

COMPETITIVENESS - KEY ISSUES OF THE ROMANIAN ECONOMY

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Abstract:

Based on the theory that competitiveness plays an increasingly powerful role in creating prosperity / wealth, a large number of economists, researchers, scientists, highlight a number of approaches aimed, on the one hand, on the analysis of competitiveness at national or regional level, and on the other hand, on the ability of local firms to achieve competitive products and to commercialize them in the external markets. In this context we aim to analyze and develop strategies and methods to help identify competitive areas at a national level. This is necessary because in our opinion the competitiveness of a company and / or country is more than wealth itself; it means a systematic process of wealth creation, plus a social system in which most citizens have access to material wealth. We consider in this respect that a country cannot automatically be considered competitive only if it is rich in natural resources. In our view, a competitive country creates wealth through labor, talent and organization and thus it manages to have a productive and creative potential making it independent of material resources.

Keywords: *competitiveness, innovation, global competitiveness index, factors of efficiency, innovation factors, basic factors.*

JEL Classification: F00, O10, O30

1. Introduction

A theoretical analysis of classical and modern theories of competitiveness highlights the main factors influencing it at micro and macro level. We talk about competition - concept that lead to progress and prosperity in the lives of individuals, organizations and countries around the world. This theory is supported by the evolution of society, both traditional capitalist society and post-capitalist society of Peter Drucker, Alvin Toffler etc. We consider therefore the competitive advantage of countries towards the natural potential of them, and the level of technological development, innovation, research and development etc. The results reinforce the idea that competitive advantage is held not only by countries that are endowed with natural resources or other items, but is found mainly in countries that stimulate investment in infrastructure, research and development, in creating a favorable business environment and an investment climate to encourage firms to specialize and become world leaders.

All these theories thus lead to the idea that "developed countries have a comparative advantage in both goods and knowledge-intensive services, while developing countries have an advantage in labor intensive goods and services" (Gibbs, 1990).

In my view, competitiveness is not just wealth itself, it can and should be a systematic process of wealth creation and a social system that allows most people to have access to material wealth. Complementing these theories, Franziska Blunk believes that "for a company, competitiveness is the ability to provide goods and services more efficiently than those of relevant competitors to a sector - national companies' ability to achieve success against foreign competitors, and for a country - ability of its citizens to achieve a high standard of living".

In this context we mention the fact that the foundations of theory and research aimed at competitive advantage can be found in the work of Michael Porter (1990), "Competitive Advantage of Nations", a work that tries to answer the question: "Why do some nations

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succeed in particular industries and which are the implications of these on firms and national economies?"

To answer this question, Porter believes that the political, institutional and economic framework of the nation plays an important role in the development of a competitive industry. Porter also argues that "the differences between the structures, values, cultures, institutions and histories contribute profoundly to the success of a nation's competitiveness."

Making a complete picture of holding competitive advantage by a country of the world is analyzed using the Global Competitiveness Index (GCI - Global Competitiveness Index).

2. Elements with direct effects on competitiveness

In my view the progress required to be obtained as a result of investments made in areas with high potential of competitiveness will be included in the achievement of proposed indicators in Europe 2020 Strategy:

- Reaching the 75% of population aged 20-64 that must be employed;
- Allocating 3% of EU GDP on research and development;
- Achieving climate and energy objectives "20/20/20";
- Reducing early school leaving to below 10%;
- Increase by up to 40% of young people with university education;
- Reduce by 20 million of people at risk of poverty).

Ensuring national competitiveness is obtained by creating a favorable climate for business development. We consider the improvement of economic, political and social factors that influence in a particular way the environment in which the economic agents activate and supporting competitive advantages. Please note that these factors are very different and one of the most complex calculation methodology of the national competitiveness of countries around the world, that tried to cover most of them, is regarded as the Global Competitiveness Index, developed by (WEF - http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2013.pdf) Global Economic Forum in Global Competitiveness Report (Chart no.1).

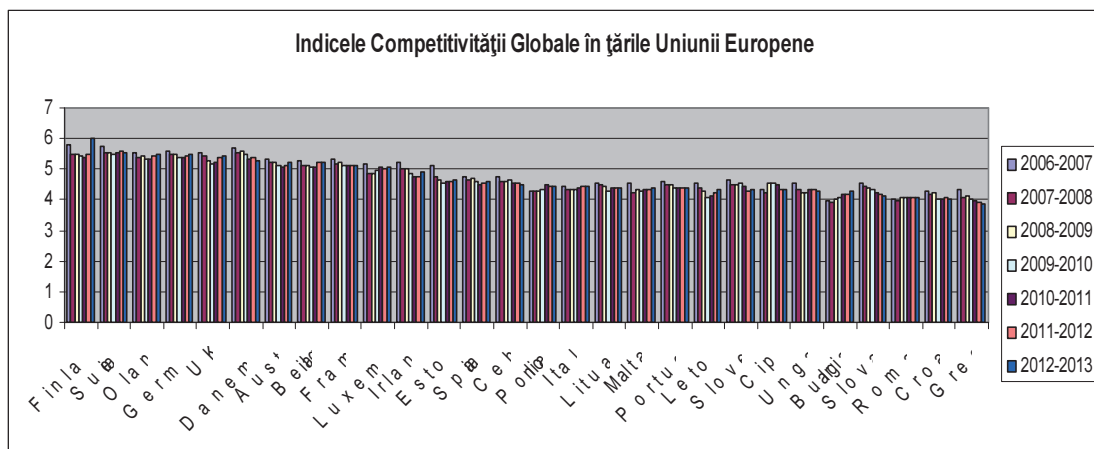


Chart no. 1 The Global Competitiveness Index in EU countries

Source: The Global Competitiveness Report 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013; World Economic Forum

Referring to Romania, according to the World Economic Forum - WEF notice that it has registered (2014-2015) an advance of 17 places, from number 76 (in 2013-2014) on 59th in the annual rankings of economic competitiveness compiled by the WEF, placing

above EU countries such as Hungary, Greece, Croatia, Slovakia and Slovenia. The report mentions the fact that Romania is surpassed by the Czech Republic (37), Poland (43) Bulgaria (located in position 54) and Cyprus (58) and that countries like Ukraine, Moldova and Serbia are not among the top 70 world economies, after the criterion of competitiveness.

This indicator takes into account a lot of factors of competitiveness, ranked in 12 categories - called "pillars of competitiveness". These pillars can be divided into three categories and they constitute the foundation of the development of any economy:

- Basic factors (institutions, infrastructure, macro economy, health and education);
- Efficiency factors (higher education and training of human resources, market efficiency, and responsiveness to new technologies);
- Innovation and sophistication factors (business environment quality and innovation).

Regarding these pillars of competitiveness is found that the levers used to increase competitiveness in a developed country will not be the same as in a less developed country. At the same time, the tools used to increase the efficiency of foreign trade, labor market, etc. will not have the desired results as long as there is not ensured proper functioning of the institutional system, the existence of a developed infrastructure, basic conditions for ensuring a satisfactory level of health and training people of this nation.

The Global Competitiveness Report ranks countries based on three levels according to income of population. Developed countries have economies considered innovative, Romania together with Bulgaria being found in the second category of economies based on essential factors, while the Baltic countries are in transition - from economies whose growth is based on efficiency factors to an innovation-based development (table no.1)

Table no. 1 The importance of factors in ensuring competitiveness in different stages of development of the economy

	Development based on factors	Development based on efficiency	Development based on innovation
Essential factors	60	40	20
Efficiency factors	35	50	50
Innovation factors	5	10	30

Source: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15

To maintain competitiveness in this stage there should be considered the following:

- The quality of the institutional system - legal and administrative framework within which individuals, firms and governments interact;
- Development of infrastructure - quality of transport infrastructure; road, air, rail and water and communication infrastructure;
- Macroeconomic stability - stability of the main macroeconomic indicators: national economies, public debt, inflation;
- Health and education level of employed - the health level of population and the quality of the education system.

Meanwhile, in the world rankings, Romania has one of the most modest achievements in terms of the quality of these pillars:

- 85th place in road infrastructure from 148 countries, being characterized by a very low level of infrastructure quality, which in the last three years has seen a slight evolution (at the quality indicator of the infrastructure has been recorded the position - 145 of 148 countries analyzed);

- poor quality of public institutions caused by deficiencies in: favoritism in decisions of government officials (place 137), waste in government spending (ranked 134), independence of the judiciary system (ranked 114), property rights (ranked 82).

Table no. 2 The evolution of Romania in the Global Competitiveness Report ranking

Pillar	GCI 2011-2012	GCI 2012-2013	GCI 2013-2014	GCI 2014-2015
	From 142 analyzed countries	From 144 analyzed countries	From 148 analyzed countries	From 148 analyzed countries
GCI	77	78	76	59
Essential factors	89	90	87	77
Institutions	99	116	114	88
Infrastructure	95	97	100	85
Macroeconomic environment	87	58	47	46
Health and primary education	66	83	84	88
Efficiency factors	62	64	63	50
High education and training	55	59	59	58
Efficiency of market of goods	96	113	117	89
Efficiency of labor market	92	104	110	90
Development of financial market	84	77	72	64
Technological training	60	59	54	47
Market dimension	44	43	46	45
Innovation and sophistication factors	99	106	103	78
Grade of sophistication of businesses	102	110	101	90
Innovations	95	102	97	66

Source: own development based of data available in Global Competitiveness Report 2011-2012...2014-2015, available at: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15

In the context presented, innovations have become an engine of economic development and a decisive factor in achieving competitive advantages, particularly for developed countries of the world. This was possible due to the creation of necessary conditions for their development. In case of Romania, we cannot speak of an innovative sector development as research intensity and other indicators of private sector innovation evolve with a negative rate. The report shows that Romania is classified for the third consecutive year in the last group, of the modest innovators in the European Union (Innovation Union Scoreboard 2014), along with Latvia and Bulgaria (Chart no.2).

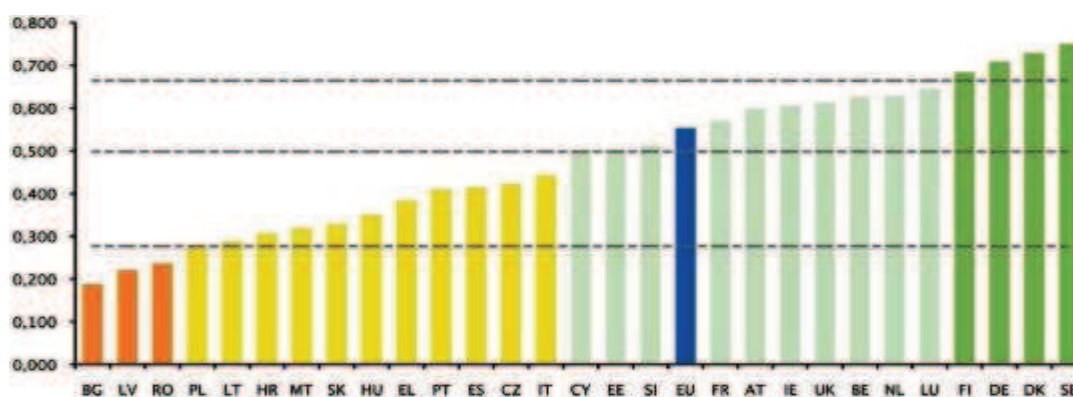


Chart no. 2: The innovation capacity of member states of the EU

Source: Innovation Union Scoreboard 2014

http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014_en.pdf

From the above chart we see that the place that it occupies Romania, 78, in the world positions it on the antepenultimate positions held within the EU. It requires the adoption of meaningful reforms in this area of research - development –innovation, since the early 90s, the national management of scientific research rather imposed restrictions than facilitated its development. During the same period it decreased the attention to science, focusing on the idea that it is a simply consumer of scarce resources, ignoring the role it plays in economic and social development. Legislation shall be implemented consistent with the European Commission to encourage such services because in Romania we have witnessed a drastic decrease in the number of employees in research-development-innovation, from 71,000 people (1990) to 26,171 in 2010, situation that can be found detailed in the table below (table no.3).

Table no. 3 Employees from CD-I activity by occupation and level of education

Employees from CD-I activity by occupation and level of education (full-time equivalent)						
	2005	2006	2007	2008	2009	2010
I. Employees from CD-I activity by level of education TOTAL	33222	29340	28977	30390	28398	26171
1. Superior studies from which:	24361	21532	21369	22128	22468	
*holders of doctor title	-	11882	14228	14851	14916	20963
2. Post secondary studies	8861	2218	2278	2134	1566	
3. High-school studies	-	4677	4710	5250	3822	5208
4. Other situations	-	913	620	878	542	
II. Employees from CD-I by occupation: TOTAL	33222	29340	28977	30390	28398	26171
1. Certified researchers	22958	19021	18808	19394	19271	19780
2. Technicians and associates	4988	4496	4361	4620	3991	3139
3. Other categories of employees	5266	5823	5808	6376	5136	3252

Source: Processed by the author after the Annual Statistic Yearbook of Romania 2011, pp. 406-407

From the above table it is noted that the employees with higher education have the highest share by levels of training, being the only category that saw growth from 2006 to 2009 (about 4.34%), while for the year 2010 is noted a reduction of employees by about 6.7%. The same trend is seen for higher education staff of doctorate degree holders (4.34% in 2009). Certified researchers have the largest share by occupations (75.57%), their number increasing by only 1.03% in 2010 compared to 2006.

Regarding the financial resources of government revenue, the gaps at the situation in the EU are worrisome; For example, in 2010, Romania has been allocated 0.49% of GDP, while in the EU the value was of 2% of GDP. In other words, Romania allocates four times fewer financial resources relative to GDP than the EU average. Regarding research units, their number increased due to higher institutes being split into smaller units, especially to the establishment of companies specialized in the research; From this point of view, Romania is ranked 22 (with 33.30% of innovative firms from the total) among EU 27 countries (51.6% of innovative firms) and is regarded as a modest innovator, along with Bulgaria, Lithuania and Latvia.

Regarding the performance of the EU Member States in innovation (innovation chapter covers both implicit aspect of innovation brought by the local economy and the sophistication of business) it is regarded an average annual growth rate of 1, 7% in the period 2006-2013. This increase is considered by officials as unsatisfactory. Thus, the analysis of the growth rate divided EU member states into four groups (chart no. 2): innovative leaders, innovators rank II, moderate innovators and modest innovators. Under these conditions we see that in the group of leading innovators can be found: Denmark (DK), Finland (FI), Germany (DE) and Sweden (SE); the echelon II – innovators rank II,

countries including: Austria (AT), Belgium (BE), Cyprus, Estonia, France, Ireland, Luxembourg, the Netherlands, Slovenia and the UK; third echelon - moderate innovators: Italy (IT), Czech Republic (CY), Spain (ES), Portugal (PT), Croatia, Greece (GR), Hungary (HU), Lithuania (LT), Malta (MT), Poland (PL).

Doing a comparative analysis on the innovative performances, we find that their improvement occurred with the launch of the Europe 2020 strategy (European Commission, 2010) and the launch of the Innovation Union (European Commission, 2013). In this context, we emphasize that innovation performance of leaders are the result of a national research and development and innovation balanced, aspect that should be considered by policy makers of each country. In this context we mention that those from the group of innovation leaders share a number of strengths of their national research and innovation systems, a key role starring enterprise activity and collaboration between the public and private sectors. Although there is not only one way to achieve peak performance in innovation, it is clear that all the leaders in innovation characterize by high expenditures on research development, including businesses.

The results obtained at EU level can be extrapolated and also compared to the performance of innovation worldwide (chart no. 3).

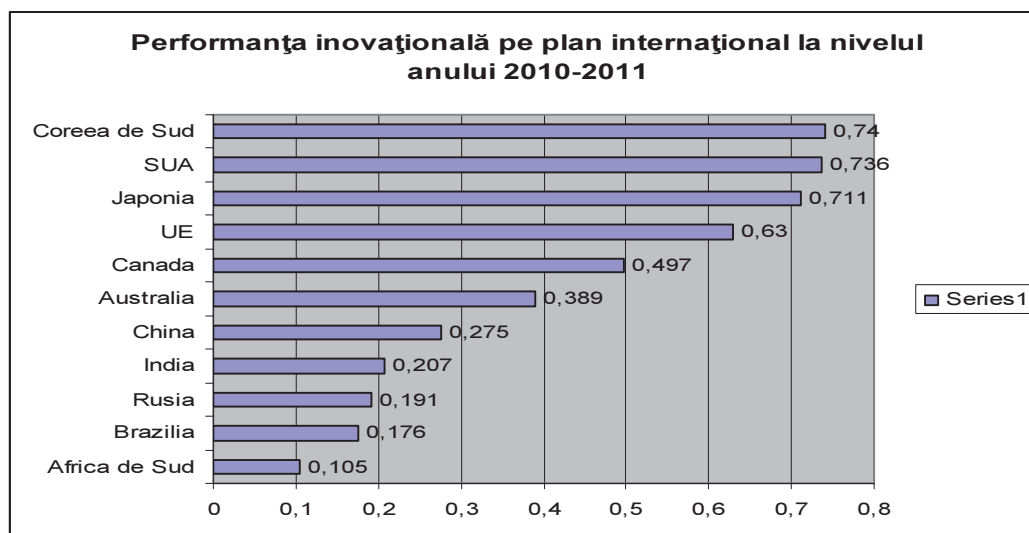


Chart no. 3. Innovation performance on international level of year 2010

Data Source: EC – Innovation Union Scoreboard 2014,

http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014_en.pdf

Comparisons reveal that the performance of the United States, Japan and South Korea in innovation exceeded those of the EU-27. In exchange, those of China were lower. To achieve these assessments there were used 12 simple indicators that formed a composite index; These indicators are: the number of new PhDs, the number of university graduates, the number of international joint publications, the most cited publications, research and development expenses in the public sector, research and development expenditures in the private sector, joint sector publications of public and private sectors, the number of patents obtained under PCT (Patent Cooperation Treaty - Treaty International patent Cooperation investment), changes in society brought by patents in PCT regime, the contribution of exports of medium and high technology products (MHT) in the balance of trade, knowledge-intensive service sector exports, foreign income from patents and licenses.

The place achieved by the European Union regarding the performance of the innovative forces EU policy makers to address the systemic problems that persist in innovation, to achieve a better balance of performance between all categories of indicators that make up the composite indicator used to assess performance of innovations in Innovation Scoreboard.

As consequence of the issues raised by us, we explicitly emphasize the idea that the prosperity evaluation at the individual, families and organizations in modern society cannot be summarized, we believe, only to the precise quantifiable indicators that differentiate countries of the world. This is because the "equation" of technological progress for all Western countries not only within about 3 centuries revealed by itself some faces less favorable for the economic development. For example, reputable analysts discuss today more strongly the need to promote "moral capitalism" through which to reconcile the corporate interest (aimed at maximizing profits and conceives welfare only in terms of USD per capita with public interest) that with the common good of some groups / classes of the population range (we consider social groups at the margins of material subsistence even in rich countries such as retired, unemployed, disabled, etc.). (Young, 2008).

3. Conclusions

According to the European Commission almost all EU Member States have improved their innovation performance, but, however, increase innovation performance has slowed, and the EU does not cover the persistent gap in relation to world leaders in innovation, USA Japan and South Korea. For EU-27, the biggest gap remains at the innovation from the private sector. Innovation activities of enterprises are distinguished as an important factor to achieve leading positions in the EU and internationally.

In conclusion we believe that a country can not be considered truly competitive, using as instruments: cheap labor, subsidies, currency depreciation and economic development based on external borrowings. At one point, cheap labor can boost penetration of new markets, devaluation of the national currency - boosting exports, obtaining relative price advantages, contracting loans - funding expenditures. However, these tools do not contribute to the increase of total productivity of factors of production and can not ensure sustainable development of an economy. Following national competitiveness, the tools should be geared towards increasing productivity that would provide real higher incomes. Also, productivity can be achieved only by using skilled labor, implementation of modern technologies and innovations: process, product, system management, etc.

In this context, the national competitiveness found in the literature may be determined by several factors of internal economic environment.

I believe that the results confirm the need for more efforts to stimulate innovation to provide businesses an environment proper to innovation. Differences between the EU and the USA require urgent presence of a European Research Area for sending a new wave of competition to attract and retain top talent.

ACKNOWLEDGMENT

This paper has been financially supported within the project entitled „**SOCERT. Knowledge society, dynamism through research**”, contract number POSDRU/159/1.5/S/132406. This project is co-financed by European Social Fund through Sectoral Operational Programme for Human Resources Development 2007-2013. **Investing in people!**”

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