COMPETITIVENESS - KEY FOR ECONOMIC DEVELOPMENT. STUDY CASE AMONG THE CENTRAL AND EASTERN ECONOMIES IN EU

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ABSTRACT: *Competitiveness improvement represents a key element for promoting economic development, for reducing unfavorable constraints imposed by legal, institutional, economic and social factors for the income per capita and productivity convergence of less developed countries with the developed one's. The majority of emergent counties ensured themselves a reasonable level of macroeconomic stability and they are now focusing on competitiveness and productivity problems. Governments are reformulating their strategies and include in their programs to reach a higher level on competitiveness. A favorable investment environment is given in a big extent by a high level of competitiveness. For highlighting the key points regarding competitiveness in the Central and Eastern economies we selected a number of 7 countries (Romania, Poland, Czech Rep., Slovak Rep., Estonia, Latvia and Lithuania) for which we will analyze the competitiveness pillars.*

KEY WORDS: *competitiveness, pillars, Central and Eastern economies.*

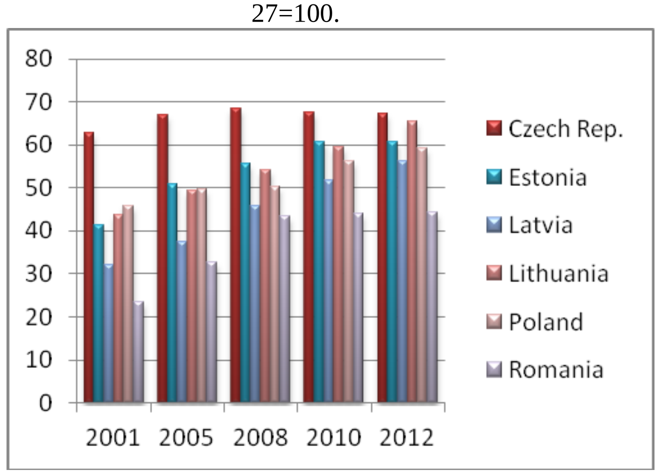
1. INTRODUCTION

For highlighting the actual problems of investment environment and for identifying possible solutions for the future, we will run an analysis, using both quantitative methods, but also qualitative, the performance of Romania being measured with the results for other 6 countries from Central and Eastern European space and with the average performance at EU 27 level, by using a series of Porter's Diamond indicators (data taken from Global Competitiveness Report 2013) [5]. We will take into consideration: the competitiveness advantage or disadvantage of the analyzed countries by comparing the score in the individual analyzed economies with the average score at EU 27 level; advantage/disadvantage intensity by comparing the difference between the individual country scores and the standard deviation at EU 27 level for each indicator.

For better understanding the quality of investment environment, we need to analyze the competitiveness level. As Michael Porter was describing in his famous work "On competition" [3], the country competitiveness is not referring in principle to the macroeconomic stability, workforce or public policies, but to productivity. A country is competitive when has the ability to develop the determinants of productivity and to increase the productivity rate.

From this perspective, Romanian competitiveness improved substantially in the last decade, by reducing the gap to the EU 27 average. Romanian productivity increased from 23.5% (2000) t 44.4% (2012) comparing with EU 27 average (figure 1). Still, is a big room for improvement, as in 2012, Romania was behind all analyzed countries, the higher productivity being in Czech Rep.

Figure 1. Labor productivity per hour worked. EU 27=100.



competitiveness analysis only by considering the productivity level represents a narrow view. We need to determine also the productivity of health and education system that counts more than half of Romanian employees from the public sector. One single indicator is not sufficient for the current analysis, as we need to consider also other qualitative factors. Porter developed an analysis framework for country competitiveness, known in the economic literature as Porter's Diamond. This is the most used and probably the most appropriate way to analyze the national competitiveness [4].

At his origins, Porter's Diamond had 4 dimensions:

- Offer conditions. Here we can include natural, human and financial resources, physical, administrative, informational and technological infrastructure. All these are contributing to the production factors specialization.
- Demand conditions. Here are included not only the factors for measurement and dynamics of the market, but also the degree of sophistication of local clients, innovational pressure on local competitors, market niches.
- The context for competitiveness and the company's strategy. We are referring to the local competitiveness intensity that can conduct to the investment environment stimulation.
- Upstream and downstream industries. Here we can include indicators related to the local suppliers and similar industries that can conduct to a vertical collaboration.

Porter's Diamond concept has been improved with two other components. One is the moral hazard that refers to the unpredictable and exogenous trends in the economy- for example, the increase of petrol international price, or, why not, a volcano eruption. The global economic crisis can be considered also a moral hazard factor. Thus, in an interconnected global economy, in which the countries are "economic agents" of the global market, those countries that have more information will be more protected from risks, and the others will pay for the negative consequences of those risks. The second aspect refers to the government role. Governments are influencing also the other faces of the diamond, especially the factors conditions (by increasing infrastructure and education investments). From a more narrow perspective, the government role refers to fiscal and budgetary policies. From a larger perspective, government role is a catalyzing one, for encouraging the development of companies, for facilitating the creation of specialized competencies, for ensuring safety and environment standards, promoting antitrust policies and stimulating investment in human capital, innovation and infrastructure [2].

2. COMPETITIVENESS ANALYSIS- PANEL DATA FOR SELECTED CENTRAL&EASTERN EUROPEAN ECONOMIES.

In this chapter we will highlight the results obtained by comparing the competitiveness indicators for specific central and eastern economies with the average of EU 27 from Porter's Diamond, by using data from Global Competitiveness Report 2013 [5], by taking into consideration:

- Competitiveness advantage/disadvantage by comparing the specific countries score with the EU average;
- Intensity of competitiveness (dis)advantage by comparing the score difference between selected countries and EU 27 average with the standard deviation for the data series for each indicator;
- Selected countries have competitiveness advantage/disadvantage if the score is higher/lower comparing with the EU 27 average;
- The intensity of advantage/disadvantage is in normal limits if matches with the level of standard deviation and is stronger if is higher comparing with the standard deviation.

2.1. Offer (factor) conditions

The results obtained for the factor conditions (table 1) are showing us an increased competitiveness in the Baltic countries, especially in Estonia. Romania, excepting the result for investor's protection, is under the EU27 average and most of the time under the other analyzed economies (figure 2).
A high quality for infrastructure and roads, investor's protection and a higher educational quality are decisive for economic development. Romania is vulnerable at several chapters on factor conditions, and this is driving to a high sensitivity at exogenous factors and increased volatility of economic growth trend.

Porter suggested 4 types of different stages for economic development:

- Economy based on factors (production factors);
- Economy based on investments ;
- Economy based on innovation (higher expenditure for R&D);
- Economy based on wellbeing.

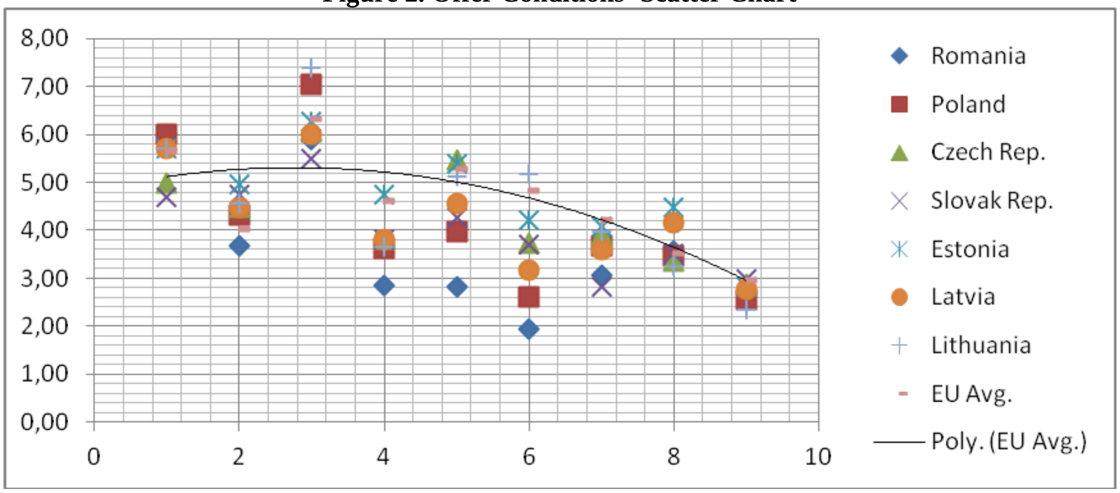
Romania was an economy based on factors, especially on natural resources and cheap workforce. In the communist period, Romania tended to be a premature state of wellbeing, in the sense in which the redistribution was higher than national wealth. In the first decade of 21^{st} century, Romania became an economy based on investments, if we consider the

FDI stock and very high rate for gross fixed capital formation. [5].

Table 1. Offer Conditions

	Romania	Poland	Czech Rep.	Slovak Rep.	Estonia	Latvia	Lithuania	EU Avg.	Std. Dev.	Competitive advantage
Investors protection	6.00	6.00	5.00	4.70	5.70	5.70	5.70	**5.65**	***1.56***	Romania, Poland
Salary corelation with productivity	3.68	4.31	4.47	4.75	4.95	4.49	4.55	**4.02**	***0.53***	Estonia
Enrolment in tertiary education	5.88	7.05	6.07	5.48	6.27	6.01	7.40	**6.33**	***2.00***	Lithuania
Intelectual property protection	2.86	3.63	3.82	3.80	4.75	3.81	3.66	**4.61**	***0.98***	Estonia
Infrastructure quality	2.83	3.99	5.47	4.27	5.38	4.56	5.13	**5.28**	***0.98***	Czech Rep.
Roads quality	1.94	2.62	3.73	3.70	4.22	3.16	5.17	**4.82**	***1.34***	Lithuania
Education quality	3.07	3.67	3.92	2.82	4.09	3.59	3.97	**4.22**	***0.85***	Estonia
Hiring and dismissal practicies	3.58	3.46	3.36	3.51	4.47	4.15	3.25	**3.52**	***0.67***	Estonia
Ease of accessing loans	2.70	2.55	2.88	2.98	2.84	2.77	2.33	**2.97**	***0.77***	Slovak Rep.

Figure 2. Offer Conditions- Scatter Chart



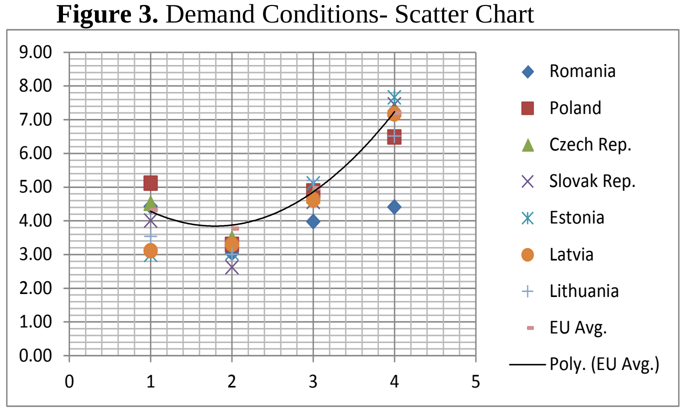
In most of the cases, as we can see in figure 2, the offer conditions in the analyzed countries are under the EU 27 average. In order to accelerate the catching-up process and to be more and more competitive in the European and global market, Central and Eastern Europe economies needs to improve the infrastructure, the quality of education and other key factor areas. Estonia has the best position among the analyzed countries.

2.2. Demand conditions

On the demand side, Romania has a competitive advantage compared with EU 27 average for the market size, but we need also to take into consideration the purchase power, that decreased after the crisis (household consumption contracted with more than 10%). The competitive disadvantage for Romania is obvious for the rest of the indicators (table 2), the results highlighting a low degree of sophistication among clients. This fact is determining companies to focus not on innovation, but on price, because clients are buying what is cheaper. Also, the client education is low (given by the level of internet users)- the situation can be improved with the help of public sector.

From the panel data, we can notice that from a market size perspective, Poland is very good positioned- this has been reflected also in the consistent results during the crisis (the only country with no negative growth in EU space).

Figure 3. Demand Conditions- Scatter Chart



Overall, in most of the cases the results for the analyzed economies are mainly under the EU 27 average. A plus is registered by the Baltic countries for the last 2 indicators. These results are highlighting the fact that they are making the transition to an economy based on innovation.

Table 2. Demand conditions

	Romania	Poland	Czech Rep.	Slovak Rep.	Estonia	Latvia	Lithuania	EU Avg.	Std. Dev.	Competitive advantage
Market size	4.41	5.12	4.51	4.00	2.98	3.11	3.53	4.32	0.97	Poland
Client sophistication degree	3.03	3.30	3.46	2.61	3.03	3.30	3.00	3.77	0.70	Czech Rep.
Client orientation degree	3.97	4.88	4.72	4.55	5.10	4.62	5.19	4.96	0.49	Lithuania
Internet users (%)/10	4.40	6.49	7.30	7.44	7.65	7.17	6.51	7.20	13.55	Estonia

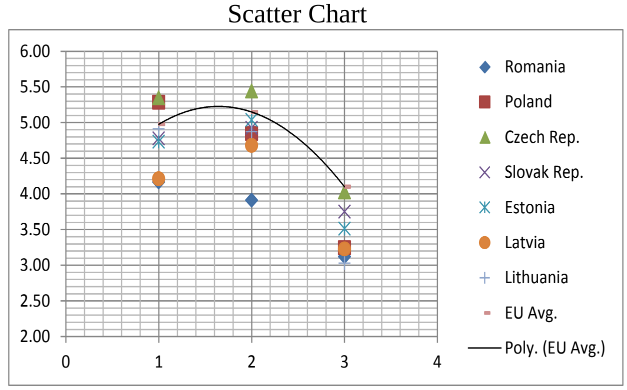
2.3. Upstream and downstream industries

The results for upstream and downstream industries are highlighting, with the exception of Czech Rep., the fact that the cluster development and local offer (quantity and quality) register a competitiveness disadvantage on the European market.

The local supplier's problem, even if it improved for Romania in the last period, remains opened, mainly from a qualitative point of view, the competitive disadvantage having a strong intensity. The biggest disadvantage is in the cluster area, and tends to be a systematic problem in all Central and Eastern Europe Economies.

The level of cluster development might represent for a country economy an important competitive advantage. A higher level of development can generate a sustainable development, influencing in a positive way both the economic side, by stimulating upstream and downstream linkages, but also the social side, considering the positive impact on employees or partners (public or private partners).

Figure 4. Upstream and downstream industries-Scatter Chart



Czech Republic is very well positioned among the analyzed countries, and has a competitive advantage also at EU 27 level, being over the result obtained for the EU 27 average.

Table 3. Upstream and downstream industries

	Romania	Poland	Czech Rep.	Slovak Rep.	Estonia	Latvia	Lithuania	EU Avg.	Std. Dev.	Competitive advantage
Local offer quantity	4.17	5.28	5.35	4.78	4.73	4.21	4.91	4.98	0.49	Czech Rep.
Local offer quality	3.91	4.85	5.44	4.92	5.04	4.68	4.87	5.15	0.56	Czech Rep.
Cluster development	3.12	3.25	4.03	3.75	3.51	3.23	3.03	4.10	0.76	Czech Rep.

2.4. Companies strategy

Regarding the company's strategy pillar, Romania has a high intensity disadvantage among all indicators. Without improved results in this area, Romania will not be able to pass to the next level of development, which is the one based on innovation.

Czech Republic and Estonia have an obvious competitive advantage among the analyzed countries, but also they are well positioned in European Union Space. The good performances will allow them to accelerate the catch-up process and to prepare for the next stage after innovation, the wellbeing stage.

Figure 5. Companies strategy - Scatter Chart

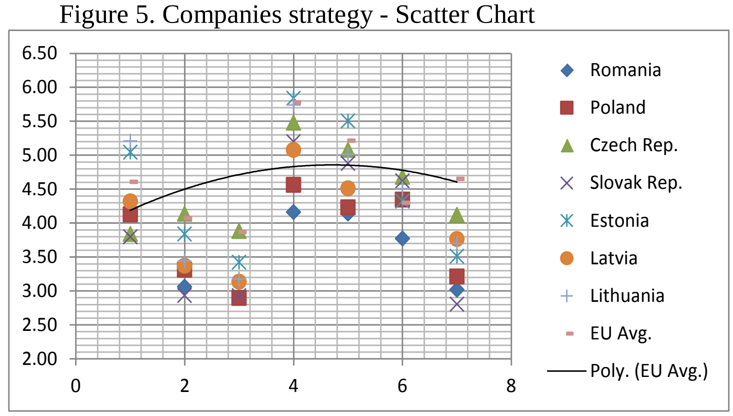


Table 4. Companies strategy

	Romania	Poland	Czech Rep.	Slovak Rep.	Estonia	Latvia	Lithuania	EU Avg.	Std. Dev.	Competitive advantage
Educational quality for mathematics and science	4.19	4.13	3.84	3.80	5.04	4.32	5.21	**4.61**	***0.68***	Lithuania
Local capacity for innovation	3.06	3.31	4.13	2.93	3.84	3.37	3.44	**4.07**	***0.92***	Czech Rep.
R&D companies expense	2.90	2.89	3.88	2.93	3.42	3.13	3.18	**3.87**	***0.96***	Czech Rep.
Availability of latest technologies	4.16	4.56	5.48	5.20	5.84	5.08	5.74	**5.78**	***0.70***	Estonia
Technological absorbtion	4.14	4.23	5.08	4.88	5.51	4.51	5.01	**5.21**	***0.64***	Estonia
Marketing development	3.77	4.35	4.68	4.62	4.32	0.40	4.51	**4.30**	***1.60***	Czech Rep.
Competitive advantage nature	3.02	3.21	4.12	2.81	3.51	3.76	3.70	**4.65**	***1.16***	Czech Rep.

2.5. Government Role

Making reference to fiscal and budgetary policies, Romania has a competitive disadvantage mainly because of low efficiency of public expenditure, diversion of public funds, but also of fiscal effects on economy.

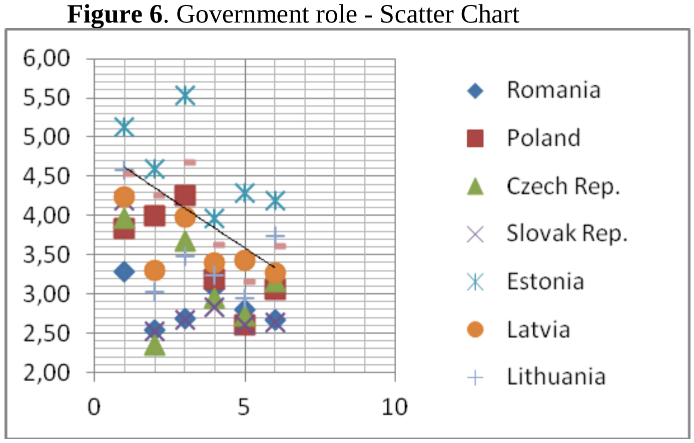
In particular, fiscal rules are representing the main obstacle for investment environment recovery, but there are consistent issues in the area of public policies, bureaucracy and corruption. Also, Romania has an intense disadvantage in the area of budgetary incomes (having the lowest share of budgetary incomes in GDP in the EU 27 area, under 32%).

The indicator for which Romania obtained the lower score is "diversion of public funds". Also, excepting Estonia, that has a competitive advantage in this area, all other countries are under the EU 27 average. This is reflecting the big deficiencies of public sector and the high degree of corruption (still a common thing among the Central and Eastern Europe countries). Therefore, the public funds are not directed on viable and efficient projects, that can bring on short term an incentive on economic development (upstream and downstream linkages, new jobs, infrastructure development, public-private partnerships), but more important on long term for creating the premises for a sustainable economic development.

The government role is mainly a facilitator one. Therefore, one of the pillars of the new European strategy is called "An industrial policy for the globalizing era". At national level, the government role, as it's defined in Europe 2020 Strategy, consists in:

- improving the business environment, especially for the small and medium enterprise, by using public policies that can encourage the innovative initiatives;
- improving the intellectual property protection;
- Public burdens reduction and improvement of legislative quality;
- Cooperation with interested parts (unions, consumers, academic environment, ONG's) for identifying and solving existent problems;
- public expenditure efficiency, by finding necessary resources for infrastructure and education investments and cluster development stimulation.

Figure 6. Government role - Scatter Chart



As we can notice in figure 5, Estonia has a strong advantage for all the analyzed indicators that is also reflected in the other pillars results. On long term, Estonia has the necessary framework to catch-up the developed economies and to make the transition to the economy based on welfare.

Table 5. Government role

	Romania	Poland	Czech Rep.	Slovak Rep.	Estonia	Latvia	Lithuania	EU Avg.	Std. Dev.	Competitive advantage
Government policies transparency	3.28	3.84	3.96	4.19	5.12	4.24	4.58	**4.53**	***0.73***	Estonia
Diversion of public funds	2.55	4.00	2.35	2.52	4.59	3.31	3.02	**4.25**	***1.33***	Estonia
Juridical independence	2.69	4.25	3.68	2.67	5.54	3.98	3.48	**4.67**	***1.26***	Estonia
Public acquisition of high-end products	3.08	3.19	2.95	2.83	3.97	3.39	3.24	**3.62**	***0.54***	Estonia
Burden of regulations	2.80	2.60	2.72	2.60	4.29	3.42	2.94	**3.16**	***0.68***	Estonia
Public expenditure efficiency	2.67	3.06	3.16	2.63	4.18	3.27	3.74	**3.60**	***0.65***	Estonia

3. CONCLUSION

Considering the results obtained by Romania, we can conclude that decision makers need to be focused on several important aspects for succeeding in ensuring a competitive and efficient investment environment. We can highlight the following directions: cluster promotion, through which the local economy will benefit in the near future of high technical progress, an increased level of knowledge, high specialized workforce; increased investment rates in infrastructure, education and sanitary system. All the above recommendations should be accompanied by an increased transparency of government policies and low diversion of public funds.

In our opinion, the best results were obtained by Estonia, which has a strong advantage in the "government role" pillar, but also in several other areas as: quality of education, users of internet, technological absorption and availability of latest technology- all reflecting the premises for further development and, most important, a solid investment framework that will attract investors in the future.

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