POLICIES FOR PROMOTING COMPETITIVENESS IN EASTERN AND CENTRAL EUROPE IN THE CONTEXT OF THE EUROPE 2020 STRATEGY

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Abstract

The present paper aims to identify the competitiveness gap between ten Eastern and Central European (ECE) countries and effective measures for bridging this gap. We find that Romania and Bulgaria are far behind the European countries that joined the European Union (EU) in 2004 in terms of competitiveness. Moreover, since the adhesion year, Romania and Bulgaria competitiveness improved very slowly, while other European countries accelerated their growth in terms of competitiveness. For this reason, the living standard of Romanians and Bulgarians increased very little compared to the increases in the rest of the ECE countries. For proving that increasing competitiveness drives an increase in GDP per capita, we also identify the gap between the actual GDP per capita and the potential GDP per capita if each of the analysed countries would apply the European Commission recommended measures for boosting competitiveness, as described in the Europe 2020 Strategy. We conclude that, unless harsh measures are imposed for increasing competitiveness, Romania and Bulgaria risk to remain far behind the rest of the analyzed countries. In this respect, we propose public policies actions based on other ECE countries good practices focused on the domains Romania and Bulgaria must improve.

Key words: Competitiveness, economic development, European Union, Europe 2020 Strategy, public policies

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1. Introduction

Today, economic competitiveness is the concept that stands at the bottom of the economic growth equation and the key concept of the current European strategy, due to its ability to provide the tools necessary for a strategic positioning in the global race. Still, not all the European countries are doing well in term of competitiveness, which hampers their chances of obtaining high rates of economic growth and a faster improvement of living standards.

Although there is not a universally accepted definition of competitiveness, it is already established that it has a major impact on economic growth. We find that competitiveness can be assessed on the internal market – or at the macroeconomic level, on international markets, at firm level and at industrial level. The common point of all these concepts is that competitiveness is seen as an enhancer for employment, research and innovation – in one word, for economic wealth.

Moreover, the competitiveness of a country is best assessed when compared to other economies. In this respect, urgent improvements in competitiveness are needed as literature and empirical analyses point to important differences in competitiveness between the old and the new EU member states. Therefore, in this research we try to identify the competitiveness gap between ten Eastern and Central European (ECE) countries that became members of the European Union (EU). We prove that this gap endangers the growth of living standards in Romania and Bulgaria and that urgent measure are needed in order to solve this problem.
In this respect, we proceed as follows. We start by analysing the literature related to competitiveness and we search a definition for this notion. We also emphasize the EU view over this concept. Then, we highlight some studies that also discuss about the gaps between the EU countries. In the second part, we prove that there exist a strong correlation between competitiveness and GDP per capita in the EU countries. Then we focus on the ten ECE countries and establish the gap between the actual GDP per capita and the potential GDP per capita if each of the analysed countries would apply the European Commission recommended measures for boosting competitiveness, as described in the Europe 2020 strategy. We also provide some good practice examples for improving competitiveness applied in the ECE countries. We conclude by suggesting that unless harsh measures are imposed for increasing competitiveness, Romania and Bulgaria risk to remain far behind the rest of the analysed countries.

2. Literature review

National competitiveness still remains an ambiguous notion given that the literature does not offer a universally accepted definition (Criste et al., 2008). When taking into account the macroeconomic approach, often the economic competitiveness is seen as the ability of a nation to offer a rapid and sustained improvement of living conditions, as the World Economic Forum states. Similarly, for the European Commission, the economic competitiveness represents the ability of a country to provide high living standards for the population and employment on a sustainable basis (Wziatek-Kubiak, 2006). The concept of competitiveness at European level gained momentum since 2000, once with the Lisbon Strategy. The Strategy purpose was to make the EU the most competitive economy in the world. Today, the main objective of the Europe 2020 strategy is also emphasizing the role of competitiveness in gaining economic welfare. The European view translates the economic competitiveness in terms of high rates of research and innovation, a good development of information and communication technology, entrepreneurship, competition, education and training.
Delgado et al. (2012) have an interesting way of expressing competitiveness. The authors refer to the expected level of output per working-age individual in determined conditions such as the quality of the country for doing business. In this respect, the author considers that there are three drivers that influence the expected output: social infrastructure and political institutions, monetary and fiscal policy, the microeconomic environment.

On the other hand, some authors refer only to country competitiveness on international markets (Scott and Lodge, 1985), while others prefer to be more comprehensive, defining competitiveness at firm level, industrial level and, finally, at international level (Arslan and Tathdil, 2012).

All in all, there is a strong perception that competitiveness improves the living standard of a country. For example, in a White Paper of the United Kingdom government, competitiveness is seen as the capacity of raising living standards (Eltis and Higham, 1995). Today, EU officials recognise that "growth and employment can only be achieved through competitive enterprises" (European Commission, 2013, p.1). The capacity of competitive countries to be more attractive even for foreign investors is signalled in Popovici and Calin (2012). Foreign direct investments are responsible for enhancing the economic development of countries, as stated in the literature.

When discussing about competitive regions, we can distinguish two meanings. The first one is defined by the area or the surface of a town, for example, in the same country, characterised by specific economic, social, demographic and cultural factors. The number of researchers trying to establish models for regional competitiveness is increasing (Brooksband, 1999; Huggins, 2003; Beger and Bristow, 2009; Bristow, 2010). The second meaning is referring to a block association, such as the EU. All in all, it is clear that the growth potential of a country can be stimulated by increasing local and regional competitiveness through creating a healthy climate for entrepreneurship, innovation and investment. For the Organisation for Economic Co-operation and Development (OECD), competitiveness is expressed in terms that take into account the social purpose, meaning the capacity to ensure relatively high income from the exploitation of inputs and higher income from promoting employment. OECD states that competitiveness represents the degree to which a country can produce goods and services that pass the test of foreign competition while maintaining and expanding domestic real income (OECD, 2010).

The EU enlargement encompassing ECE countries issued debates as concerns the structure of Europe in terms of competitiveness. Agnew (2001) asks if the continent is divided into a "core" Europe, a "peripheral" Europe constituted of eastern countries trying to obtain full membership and the "external" Europe that is exclude from membership. The author proposes as a solution for this divided Europe more policies focused on economic competitiveness and regional distribution.

Fischer et al. (1998) evaluate the gap between ECE countries and Western EU countries by assessing the "distance" from Brussels in three different ways: relative to income gaps, to macroeconomic performance and the progress in adopting market-based systems. The main conclusion is that the income level in ECE countries is close to the low-income Western EU countries, but the gaps still remain large. In terms of macroeconomic performance, ECE countries are not far from accomplishing the Maastricht criteria and also in obtaining a market-based system, although both progresses in privatization and in reforming the financial

reforms are lagging behind. As a conclusion, 30 years are needed for the ECE countries to catch up with the Western EU countries income level.
Sanfey and Zeh (2012) find that differences in terms of competitiveness between the countries in South Eastern Europe that have joined, or are about to join the EU, continue to exist. The authors states that these countries need robust economic growth enhanced by deep structural and institutional reforms that generate an increased competitiveness and a greater ease of doing business.
Brunet (2013) suggests that the periphery of the EU is confronting with deficits on productivity and competition. While the euro area states saw a growth in competitiveness through reforms and applying ruled policies, not the same happened for the rest of the EU countries. On the contrary, we assist to an increased gap between these two groups of countries precisely because of these measures.

3. Research methodology, results and discussions

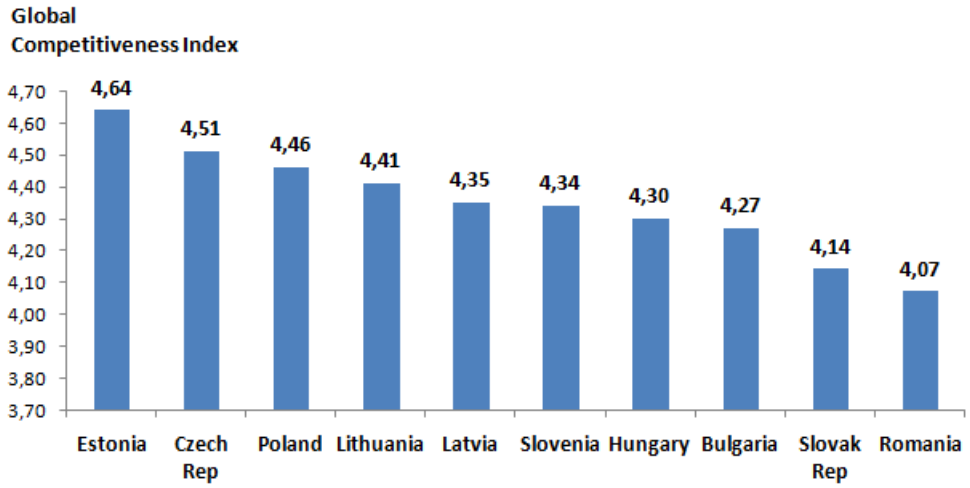
In this paper, our aim is to find the answer for several research questions:

- To assess the competitiveness level and the evolution of the living standards in ten ECE countries since the EU adhesion;
- To identify the competitiveness gap between the analyzed countries;
- To establish if there is correlation between the competitiveness of the analyzed countries and the GDP per capita as an expression of the living standard;
- To determine the potential increase in GDP per capita if each of the analysed countries would apply the European Commission recommended measures for boosting competitiveness, as described in the Europe 2020 Strategy.

In this respect, we analyze ten ECE countries, among the newest EU countries: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. We are interested in these countries as all of them have a similar background of transition and joined the EU about the same time, therefore their economic development should be almost similar. For assessing competitiveness, we use the Global Competitiveness Index, developed by World Economic Forum in its Global Competitiveness Report 2012-2013 and the GDP/capita in euro at market prices as provided by Eurostat in 2004, 2007 and 2012. In order to assess to what extent an increase in competitiveness causes an improvement in living standard, we employ the scores provided by World Economic Forum in their report „The Europe 2020 Competitiveness Report". We use this report as the analyzed countries have to follow the European Commission recommended measures for boosting competitiveness in the Europe 2020 strategy horizon. The composition of the Report's general competitiveness score is described below.
Today, competitiveness gaps persist between the ten ECE countries that became members of the EU, as indicated by the Global Competitiveness Report 2012-2013. Among these countries, Romania, Bulgaria and the Slovak Republic have the worst performance in terms of competitiveness, as can be seen in Figure 1. Estonia and

the Czech republic, although they are small countries, are the most competitive countries among the group we analyzed.

Figure 1. Competitiveness score in ECE countries in 2012, according to the Global Competitiveness Report



Source: Global Competitiveness Report 2012-2013

It is not surprising therefore, taking into account the conclusions found in the literature relating to the strong influence of competitiveness on the living standards, that the living standard of Romanians and Bulgarians increased very little compared to the increases in the rest of the ECE countries. Moreover, since the adhesion year, Romania and Bulgaria competitiveness improved very slowly, while other European countries accelerated their growth in terms of competitiveness, as shown in Table 1.

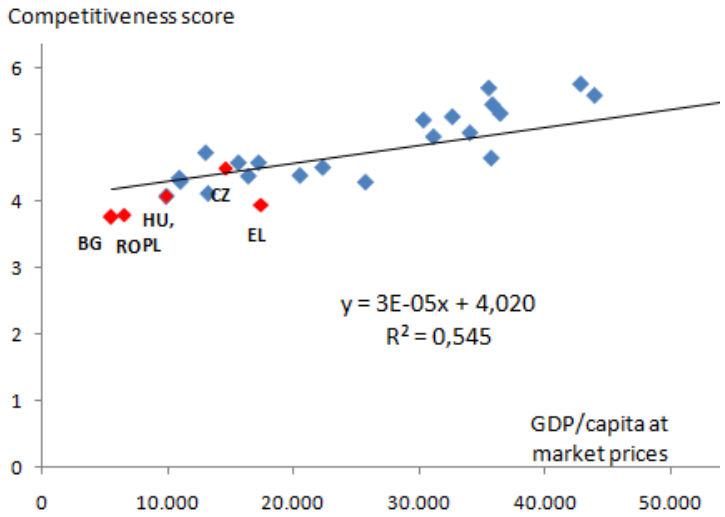
Table 1. GDP/capita in ECE countries. Comparison between 2012 and the adhesion year

Country	GDP/capita in euro at market prices			Difference (%) from the adhesion year
	2004	2007	2012	
Bulgaria		4,000	5,500	37.5
Czech Rep	9,000		14,600	62.2
Estonia	7,200		13,000	80.6
Latvia	4,900		10,900	122.4
Lithuania	5,400		11,000	103.7
Hungary	8,100		9,800	21
Poland	5,300		9,900	86.8
Romania		6,000	6,500	8.3
Slovenia	13,600		17,200	26.5
Slovak Rep	6,300		13,200	109.5

Source: Eurostat and authors' calculations

There are three countries out of ten that doubled their standard of living (Latvia, Lithuania and the Slovak Republic). Romania has the worst improvement, by only 8.3% in terms of GDP/capita in 2012 compared to 2008. We still must take into account the three years difference between the adhesion year of Romania and Bulgaria and the rest of the ECE countries. Estonia and the Czech Republic, the most competitive countries in 2012, also saw important increases in the living standards between 2004 and 2012, of 80.6% and 62.2% respectively.
As stated in the literature, we find a strong correlation between competitiveness and economic development at the EU level, as competitiveness final scope is to promote higher living standards and thus to encourage employment. We test for this correlation among the EU member states in 2012 and find strong evidence in its favour, as shown in Figure 2. We used the competitiveness score as calculated in „The Europe 2020 Competitiveness Report" launched in 2013 by World Economic Forum and the GDP/capita level expressed in euro at market prices, as provided by Eurostat.

Figure 2. Correlation GDP per capita/level of competitiveness



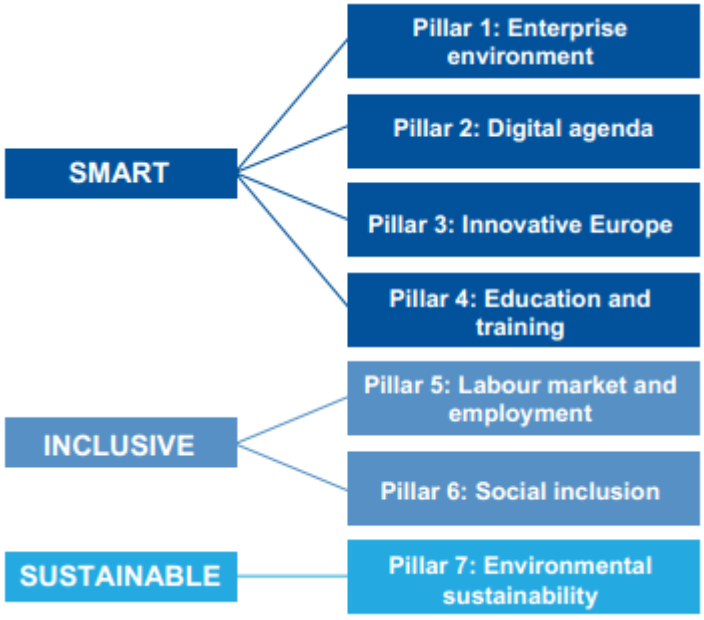
Source: author's calculations

As figure 2 points out, there is a strong correlation between the competitiveness score of each EU country and its GDP/capita expressed in euro at market prices. On the figure, there are emphasized the countries in the ECE, the least developed in terms of competitiveness and standard of living.
In this respect, we are interested how a change in competitiveness could contribute to increasing the GDP per capita level. We identify the gap between the actual standard of living and the possible level of standard living if each of the countries

would improve their competitiveness to the best level recorded of the EU countries by taking into account the European Commission recommended measures for boosting competitiveness in the Europe 2020 strategy horizon. We apply a similar approach as in Demekas et al. (2007), that launch the concept of potential FDI for the host countries and estimate the additional FDI that can be attracted if each of the governments would apply the optimal policies in terms of labour, corporate tax system and infrastructure and Bellak, Leibrecht and Stehrer (2008) when analysing the role of public policy in closing FDI gaps. Our main contribution lies in applying this methodology for establishing the potential increase in the living standard if improving competitiveness. The steps of the empirical analysis are described below, as we are conducting our own analysis.

For measuring competitiveness, we use the scores provided by World Economic Forum in their report „The Europe 2020 Competitiveness Report". The report provides a general competitiveness score, based on seven key dimensions that are grouped in three sub-indexes. The first one is the „Smart Europe" sub-index, composed by four pillars that could contribute for developing smart economies: the enterprise environment, digital agenda, innovative Europe and education and training. The second sub-index is the „Inclusive Europe", composed by two pillars: labour market and employment and social inclusion. Finally, the last sub-index is the "Sustainable Europe" composed by only one pillar expressing the environmental sustainability, as presented in Figure 3.

Figure 3. Europe 2020 Competitiveness Report Framework



Source: World Economic Forum, Europe 2020 Competitiveness Report, 2013

In order to see what component of the competitiveness score countries should improve, we use the values employed in „The Europe 2020 Competitiveness Report" of the World Economic Forum for calculating the competitiveness score.
Therefore, we will estimate the potential GDP/capita if each of these countries will apply the best practice in terms of smart, inclusive and sustainable economy in Europe. We proceed as follows. For each of the variable above, we establish a benchmark, which represent the best practice among the analyzed countries and also based on the EU average. The results are presented in Table 2. Sweden is the EU champion in terms of smart and sustainable growth, while Denmark is placed the first in terms of inclusive growth.

Table 2. The values of the variables in case of best practice

	Smart Europe	**Inclusive Europe**	**Sustainable Europe**
Benchmark level	5.76 (**Sweden**)	5.98 (**Denmark**)	6.31 (**Sweden**)
EU average	4.65	4.76	4.73

Source: World Economic Forum, Europe 2020 Competitiveness Report, 2013

Subsequently, for each country, we calculate the distance which separates it from the benchmark level, using the percentage difference according to equation 1:

Distance from the benchmark = (value at the benchmark level$_i$ – the value of the variable in each country$_i$)/ the value of the variable in each country$_i$ (1)

where i represents the component of the competitiveness score (namely, smart, inclusive or sustainable growth). The results are presented in Table 3.

Table 3. Distance as compared to the best practice or to the EU average

	Best practice			**EU average**		
	Smart	**Inclusive**	**Sustainable**	**Smart**	**Inclusive**	**Sustainable**
Bulgaria	0.56	0.50	0.75	0.26	0.20	0.31
Czech Rep	0.32	0.24	0.51	0.06		0.13
Estonia	0.20	0.28	0.35		0.02	0.01
Hungary	0.42	0.41	0.71	0.14	0.12	0.28
Latvia	0.42	0.36	0.14	0.15	0.08	
Lithuania	0.34	0.42	0.37	0.08	0.13	0.03
Poland	0.41	0.50	0.50	0.14	0.19	0.13
Romania	0.58	0.49	0.59	0.28	0.18	0.19
Slovak Rep	0.47	0.37	0.38	0.19	0.09	0.03
Slovenia	0.31	0.26	0.25	0.05	0.01	

Note: The blanks indicate that the country already reached and exceeded the EU average.
Source: authors' own calculations

We can conclude that all the countries in ECE could improve their standard of living by increasing competitiveness and the majority would do better in terms of competitiveness by only coming close to the EU average.
We multiply the results by the weight of each variable that compose the competitiveness score. As the competitiveness score is made up by seven pillars, we give equal weight to each pillar and then we calculate the weight of each sub-index. Therefore, we obtain a weight of 57.14% for Smart economy, 28.57% for Inclusive economy and 14.2% for Sustainable economy. This value represents the hypothetical percentage change of GDP/capita, ceteris paribus. The results are presented in table 4.

Table 4. The hypothetical percentage change of GDP/capita to a change of each competitiveness variable to the best practice or to the EU average

	Best practice			EU average		
	Smart	**Inclusive**	**Sustainable**	**Smart**	**Inclusive**	**Sustainable**
Bulgaria	32.05	14.36	10.62	14.80	5.60	4.39
Czech Rep	18.00	6.73	7.29	3.47		1.89
Estonia	11.57	8.09	4.99		0.61	0.17
Hungary	23.93	11.72	10.02	8.25	3.50	3.94
Latvia	24.13	10.35	2.00	8.41	2.41	
Lithuania	19.58	11.92	5.32	4.74	3.66	0.42
Poland	23.33	14.25	7.13	7.77	5.51	1.78
Romania	33.28	13.93	8.37	15.79	5.26	2.70
Slovak Rep	27.04	10.71	5.36	10.75	2.69	0.45
Slovenia	17.49	7.55	3.58	3.06	0.18	

Note: The blanks indicate that the country already reached and exceeded the EU average.
Source: authors' own calculations

Romania and Bulgaria could improve most their standard of living by investing in the Smart component of competitiveness. These two countries are at over 30% distance from the best practice provided by Sweden. Bulgaria and Poland will have the greatest gain if promoting the Inclusive component of competitiveness, while Bulgaria and Hungary should improve their Sustainable component of competitiveness.
As regards the comparison to the EU average, Romania and Bulgaria are the most distant from the average, being at around 15.8%-14.8% below the average in terms of the Smart component of competitiveness. Slovenia and the Czech Republic have the best performance among the analyzed countries. Bulgaria and Poland must recover a gap of around 5.5%-5.6% as compared to the EU average in terms of Inclusive competitiveness, while Bulgaria and Hungary are at 4.4%-4% distance from the EU average.
The nominal value of the GDP/capita increase is presented in table 5. We multiply the previous results by the GDP/capita value in euro for each of the analyzed countries, registered in 2012.

Table 5. Potential increase of GDP/capita

	Best practice			EU average		
	Smart	**Inclusive**	**Sustainable**	**Smart**	**Inclusive**	**Sustainable**
Bulgaria	1762.98	789.62	584.13	814.14	307.95	241.34
Czech Rep	2628.44	982.48	1063.94	506.50		276.21
Estonia	1504.25	1052.06	648.27		79.70	21.96
Hungary	2344.71	1149.00	981.64	808.13	343.38	385.72
Latvia	2629.71	1127.90	218.32	916.44	262.47	
Lithuania	2153.74	1310.70	585.32	521.48	402.15	46.13
Poland	2309.77	1410.67	706.25	768.90	545.84	175.91
Romania	2163.16	905.43	544.04	1026.40	341.85	175.66
Slovak Rep	3568.69	1413.13	708.02	1419.62	355.45	59.57
Slovenia	3008.60	1298.64	615.45	525.78	31.17	

Note: The blanks indicate that the country already reached and exceeded the EU average.
Source: authors' own calculations

This method allows us to establish the level of GDP/capita that could be obtained as compared to the actual moment (namely with 2012, the year of our analysis) if the countries would apply measures in order to increase competitiveness. We find that the Slovak Republic could add over 3,500 euro to its GDP/capita by applying measures for increasing its Smart competitiveness to the level registered by Sweden, other over 1,400 euro for measures representing Inclusive competitiveness and 700 euro for Sustainable competitiveness. The Slovak Republic would have the highest increase in GDP per capita if improving the Smart and the Inclusive components of competitiveness and the Czech Republic if would focus its efforts on improving the Sustainable component of competitiveness.

Moreover, it would be enough for the analyzed countries to reach the EU average for having a higher GDP/capita. For example, if Romania would promote competitiveness for reaching the EU average, its GDP/capita will increase by 1,544 euro: 1,026.4 euro from the Smart component, 341.85 euro from the Inclusive component and 175.66 euro from the Sustainable component of competitiveness.

The logical question is how to enhance competitiveness. We have examples of good practice even among the analyzed countries.

For example, Lithuania seized the fact that has a low high-tech production based on research and innovation, of only 0.8% of total production. Therefore, Lithuania developed the High technology development programme during 2011-2013. The goal is to support the competitive high-tech manufacturing and production by promoting a strong collaboration between science and business. Lithuania counts on the collaboration between universities and companies. The overall budget is 2.23 million euro.

Poland has a similar programme for implementing the results of research and development works in the high-tech area. The programme is focused on supporting the production of the electronic elements, production of the optical instruments, production of the basic pharmaceutical substances, production of the IT equipment

etc. The goal of the Polish programme is to establish a knowledge-based economy. The programme is addressed to both SMEs and large enterprises established in Poland. Total budget is 780 million euro.
Hungary offers support to market-oriented R&D activities in strategic fields for the competitiveness of the economy, such as medical sciences, pharmaceuticals, agricultural science, IT programming etc.
The Slovak Republic encourages the demand for green product-service systems by including the criteria of Green public procurement in the procurement contracts of the administration.
Each of these programmes could be adapted to the own country specificity and used for increasing competitiveness and thus obtaining an improvement in the living standards.

4. Conclusions

It becomes clear that, unless harsh measures are imposed for increasing competitiveness, Romania and Bulgaria risk remaining far behind the rest of the analyzed countries.
In this respect, the role of the state is extremely important, as it is the state that establish the "rules of the game" and could contribute at creating an attractive business environment, at diminishing bureaucracy and corruption and, especially, at establishing strategically sectors for the economic and focusing financial resources there.
First of all, Romania and Bulgaria should establish their economic goal on the long term and then to propose, in collaboration with the private environment, strategic sectors for the economy. At this moment, Romania does not have a competitiveness or an industrial policy paper as guide.
Secondly, the support programmes should concentrate on the specific sectors mentioned above. The examples of Lithuania, Poland and Hungary are appropriate for supporting this proposal.
Thirdly, not only the private environment should employ the measures for improving competitiveness, but also the public environment, such as the example of the Slovak Republic.
There is need of collaboration between the public and the private environments. If urgent measures are not taken for improving competitiveness, the population living standard is at stake and Romania and Bulgaria risk of not taking part at the full benefits of the EU.

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