

STUDY ON THE CAUSES OF REGIONAL ECONOMIC DISPARITIES IN ROMANIA

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Successive enlargements of the European Union have led to increasing heterogeneity of the development levels of the states and regions members. The Romanian development regions are among the most poorly economically developed European regions and are regarded as economies based on production factors where the development of economy is mainly triggered by the poorly qualified labour and the natural resources.

This paper aims to analyse and to identify the factors lying at the bottom of regional development and the causes of Romanian regional disparities, by comparative analyse and the break down the basic development indicators into their components.

The regional economic disparities from Romania tend to be more prominent due following causes: low level of development of most regions, structure of economy dominated by economic sectors with a low productivity; the low research-innovation potential; the low share of the population having a higher education, reduced capacity of the poorly developed regions to withhold the highly qualified labour, the weak development of infrastructure, particularly poor quality of infrastructure networks.

Romania stays anchored in a development model characterized by an anachronous economic structure, a poorly qualified labour, a slow accumulation of capital and a reduced sustainability of the development rate.

Keywords: disparities, economic development, region, factors, convergence

Clasificarea JEL: O11, O47, R11, R13

1. Introduction

Given the high heterogeneity of the development levels of the states and regions members of the European Union, the regionally policy occupies a central place within the European Union policies. According to the European Committee, in every fourth region of the widened Europe GDP/per capita is below 75% from the EU average, a fact determining the eligibility of regions for the Convergence of the European structural funds objective” (The European Committee, 2006). These “convergence regions” have several characteristics: low levels of GDP and occupancy, they share within the total GDP of the EU being only 12.5%, as compared to 35% for the total population of the EU (Béla Szörfi 2007: 101).

The main objective of the EU regional policy is the increase of the economic welfare and the bringing near of the development levels of regions, the obtaining of the economic and social cohesion meaning the reduction of the economic and social inequalities among the European regions. The economic cohesion is a desiderate followed by the European Community ever since its setting up, so it was mentioned in Article 130a of the Treaty of Rome for the setting up of the European Community. Article 3 of the European Union Treaty stipulates „European Union must work for a sustained development of Europe based on a balanced economic increase and.. promote the economic, social and territorial cohesion and solidarity within the member states” (European Union 2006: 118).

The important themes of the European Union cohesion policy are the following:

1. Competitiveness which is the central theme of the regional and economic and social cohesion policy. Otherwise, in a report of the European Committee (2002), the EU experts wonder whether the policy of industrial agglomerations itself may be the “landmark” of the EU’s reference

objective, namely to become the most competitive region in the world until 2010. In concordance with the mutations produced in the evolution of theories and models for economic increase and development, the Lisbon Agenda put in the centre of attention the economic growth based on the technologic progress and employment.

2. The active policies related to the labour market focus on the encouragement of employment, the consolidation of the social cohesion and reduction of the poverty risk and incidence.

3. The sustainable development means the orientation of the regional policies towards the attaining of the objectives established by Goteborg agenda (2001).

2. Literature review – Economic development and regional disparities

According to the large economic thinking currents that lay at the bottom of formulation of increase/development theories and models, the support of the regions left behind so as to recover the gap separating them from the developed regions may be achieved in two ways: regional development policies and measures (Keynesian and post-Keynesian approaches) and promotion of the economic liberalism (neoclassical approaches) leading to the general economic progress.

A controversial issue related to the regional growth disparities refers to the medium-long term vision on the consequences of regional growth. Based on Solow's model (1956), the neoclassical economists underlying the role of demand within the regional growth came up with the idea that the regional disparities diminish once with growth.

On the other hand, Myrdal (1957) and other post – Keynesians sustain that the regional growth process is a spatial cumulative one leading to the increase of regional inequalities.

Williamson (1965) shows that in the initial stages of development, when investments in the physical capital are the main engine of economic growth, inequality stimulates growth through the orientation of resources towards those who save money and invest more. Conversely, in developed economies, the accumulation of the human capital replaces the accumulation of physical capital as the main engine of growth. Williamson sustains that in the initial stages of a country's development, there are increases of regional disparities whereas in more advanced stages, development may lead to regional convergence.

The issue of disparities in the regional economic development gives rise to intense discussions among the development theorists since the goal of regional development is not just the one of identifying methods for the promotion of economic growth and structural changes in economy, but also of improving certain social aspects such as health, education, the work conditions etc. An important problem is to find an adequate manner for the analysis of the regional growth and development processes, to identify the factors contributing to accentuation or diminution of disparities. Depending on the purpose for which they make the measurement of the economic growth and disparity analysis, we may use the following indicators: increase of total output, increase of output per employed person, increase of output per capita.

The identification of causes of regional disparities supposes the identification of the causes leading to the interregional gap of GDP/inhabitant. Thus, we may identify four factors tightly connected to the interregional differences of GDP/inhabitant: structure of the economic activity, the size and potential of the research/innovation activity, region's infrastructure and accessibility, education and labour qualification (Ciupagea C et al. 2004: 115).

The studies carried out show that between the abovementioned factors influencing the regional GDP and the economic growth potential, there is a relatively strong connection (Ciupagea C. 2004). Thus, the developed regions are characterized by high employment rates in high productivity sectors (industry, constructions and services, mainly productive/producers' services) whereas the poorly developed regions are characterized by large shares of employment in agriculture, a fact that hampers the economic growth. At the same time, a high level of education as well as the existence and development of an adequate infrastructure favours economic growth. The framework for the analysis of regional development and the accentuation/reduction of the interregional disparities should be extended on other factors related to the mutations and

evolutions occurred within the EU economic policies at world level. Thus, knowing that the engine of capitalist economy is represented by the free initiative and competition among entrepreneurs, it is necessary to include in the regional analysis the residential population's capacity to take the risks and responsibilities afferent to the private initiative, to generate the technical progress and innovating activities that might propel them in leading positions of the market, to benefit from competitive advantages created by the property rights.

Regardless of the economic theory or theories shaping the regional development policies at a certain time, a decisive role in the general progress of the region might be played by the social innovations. They refer to the capacity and will of individuals, enterprises and public entities (central or local) to collaborate in order to adapt and permanently improve the economic policies so as to ensure the balance between the capitalization of the factors lying at the bottom of the economic progress and the changes occurring in the economic realities.

3. Research methodology

The different approaches of economic theories and policies related to development must identify and take into account the factors that may lead to the economic convergence or non-convergence among regions and countries. (Ray Debraj 2008). In order to analyse the traditional indicator of the development level – GDP per capita – and to study the causes of its evolution at regional level, it is useful to break it down and study the influence of six factors on the economic development level. These factors mainly refer to the structural characteristics of regions such as: structure of economy, demographic structure, relative competitiveness of factors, efficiency of operation of the local market and labour, productivity differences – given the regional structure of the industrial mixture, the differences in the occupancy rate – given the regional demographic structure (Bruno Bracalente and Cristiano Perugini 2008: 2). This paper aims to analyse and to identify the factors lying at the bottom of regional development and the causes of Romanian regional disparities, by comparative analyse and the break down the basic development indicators into their components: structure of the economic activity, the size and potential of the research/innovation activity, education and labour qualification, region's infrastructure.

4. Research results - Causes of regional economic disparities in Romania

The comparative regional analyses of our country indicate that there are no developing regions where the economic progress and the development level are uniform in all the composing counties and areas/spaces. In most regions, despite their diversity, we must consolidate and capitalize the factors lying at the bottom of development from the free market perspective (Ciupagea C et al.2004: p117). Thus, besides the activity domains of social interest we must stimulate the economic activities making the object of private initiatives from all fields.

Table 1 Indicators of regional economic disparities 2007

Indicator \ region	GDP/inhab. PPS/inhab.	GDP/inhab. % in EU average	GDP/employee EUR (2006)	Income of private household (PPS/inhab)
North East	6600	27	6583,8	4064,4
South East	8400	34	9219,1	4669,7
South	8500	34	8741,8	4478,5
South West	8100	33	7918,2	4705,5
West	12000	48	12476,1	5757
North	10000	40	10109,2	5000,8

Indicator \ region	GDP/inhab. PPS/inhab.	GDP/inhab. % in EU average	GDP/employee EUR (2006)	Income of private household (PPS/inhab)
West				
Central	10500	42	11225,7	5015,4
Bucharest	23000	92	21505,4	9296,3
Romania	10400	42	10496,2	7053
EU27	25000	100	53074,6	18976

Source: Achieved by author based on data Eurostat, Regional statistics, Regions and Cities

The Romanian development regions are among the most poorly economically developed European regions and this fact is shown by Eurostat statistics and documents that characterize the economies of the regions from our country as having a medium development level and so they are regarded as economies based on production factors where the development of economy is mainly triggered by the poorly qualified labour and the natural resources. The only region making an exception and falling into the category of intermediate regions is Bucharest-Ilfov region that registered in 2007 a GDP/inhabitant of 92.2% from UE27 average (Paola Annoni and Kornelia Kozovska, 2010).

The heterogeneity of levels of regional economic development in Romania is very high (table 1). Thus, the North-East region is by far the most poorly developed of the regions of our country characterized by a GDP per inhabitant 3.48 times lower than that of Bucharest-Ilfov region and 3.8 times lower than the average GDP of UE27. PIB/inhabitant of the North-East region established as a share from the average GDP/inhabitant of UE27 is 27%, one of the lowest of all the EU development regions. At the same time, the available income of the private households is about 2.3 times lower than that of Bucharest region and 4.7 times lower than the average income of UE27.

An explanation of these gaps in terms of the GDP per inhabitant is the low work productivity from the development regions of our country as compared to the average productivity of UE27. Thus, the work productivity of the North-East region, expressed as a ratio between the regional GDP and the employed population, is 1.6 times lower than the national average, about 3.3 times lower than the Bucharest region and 8.1 times lower than the average productivity of UE27 regions. The low level of regional work productivity may be attributed to the structure of regional occupancy by activity fields (table 2).

Table 2 Regional economy structure - Employed population by sector 2006

Sector/region	N-E	S-E	S	S-V	V	N-V	C	B
Agriculture	47,7	32,5	35,4	46,4	18,7	29,4	16,8	2,1
Industry	23,1	27,9	32,4	24,1	41,3	32,6	41,7	28,2
Services	29,2	39,6	32,2	29,5	40,0	38,0	41,5	69,7

Sursa: Achieved by author based on data Eurostat INSSE, Statistici regionale

In 2006 the structure of the activity fields was dominated by agricultural activities in the most poorly developed Romanian regions, 47.7% in the NE region and 46.4% in the SW region. The more developed regions (Bucharest-Ilfov, Central area, the Western area) are characterized by a better employment in the industrial and service providing sectors with a work productivity superior to the one in agriculture. We also may notice in all regions a shifting of the labour from agriculture towards the non-agricultural branches, the share of employment in agriculture

registering a descending trend. However, the transfer rate of labour from agriculture to industry and services was faster in the more developed regions (central area, western area) than in the more poorly developed regions (NE, SW, NW). The inadequate structure of economy and the high importance of the sectors characterized by a low work productivity in employment and GDP explain why the Romanian economy has known a larger GDP contraction: -7.1% in 2009 and -1.3 % in 2010, as compared to the UE27 average: -4.2% and 1.8% (Eurostat). Accentuation in time of the interregional disparities from Romania is highlighted by increase of dispersion of the regional GDP/inhabitant from 12.8 in 1995 to 35.3 in 2007, whereas for the entire UE27 the regional GDP/inhabitant has a slightly decreasing trend from 35.4% in 2001 to 32.7% in 2007. An important role in the process of development of regional economies is played by the access of residential population to education and professional training. EU regional statistics shows that the share of the population aged between 20 and 24 years included in the tertiary education is higher in the regions with economy more developed: Bucharest 248.9%, the Western area 66.3%, the central area 55.5%; and lower in the in the less developed regions: North East 34.2%, South Muntenia 19,7 %, South West Oltenia 36,4 % South East 32.7% (data from 2008). These weights have seen an upward trend during 2002-2008 in all regions, but this was more pronounced in developed regions. The share held by the development region of Bucharest (248.9 %) shows that the academic education institutions from the country's capital city attract students from other development regions. The highly qualified human resources are attracted towards the developed regions offering a better access to the labour market and remuneration.

Table 3 The extent and potential of research / innovation activities **2008**

Specification	Human res. In science and tech. (% ec. act. pop.)	Researchers, all sect. (% total empl.)	Employment in high-tech sect. (% of total empl)	Total intramural R&D expend. (eur/inhab.)	Total intramural R&D expend. (% GDP)
North East	17	0,12	1,31	15,7	0,39
South East	18,5	0,06	1,21	9,5	0,18
South	16	0,13	1,23	18,9	0,35
South West	18,5	0,09	0,95	10,5	0,21
West	21,8	0,11	4,16	21,6	0,31
North West	22,4	0,16	2,03	25,8	0,45
Central	22,2	0,1	1,71	8,6	0,14
Bucharest	42,2	0,97	6,55	224,9	1,42
Romania	-	0,31	5,6	37,6	0,58
EU27	-	1,04	6,59	481,6	1,92

Source: Achieved by author based on data Eurostat Eurostat, Regional statistics, Regions and Cities

Current models of development in advanced countries and regions, focus on promoting a knowledge-based economy, technological progress, research and innovation (Romer 1986, Lucas 1998, Aghion și Hewitt 2009), but Eurostat data show that the most regions in Romania are not yet able to implement such a model (table 3). The shares of human resources involved in the research and high tech activities are higher in the developed regions than in the less developed ones. Thus, the north-east region which is the weakest of all the Romanian development regions was characterized in 2008 by 0.12% population employed in scientific research as compared to 0.97% for Bucharest region and 1.04% the UE27 average. At the same time, employment in the high-tech sectors was in 2008 of only 1.2 % in the North-East region as against 5.45% in Bucharest-Ilfov region and 6.59% the EU average. In 2008 the research-development expenses per inhabitant from the north-east region were 14.3 times lower than the ones from Bucharest-Ilfov region and 30.7 times lower than the average of UE27 regions. However, these expenses

have registered an ascending trend for all regions and the gaps tend to slightly diminish. In 2008, the Romanian development regions allocated for the research-development expenses shares between 0.14 (the central region) and 0.45% from the GDP (north-west region) as compared to 1.42% from the GDP in Bucharest-Ilfov region and 1.92% which is UE27 average. The involvement of the private sector in the research-development activities in the Romanian regions is extremely reduced as compared to the UE27 average. Thus, the share of the private sector within the average research-development expenses per Romanian inhabitant was 30% whereas the regional average of UE27 was 63.2%.

The data presented above show that the development model of the Romanian regional economies comes into contrast with the current trends of the development models from the European developed countries and regions. Thus, if the main engine of development of the regional economies from the developed countries is the research-development-innovation activity and the development of the innovating sectors characterized by high technologies, the Romanian development model is characterized by an inadequate structure of economy where the agricultural sector absorbs a very large part of the active population.

5. Conclusions

The regional economic disparities from Romania tend to be more prominent due to the low level of development of most regions; thus Kuznetz's and Williamson's hypotheses, according to which in the initial stages of a country's development, there are increases of regional disparities whereas in more advanced stages, development may lead to regional convergence, are confirmed. At the same time, we may notice the existence of some regional growth poles (the country's capital city, Bucharest, and several more important towns of the country) where the factors favorable for development are concentrated: internal and foreign capital, highly qualified labour and the research-innovation activity.

Among the causes of accentuation of the regional economic disparities we can stand out:

- the structure of economy dominated by economic sectors with a low productivity of the production factors. In the most poorly developed region of the country the population is preponderantly employed in agriculture what explains the reduced regional productivities. Unfortunately, the transfer rate of labour from agriculture to the non-agricultural sectors is a very slow one, due to the slow development of the entrepreneurial initiatives of the residential population, mainly in the industrial domains and services having a high technological level.
- the low research-innovation potential due, on one hand, to the insufficiency of the financial resources allocated from the state budget and the poor implication of the private sector in funding the research-innovation activities and on the other hand, to the insufficient human resources weakly motivated and the migration of the highly qualified labour and the people having a higher education towards the developed regions offering better perspectives for employment in fields of competence, better jobs and remuneration. To stimulate the research-innovation activity, it is first of all necessary to develop the business environment and to promote social innovations, the collaboration among the research institutions, the private organisations and the public institutions.
- the low share of the population having a higher education as compared to the developed regions due to the reduced capacity of the poorly developed regions to withhold the highly qualified labour. Another drawback refers to the quality of the training activity and the capacity of education to offer the labour skills and competences required in the labour market. To a certain extent, this explains the weak collaboration or the lack of communication between the business environment and the educational institutions so as to highlight the deficiencies in the formation of labour and to identify the skills/abilities necessary to ensure the access of graduates to the labour market.

As a general conclusion, while the developed countries discuss the passing from the development models focused on the accumulation of production factors to models centered on innovation and

the human capital with high skills and competences, Romania stays anchored in a development model characterized by an anachronous economic structure, a poorly qualified labour, a slow accumulation of capital and a reduced sustainability of the development rate.

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