponding coefficient obtained when using the initial sample. As in the first case, both *dummies* are significant.

In the demand equation, nominal interest rates becomes highly insignificant. It is also worth noting that the convergence is achieved only after 33 iterations, as compared to 42 in the previous case, and the value of log-likelihood is smaller (302.2 vs. 338.5).

In order to further check the validity of our model we have to test whether there are co-integration relationships between the fitted values of demand and supply, as calculated from ML method, and the observed values of **DL\_CNG**. To this end, we performed two Johansen co-integration tests (trace tests) for the two pairs of time series, as shown in tables 8 and 9.

## 5. Overall conclusions

This paper investigates the Romanian credit market that appeared in the process of transition to the market economy, which include a healthy banking system. First part deals with a comprehensive presentation of past results and findings in the field of disequilibrium models used in various national credit markets.

The second and third parts shortly present the theoretical model, as well as the main findings related to an empirical disequilibrium model for credit market of Romania. Using the maximum likelihood method, which is well-known in the literature, we estimate the structural parameters of our model and make some useful insights into the inner structure of the non-governmental credit.

Finally, some possible future research areas related to the improvement of the proposed disequilibrium model are suggested.

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# Determinants of FDI Stocks and Flows to Eastern European Countries

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## Abstract

*Considering the significant positive impact of foreign direct investments on the developing economies, we have tried in this paper to identify the main factors influencing one way or another the flows and stocks of FDI.*

*Our sample includes four host countries with a similar past from Eastern Europe and five home countries with an important contribution to the FDI stocks within the host countries.*

*After choosing the main potential impact factors based on previous theoretical and empirical evidence, we have performed a panel data analysis based on a gravitational approach.*

**Key words:** economic growth, FDI stock, FDI flows, home country, host country.

**J.E.L Classification:** E22, F21, F23.

## 1. Introduction

Over the last decades, foreign direct investments have played an important part in stimulating the economic growth of emerging countries. Each year, more than a half of the global FDI flows are directed towards these developing economies.

Conceptually speaking, a foreign direct investment implies “a lasting investment relationship between a resident and a non-resident entity”..

In the context of globalization and tax competition, financial researchers have tried to identify the main factors associated with FDI flows and the manner in which a certain

variable can influence the location decision of a multinational company’s capital.

Practices regarding capital locating in general and foreign direct investment flows in particular began emerging with the coming of the second stage of economic globalization. The first studies on foreign direct investment flows used macroeconomic variables and relied on a methodology based on time series: Hartman (1984), Boskin and Gale (1987), Newlon (1987), Young (1988). Acknowledging the advantages offered by panel databases marked a ‘new era’ in foreign direct investment flows analysis. Few examples of studies which led to a better understanding of the specific foreign direct investments factors are those of Devereux and Freeman (1995), Bellak and Leibrecht (2005), Hansson and Olofsdotter (2009).

The increase of information availability favored the elaboration of studies on large multinational company capital location: Devereux and Griffith (1998), Kemsly (1998). The existing limitations refer particularly to data accuracy.

## 2. Data and methodology

Our empirical study is based on a panel-associated methodology, its main goal being to identify the factors which have influenced the existence of foreign direct investments between 2000 and 2011 and outlining their impact within the host country.

In order to ensure the existence of foreign direct investments, the countries of assignment support politics compatible with the investors’ strategies, which are constantly searching for new opportunities. Actually, the amount of foreign direct investments depends on the investors’ views on the

country’s economic and political background.

The authors have selected four countries of assignment (Romania, Hungary, Bulgaria and Slovenia) and five investor countries (France, Germany, Netherlands, Austria and The United States of America).

The first four countries were chosen because they are emergent Eastern European countries and have a similar history when referring to the centralized economy.

When selecting the five investor countries the main criterion relied in the stock of foreign direct investments representing more than 50% of the total foreign direct investments stock within the host country (*j*).

The selected endogenous variables are the bilateral outgoing foreign direct investment flows from the home country (*i*) towards the host country (*j*) in the (*t*) period, as well as the bilateral stocks of foreign direct investments.

After consulting the literature, the authors mention a few factors with a demonstrated influence upon foreign direct investments (flows or stocks): market dimensions (often highlighted using the GDP or the GDP/inhabitant) and the distance. These variables imply an analysis focused on a gravitational approach. Thus an analogy is made between the movements of capital in the shape of foreign direct investments and the gravitational forces between two entities (two states in this case) depending on their mass (reflected through the GDP, the GDP/inhabitant or the population viewed as a proxy variable for the absorbing and the offer capacity) and the distance (the distance between the centres of gravity represented by the countries’ capitals).

Proceeding beyond the gravitational approach, the authors add other variables present in both theoretical and empirical literature such as: the differences in labour costs, the inflation within the country of assignment, the differences between the company profit tax rates (as an attribute of taxation), the government investments in the country of assignment and the GDP growth rate.

### 3. Estimation and empirical results

The table below presents the results obtained by running a panel data regression

on economic growth using the increase of FDI stock as explanatory variable.

*Table 1. Impact of FDI on economic growth*

Economic growth modelling	Effects		
	None	Fixed	Random
<b>R<sup>2</sup></b>	<b>0.44</b>	<b>0.46</b>	<b>0.44</b>
Constant (t-Statistic)	0.123 (0.162)	-0.106 (-0.128)	0.123 (0.147)
<b>FDI stock increase</b> (t-Statistic)	14.754 *** (5.313)	15.905 *** (4.995)	14.754 *** (5.149)

*Source: Author’s processing*

Note: \* 1% significance level; \*\* 5% significance level; \*\*\*10% significance level

Panel data models are divided into three categories: constant coefficients models, fixed effects models and random effects models. The first category implies a lack of significant spatial or temporal effects. Fixed effects models allow for the existence of significant spatial differences.

In order to choose between a fixed effects model and a random effects model we will apply the Hausman test which analyses the correlation between the regressors and unobserved random effects. The acceptance of the null hypothesis implies that a random effects model is preferable meanwhile the rejection of the null hypothesis is in favour of a fixed effects model.

By applying the Hausman test we concluded that the fixed effects model is a better choice for our linear regression. FDI stock increase has a significant impact on the economic growth of host countries. The results of the Hausman test are presented in the table below:

*Table 2. Hausman Test of choosing between fixed and random effects*

Endogenous variable	Economic growth
Exogenous Variable	Increase of FDI stock
$\chi^2$ Test	Probability
0.687421	0.4070
<b>Applied Effects</b>	<b>Fixed</b>

*Source: Author’s Processing*

In order to explain FDI flows to the Eastern European countries under analysis

we have considered several variables that are expected to have a significant contribution to attracting foreign investors: current foreign direct investment stock (FDI\_stock), the economic growth of the host country (GDP\_growth), the GDPs of the host and home countries (GDP\_host and GDP\_home), the GDP per capita in both host and home countries (GDP/cap\_host and GDP/cap\_home), the tax difference between the two countries (Tax\_diff), the difference in the labour cost (Labcost\_diff) and the host country governmental investments (Inv\_gov).

The table below presents the results of the Hausman test applied in order to choose between fixed and random effects in modelling FDI flows:

Table 3. Hausman Test for choosing between fixed and random effects in modelling FDI flows

<b>Endogenous variable</b>	<b>FDI_flow</b>		
<b>Exogenous variables</b>	FDI_stock, GDP_growth, GDP_host, GDP_home, GDP/cap_host, GDP/cap_home, Tax_dif, Labcost_dif, Inv_gov		
$\chi^2$ Test	12	Probability	0.213
<b>Applied effects</b>	<b>Fixed</b>		

Source: Author's processing

The Hausman test follows a  $\chi^2$  distribution with 9 degrees of freedom and a value of 12. It is a Wald type test  $\chi^2$  with k-1 degrees of freedom, where k represents the number of regressors.

Table 3. Regressors' parameters in FDI\_flow fixed effects estimation

Source: Author's processing

Panel Regression	(1)	(2)
<b>(R<sup>2</sup>)</b>	<b>0.28</b>	<b>0.36</b>
Constant	20.19*	343.7*
(t-Stat)	(1.796)	(1.81)

FDI_stock	-0.448	0.362
(t-Stat)	(-0.488)	(0.27)
GDP_growth	0.113	0.167*
(t-Stat)	(1.462)	(1.67)
GDP_host	-6.516	-13.265
(t-Stat)	(-0.268)	(-0.23)
GDP_home	-55.49**	-89.09*
(t-Stat)	(-2.103)	(-1.865)
GDP/cap_host	11.625	22.372
(t-Stat)	(0.491)	(0.404)
GDP/cap_home	53.83**	82.764*
(t-Stat)	(2.097)	(1.784)
Tax_diff		-0.1
(t-Stat)		(-0.754)
Labcost_dif		-0.405
(t-Stat)		(-0.699)
Inv_gov		-1.948**
(t-Stat)		(-2.289)

Economic growth and the GDP per capita have a positive impact on FDI flows, while the GDP of the home state and the governmental investments of the host state are negatively impacting FDI flows.

It is recommended for heteroskedastic panel data model to be estimated through EGLS method (Estimated Generalized Least Squares) or FGLS method (Feasible Generalized Least Squares). By using the Estimated Generalized Least Squares method in order to neutralize the heteroskedasticity we obtained the following results:

Table 4. Regressors' parameters in FDI\_flow EGLS estimation

R <sup>2</sup> (0.55)	Coefficient	t-Statistic
Constant	329.4***	3.226371
FDI_stock	1.28588*	1.956379

<i>GDP_growth</i>	0.184***	3.573080
<i>GDP_host</i>	-46.81912	-1.41880
<i>GDP_home</i>	-57.9334*	-1.95238
<i>GDP/cap_hs</i>	50.25662	1.575066
<i>GDP/cap_hm</i>	51.8371*	1.729596
<i>Tax_dif</i>	-0.052604	-0.61784
<i>Labcost_dif</i>	-0.398571	-1.37616
<i>Inv_gov</i>	-1.0564**	-2.57127

Source: Author's Processing

Besides a significant increase of the determination coefficient, by using the EGLS method the number of significant explanatory variables also increases. The stock of FDI, the economic growth and the GDP per capita seem to positively influence the flows of FDI, while the GDP of the home state and the governmental investments of the host state have a negative impact on FDI flows.

Similarly we have used the explanatory factors for modelling the stock of foreign direct investments for the Eastern European countries under study.

Table 5 presents the results of the Hausman test applied in order to choose between fixed and random effects in modelling FDI stock:

Table 5. Hausman Test for choosing between fixed and random effects

<b>Endogenous variable</b>	<i>FDI_stock</i>		
<b>Exogenous variables</b>	<i>FDI_flow, GDP_growth, GDP_host, GDP_home, GDP/cap_host, GDP/cap_home, Tax_dif, Labcost_dif, Inv_gov</i>		
$\chi^2$ Test	18	Probability	0.028
<b>Applied effects</b>	<b>Random</b>		

Source: Author's processing

Hausman test suggests that a random effects panel data modelling should be applied. Table 6 presents the estimated coefficients based on the EGLS method in order to correct heteroskedasticity.

Table 6. Regressors' parameters in *FDI\_stock* EGLS estimation

<b>R<sup>2</sup> (0.72)</b>	<b>Coefficient</b>	<b>t-Statistic</b>
<i>Constant</i>	-31.96***	-6.12
<i>FDI_stock</i>	0.002	0.452
<i>GDP_growth</i>	-0.012*	-1.848
<i>GDP_host</i>	1.516***	5.6005
<i>GDP_home</i>	-0.511**	-2.913
<i>GDP/cap_hs</i>	-0.275	-0.963
<i>GDP/cap_hm</i>	3.197***	5.825
<i>Tax_dif</i>	-0.0075	-1.0481
<i>Labcost_dif</i>	0.03144	1.2618
<i>Inv_gov</i>	0.0027	0.0648

Source: Author's Processing

The GDP of the host state and the GDP per capita of the state have a positive impact on the stock of FDI, while GDP growth and the GDP of the home state are negatively impacting the stock of foreign direct investments.

In order to improve our model we have considered a gravitational approach of FDI stocks by also including in our analysis spatial factors such as the distance (Dist) between the host and home countries' capitals and the inflation rate of the host country (Infl\_host).

The results are presented in the table below:

Table 7. Regressors' parameters in *FDI\_stocks* EGLS estimation – gravitational approach

<b>R<sup>2</sup> (0.74)</b>	<b>Coefficient</b>	<b>t-Statistic</b>
<i>Constant</i>	-27.54***	-6.052
<i>FDI_stock</i>	0.0027	0.422
<i>GDP_growth</i>	-0.0087	-1.248
<i>GDP_host</i>	1.582***	5.394
<i>GDP_home</i>	0.0503	0.1683

<i>GDP/cap_hs</i>	-0.5959**	-2.27
<i>GDP/cap_hm</i>	2.824***	5.3947
<i>Tax_dif</i>	-0.007558	-0.864
<i>Labcost_dif</i>	0.0247	0.9246
<i>Inv_gov</i>	-0.0111	-0.2172
<i>Dist</i>	-0.8796**	-2.3336
<i>Infl_host</i>	0.0229	-1.552

Source: Authors' processing

Distance between the capitals of home and host countries seems to be a significant factor with a negative impact on FDI stocks as expected.

The GDP of the host country and the GDP per capita in the home country have significant positive impact of the stocks of FDI in our sample of Eastern European countries.

The GDP per capita in the host country has a negative influence on the stock of foreign direct investments.

#### 4. Conclusions

Markets' globalization, firms' loosening of regulations and corporate activities' internalization are just a few factors which have led to the generalization of economic practices and that have also contributed to the increase in international capital flows, which in turn are responsible for international investment developing. When speaking of the connections set between the investor and the beneficiary, they take the shape of foreign direct investments and portfolio investments.

Considering the significant impact of FDI on emergent economies, we have tried in this paper to identify the factors influencing one way or other bilateral flows of FDI. For this reason we have chosen five home countries and four host countries from Central and Eastern Europe with a similar past.

After identifying in the financial literature the main factors that are

expected to play an important part in attracting foreign investors such as: current foreign direct investment flows/stocks, the economic growth of the host country, the GDPs of the host and home countries, the GDP per capita in both host and home countries, the tax difference between the two countries, the difference in the labour cost, the host country governmental investments, the distance between the capitals of the home and host countries and the inflation rate in the host country – we have performed econometric modelling based on panel data analysis.

The stock of FDI, the economic growth and the GDP per capita proved to positively influence the flows of FDI. The GDP of the home state and the governmental investments of the host state have negatively influenced the flows of foreign direct investments.

The GDP of the host state and the GDP per capita of the state have a positive impact on the stock of FDI, while GDP growth, the distance between capitals, the GDP of the host state have negatively influenced the stock of foreign direct investments.

The results of this study confirm the positive role of foreign direct investments in developing countries.

Our intention is to extend this study over a larger sample and to identify new variables with a significant impact on FDI flows and stocks.

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# Econometric Study of the Relationship between Dimensions of Corporate Responsibility in the Multinational Companies

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## Abstract

*Corporate Responsibility, seen as a fundamental principle of corporate governance, aims contribution must have companies in the development of the modern society. Although it is widely discussed in the literature, the association of corporate responsibility - multinationals assumes, that the globalization of business, multinational companies are ones that have to initiate socially responsible actions, in order to meet changing requirements interest of more sophisticated. Most studies focused on the relationship: social performance-financial performance showed that the relationship is positive synergy within the theory and, moreover, were considered the manifestation of corporate global companies. In this context, we consider it appropriate to analyze expression of corporate responsibility in a representative sample of multinational companies operating in Romania, focusing on circular causality between the dimensions of corporate responsibility.*

**Keywords:** corporate responsibility, social actions, multinational companies, social performance, financial performance.

**J.E.L. classification:** M14, M38, M41, M42.

## 1. Introduction

Over time, the responsibilities companies have known meanings, and different perspectives. A broad approach concerns four types of responsibilities that companies have to the society as a whole: *economic responsibilities, legal responsibilities, ethical responsibilities and discretionary (philanthropic) responsibilities* [2]. Although at first, the focus was more on economic and legal dimensions of corporate responsibility,

in recent years, an important aspect presents ethical and philanthropic obligations, which began to grow. Looking at the literature, we find that the issues addressed in relation to *Corporate Responsibility* (CR) focus rather on *corporate social responsibility* (in the sense of involvement in social action, the so-called philanthropic responsibility) and its relation to company performance [4]. They do not look like an accumulation of corporate responsibility that companies have obligations to the society as a whole.

## 2. Present stage of knowledge on the corporate responsibility and its dimensions

Most studies focused on the relationship: social performance-financial performance fall into the so-called theory of "virtuous circle" or positive synergy. This implies that financial performance influences social performance, which in turn has positive effects on company image and, hence, again on financial performance [9] and [10]. Literature of our country provides different manifestation studies on of corporate responsibility of companies, but that is essentially qualitative criteria [8] or targeting a single entity for which examines corporate responsibility over time. Note that, in our research, we start with the four dimensions of Corporate Responsibility, namely: economic dimension, legal dimension, ethics and philanthropic dimensions [3] - the most comprehensive view on the theory of Corporate Responsibility. Specifically, in our study, based on the literature, we try to identify variables that characterize each dimension of Corporate Responsibility with a focus on economic and philanthropic dimensions and the relationships between these dimensions.

The same author mentioned above [3] considers that as a pyramid scheme, which should be based on economic size and the top

philanthropic size, would best play the importance and scope of each dimension of corporate responsibility in a company. In other words, the order of priority starting with economic issues, transiting through legal and ethical issues, because ultimately reaches philanthropic matters.

*The economic responsibility* is synonymous with the term “Profit”. This is the other three categories of responsibilities, knowing that the profit is both a means and an end of existence and effective functioning of a company. *The legal responsibility* refers to “Respect the Law!” Components are: to act according to legal requirements, to meet national and international regulations, to carry out the objects of compliance with legal requirements. *The ethical responsibility* is associated with the slogan: “Be ethical!” Ethical components of CSR concerns: to act in accordance with moral norms, and to recognize that corporate integrity and ethical behavior involves the assumption of higher obligations compliance. In top of the pyramid of corporate social is *discretionary or philanthropic responsibility*, characterized by the expression: “Be a good corporate citizen!” The obligations undertaken by companies in this direction are purely voluntary, and their ownership decision is guided by the desire of companies to engage in social action and *involvement which proves to be a win-win solution for both the company and society as a whole.*

Organizational theory shows that, over time, the focus was especially on the first two types of responsibilities (*economic and legal*) that were placed, moreover, at the bottom CSR. Later, it was necessary ethical obligations and discretionary CSR area complete response to changes in the value systems of all categories of stakeholders.

Through this study we try, therefore, to identify causal relationships between the dimensions of CR, in particular, the relationship between economic and philanthropic dimensions.

### 3. Research methodology and empirical data source

Research undertaken for the preparation of this study is conceptual-methodological nature. The methodology is based on *deductive reasoning*, starting from the current

level of knowledge presented in the literature. One of the theses of a general nature from which we has into account that financial and social performance of companies and positively influence each other as theory “virtuous circle” or positive synergy [12]. In this regard, we ask: *what about the social equity investments when companies undergoing a less powerful?* With this question, we set following **hypotheses**: 1. *Social equity investments made in the current financial year leading to increased financial performance of companies in the following financial year.* We aim to determine the extent to which performance is affected companies investing in social actions performed in an earlier period, the companies of the sample; 2. *Position and financial performance of companies in the current financial year budget for social action dimensioning to be made in the next financial year.* We plan to test this hypothesis on the sample studied, where we deduce another working hypothesis, namely: 3. *increasing indebtedness of the company resulting in decreased budget for social action* (in the sample analyzed).

The third hypothesis is, in fact, a working hypothesis derived from the second hypothesis, but for clarity, I set it separately. We see, therefore, that follow a circular causal influences by testing variables between two consecutive financial years.

The study is conducted on a *sample* of the top 40 multinational companies operating in Romania, according to the budget allocated for social action (made in Romania) in 2009-2010. Studied *variables* are numeric variables: the first model, the variables are defined in absolute size, while the second model; the variables are defined with the aid reports, specific method of financial analysis.

In terms of *research methods*, *data collection* method is based on the observation by observation guide, combining quantitative and qualitative approach by analyzing documents; *processing of data* is carried out using methods related technical reports (specific method of financial analysis), but also with econometric models [6] (*simple linear regression and multiple linear regression*); *data interpretation* based on causal explanation [7]. The data is processed using SPSS 19.0 statistical tools, software modules that are useful for the preparation,

processing and output to test working hypotheses.

To collect data used in our research, sources of information were quite different. Some of the data (about budgets for social action companies) were taken from a series of questionnaires, following an investigation by survey. All other data were collected from various reports and documents from different companies downloaded from the website (*corporate responsibility reports, social reports, annual financial reports*).

#### 4. Results and discussions

As mentioned previously, empirical study is performed on a **sample** of the first 40 multinational companies operating in Romania, according to the budget for social activities (social activities performed in Romania) in 2009-2010. Study sample was divided according to the activity of the companies in two ways. One way is classification areas: *Trade (17.5%), Services (40%) and Manufacturing (42.5%)*. Another variation involves consideration of the following areas: *IT and Telecommunications (12.5%), Services (7.5%), financial services (22.5%), Manufacturing Engineering (2.5%), Manufacturing industry (20%), Construction (5%), Sales (10%), Energy-Oil (7.5%) and Pharmaceutical Chemistry (12.5%)*. In the first classification, the largest share is held by the manufacturing industry (42.5%), somewhat like the services sector (40%). The second classification reveals that the largest share in services is owned by the financial services sector (22.5%).

Analyzing the assumptions above, we see that the tests you want to perform not necessarily concern the existence of two types of performance (social and financial), but intended to assess whether the financial position influences the budget for social action (hypotheses 2 and 3). This is caused by the fact that corporate responsibility should not be considered a panacea generally applicable in all situations order to restore a positive balance in a company's financial results [5]. We can only talk about *positive synergy theory* given that companies face reputational risks. In terms of systemic risk (as the current financial crisis) is more difficult to sustain positive synergy theory, because imbalances occur at a higher level

than corporate. It is possible to set out a theory, which we call: *borrowing theory or theory borrowed resources*.

To test the assumptions made, we resort to two models of linear regression (simple and multiple), where variables are defined in the table below. The first model, the variables are defined in absolute size. For the second model, we defined variables with the aid reports, specific method of financial analysis.

The first simple linear regression model is of the form:  $Y_i = \alpha + \beta X_i + \varepsilon_i$  and test the influence of, on average, the expenses for social activities in the financial year ended 31 December 2009 (independent variable) on the size of turnover recorded in the year ended December 31, 2010 (dependent variable).

The second model is of the form:  $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \varepsilon_i$  and test the influence of rates of return and leverage the financial year ended 31 December 2009 (independent variables) on the percentage of the budget for social activities in 2010 compared to the turnover of this reporting period (dependent variable).

In both regression models,  $Y_i$  is the dependent variable,  $X_i$  și  $X_{ji}$  are independent variables,  $\alpha$ ,  $\beta$ ,  $\beta_j$  are coefficients of regression models ( $\alpha$ ,  $\beta_0$  indicates the average value of dependent variable when the independent variables would have a value of 0; where  $j=1;4$ ),  $\varepsilon_i$  is the error or residual component (in both models  $i=1;40$ ).

Table 1. Presentation of numerical variables analyzed

Model 1 – simple linear regression (testing Hypothesis 1)		
Variable	Meaning	Method of calculation and comments
$T_{2010}$	The turnover in 2010	Is taken as such in financial statements prepared for the year 2010 (dependent variable for <i>simple linear regression model</i> )
$SE_{2009}$	Expenses incurred for social actions in 2009	Taken from the above data sources (independent variable for <i>simple</i>

Variable	Meaning	Method of calculation and comments
<b>Model 2 – multiple linear regression (testing Hypothesis 2 and 3)</b>		
<i>BS/T<sub>2010</sub></i>	The budget for social activities in 2010 compared to the turnover of 2010	Taken from the above data sources (dependent variable for <i>multiple linear regression model</i> )
<i>ROE<sub>2009</sub></i>	Return on Equity in 2009	Net income/equity (independent variable for <i>multiple linear regression model</i> )
<i>ROA<sub>2009</sub></i>	Return on Assets in 2009	Net income/Total assets (independent variable for <i>multiple linear regression model</i> )
<i>ROT<sub>2009</sub></i>	Return on Turnover in 2009	Net income/Sales (independent variable for <i>multiple linear regression model</i> )
<i>I<sub>2009</sub></i>	Indebtedness in 2009	Total debt/equity (independent variable for <i>multiple linear regression model</i> )

**Source:** own processing according to the variable in the database

After processing the data in SPSS 19.0 and obtain the regression coefficients, we present the first *simple linear regression model*:

$$T_{2010} = 5,001x8^{10} + 483,67xSE_{2009} + \varepsilon$$

The model requires some explanations and comments. First, according to the results of processing carried out, we find that value Sig. for F is less than 0.05, so that the relationship between the two variables considered significant. In other words, the model is statistically significant. Report of determination  $R^2$  of 0,525 indicates that the dependent variable ( $T_{2010}$ ) is influenced by the extent of about 53% of the independent variable ( $SE_{2009}$ ). The difference is explained by the influence of other variables that were not included in the model. Regarding testing the regression model parameters for the

example given, the Sig. is less than 0.05, which indicates that  $\beta$  corresponds to a significant link (direct and positive) between the two variables. Specifically, a one unit increase in social spending in the current financial year, growth in turnover in the next financial year is ROL 483.67, on average. So we can say, at least in theory, that socially responsible investments made over a period helps to increase the sales in the future. This validates **Hypothesis 1: Social equity investments made in the current financial year leading to increased financial performance of companies in the following financial year.**

To follow circular causality between financial performance and social performance, we tried to answer **Hypothesis 2: Position and financial performance of companies in the current financial year budget for social action dimensioning to be made in the next financial year** (through multiple linear regression model). Data processing using SPSS 19.0 software on all companies in the sample studied not allowed us to obtain a significant link between the independent variables and the dependent variable considered (Sig is much greater than 0.05). The exception is the influence of the independent variable: indebtedness, for which we can say that the model is significant, with a risk of about 6%. In these circumstances, I have drawn another working hypothesis, namely **Hypothesis 3: Increasing indebtedness of the company resulting in decreased budget for social action**, which I tried to check the companies in the sample studied, but grouped by areas: trade, production and services. Regression model obtained is as:

$$BS/T_{2010} = 0,01 + 0,005xROE_{2009} - 0,015xROA_{2009} - 0,01xROT_{2009} - 0,001xI_{2009} + \varepsilon$$

Like the previous model, and multiple linear regression model requires a number of explanations. According to the results, we see that value Sig. for F is less than 0.05, only for companies operating in services. Thus, the model was statistically significant only for services; all explanations will be attached to this domain. In addition, we will consider, in particular, influence changes leverage the budget for social activities related to turnover, because the correlation between the two variables is largest (reverse), and Sig. is

0,002. Report of determination  $R^2$  is 0.86, which indicates that the dependent variable ( $BS/T_{2010}$ ) is influenced by the extent of about 86% of the independent variables ( $ROE_{2009}$ ,  $ROA_{2009}$ ,  $ROT_{2009}$ ,  $I_{2009}$ ). The difference is explained by the influence of other variables that were not included in the model. Regarding testing the regression model parameters for the example given, the Sig. is less than 0.05 for three independent variables, the correlation was not significant between  $ROT_{2009}$  (Sig. is 0.078) and the dependent variable (part supported by a low correlation coefficient). Sign of regression parameters show the relationship between correlated variables. Thus, only  $ROE_{2009}$  positive affect  $BS/T_{2010}$ . Other independent variables negatively influence the dependent variable. The model shows that significant contact occurs between  $I_{2009}$  (independent variable) and  $BS/T_{2010}$  (independent variable). *How do we explain this link?* An increase of one unit of indebtedness ( $I_{2009}$ ), decreased budget for social activities related to turnover ( $BS/CA_{2010}$ ) to 0.001. We must take into mind that the variables included in the model are expressed in the form of reports, which complicates somewhat the interpretation of things. Conclusions drawn from the second model are: *position and financial performance of companies in the current financial year budget for social action sized to be made in the next financial year, and increasing indebtedness of the company resulting in decreased budget for social action* (the the sample analyzed for services). We validate and last hypotheses.

## Conclusions

As a general conclusion of the study, we noted that the sample analyzed for the period concerned, justifies not only the social impact hypothesis, formulated by Cornell and Shapiro in 1987. Given the period (2009-2010), straddles the economic and financial crisis, it is difficult to verify the hypothesis of resources available Waddock and Graves 1997, because we are in a period less resources available or available with a greater effort (see credit in this respect). Under these conditions, based on study results, we can state the hypothesis/theory of indebtedness, which does not fit into any of the theories mentioned in the literature. What is the

explanation for such a theory proposed? In a certain context, *increasing indebtedness destroy social performance* (during the imbalances occur at a higher level than corporate) especially if we consider that in the period under review the average interest rate banks recorded high levels (according to the Financial Stability Report 2009, issued by the NBR, the average bank interest for this period is about 0.14 - loans in lei), exceeding economic rate of return (the average of the sample companies studied is 0,07, while the services sector is 0.12), thus reducing the rate of financial return. In other words, we have a situation of *negative financial levier*, the economic rate of return is less than the average rate [11] - the model is demonstrated by Modigliani-Miller '80s. In this case, they are exposed to financial risk, in particular, shareholders clearly manifested. It is a fact that the remuneration of debt is at a higher level pay equity and debt increase train higher financial expenses, which will erode the financial result and hence the net. In this case, the financial structure should be reviewed as continuous and increasing indebtedness may lead to a financial return void and forward to recording equity losses will diminish.

Regarding the quality level of the achievement of goals and objectives, it could be influenced by *a number of uncertainties and limitations of research*. The main causes can include: wide variety of definitions of CSR that generates confusion about how social performance can be operationalized and measured, the complexity and variety of economic, legal, ethical and philanthropic differently affecting various industries, the relationship : social performance-financial performance is specific to each entity separately so that comparisons between companies can be altered, inadequate quantification of indicators, especially, social, impossible to take into account stock quotes, because the companies included in the sample studied are listed on the market various parts of the world financial affecting comparability; limited period of time to which they relate and, not least, reduced availability and inconsistency of data.

However, we believe that proposing a major goal and objectives of the research, various other objectives pursued various research papers on the subject, fall in line for

their contributions in the field. Established theories of literature reveal that social performance and financial performance are positively correlated, and the relationship between them is manifest biunivocal. This hypothesis has been demonstrated in practical cases encountered in periods unaffected or less affected by the financial crisis. In addition, most studies on the subject of our research was conducted through a questionnaire survey and targeted global comparisons (by country) or national level but analyzed social performance-financial performance relationship just because a company more consecutive financial years.

Under these circumstances, we believe that the research conducted contributing to the development of knowledge in the field of corporate responsibility and performance of multinational companies, precisely because the study concerns a sample of companies and multinationals operating in Romania in a time of crisis.

Compared to most studies presented in the literature highlighting the relationship between mutual and positive social performance and financial performance, the present research we concluded that we can only confirm social impact hypothesis (involvement in social action affects growth sales companies), and assuming no resources. The cause of this is the fact that in the period under review, the companies have encountered problems rather a lack of resources or purchasing them harder (with higher costs).

So, assuming that supposed financial position and performance sized companies' budget for social activities and analyzing a series of economic and financial indicators that characterize the activity of companies in the period under consideration, we're in a position to enunciate another hypothesis work, which assumes that increasing indebtedness of the company resulting in decreased budget for social action. The validation of this hypothesis in the sample studied, we are in a position to enunciate a theory different from those found in the literature (taking into account financial performance), the borrowing theory, *which assumes that during the imbalances occur at a higher level of corporate debt increased destroy social performance of companies.*

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## Energetic Issues Concerning the Content of Money

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### Abstract

*In full times of crisis, money has become increasingly more important. We put the issue to analyze whether money can be considered a form of energy. The article is taking into consideration the conservation of energy and for money is due to kinetic energy during the boom and to potential energy during the crisis. In the article is also made an illustration of the energetic content of money at a company's level..*

**Keywords:** money, energy, kinetic energy, potential energy, profit, loss, bankruptcy, liquidity.

**J.E.L. Classification:** M21

### 1. Introduction

„In exchange for services offered to someone you get your money to buy this book. By purchasing the book, you pay for the energy that many people, including myself I have used it to produce it. I will use this money to pay for the energy spent by someone else and so on. It is a process chain. Therefore we can say that money is an energy that flows without interruption. Abundant secretion is to let the free energy instead of blocking, as do most people. The answers that follow will provide concrete means to let this energy flow”[1].

The idea of achieving that article is the answer to the question "Money is energy?" given by Lise Bourbeau, which we present below.

Also, for a better understanding of the terms used in this article are some helpful definitions:

1. Kinetic energy = energy developed by a body in motion, equal to half the product of body mass and the square of its speed [2].

2. Potential energy = energy we can develop a body by its motion from the position in which it's stays to an reference index [3].

3. Net profit = Part of the profit that remains from the gross profit minus the amount of income taxes and dividends due companies and shareholders [4].

4. Gross investment = gross investment are considered to be formed from the value recorded depreciation for the current period and the profit from the investment process designed. We appreciate that for a minimal profit for the financial period investment process is 5% of net profit. Depending on the interests of the company can reach up to 100% of net profits invested in this process.

### 2. Money and kinetic energy

According to the law of conservation of energy, "nothing is lost, nothing wins, everything is transformed". If we can prove that money is a form of energy, means that in times of crisis and boom, the wealth of nations is preserved, and money plays the role of kinetic energy (its boom) and potential energy (the economic downturn).

In these circumstances, the way out of economic decline can be found in the measures taken for the money, with the potential energy to kinetic energy converted into bathrooms, creating economic development.

Physics we know that the sum of kinetic energy and potential energy of a system is constant.

$$E_c + E_p = ct \quad (1)$$

$$mv^2/2 + mgh = ct \quad (2)$$

In an economic system we should identify those indicators which develops kinetic energy versus potential energy indicators developed.



Because speed is determined from the ratio space / time follows that the kinetic energy derived indicators such as money depends on labor productivity, investment per unit profit, debt recovery period or during debt repayment.

In terms of potential energy, we see that it depends crucially h (height), ie the potential energy of money depends on absolute indicators such as turnover, net profit, net dividend or gross investment.

At an empirical analysis of these considerations that the growth potential energy kinetic energy at the expense of the money will be taken as:

- Labour productivity growth;
- Increase investment in a penny profit;
- Reduction of debt repayment;
- Reduction of debt recovery;
- Reduced of turnover;
- Decrease in net income;
- Decrease in net dividend;
- Reduce gross investment.

Mere the measures of increase in kinetic energy in the detriment of potential energy of money, adds a number of inconsistencies in the application of these measures, such as:

- Productivity does not increase if turnover falls;
- A leu investment in net profit do not increase if net profit and gross investment drops;
- Period of debt repayment and debt recovery period does not decrease if reduced turnover.

In my opinion, these contradictions have no substance. For example, labor productivity may increase if the turnover decreases, provided that substantially reduce the number of employees on the basis of what Jim Collins in his book "Excellence in Business" called "to accelerate technology" [5] or may increase investment in A leu net profit net profit if the intended development is growing faster than the net profit for the shareholders.

At the level of economic agent will present the status indicators above the reference level for two years, 2008 and 2011.

### 3. Illustration of the energy content of money

To illustrate theoretical concepts presented in the previous section of this

paper, we intend to highlight the dynamics practice: labor productivity, investment in one leu profit, debt repayment, debt recovery, turnover, net profit, gross dividend / net, gross investments.

The data are summarized in the table below:

Table no. 1. Reference indicators for ECONSULTING Company

No. Crt.	Indicator	Symbol	Formula
1	Turnover	CA	
2	Index of turnover		$CA_n/CA_{n-1}$
3	Gross investment	IB	$(A_m + 5\% * P_N)$
4	Net profit	PN	$(PB - IMP)$
5	Profit net rate		$(\text{Net profit} \times 100) / \text{Total incomes}$
6	Net profit at 1 leu investment	I	$(IB/PN)$
7	Total debts	DT	
8	Duration of payment of total liabilities		$(DT/CA) * 360$
9	Receivables	C	
10	The duration of receivables collection		$(C/CA) * 360$
11	Social capital	CS	
12	Legal reserve	RL	
13	Legal reserve amounted	RLN	$(CS * 20\%)$
14	Gross dividend	DB	$(PB - RLN)$
15	Tax	IDB	$(DB * 16\%)$
16	Net dividend	DN	$(DB - IDB)$
17	Number of staff (number of persons)	N	
18	Labor productivity		$(CA/N)$
19	Labor productivity index		$WP_n/WP_{n-1}$

No. Crt.	2008	2009	2010	2011
1	343,742	238,745	229,734	87,764
2	-	0.69	0.96	0.38
3	50,221	51,743	108,799	39,206
4	-779	30,432	5,036	1,105
5	-0.23%	12.75%	2.19%	1.26%
6	-	1.700	21.604	35.480
7	371,201	337,207	210,189	208,993
8	388.76	508.47	329.37	857.27
9	28,922	20,478	4,045	3,821
10	30.29	30.88	6.34	15.67
11	200.00	200.00	200.00	6,760.00
12	0.00	0.00	0.00	0.00
13	40.00	40.00	40.00	1,105.00
14	0	30,392	4,996	0
15	0	4,863	799	0
16	0	25,529	4,197	0
17	1.00	1.00	1.00	1.00
18	343,742	238,745	229,734	87,764
19	-	0.69	0.96	0.38

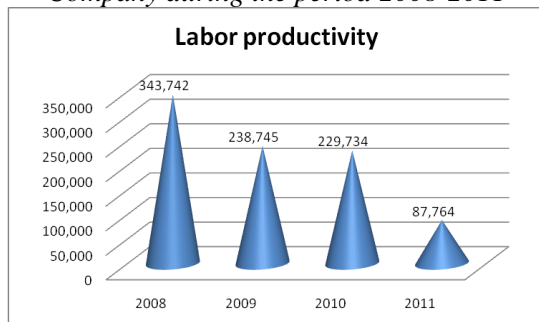
Source: Elaborated by the author

From the data analysis in the table above, we notice that the background current economic crisis, the company faces major problems in terms of:

- number of performed turnover (they noticed a considerable decrease it)
- low labor productivity
- Major discrepancies between debt repayment period compared to the collection of debts (the first being about 20 times higher than the second)
- reduce the possibility of granting major dividends.

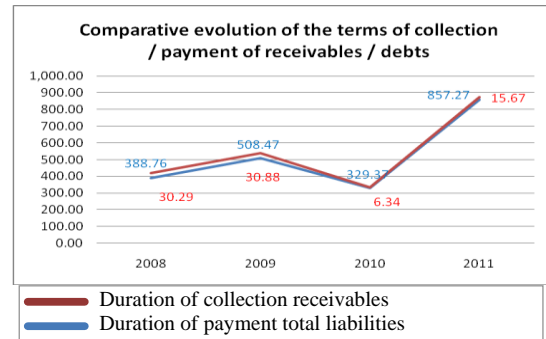
These issues are highlighted in the figures below:

Figure no. 1. The evolution of labor productivity indicator for ECONSULTING Company during the period 2008-2011



Source: Elaborated by the author

Figura no. 2. Comparative evolution of the terms of liquidation of debts / liabilities for ECONSULTING Company during the period 2008-2011



Source: Elaborated by the author

#### 4. Conclusions

It is commonly believed that the system is extremely risky enterprise. Entrepreneurs turn opportunities in areas of low productivity in those with higher productivity.

An analysis at first glance indicators presented in the table above lead to the following conclusions

1. Kinetic energy of money depends on entrepreneurship;
2. Potential energy of money depends on the relational system from the society.

Entrepreneurial activities are perceived as high-risk activities. To reduce the risk it is recommended that the entrepreneurs to be focused on activities carrying kinetic energy to the detriment of the activities carrying potential energy.

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## **Effects of Fiscal Policy in Romania. The results of an empirical study based on a VAR type model**

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### **Abstract**

*In this article, our target is to analyze the effects of fiscal policy on GDP in Romania, using a model based on an unrestricted Vector Autoregression Model (VAR). We used in our research the quarterly data taken from the National Statistics Institute reports and Eurostat. The main independent variables that we have included in our study are: private consumption, governmental debt, gross fixed capital formation, inflation, ROBOR interest rate, governmental consumption and gross domestic product.*

*We have identified the effects of fiscal policy in Romania on the size of GDP after using the impulse function for the VAR type model.*

**Keywords:** fiscal policy, governmental consumption, VAR, governmental debt.

**J.E.L. Classification:** E62, H30.

### **1. Introduction**

The literature review has not reached a consensus on the effects of fiscal policy on economic growth, the authors having different positions to suit the doctrines that they have adhered to. Opinions range from the exaggeration of taxation and of fiscal policy to a recognition of the merits of automatic fiscal stabilizers and a denial of fiscal activism, but also towards the need for fiscal reforms and the real impact they have on the economic recovery after a severe recession.

However, the monetary policy, has received more attention both in academic environment and among policy makers. During the current financial crisis it was observed that countries in the Euro zone, from the moment in which they transferred the attribute of performing their own monetary policy to the ECB, have been constrained to act only through the use of fiscal policy. The result is fiscal policy has started to receive more attention in the academic environment and among policymakers and the public has begun to have a number of demands on the fiscal policies promoted.

This paper aims at analyzing the impact of fiscal policy in Romania on a sufficient large time (46 quarters), from 2000, the first quarter, to 2012, the second quarter, including the period in which fiscal policy has undergone substantial changes materialized in different tax regimes:

- In the first part of the review under analysis (2000 - 2004) the profit of companies was taxed with a share of 25% and overall income of individuals was taxed progressively with marginal rates that could reach up to 40%.
- since the first quarter of 2005, the flat tax of 16% was introduced for both corporate profits and the incomes of individuals;
- since the third quarter of 2010 VAT rate increased by five percentage points from 19 to 24%.

Note that the Budget Law and by correcting the Tax Code, changes were made

annually in the level and structure of tax deductible expenses and the value of excise duties increased from year to year after Romania's accession to the European Union on 1 January 2007.

We want to highlight in our study the impact of fiscal policy, on the size of GDP, through the following variables: private consumption, governmental debt, gross fixed capital formation, inflation, ROBOR interest rate, governmental consumption and gross domestic product. In second part of the article we want to analyze the influence of three dummy variables, one for the flat tax introduction in the first quarter of 2005, the second for the entrance of Romanian economy into recession occurred in the second quarter of 2009, and third for the increase of the VAT rate in the third quarter of 2010, in order to pursue the response of overall economy to these socio-economic changes.

The research in this paper started from the previous studies undertaken by Blanchard and Perotti (2002), Gali (2006), and Mihov (2001). Perotti (2002) uses a VAR with five variables, including GDP, governmental consumption, net income and the interest rate. Gali (2006) used a VAR with 4 variables including GDP, government consumption, employment and interest rates. These studies conclude that a shock in governmental consumption will lead to a positive response of consumption, and implicitly of the GDP, while the shock on investment will be insignificant. In the study made by Perotti (2002), which examines the impact of fiscal policy in Australia, Canada, Germany and the United Kingdom, the conclusion is that fiscal policy effects are relatively small.

To study the impact of fiscal policy on economic growth in France, authors Biau and Girard (2005) use a VAR with five variables taking into account governmental consumption, net income, GDP, price level and interest rate. They concluded that fiscal policy positively affects consumption and investment but only for the first year.

## 2. Data used in the research

We want to show the influence of exogenous variables on GDP growth through an impulse response function and to illustrate, using dummy variables, the

following: the consequences of the introduction of the flat tax of 16% in the first quarter of 2005 in our country, the consequences of the crisis occurring in the second quarter of 2009 and the VAT increase from 19% to 24% in the third quarter of 2010.

Our assumptions regarding the three dummy variables are:

- Introduction of the flat tax of 16% had a positive influence on the evolution of GDP growth due to the increase of aggregate demand;

- Financial crisis occurring in 2009 had a strong negative effect on GDP, consumption and gross formation of fixed capital;

- VAT increase from 19% to 24% had a negative influence on all three variables.

The main variables in this study are: private consumption, governmental debt, gross fixed capital formation, inflation, ROBOR interest rate, governmental consumption and GDP. Data were taken from the website of the National Institute of Statistics and Eurostat website.

Data are seasonally adjusted and differentiated logarithmically, less the ROBOR interest rate and inflation.

## 3. VAR Model

**VAR model used in this study has the form:**

$$X_t = B(L)X_{t-1} + U_t$$

Where  $X_t$  is the vector of variables,  $B(L)$  is the autoregressive polynomial lag in operator  $L$  and  $U_t$  is the vector of innovations, lags' order being set at 3.

After estimating VAR, we researched through the impulse function the response of all variables considered on GDP, consumption and investment.

There were also included, so to have an accurate survey, the dummy variables described above. Following this estimation, VAR's stability was ensured and the lack of autocorrelation and heteroscedasticity was identified.

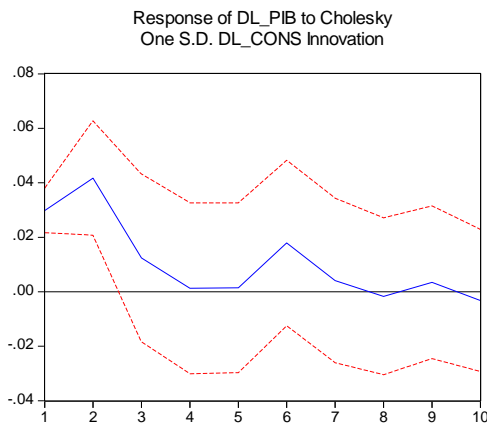
## 4. GDP Response

After estimating the VAR and calculating GDP's responses over a period of 10

quarters, at the variables of private consumption, governmental consumption, gross fixed capital formation and investment, governmental debt, Robor at 12 months and inflation, we have reached the following conclusions:

- GDP responds positively to an increase in consumption with a standard deviation for 4 quarters, will then influence the shock to fall for quarter and will fluctuate until the end, as shown in the chart No. 1:

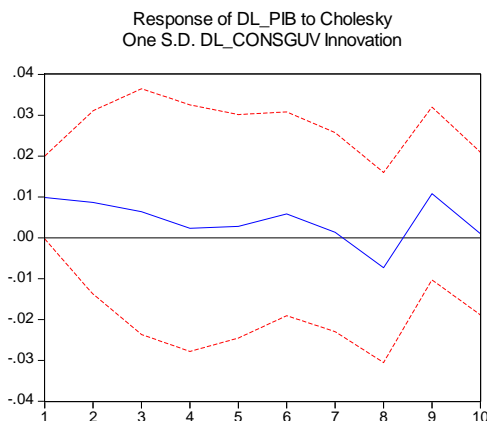
*Chart 1 Response of GDP to Private Consumption*



Source: Own Projection

As shown in the chart below, an increase with one unit of government consumption will positively influence GDP over 7 quarters, on a downward trend, and will afterwards have a negative/positive fluctuation for still other 3 quarters.

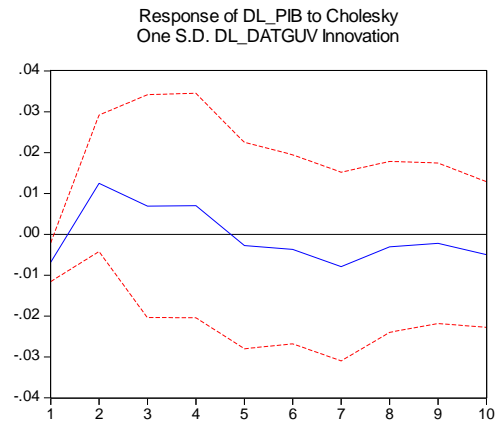
*Chart 2: Response of GDP to governmental consumption:*



Source: Own Projection

As can be seen from the chart below, an increase in government debt will have a negative effect for half of the first quarter and afterwards it will have a positive influence from quarter 2 to until quarter 5, when its influence becomes negative until the end of period.

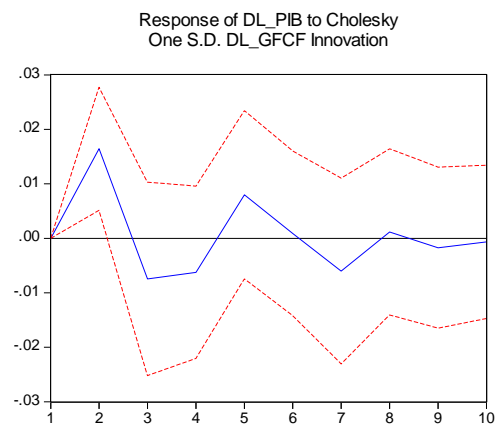
*Chart 3: Response of GDP to governmental debt*



Source: Own Projection

Gross fixed capital formation has a positive influence on GDP, therefore a shock of an unit on the gross formation of fixed capital will have a positive impact on economic growth over 3 quarters and this influence turns negative for a quarter and a half but, by the end of this period, we shall have a fluctuation of this variable's influence.

*Chart 4: Response of GDP to gross formation of fixed capital*

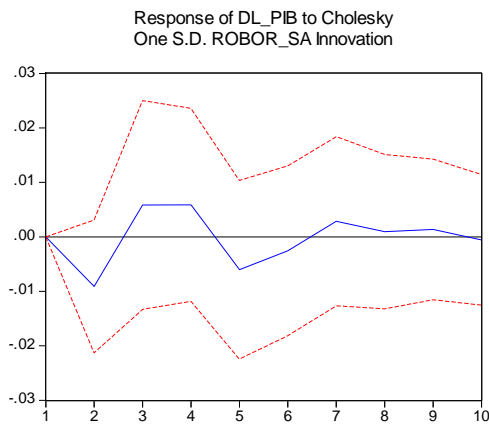


Source: Own Projection

The ROBOR impact on GDP is negative during 3 quarters, then it becomes a positive

influence for a quarter and half, and afterwards the shock will be reabsorbed.

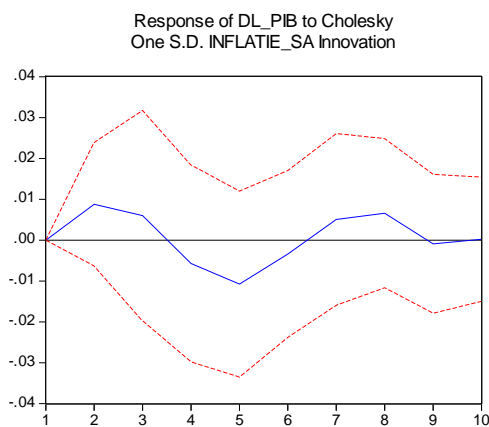
*Chart 5: Response of GDP to ROBOR*



*Source: Own Projection*

Action of an increased inflation on GDP is positive for the first 3 quarters, negative for the next 3, then positive for the following two and insignificant for another quarter.

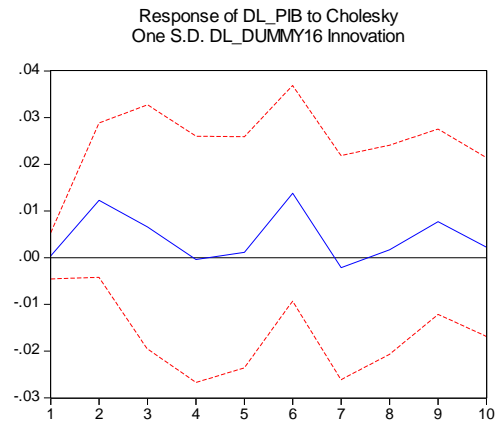
*Chart 6: Response of GDP to inflation*



*Source: Own Projection*

As you can see from the chart below, the influence of introduction of the flat tax of 16% in the first quarter of 2005 had a positive impact on GDP, for the first 4 quarters, an upward trend for the first two and a descending one for the following two, then an insignificant impact for the following quarter, continued by a positive influence on an upward trend for another quarter and afterwards it continued to have a positive impact of low intensity for the remainder.

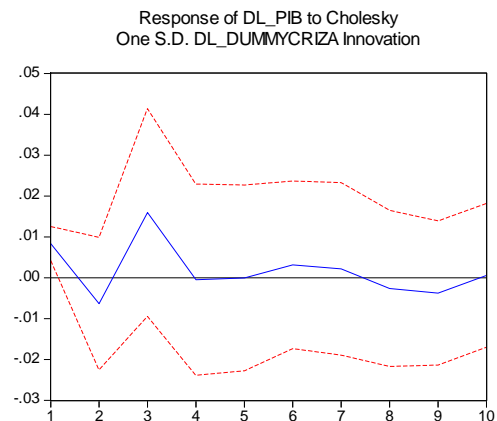
*Chart 7: Response of GDP to the introduction of flat tax of 16%*



*Source: Own Projection*

Impact of the financial crisis on GDP was negative in 3 quarters, namely the 4<sup>th</sup> quarter of 2008 and the first two quarters of 2009. For another quarter the influence of a shock on the dummy variable will have a positive effect, followed by the shock’s reabsorbing starting with 4<sup>th</sup> quarter.

*Chart 8: Response of GDP to financial crisis*

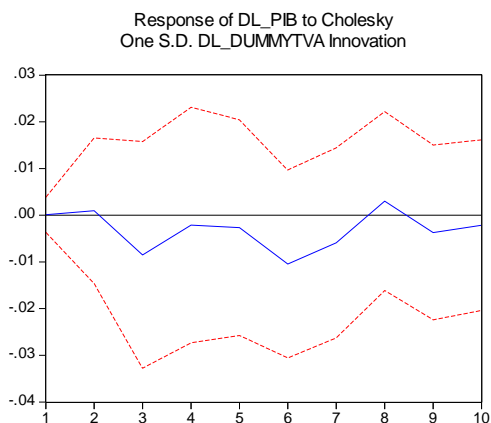


*Source: Own Projection*

VAT increase in the third quarter of 2010 had a positive influence of very low intensity for the first quarter, but by the end of the year, VAT increase had, as expected, a negative effect on GDP. This is explained by an increase in the price of consumer products, and referring to the average daily basket that is formed mostly of basic necessity products, a negative influence of this variable expected, but of a lower intensity whereas demand is inelastic. The slight positive impact in the first quarter can

be explained by the rational anticipation of households to purchase before the VAT increase.

Chart 9: Response of GDP to VAT increase



Source: Own Projection

## 7. Conclusions

The results of this study confirm that the effects of fiscal policy on economic growth in Romania are relevant throughout the entire period. Major changes occurring in fiscal policy had every time reverberated over the real economy, thus:

- introduction of the flat tax in 2005 had a strong positive impact by increasing aggregate demand, and GDP grew for 6 quarters but afterwards the impact was becoming less strong;

- increase of the VAT rate in the third quarter of 2010 did not have a negative influence immediately because traders did not automatically increase prices with the increase of VAT rates, preferring to liquidate previously purchased stock. Starting with the next quarter a negative, but not strong,

impact was felt on GDP, because the subsistence expenses represent a high share of the family budget which makes inelastic the demand, and, consequently, a reduction in VAT for food, which is under discussion as a major theme of the election campaign, is expected to have a high impact on the economy.

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