# **Economic Growth and European Funds Absorption in Central and Eastern European Countries**

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Abstract: Integration of Central and Eastern countries in European Union assumes obtaining certain benefits. Upon joining the European Union internal market and free movement of labour, absorption of European funds could help the convergence go on and reduce disparities between countries. This study aims to provide insights in regionalization, absorption of European funds and economic growth. There are various ways of defining the regional growth. The most common refer to the increase of the total output of a region, output increase per employed person, output increase per capita. In turn, the output can be assessed by the gross production of a region, the region's gross domestic product or net domestic product of that region. The paper proposes an integrated analysis of European situation by means of data and statistics provided by European and national statistics institutions. A better absorption of European funds can lead to growth and economic development and thus reduce regional economic disparities. One of the main objectives should be the absorption as much financial support as possible by continuous efforts from the Central and Eastern European Countries and also regional and local government involved in every stage of the process.

Keywords: economic growth; regional development; funds; integration; budget

JEL Classification: E61; F02; F15; P47

### 1. Introduction

The United Nations Organization defined the term Central and Eastern Europe as a region composed of: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Greece, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia, Republic of Macedonia, and Ukraine. During the 90s, after the fall of the Berlin Wall and the democratization of Central and Eastern Europe countries, the enlargement has become a fundamental priority of the European Union. So far, six steps of

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extending the Community which initially consisted of six Member States (Belgium, Germany, France, Italy, Luxembourg, and Netherlands).

Currently, Croatia, the former Yugoslav Republic of Macedonia and Montenegro are candidate countries for EU membership. The European Council also offered all Western Balkan countries - Albania, Bosnia and Herzegovina, Serbia and Kosovo – the EU accession perspective in a more or less distant future. <sup>1</sup>

Among all the EU extensions, the eastward enlargement in 2004 was the most challenging in the history of European integration, both due to the number of member states that joined the European Union - EU increasing number of people around the 380 to 485 million, but also due to the gross national product (GNP) difference between the old and new EU members. A comparison of GDP per capita shows that the richest new member states did not exceed 40% of the EU-15, the differences being even larger if we relate to the wealthiest member states of the old union.

Considering the regional disparities (Constantin, 2010) in economic growth could be various ways of defining the regional growth. The most common definition of economic growth refers to the increase of the total output of a region, per employed person, and per capita. In turn, the output can be assessed by the total (gross) production of a region, the region's gross domestic product or net domestic product of that region. For example, a region may show, at the same time, a small increase of total output and a rapid increase in output per capita if the process of emigration from those particular region records significant levels during the period the study is conducted. (Timbergen, 1965)

According to the neoclassical model, which emphasizes the role of the supply, the regional economic growth leads to convergence in economic and social development of regions. On the other hand, in the vision based on the models of post-Keynesian approach of demand (model based on export potential, the cumulative causes model), the regional economic growth emphasizes the divergence.

Regional growth-related theories have evolved gradually, marked at the beginning by the opinion according to which regions had been regarded as non-spatial elements of the national economy, later on space was taken into consideration explicitly. In the first category the following models are included: the neoclassical model (based on the principles issued by Marshall), the model of cumulative causation, (Myrdal, 1957) the model based on export potential, (Aghion & Bolton, 1987, pp. 388-401) econometric models, (Czamanski, 1964, pp. 177-200; Klein &

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/economy\_finance/international/enlargement/index\_ro.htm. http://europa.eu/legislation\_summaries/enlargement/2004\_and\_2007\_enlargement/index\_ro.htm. 178

Goldberger, 1955; Harris & Todaro, 1970, pp. 126-146), input-output models (Leontief, 1966, pp. 223-257; Richardson, 1972)

As an alternative perspective to the traditional models, recognizing the spatial component importance can be seen in theories and models such as: the center peripheral model and that of the development corridors (Friedmann, 1966); spatial variants of the growth poles theory (Boudeville, 1966); analysis of the influence of congestion and the "hinterland" effects on the size and distance of urban areas (von Böventer, 1963, pp. 163-187); discussing the role of transport and polarizing forces in regional growth (Siebert, 1969); development axes theory (Pottier, 1963, pp. 63-95); analysis of the spatial diffusion of innovations. (Hägerstrand, 1967)

As a consequence of the comparative approach of the two major trends, a widely-discussed theory resulted, and it refers to the competitive or generative character of the regional growth. Competitive growth models imply that the possible rate of the national economic growth is to known and that it examines the forces that determine the way in which the given rate of the economic growth between regions of the system will be distributed. In these models the growth of a region will always take place at the expense of the other. Many of the traditional theories on regional growth (cumulative causality, neoclassical theory, etc.) belong to the category according to which regional growth is regarded as a competitive growth. The national growth rate is determined exogenously and regional economic analysis function is only to distribute this growth between regions. The need to include these spatial variable models is very low since every region is treated as if it were an economic sector.

According to the generative growth models, the regional dimension is much more emphasized. This type of models considers that the national economic growth rate is a result of the growth rates of the regions. In this view the entire increase is spatially oriented, i.e. the increase in any part of the national economy is based on a particular location. The growth performance of a region can be improved without inducing any adverse effects on the growth rates of neighboring regions. Thus the increase induced by the innovation process can be included in this context: congestion and spatial proximity of activities in certain cities or regions may induce innovation rates higher than the one that would be recorded in the absence of congestion. Similarly, changes that may occur in intra-regional distribution of production factors, facility, for instance, by an efficient intra-regional transport system, can also increase production efficiency and regional growth rates.

The importance of this spatial impact on regional growth is overlooked when dealing with models that are focusing on competitive growth. This particular phenomenon, in which intra-regional spatial efficiency of a region can have a feedback effect upon the rate of aggregate economic growth, is called generative growth. The competitive growth models think that if the production factors are

distributed efficiently across regions the economic growth rate should be maximum; the generative models reinforce the need for commitment to stimulate favorable conditions for economic growth within each region, rather than to divert the resources from other uses which are possibly even more productive, in other regions.

### 2. Methodology

The use of models in economic fields is influenced by numerous conditions and factors. Only parts of these are registered in the statistic data. These models are influenced by a great variety of local, national and European decisions. In order to reach the objective of the present paper, numerous sources and materials have been appealed to, focusing on data regarding economic growth and European funds. All things considered, this paper aims to conduct and develop an objective analysis of the current state of regionalization, absorption of European funds and economic growth in Central and Eastern European Countries using data and statistics provided by European and national statistics institutions.

## 3. Economic Growth in Central and Eastern European Countries

On the background of the current financial crisis started in 2007, have been analyzed the performances of European growth models applied in the Central and Eastern Europe, attempting to identify the causes and effects that led to an economic growth or, on the contrary, to a contraction.

Three types of growth models have been highlighted.

Model of a sturdy, sustainable (Poland) growth characterized by: large domestic market, which minimizes the economy dependence on exports and allows Polish companies to maintain the high level of local sales compared to those on foreign markets; a diversified economy; an youthful human capital that is based on young professionals who came back to Poland after finishing their studies abroad; an important number of "regional clusters", which differentiates Poland from other Eastern-Central European countries that have economic and commercial centers in their capitals; the 1990 shock therapy helped the country to manage the economy.

The measures of macroeconomic stabilization and extensive liberalization (broadening the economic freedoms by removing the various limitations imposed by the State) have triggered major institutional reforms (both at legislation and enterprise levels) that climaxed with the growth of private companies and investors attracting – an element essential to supporting the sustainable economic growth

Model of moderate growth countries (Czech Republic, Slovakia, Slovenia, and Romania) characterized by: moderate rates of economic growth; slowdown in disinflationary process; maintaining the current account deficit at a high level in the context of a high volume of direct foreign investments; implementation of the inflation direct targeting strategy in the context of continuing the capital account liberalization; loosening up the revenues policy and advancing a pro-cyclical fiscal policy; a sustained decline in inflation rate is necessary for boosting the investment process as foundation for a sustainable economic growth.

Model of countries with an economic contraction (Bulgaria, Hungary, Baltic States)

Hungary was distinguished by a lack of diversity, its development model mainly emphasizing the exports. Being faced with a current account deficit Bulgaria became vulnerable in front of crisis while the Baltic countries passed from boom to a sudden drop. However, the countries of Central and Eastern Europe enjoy a competitive advantage over the other emerging markets, being located in a central area and benefitting both from structural and cohesion funds with a view to modernization, development and from attracting Western investors due to the human capital held. Thus, for the purpose of economic recovery, the East - European countries have to improve their models either by looking on the Polish model or by finding the variables that must be pursued depending on their economic profile.

Table 1. EU10 Growth

	2010	2011	2012
EU 10	2.1	3	2.1
Bulgaria	0.2	2	2
Czech Republic	2.2	2.1	1
Estonia	3.1	7.6	3.5
Latvia	-0.3	4	2.8
Lithuania	1.3	5.8	3.5
Hungary	1.2	1.7	0.5
Poland	3.8	4	2.9
Romania	-1.3	1.5	2
Slovenia	1.4	1.3	1.4
Slovak Republic	4	3	1.5

Source: The World Bank Report 2012

Regarding economic growth, with global prospects worsening and financial markets stalling, private demand has not been able to pick up the slack from public demand. As a result, with the exception of Estonia, Latvia, Lithuania and Poland, domestic demand remains weak. Furthermore, as domestic demand has failed to take off, unemployment persists at elevated levels. Only Estonia, Lithuania and Latvia have made some headway in reducing unemployment rates from the peaks

during the crisis, and even there they are still more than three times the pre-crisis levels.

There is an obvious connection between the cohesion policy and economic growth in the EU. Studies have shown that the GDP in EU-25 as a whole was 0.7% higher in 2009 due to the cohesion policy investments throughout 2000-2006. This is estimated to increase to 4% by 2020. In the EU-15 was estimated a cumulative net effect on GDP of 3.3% until 2020. The cohesion policy during 2000-2006 has led to a refund of  $\in$  2.1 for each invested euro. By 2020, the refund is estimated at  $\in$  4.2 per invested euro. Also, the cohesion policy contributed to the raise of employment.

# 4. European Funds Absorption in Central and Eastern European Countries

In the period 2007-1013 EUR 209.1 billion, including national public contribution could be spent on the improvement of economic and social policy. The budgets have been set according to different considerations among Member States through their National Strategic Regional Framework Programmes.

Interventio Bulgari Czech Hungar Polan Romani Slovaki Sloveni n type Republi d a a  $\mathbf{c}$ 7.4 38.2 5.4 **Population** 10.5 10 21.4 2.1 (million) Annual 38.8 154.7 95.5 363.6 119 67.5 36.2 GDP(EUR) GDP per 5,225 14,684 9,564 9,518 5,555 12,410 17,644 capita(EU R) Available 4% 15% 14% 40% 11% 6% 2% budget (%)

Table 2. Population, GDP and available budget for 2007-2013

Source: EUROSTAT

Out of the total allocation, the beneficiaries in the 10 CEE have been committed EUR 139.9 billion, which is the two-thirds of the total available budget.

Regarding payments, by the end of 2011 more than 43% of the contracted grants 60.8 billion EUR were distributed to the beneficiaries. Between these countries, top performers are Estonia, Latvia, above average performers are Bulgaria, Lithuania, Czech Republic and below average performers are Slovakia, Slovenia, Hungary, Poland and Romania.

The problems in using the funds in general and the funds for infrastructural, environmental, e-administration and R&D may result from poor feasibility study development, limited knowledge's about how these funds may be used and poor project management skills and poor practice.

Table 3. Contraction ratio for 2007-2011 based on the budget for 2007-2013

Interventi on type	Bulgar ia	Czech Repub lic	Hunga ry	Pola nd	Roman ia	Slovak ia	Sloven ia	Total CEE progre ss
Environm ent	59%	25%	57%	67%	81%	67%	20%	61%
Transport	124%	94%	74%	59%	50%	50%	33%	67%
Healthcar e	N/A	N/A	66%	84%	N/A	100%	N/A	81%
Human resource developme nt	65%	79%	72%	72%	82%	86%	75%	76%
Energy	N/A	54%	58%	34%	14%	79%	34%	48%
Economic developme nt	62%	74%	74%	70%	53%	53%	65%	70%
Public sector	59%	74%	44%	56%	46%	42%	N/A	55%
TA	59%	59%	79%	47%	24%	84%	97%	56%
Innovatio n R&D	N/A	82%	36%	68%	69%	62%	N/A	70%
Settlement	76%	79%	60%	66%	58%	77%	N/A	70%
Total progress	79%	72%	64%	63%	63%	64%	59%	67%

Source: KPMG Report 2012

During 2007-1013, 139.9 billion EUR worth of grants have been granted by the 10 Central and Easter European Countries. This amount is 67% of the total available budget allocated for 2007-2013. The majority of grants, 102.24 billion EUR, 73% of total contracted grants, have been contracted by transport, human resources, economic development and environment related projects. Regarding payment ratio, Bulgaria has 16%, Czech Republic 39%, Hungary 29%, Poland 28%, Romania 14%, Slovakia 28% and Slovenia 38%.

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<sup>&</sup>lt;sup>1</sup> KPMG Report 2012.

### 5. Conclusions

The Central and Eastern Europe integration in the EU should bring them significant benefits. Along with joining the EU internal market and free movement of labor the absorption of EU funds could help the process of convergence and diminish the disparities between countries.

The EU integration needs to advance radical reforms in the economic and social areas, to extend the modern technology transfers through trade and direct foreign investment, to increase the workforce mobility, including the highly skilled, the administrative and institutional reform.

An efficient use of the structural funds is generally conditioned by the quality of governance and, in particular, by the public administration institutions. One of the reasons slowing down the disparities decrease and convergence achievement is the inefficient use of structural funds by the beneficiary countries, through using untrained staff within the directly involved public institutions, EU funding in areas with low economic impact, using inadequate government policies.

The regional integration has the purpose to enhance the income in the region, which may be achieved through getting higher economic results by using the production factors more efficiently, increasing their mobility and benefiting from the access to a comprehensive knowledge base. This income increase leads to higher savings and a larger productivity of marginal capital, which further induces the capital increase.

All the countries in the Central and Eastern Europe which joined and will join the EU had and will have to take reform measures having the objective of: adaptation towards the accomplishment of intended purpose - establishing a leadership based on law, a market economy, participation in the European integration process and the actual contribution to these objectives. With a view to reaching these objectives, each country should have taken regulations and compensatory measures for reducing the economic and social problems caused by the process of transformation.

The impression that a market economy development and foreign capital attraction can be achieved by simply promulgating certain law packages has always been false. The reality proved otherwise. The actual risk today is that while the legislation provides the necessary essential conditions, in practice its enforcement may not work satisfactorily.

### 6. Bibliography

Aghion, P., & Bolton, P. (1987). Contracts as a barrier to entry. *The American Economic Review, Vol.* 77, no. 3, 388-401.

Boudeville, J. (1966). Problems of Regional Economic Planning. Edinburgh: University Press.

Constantin, D.-L. (2010). Economie Regională. Teorii, modele, politici/Regional Economics. Theories, models, policies. Bucharest: ASE.

Czamanski, S. (1964). A model of urban growth. Papers of the Regional Science Association 13, 177-200

Friedmann, J. (1966). Regional Development Policy. Boston: MIT Press.

Hägerstrand, T. (1967). Innovation diffusion as a spatial process. Translation and postscript by Allan Pred. Chicago: University of Chicago Press.

Harris, J., & Todaro, M. (1970). Migration, unemployment and development: a two-sector analysis. *The American Economic Review* 60, 126-146.

Klein, L. R., & Goldberger, A. (1955). An Econometric Model of the United States, 1920 - 1952. Amsterdam: North-Holland Publishing Co.

Leontief, W. W. (1966). Input-Output Economics. New York: Oxford University Press.

Myrdal, G. (1957). Economic Theory and Under-developed Regions. London: Methuen & Co Ltd.

Pottier, P. (1963). Axes de communication et dévelopment économique/Axis of economic communication and devolopment. Revue économique/Economic Review, Vol. 14, No. 1, 63-95.

Richardson, H. W. (1972). Input-Output and Regional Economics. New York: Halsted Press.

Siebert, H. (1969). Regional Economic Growth: Theory and Policy. Scranton, Pennsylvania: International Textbook Company.

Timbergen, J. (1965). International Economic Integration. Amsterdam: Elsevier Publishing.

von Böventer, E. (1963). Towards a united theory of spatial economic structure. *Regional Science Association; Papers, X, Zürich Congress, 1962*, 163-187.

KPMG Report 2012.

#### **Online Sources**

www.ec.europa.eu

http://ec.europa.eu/economy\_finance/international/enlargement/index\_ro.htm.

http://europa.eu/legislation\_summaries/enlargement/2004\_and\_2007\_enlargement/index\_ro.htm.