

# REGIONAL ECONOMIC DISPARITIES IN ROMANIA. COMPARATIVE ANALYSIS OF THE NORTH-EAST AND WEST DEVELOPMENT REGIONS

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## **Abstract:**

*In Romania, the territorial development differences have historical, cultural and economic roots. The industrialization process, from the communist period, but also the structural changes that were implemented during the transition to a market economy had a long run impact on the regional development disparities. However, it was noticed that these gaps have increased very much after the fall of the communist regime. A regional policy was promoted only after 1998, when a law was promulgated in this field. Romania's development regions, created at the European Union suggestion in order to reduce the territorial development differences, are NUTS II statistical units. Even though they have been created for more than 10 years, there are significant development differences among Romania's regions, especially between the West region (the second one from the development point of view), which has a diversified infrastructure and a high and qualified demographic potential, and the North-East region (the least developed), which is among the EU poorest regions. Considering all these aspects, in the present paper we intend to identify the factors that have generated these disparities and to analyze the evolution, during time, of the development gaps between the two regions, with the help of the macroeconomic indicators. In order to achieve these objectives, we have collected and analyzed the information included in various empirical studies, yearbooks, statistical databases and reports.*

**Key words:** development regions, economic development, regional disparities, West region, North-East region

**JEL classification:** P25, R11, R13, R23

## **1. INTRODUCTION**

Starting with the last half of the past century, but especially during the last 20 years, the analysts' interest for geographical aspects of economic development has increased. Until 1950s, the economists have shared the introspective point of view, specific for the geographers, focusing on a descriptive approach of the areas, which reflected the usage of the land, the production and the commercial exchanges of goods that took place in different geographical areas. This type of approaches can be found at some economists such as Johann Heinrich von Thunen, Arthur Weber, August Losch, Herbert Hoover, Walter Isard or at the geographer Walter Cristaller.

Over the past few years, a so-called "geographical economy" has developed, based on the spatial agglomeration of the industries and on the long-term convergence of the regional incomes. Pioneers in this direction were Paul Krugman, Michael Porter, Robert Barro and W. Brian Arthur. Thus, subjects which initially were of interest only to the economists and geographers, are currently investigated by sociologists, political scientists as well as by researchers from other subfields of social sciences. This increased interest of the researchers from different areas is largely due to the recognition of the fact that "space matters", meaning that the processes which generate national innovation and economic growth are essentially related to space.

While Jeffrey Sachs (2005) tries to explain the regional differences through the inherent geographical differences from various parts of the world or through the population's tendency to form megalopolises, Paul Krugman argued for a synthesis of the location and trade theories in order to use geography as an important component in building a new "geographical economy" of trade. The purpose of Krugman's analysis (1991) is to show how a country can develop from the center, heavily industrialized, to the agricultural periphery, through the scale economies, differentiation of the products and of the transport costs. According to Krugman, the center will attract both workers,

because of a greater variety of differentiated products, and also companies, as they have a large workforce and provide a broad outlet market for their goods.

This idea promoted by Krugman is not new if we consider that, even since the middle of last century Francois Perroux talked about the space as a network supported by centripetal forces, idea which was the basis for most of the growth poles theories (Perroux, 1950). According to Perroux's point of view, a growth pole represents the links between companies and industries. "Propulsive firms" are those very large companies that generate growth through inter-industry linkages. While Hirschman (1958) develops this theory of linkages between an industry's firms, Boudeville (1966) places Perroux's approach into the spatial context.

Despite the fact that most analysts of the regional development problem are concerned to understand the process of regional increase and decrease, there is a lack of consensus regarding the way the region should be defined. Some analysts believe that it would be appropriate a definition which to include geographical, administrative, economic, historical and social aspects (Pearse and Thomas 1968; Dawkins 2003). A more popular approach among economists defines the region in terms of "nodal" spatial and labor market interdependence (Hoover and Giarratana, 1985). The concept of "functional economic area", developed by Fox and Kumar (1994), is also based on the nodal approach and implies the fact that the dominance of the central node on the surrounding periphery is due to the spatial addiction of the workers to adjacent employment centers. This approach provides a theoretical basis for defining "the economic zones" in the way that they are mentioned by the Department of Commerce Bureau of Economic Analysis from the USA.

At the European Union level, developing a common regional policy involved a clear definition for "region", which was associated with that of a well-defined territory that can be described, analyzed, economically managed and planned. The essential element of a region is the common interest regarding the welfare and development in order to stimulate the socio-economic progress. The European Union has created a common classification of the territorial units, called NUTS (Nomenclature of Territorial Units for Statistics), with 5 levels from which the most important are the first three. The EU regional development policy is made at the NUTS II regions.

The regional development policy is essential for EU because its main objective is to reduce the economic and social disparities between the various regions of the Union. Created as a policy of solidarity in Europe, the regional policy is mainly based on financial solidarity, which means the redistribution of a part of the Community budget to the poorer regions and social groups.

In Romania, eight development regions were established in order to be applied the regional development policy. Each region comprises several counties. The development regions are not administrative-territorial units and they do not have legal personality; they resulted from an agreement between the county and local commissions. The main areas covered by the regional policy are: business development, labor market, investments, technology transfer, SMEs sector, infrastructure, environment, rural development, education, health and culture.

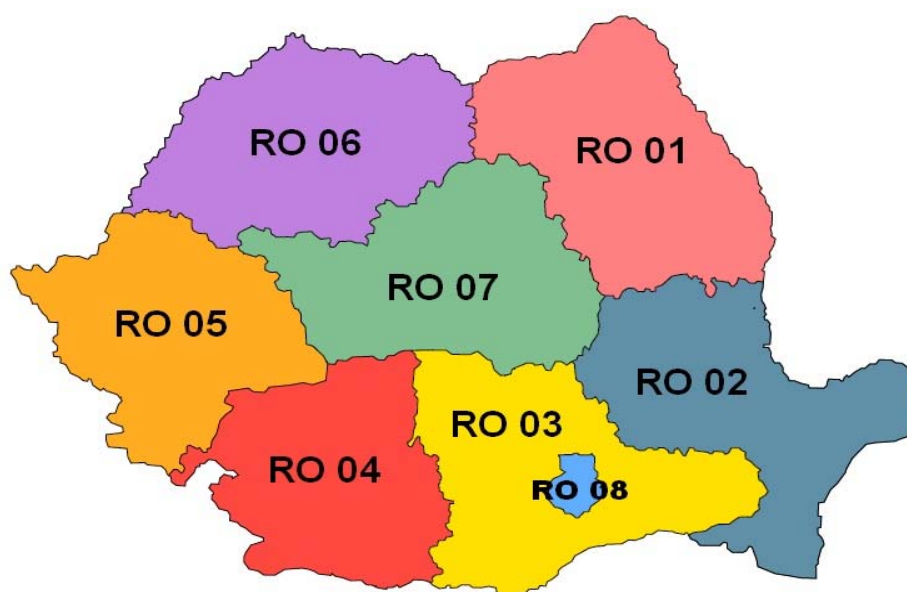
After 1989, the decline of the economic system made difficult to approach the issue of territorial priorities, one of the main concerns of the regional development policy. The period of transition to a market economy has continued to reflect the problems generated by communism. Thus, the transition process was difficult and long, marked by radical changes among all institutions, by restructuring the ownership and distribution rights, the organizational and political framework, as well as the formal and informal rules that regulate the relations between citizens, organizations and government (Schrieder, Munz and Jehle, 2000).

During this transformation process, the role of the European Union was decisive. In the process of adhesion to the European Union, Romania has faced a considerable pressure in meeting the criteria regarding the rules and principles of regional common policy, which aimed to reduce the disparities between regions. In 1998, in Romania eight development regions were created (NUTS II territorial division), in order to meet the EU requirements and to stimulate the national structural policies. These regions were created in the context of the promulgation of a law on regional development, subsequently amended in 2004.

In the present paper we intend to make a general approach of the factors that influenced the regional disparities that currently exist in Romania and to analyze the economic and social situation of two development regions: the North-East (least developed) and the West region (the second one according to the development level), using the data provided by the statistical yearbooks and reports regarding the macroeconomic indicators.

## 2. DEVELOPMENT REGIONS IN ROMANIA – GENERAL APPROACH AND DETERMINANTS OF THE DISPARITIES

The first of the eight development regions created in Romania is the North-East one which, despite the fact that it is the largest and most populous, is the least developed. Development region 2 (South-East) is the most culturally heterogeneous, as it includes two counties of Moldova, two of Muntenia and two from Dobrogea. From the point of view of the economic development, region 2 is close to the national average. South region (Muntenia) is also an underdeveloped region, because it comprises four counties with a low level of development; however, it also includes three counties with a high economic development level (Prahova, Argeş and Dâmboviţa). A fourth development region is the South-West (Oltenia), with a similar level of development as the region 2 (South-East). West region is the second most developed region of the country, after Bucharest. Region 6 (North-West) is a developed area, with values of the macroeconomic indicators similar to those of the national average. The development region number 7 (Center) ranks third among the developed regions in Romania. The most highly developed is region 8 (Bucharest-Ilfov), which includes the capital. These eight regions may be seen in figure no. 1.



**Figure no. 1. Geographical location of the eight development regions of Romania**

In terms of economic and social development, the regional disparities are increasing in the country, according to the Regional Operational Program 2007 – 2013. Analyzing the statistical data, we can see that, at the beginning of the transition period, Romania had relatively low regional disparities, compared to other former communist countries in Eastern Europe. This, however, does not suggest a positive situation, since after the fall of Communism all regions of the country were underdeveloped. The regional disparities have increased rapidly, since the mid-1990s, the Bucharest-Ilfov region significantly standing out from the rest of the regions. Except this region, which has a unique situation in the socio-economic context of the country, we can see that the development followed the West-East direction, the proximity to Western markets being among one of the factors that influenced the economic growth.

Comparing the situation of the Romania's regional disparities with that of other European countries, we see some similarities. Thus, both in Romania and in other countries such as Austria or Germany, while the most developed region includes the capital, the least developed areas are along the border. Analyzing Romania's macroeconomic indicators, we see that the areas located on the last places in terms of development are concentrated in the North-East part, on the border with Republic of Moldova, and in the South, along the Danube. In these areas the underdevelopment is closely related to unemployment, to the lack of attractiveness for the foreign investors and also to the predominance of rural activities. Thus, both in the North-East and South regions, agriculture has a significant share among the economic sectors and the level of foreign investments is much lower than in other regions. Enjoying a favorable geographical position, closer to Western markets, and a lower dependence on the primary sector, the West, North-West and Center regions have attracted more foreign investors, fact that significantly influenced the economic development of these areas.

Apart from the above mentioned causes, which have influenced the economic development, there are also a number of other key factors, such as the training of the labor force, the internal or international migration (we notice that the less developed areas have a high number of emigrants attracted by other developed regions of the country or by other countries), the infrastructure which in the North-East region is the least developed, the distance to the sources of raw materials and the absorption capacity of the market.

As we can see, all these factors are closely related to each other, so that a less favorable geographic location and an underdeveloped infrastructure significantly reduce the attractiveness of a region for foreign investors. This fact may diminish the degree of industrialization of the area, the training level of the workers and hence the amount of the revenue. In this context, individuals will be motivated to focus on those locations, internal or external, which could provide them a higher living standard.

Once recognized the existence of the disparities between regions, it is necessary to quantify them. Thus, in the next part of the paper we intend to analyze the evolution of these gaps, during time, between the two regions of Romania which are significantly different in terms of development level: the North-East and West regions.

### **3. COMPARATIVE ANALYSIS OF THE DEVELOPMENT REGIONS NORTH-EAST AND WEST**

The North-East Development Region comprises six counties that belong to the historical region of Moldova (Suceava, Botoșani, Neamț, Iași, Bacău and Vaslui) and covers an area of about 37,000 km<sup>2</sup>, with a population of 3.7 million inhabitants (INS, 2012a). Although it has the largest area of the eight regions and a density exceeded only by Bucharest-Ilfov region, it is the least developed in Romania (in 2009, GDP/capita was 62% of the national average). From this point of view, the region is also situated on the last positions in the European Union's rankings. Within the region, the poorest areas are the South part of Iași, the South-Eastern part of Neamț, the Eastern part of Bacău, counties Botoșani and Vaslui.

During time, the geographical and historical conditions have negatively influenced the socio-economic climate of the North-East region. Thus, if in the 1960s the economy of this area was predominantly agricultural and it was a low living standard, from 1965 to 1985 it was made a forced industrialization that aimed to improve the economic situation. In the end of the 1980s, despite the fact that in this region there was a large number of specialists, the industrial development did not take into account the specific conditions and the available resources.

During the period 1990-1999, there were felt the effects of price liberalization, of the implementation of the restructuring programs and reforms, the economic situation of this region recording a considerable decline that reached its peak during 1998-1999.

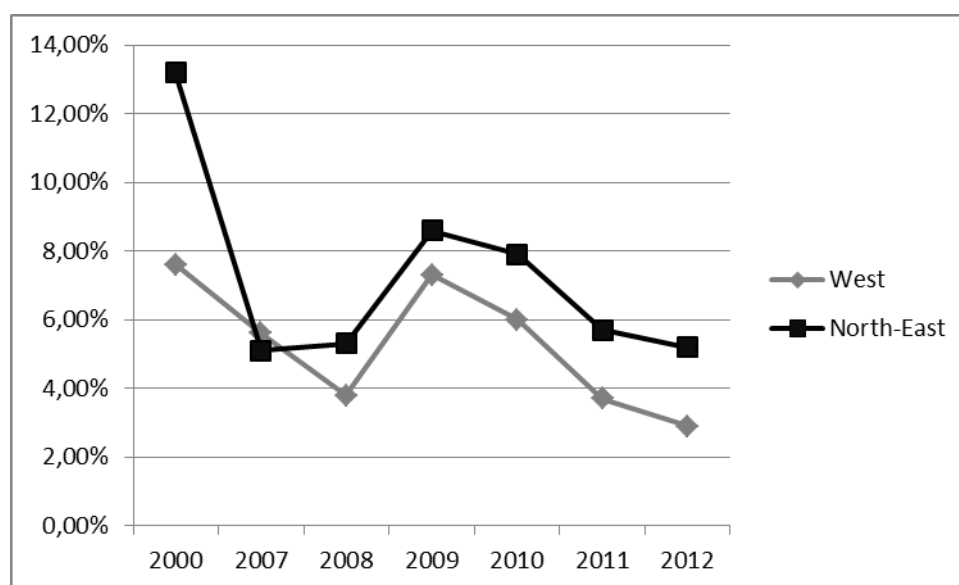
All these aspects had an impact on the development level of the North-East region even after 2000, when the macroeconomic indicators had the lowest levels from all the regions. This situation has also negatively influenced the attractiveness index of the region, which is two times lower than

that of the Western part of the country. This explains the low volume of the foreign direct investments made in the North-East region, which totaled 1.767 million euros at the end of 2012, representing only 3% of the investments made at the national level (BNR & INS, 2012).

West Region is geographically located on the Timiș area, introduced in the administrative reform of 1938, and it includes the counties of Arad, Caraș-Severin, Hunedoara and Timiș. The area of this region is 32,000 km<sup>2</sup> and the population totaled approximately 1.96 million inhabitants in 2011 (INS, 2012a).

In terms of the economic development level, the West region ranks second in the entire country, after Bucharest-Ilfov. It has a high growth potential and the macroeconomic indicators have higher values than the national average (for example, in 2011, GDP/capita was 13% higher than the national average, according to data from ADRVEST, 2012).

Regarding the unemployment rate, the North-East region has been characterized, during time, by values systematically higher than the national average, the largest gaps being recorded immediately after the emergence of the development regions. As it can be seen in figure no. 2, since 2000, the unemployment rate has always been higher in the North-East region compared to that of the West region, except in 2007, when in the West this rate was 5.6% and in the North-East 5.1%. However, we note that, if in 2000 in the North-East region the unemployment rate was almost double than that of the West region, after this year the unemployment rate has dropped significantly, up to 2007. This reduction is largely due to the reforms implemented in the context of the preparation for adhesion to European Union. In this way, the gaps between the unemployment rate in the North-East and the national average were gradually reduced. Since 2008, when the effects of the economic-financial crisis were also felt in Romania, the unemployment rate rose in both analyzed regions.



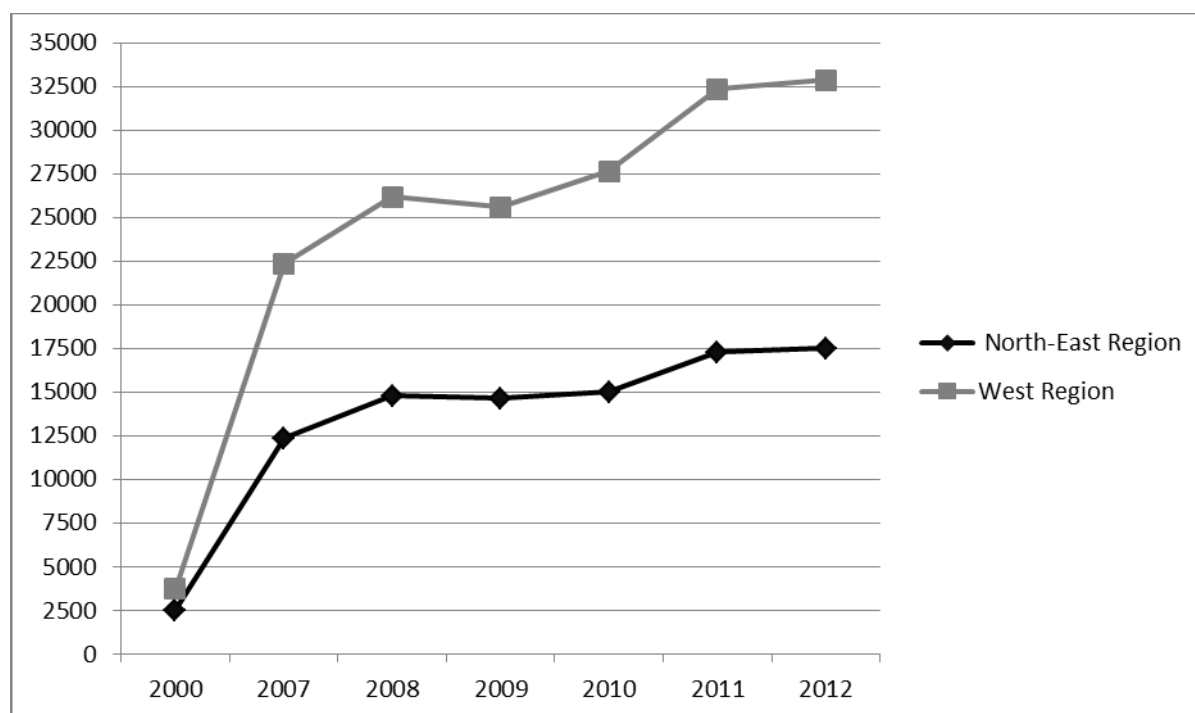
**Figure no. 2. The evolution of the unemployment in West and North-East regions between 2000 and 2012**

Source: Own elaboration using data from INS (2012b) and ADRVEST (2012)

Analyzing the unemployment by counties, it can be noted that, in the West region two counties (Arad and Timiș) have low values at this indicator between 2007 and 2012, while in the other two the unemployment is almost double (National Commission for Prognosis, 2012). Even so, the average rate of unemployment in the West region is below the national average, during the analyzed period. The North-East region is in the opposite situation, the unemployment rate exceeding every year the national average. Among the counties from the North-East region, Vaslui recorded the highest values of unemployment, during all the analyzed years, far superior to the values of the other five counties. From this point of view, Vaslui was situated on the top position even at the national level.

If we consider the unemployment rate by level of education, we see that in the North-East region, in 2011, the value of this indicator for people with reduced level of education (2.3%) was much lower than the unemployment rate recorded in the case of people with tertiary education (6.1%). In the West region, however, the situation is reversed: the unemployment rate among people with low level of education (8.6%) is almost double than that for people with higher education, of 4.4% (INS, 2012b). These values suggest that while in the West region there are offered many jobs that require higher education, in the North-East there is a greater offer of jobs requiring low levels of education. This is not necessarily surprising if we consider population structure by areas and the employment by industry. Thus, in 2011, while in the North-East region only 41.6% of people lived in urban areas and the rest (58.4%) in rural ones, in the West region most of the people (62.1%) lived in urban areas (INS, 2011a). If we look at the employment by branch of activity, we note that, in 2011, in the North-East region about 50% of people were working in agriculture, forestry and fishing, 11% in manufacturing and 10% in commerce, in other industries being registered percentages below 10% (INS, 2012b). In the West region, in the same year, the situation is different, a large share of the population (about 30%) working in manufacturing, only 17.4% were employed in agriculture, forestry and fisheries, and 12.7% in commerce. In the West region, in the remaining branches there were also recorded percentages below 10% (INS, 2012b).

In terms of the evolution of GDP per capita, we see from figure no. 3 that it was in a continuous increase since 2000, in both analyzed regions. However, it appears that in the West region, the level is far superior to the North-East, fact that explains the high level of poverty in the latter area. While at the national level GDP/capita has increased 10 times in 2012 compared to 2000, the same increase being recorded in the West region, in the North-East region the GDP/capita has augmented only 7 times during the analyzed period.



**Figure no. 3. The evolution of GDP/capita in West and North-East regions between 2000 and 2012**

Source: Own elaboration using data from INS (2011b) and National Commission for Prognosis (2012)

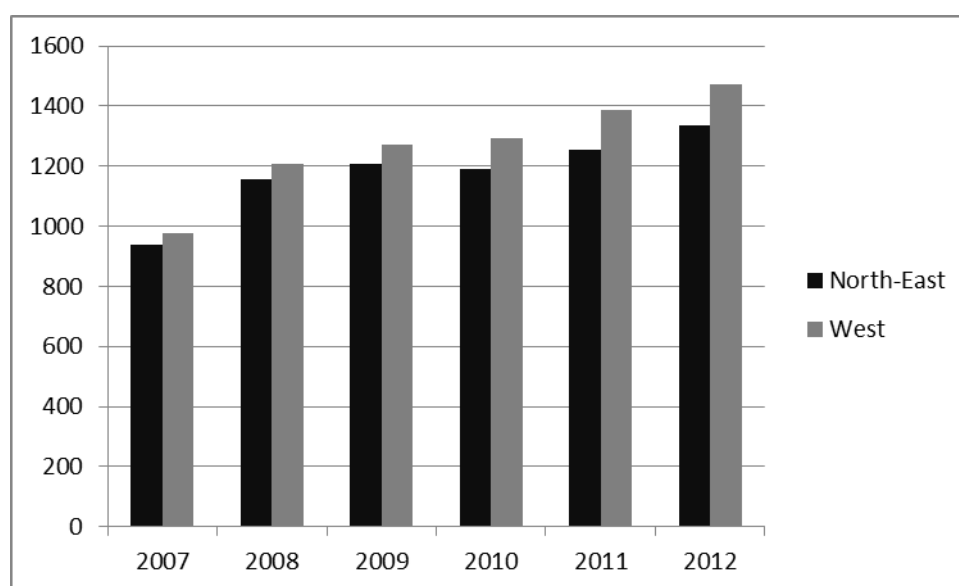
In order to see if the GDP/capita is a reliable indicator and how large are the deviations from the mean, it was calculated a disparity index that takes into account the GDP/capita from a given region and the national GDP/capita. This index calculated for the period 2007-2012 has the lowest value in the North-East region, compared to the other regions of the country, the ratio ranging

between 0.6/1 and 0.62/1. For the West region, the index fluctuated between 1.09 and 1.15, during the analyzed period, which suggests a more egalitarian distribution of GDP/capita (National Commission for Prognosis, 2012).

During the last 13 years, the West region has experienced a rapid growth in real wages, fact that was influenced by strong productivity gains (among the fastest of all European regions), stimulated by large increases in investments.

Although the North-East region has experienced an increase in labor productivity since 2000, it has the lowest productivity in agriculture, construction, industry, information and communication, as well as in financial intermediations. The situation is worrying considering the fact that over 50% of the persons from this region are located in rural areas and a large share of the population work in agriculture.

In terms of wages, although in both regions there was an upward trend during the period 2007-2012 (see figure no. 4), the West region recorded higher values. From this region, Timiș county had the highest values, in each year. In the North-East region, the highest salaries are found in Iași, closely followed by Bacău.



**Figure no. 4. The evolution of the average net income, per month (lei/employee), in West and North-East regions, during the period 2007-2012**

Source: Own elaboration using data from National Commission for Prognosis (2012), Proiecția principalilor indicatori economico – sociali în profil teritorial până în 2015, [www.cnp.ro/user/repository/prognoza\\_regiuni\\_2012-2015.pdf](http://www.cnp.ro/user/repository/prognoza_regiuni_2012-2015.pdf)

As it can be seen from the above data, the North-East region is lagging behind the West region from the point of view of all the analyzed indicators. This situation is not temporary or recent, the explanations of this fact being found among the causes of the regional disparities, mentioned before.

#### 4. CONCLUSIONS

Romania is currently facing serious development problems in some regions, particularly in the North-East one, which could be overcome through the implementation of some strategic policy measures of regional development.

The development regions, as they were built around the polarizing centers, must involve new mechanisms for regional growth, which, up to this moment, did not have the expected effects in some regions of the country, especially in the North-East one. The European Union structural instruments, which are aimed to stimulate economic growth and to reduce the disparities between regions, require a careful implementation and adaptation to the specific of the country and region.



Analyzing the factors that led to these disparities between the regions of the country, especially between the North-East and West regions, we find that most of them could be removed through actions promoted and implemented not only at the central level but also locally. Thus, starting with the improvement and expansion of the infrastructure, it can be increased the region's attractiveness to foreign investors. This aspect might increase the level of industrialization of the area, the workers' training level, the labor productivity and therefore the revenues.

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