Romania's Economic Competitiveness

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Abstract

The interrelation research-development-innovation has proved crucial for raising the economic competitiveness. The comparative analysis of Romania's competitiveness in the global and European context highlights significant gaps as compared with advanced countries, mainly in Research & Development intensity, quality of scientific research, innovative entrepreneurship, intellectual assets. The complexity of the business environment, the increasing economic liberalization, the intensification of competition, the rapid transformations in the technological and IT field, the demographic changes, the ecological problems caused by pollution and resource depletion and last but not least, the economic and financial crisis, are elements that impose, to a certain extent, a different way of leading and governing companies. Also, the current crisis has highlighted much better the negative effects generated by the institutionalization of a system in which power and skills are decoupled from moral responsibility and in which individual and collective responsibility are no longer a defining element of the business environment.

Key words*:* competitivity, innovation, development, business ethics**,** European integration
J.E.L. classification: M29, O00, R58

1. Introduction

Adopting a moral commitment and substantiating an ethical concept in companies in our country are essential in order to attract and positively involve all stakeholders: employees, customers, shareholders, creditors, suppliers, community, etc., being possible to obtain competitive advantages and consolidating a healthy economy. If these participants notice that as a result of the relationships they develop with a company, they are treated correctly and benefit from mutual benefits, ie the components of the ethical guide specific to the integrationist model are met, they will develop those relationships based on trust, loyalty and mutual respect (Aasland D., 2004). The knowledge of the rights, duties and responsibilities by each economic agent, will strengthen the structure of the links between a company and its stakeholders, leading at the same time to obtain competitive advantages (Acemoglu D., 2007). But the lack of trust leads, in economic terms, to additional costs.

Innovation activity indicators are closely monitored and introduced in various reports such as the "Global Competitiveness Index" reported by the World Economic Forum, the "Knowledge Economy Index" measured by the World Bank, the "Innovation Summary Index" published by Eurostat, so they can compare the countries and their evolution, bringing useful information for political decision makers. Without trying to analyze all the indicators published or calculated by different international bodies, through this article I propose to highlight the main specific features of competitiveness in Romania (Commission, 2016). The motivation in choosing the theme comes precisely from observing the persistence of factors that have a negative effect on development, which continue to hinder performance, economic growth and keep us in the bottom of the rankings. Competitiveness is viewed and treated in various ways and by reference to multiple dimensions: globally, nationally, regionally or at company level (Barro R. J., 1991).

2. Literature review

As of late, the entire world has gotten progressively interconnected because of the wonder of globalization. Nonetheless, regardless of how idealistic we will be, we can ascertain the advantages and the chance to take care to empower globalization. The European Union gives specific consideration to wonders and surpasses all endeavors with the goal that the positive viewpoints can be promoted and the negative angles limited.

In the expansive setting of globalization, the Romanian open foundations are obliged to be lined up with the principles forced by the European Union or even to the universal guidelines. In the most recent years, the serious condition isn't just the inner one, national, it is broadened globally, and, at this time, this requires a progression of adjustments, changes, modifications, etc. Subsequently, it is important to examine the worldwide seriousness, idea strongly conveyed by the accompanying two global associations: The World Economic Forum (WEF https://www.weforum.org/) and the International Institute for Management Development (IMD - https://www.imd.org/).

In this specific circumstance, we accentuate the importance of the Global Competitiveness Index, created by WEF and dependent on twelve systematic columns, which alludes to: Public and private foundations; Infrastructure; Macroeconomics; Health and essential instruction, Higher instruction and preparing; Market effectiveness; Labor advertise productivity; The unpredictability of the budgetary market; The innovation; The size of business sectors; Business Complexity and Innovation.

Given the investigative columns recorded above, we underline the association between organizations, human capital, instruction, preparing and constant improvement, framework, innovation and advancements. It is an interconnected chain, from which no connection can be absent, in the event that we need things to work, from a hierarchical perspective. As a unit of proportion of the nature of human capital, the degree of general and expert preparing of representatives, proficient experience is utilized; number of recommendations made by representatives so as to improve the creation procedure or developments.

Considering the way that we have recently alluded to the Institute for Management and Development, we consider that it is proper to bring into conversation a few angles identified with the way that there is a computerized seriousness characterization around the world, to be specific: IMD World Digital Seriousness Ranking. This pointer is significant in light of the fact that innovation and quickened changes in data and correspondence innovation not just influence the presentation of foundations and associations (open or private, by and large), yet in addition how nations, at the full scale level, realize how to get ready for what will occur later on. This is the reason most Governments put resources into the computerized economy. The marker we alluded above, dissects and assesses the limit of 63 national economies (counting Romania), on the best way to receive, execute and investigate advanced advances. In this way, as per the reports made by the IMD World Competitiveness Center, the appraisal of a national economy is breaking down from three points of view: information, innovation and future preparing in regards to the degree of preparing of Governments in abusing future computerized changes (and even in their level of adaptability in developments).

Another viewpoint we need to examine is manageable turn of events, since intensity isn't tough without being related with this idea. The last arrangements with three columns, individually: the monetary column (which alludes to productivity), the social column (which alludes to government assistance, value and social equity, consideration and social solidarity) and the ecological column, which expects to keep up a steady normal asset base; biodiversity, staying away from over the top misuse of inexhaustible assets; biological effectiveness.

In conclusion, we can say with certainty that the exigencies of the digital society made clear that human capital can no longer be just passive and receive certain information, but must become a conscious, complete and complex actor, to receive, acquire, transform their information and, relay the information in the form of in-depth and personalized knowledge on each particular case. The literature emphasizes that the economic performance of a country is a direct result of the quality of its human potential for research and development, and the experiences of the developed countries

(USA, Japan) have shown that the continuous improvement of human resources leads, in time, to the capacity development, national innovation and the competitiveness of the economy.

3. Research methodology

In order to base the research methodology on the project, we used classical observation and examination instruments, research methods based on the basic principles of scientific research. We used procedures based on factual analysis, intensive documentation at the level of internal and international literature, using the databases and the scientific material existing in the endowment of libraries of specific institutes in Romania and internationally. The methodology of the paper has as direct instruments the collection of data and information from the literature and from the existing practice in public and private institutions, but especially scientific articles published on specialized research networks (Research Gate, Academia.edu, etc.), articles published in various journals, relevant books in the field of reference, legislation, analyses and studies, official documents of various tax bodies, tax documents and interactive database of the National Bank of Romania, other relevant sources identified in the libraries: Academia Romanian, National Institute of Economic Research 'Costin C. Kiriţescu' (NIER), National Library, etc. Moreover, we analyzed the documents using the comparative, analytical, descriptive method, the no participative and participatory observation, and the use of a set of informational sources, the collection of financial data in the established databases. The work is also based on annual reports, publications, consolidated statistical data provided by the National Bank of Romania, the European Central Bank (ECB), the International Settlement Bank (BRI), the European Commission, OECD, published annually, data that have been processed for can provide a general and analytical picture of the most important changes taking place in the financial markets in the European Union as a whole but also globally - considered to be representative of the understanding of the phenomena studied, and especially in Romania.

4. Results

4.1. Romania's economic competitiveness at Global level

In a broader sense, the World Economic Forum (2017) conceives economic competitiveness through the prism of a set of institutions, policies and factors that determine the level of productivity of a country, calculating a composite index (GCI - Global Competitiveness Index) for 137 of economies, being built by aggregating the weighted average scores of the 12 pillars of competitiveness (Forum, 2020).

Table no. 1. Romania in the global ranking of competitiveness according to the pillars related to innovation in 2018

Pillar	Subindices	Maximum score	Minimum score	Romania Score	Rank Romania (137 countries)
4th pillar	Health and primary education	6,9	3	5,5	92
5th pillar	Higher education and training	6,3	1,9	4,4	70
6th pillar	Goods market efficiency	5,8	2,8	4,1	92
8th pillar	Financial market development	5,8	2,1	3,7	88
9th pillar	Technological readiness	6,5	2	4,8	51
11th pillar	Business sophistication	5,9	2,6	3,5	116
12th pillar	Innovation	5,8	2,1	3,1	96

12.01	Capacity for innovation	6,2	2,2	3,7	109
12.02	Quality of scientific research institutions	6,6	2	4	57
12.03	Company spending on R&D	6,1	1,9	2,8	110
12.04	University-industry collaboration in R&D	5,8	1,9	3,1	97
12.05	Gov't procurement of advanced tech. products	5,5	1,8	2,3	133
12.06	Availability of scientists and engineers	6	2,2	3,8	80
GCI	**Aggregate index**	7	0	4,3	68

Source: World Economic Forum - The Global Competitiveness Report 2017–2018, p.258-259

With the mention that each indicator - pillar is calculated on the basis of sub - indicators, from the data presented in Table no. 1 results that, in the classification of the states of the world according to the performances associated with competitiveness, Romania is on a modest position (68th place out of 137 countries), at most indicators related to research-development and innovation, we are on the less favorable places (World Economic Forum, Building a More Competitive Europe, 2014). Regarding Pillar 12 (Innovation), Romania is on the 96th place in the world, and on some sub-indicators on more unfavorable positions such as the expenditure of companies for Research and Development (110th place) and public procurement of technologically advanced products (place 133). Most of the gaps are about 2-3% of the maximum score on this pillar. Compared to other countries in the region, Romania ranks better than Serbia, Albania, Montenegro and Croatia, but worse than Bulgaria, Turkey, Poland, Hungary and the Czech Republic (Ministry for European Funds, 2016).

Table no. 2. Competitiveness index for Romania in the period 2012-2018

Period	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Rank	78/144	76/148	59/144	53/140	62/138	68/137
Score	4,1	4,1	4,3	4,3	4,3	4,3

Source: World Economic Forum - The Global Competitiveness Report 2017–2018, p.258-259

Table no. 2 shows that Romania has not made progress in the last 5 years, maintaining the same score and is constantly ranked on a modest position Romania can and must become more competitive globally, developing without sacrificing the development opportunities of future generations and must take advantage of the opportunities for modernization offered by European integration (World Economic Forum, 2018). An overview of international competitiveness reports reflects the growing trend of the productivity gap between the EU and major international competitors (US and Japan), as well as the loss of significant market shares in international trade in favor of emerging countries, such as: China, India, Brazil. This fact is mainly due to the following factors: insufficient investment in high technologies, education, research and development and inefficient use of labor (compared to the US and Japan), respectively, more expensive labor (compared to emerging countries).

4.2. Romania's economic competitiveness at European level

At the level of the European Union, the best-known strategies that include references to competitiveness and sustainable development are:

- Lisbon Strategy;
- EU Sustainable Development Strategy;
- Europe 2020 Strategy.

From the analysis performed on the industrial competitiveness of Romania, we found the following:

• Romania is at a net competitive disadvantage compared to the European Union average and implicitly, compared to most component countries, in terms of the level of fundamental output indicators that characterize economic competitiveness, respectively: GDP / place, labor productivity, employment rate and commercial balance;

• If we refer to the input factors of the economic and industrial processes, essential for the level of competitiveness, we find that Romania is also in this case, at a competitive disadvantage in the sense that most of these factors have performance levels below the Unions average;

• With reference to the factors that characterize the environmental pillar of sustainable development, Romania's position in the EU28 is better than in the case of the economic pillar of sustainable development.

The competitiveness and poor performance of our country lead to the inability to benefit from the financial support provided by the European Union. Despite the internal funding gap for Research and Development, Romania failed to capitalize on opportunities to attract European funds through the Sectoral Operational Program Increasing Economic Competitiveness (over 2.5 billion euros for the period 2007-2013, respectively a figure comparable to budget allocations for Research and Development during this period) the absorption rate being only 6.77% in mid-2013.

The indicators that we consider to be suitable for assessing the competitiveness of the sectors of the national economy, in the conditions of sustainable development, are the following: GDP; Annual GDP growth rate; Occupancy rate; Work productivity; exports; Total greenhouse gas emissions; Energy intensity; The share of renewable energy resources in total primary energy; Waste recycling performance; Expenditures on Research, technological development and innovation RDI / GDP; The share of engineers and specialists in exact sciences; Degree of vocational training at work (continuing education); ICT training index; Stock of foreign direct investment (FDI) generated / stock of foreign direct investment (FDI) received.

For all the indicators listed above, both the calculation of the momentary value and the calculation of the evolution rate over time are suitable (Zaman & Georgescu, 2013). The momentary value is calculated, usually for one year, and by evaluating these values for successive years, the evolution of the indicator over time can be highlighted. There are persistent significant gaps in other indicators of Romania's competitiveness: labor productivity (less than 1/5 of the EU average), energy intensity (almost 3 times higher than the EU average), the share of high-tech exports (less than 1/2 from the EU average). In the Europe 2020 Strategy, research and innovation play a central role, as a decisive factor in overcoming the crisis and closing the competitiveness gap (compared to the USA, Japan and probably soon China), being launched, in addition to the "Digital Agenda for Europe". the "Innovation Union" initiative financially supported by the Horizon 2020 platform, with a budget of 70 billion Euros for the period 2014-2020.

The moral philosophy adopted within the management and governance systems influences the way of establishing and prioritizing the economic and ethical objectives of a company in relation to the interested parties: employees, customers, suppliers and competitors, as follows:

• in relation to employees: through the management system based on deontological ethics, dignity is offered to the labor force, compared to the management system based on ethical selfishness (European Investment Bank, 2016);

• in relation to customers: the application of deontological ethics in the local business environment leads to the development of a relationship based on trust, indirectly supporting responsible consumption, avoiding that wasteful and harmful abundance of the environment or offering products that may affect the safety and / or health of consumers;

• in relation to suppliers: the objective of developing a long-term relationship based on obtaining mutual benefits is specific to companies whose moral philosophy is deontological ethics;

• in relation to competitors: the management system that adheres to deontological ethics aims, to a much greater extent, to promote fair competition, differentiation from competition through quality and innovation, without pursuing a concentration of market power;

• general objectives: management systems based on ethical selfishness support obtaining a record profit, in the short term, neglecting the logic of reciprocity and obtaining mutual benefits. Management systems based on deontological ethics aim to obtain a sustainable, long-term profit, to offer quality products and services that do not affect the health and / or safety of customers and to ensure the well-being of employees.

5. Recommendations and solutions

Despite the recommendations at European and international level, that the post-crisis measures do not affect the financing of research and development, implicitly the targets of the Europe 2020 Strategy (European Commission, 2010), it is necessary to identify solutions to stimulate the growth of demand for Research, Technological Development and Innovation (RDI), that include:

- substantial improvement of the national infrastructure, an aspect that would achieve an important opening of Romania to the markets with which there are currently connections, but also the attraction of new trade partners. Improving infrastructure would generate substantial investment, which could be achieved through EU funding. These investments would generate many benefits, increasing in the medium and long term the degree of competitiveness of Romania;
- improving health and education services. Another important step that Romania must take is related to the health and education system. The investment in the health system would generate the increase of the general degree of satisfaction of the population, and the investment in education would generate in the medium and long term the creation of the premises that would lead to a sustainable development, in all its senses;
- substantially improve the efficiency of the labor market and the material goods market, mainly by: Improving the relationship between employees and employers; Substantial reduction of brain drain by adequate motivation of researchers to work in Romania; Extending the culture and application of professional management, mainly in the public environment; Making the necessary legislative changes to establish in the public environment (economic and institutional) the flexibility of establishing salaries and their correlation with labor productivity; Reducing the level of taxes; Simplification and efficiency of customs procedures; Streamlining antitrust policy; Improving the culture of quality and the degree of customer orientation, mainly in the public environment;
- improving the business environment by: Substantially reducing the level of corruption; Significant reduction of bureaucracy; Clear, stable and simplified fiscal regulations that facilitate access to financing for feasible companies / projects.

All these strategic directions can achieve an improvement in the level of competitiveness of the Romanian economy, but in order to be implemented, people are needed, who first of all must be well prepared and who, just as importantly, must be found in those positions from which to implement the established measures. Consequently, we can say that one of the most important problems of Romania is the human resource. Romania needs the expertise of these qualified people, but at the same time it needs a high level quality management. Instability does not give our country, on the one hand, the chance to use its full capacity to attract foreign investment and, on the other hand, as a consequence, to retain and attract highly skilled labor. Going beyond human resources and the stability of the political class, stability that should generate long-term visionary strategies that have continuity, money is needed. Romania has a great potential on both the industrial and the agricultural sector. Although this sector has not been treated, we cannot ignore the decisive importance that the agricultural sector in Romania has, a sector that could contribute substantially to the increase of the economic competitiveness of our country.

In the agricultural sector, Romania is in the top three EU countries in terms of agricultural potential (Guvernul Romaniei, 2006). We appreciate that the necessary measures to be taken for Romania to become a strong player on the agricultural market, which would generate the increase of national competitiveness, are the following:

- ensuring the priority position for Romanian citizens regarding the purchase of arable land in Romania;
- negotiating and obtaining a subsidy, for the agricultural sector in Romania, to rise to the level of the subsidy from the rest of the EU countries;
- revitalization of the country's irrigation system;
- achieving taxation for those working in agriculture.

This sector is all the more important as its development would generate an indirect development on the industrial sector as well. In order for the agricultural sector in Romania to be truly competitive, we consider it necessary to develop the sector of the industry producing agricultural tools and equipment in Romania, a sector that no longer exists today. Developing this industrial

sector would stimulate research, technological development and innovation in this field, Romania winning on several levels.

6. Conclusions

Economic globalization has led to increased international competition and, in this context, the competitiveness of an economy is essential for its survival.
Research funding has always been an important issue in Romania, although it is recognized among the priorities of each government. Without a national strategy in the field of long-term competitiveness, which would effectively promote national interests, Romania will forever depend on imported technologies, without being able to exploit and benefit from its national capacity for innovation to increase the living standards of its citizens.

In order to become competitive, Romania is obliged to fully attract the amounts allocated for the budget year 2021-2027, otherwise the gap between our country and the rest of the EU countries will widen, Romania risking to be far behind. Romania must develop macroeconomic policies to stimulate economic competitiveness, develop all regions, to attract foreign direct investment, external grants.

The application of certain values within a company decisively dictates the nature and size of its relations with stakeholders. We believe that companies in our country can be supported and encouraged, in order to apply ethical principles and moral values, in decision-making processes or in the way of action specific to daily practices, and through the educational environment insofar as it is concerned with the introduction of ethical components in the disciplines of studies and the training of future employees with an integrity character. In this sense, we support the need to study the discipline Business Ethics in the faculties with economic profile and the introduction of specific notions of ethics for primary education.

7. Acknowledgement

This work is supported by project POCU 125040, entitled "Development of the tertiary university education to support the economic growth - PROGRESSIO", co-financed by the European Social Fund under the Human Capital Operational Program 2014-2020

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