

THE MACROECONOMIC EVOLUTIONS IN THE ROMANIA DEVELOPMENT REGIONS IN THE CURRENT ECONOMIC - FINANCIAL CRISIS

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Abstract

Disparities between the regions of Romania as within them were both in the run-up to accession of Romania to the European Union as well as after 1 January 2007. This phenomenon has gained momentum due to the impact of economic restructuring, especially in the areas of monoindustriale, whose population has been affected by unemployment as a result of the closure of unprofitable State enterprises.

The impact of the financial and economic crisis on economic growth at the level of the eight development regions of Romania did not produce modifications in their rankings after the index of regional disparity, even though for some, its value increased compared to 2006 or 2008.

The paper presents a comparative analysis of the evolution of macroeconomic indicators in the development regions of Romania in the period 2006-2011.

Keywords: *development regions, territorial-administrative structures, regional disparities, aging, education level*

Introduction

In the last decade there have been major changes in the world economic system, due mainly to the economic development of the Central and Eastern European countries, but also the commitment of the paths of economic development of countries with large populations (China and India approx. 1/3 of the world's population). In this context, balance the markets of energy resources, raw materials, capital, labour and the global ecological balance have been and will be affected

Highs in several developed countries, fluctuations in oil and gas prices, inflation, crisis in the agro-food sector, the crisis in the financial markets, reducing the pace of economic development in some countries are aspects of regulating phenomena/regulating an economy " increasingly global".

The global impact of the financial crisis on the real economy was felt strongly, and the economy as a whole, has been affected by a substantial growth slowdown that has affected the population, companies and jobs. Under these conditions, the growth of world GDP went down from 5.3 percent in 2010 from 3% in 2011.

The global financial crisis has generated a global crisis and places of work. Among the macroeconomic indicators, unemployment is reflected directly in the daily life of citizens than GDP, budget deficit, inflation, exchange rates or interest rates. The global economic crisis has led to a "dramatic increase" in the number of those who have lost their jobs, and those with low wages.

The domino effect was felt in the European financial system, as well as in American also. At national and international level were developed numerous bailouts, which have included a wide range of measures, from grants and equity participation up to the nationalisation of financial institutions in crisis, giving public guarantees of bank deposits insurance, etc.

In a difficult international conjuncture, Romania continued in 2011 aimed at stabilising the macroeconomic policies. 2011 has seen a slight recovery on the labor market conditions amid the resumption of economic growth and of the entry into force of the new labour code in May. Thus, the

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number of persons employed in the economy has reversed the downward trend observed in the period 2009-2010, but the pace of growth during the year was modest. ILO unemployment trends in each of the developing regions of Romania reflects the persistence of difficulties encountered by certain categories of persons (e.g., young inexperienced workers without qualifications) in finding a job, amid a moderate pace of economic growth and structural failures and rigidities of the labour market (still a significant share of employment in agriculture of subsistence, low emphasis placed in the system of education on the development of practical skills, the persistence of global imbalances between supply and demand of manpower at the regional level, etc.).

The basic aim of the regional development policies is to reduce territorial disparities, achieving a balance between the levels of economic and social development of the various regions. A goal of regional policy, specific to this period, shall be to facilitate structural adjustment and sectoral restructuring processes support and economic revival, reconstruction and boosting the competitive ability of the regions to support the processes of European integration. Most countries, including the developed ones, faced with regional disparities and, in consequence, apply strategies and regional development policies. For its part, Romania is the sum of the inner regions, so the overall growth of Romania depends on the evolution of these regions.

The eight development regions of Romania presents certain particularities in terms of their economic structure, what makes certain sectors to play a decisive role in their future development. The economy of the regions in the South of the country (South-East, South, South-West Oltenia) is influenced by the evolution of the agricultural sector, it owns in these areas a significant proportion of over 15%, which makes in the years with harsh conditions for agriculture gross domestic product growth to be influenced negatively. There are also regions with significant tourist potential (the Bucovina region in North-Eastern region, coastal and Danube Delta in the South East region, etc.), economic developments of these being influenced and level of use of this potential. Another peculiarity is the areas where mining play an important role (Jiu Valley basin of South-West Oltenia) and whose economy has been affected as a result of the restructuring process of goal to mining sector.

The impact of the financial and economic crisis on economic growth at the level of the eight development regions of Romania did not produce modifications in their rankings after the index of regional disparity, even if for some, its value has increased ahead of 2006.

Brief overview of the evolution of macroeconomic indicators in the major regions of Romania

Administrative-territorial structure of Romania consists of 320 towns (of which 103 municipalities) and 2861 common and 12957 villages¹.

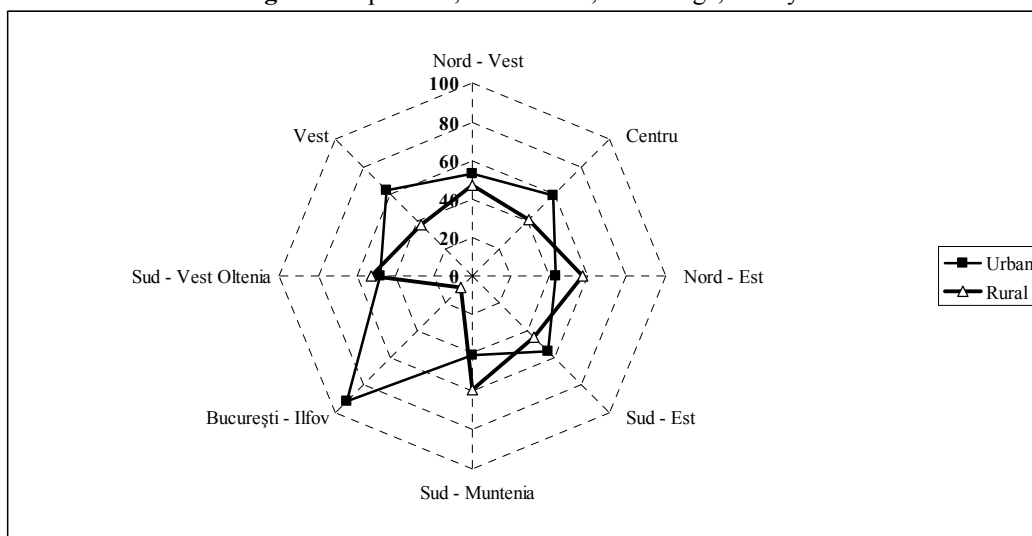
In 1998 it was approved the law No. 153 concerning regional development, legislation setting out the framework, objectives and institutional competencies and specific policy instruments for regional development in Romania. In order to achieve the objectives of regional development policy, law No. 151\1998 has enabled the establishment of the eight development regions corresponding to NUTS II-statistical level, through voluntary association of counties.

In terms of population density, there are differences between regions. Without taking into account the Bucharest-Ilfov Region which has 1.237, 7 inhabitants/km²-as a result of this urban agglomeration of the capital-the largest population density is recorded in the North-East Region (100,3 inhabitants/km²), and the lowest population density is in the region of Western Romania (59.6 inhabitants/km²)-the region with the greatest population decrease and mountainous part on a large part of the surface.

¹ Romanian Statistical Yearbook 2012 Table 1.8

Degree of urbanisation of regions is also somewhat different. With the exception of the Bucharest-Ilfov Region, the most urbanized regions are the Western Regions (62.7% of urban population), Center (59.2%), Southeast (55%), and Northwest 53,1% urban population with (see Figure 1).

Figure 1 Population, in territorial, on average, to July 1



Source: Romanian Statistical Yearbook 2012, Table 2.32, National Institute of Statistics

Instead, in the Northeast Region and in the entire southern part of Romania: Muntenia and Southern Regions Southwest still prevails rural population, which are large areas of lowland areas where companies are farming activities (Figure 1).

After decades the number of inhabitants of cities has registered a significant increase in the period 1990-2010, the urban population has seen a trend of continuing growth in all developing regions.

The main cause of the decreasing of the urban population was both migration to rural areas, as well as outside the country. This was caused by the economic downturn as a result of which some of the inhabitants have left the towns of which remained without jobs. In parallel to the decrease of the urban population have contributed and other demographic phenomena (e.g., negative natural increase) but their magnitude was much lower. As a result of these developments, the ring network structure has changed: increased the number of small cities and towns issue has decreased. A relatively balanced distribution in the territory of the towns remained a distinctive feature for the network of villages.

Statistics show that Romania has entered the transition process with a relatively low level of regional disparities, compared with other Member States or candidate countries. They have rapidly increased especially between Bucharest and the rest of the country.

The disparities between regions and within them have gained momentum because of the impact of economic restructuring, particularly in monoindustriale areas whose population has been affected by unemployment as a result of closing unprofitable State enterprises but also because of the economic and financial crisis. Among these may be mentioned the regions border with Moldova and Ukraine and the less developed regions along the Danube.

Based on data provided by the National Institute of Statistics of regional disparity index was calculated for the period 2005-2010 (Table 1) using the relationship

$$\frac{\text{PIB}_{\text{reg}}/\text{loc.}}{\text{PIB}_{\text{na}}/\text{loc.}} \cdot 100$$

Table 1 Regional Disparity Index

	2005	2006	2007	2008	2009	2010
Regiunea						
North-West	0.938	0.936	0.964	0.900	0.912	0.893
Center	0.980	0.997	1.014	0.949	0.969	0.959
North-East	0.667	0.645	0.639	0.618	0.628	0.614
South-East	0.864	0.850	0.810	0.798	0.803	0.822
South-Muntenia	0.828	0.838	0.816	0.821	0.853	0.830
Bucharest-Ilfov	2.213	2.193	2.228	2.493	2.360	2.379
South-West Oltenia	0.776	0.781	0.782	0.745	0.761	0.767
West	1.127	1.163	1.157	1.094	1.097	1.131

Source: Romanian Statistical Yearbook 2007-2012, authors' calculations

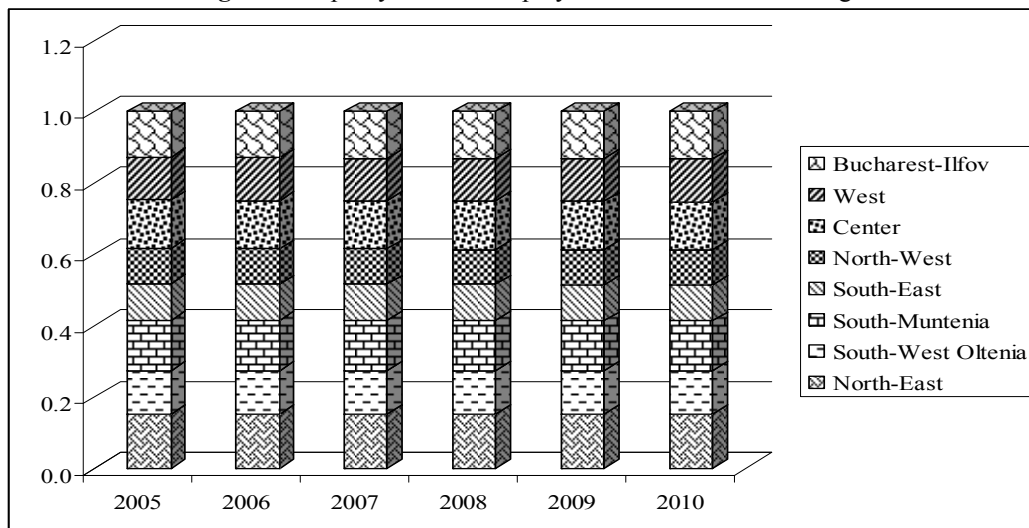
Analysis of the data in Table 1 reveal declines recorded by the North-Eastern regions (from 2005 to 0,667 0,614 in 2010) and Center (in 2005 the 0,980 0.959 in 2010) and the leap of București-Ilfov (from 2,213 in 2005 to 2,379 in 2010).

The impact of the financial and economic crisis on economic growth at the level of the eight development regions of Romania in 2010 has not produced significant changes in their rankings after the regional disparity index even if all its value has dropped significantly from 2005.

Estimates of *labor force* at the regional level, during the period 2005-2010 have taken into consideration the disparities still exist but with a downtrend due to economic differentials within the regions.

For the *employed population* at the level of all eight development regions have experienced a slight increase. In terms of regional differences are slight decrease in each region. The maximum values are registered in the North-East (which holds approximately 15% of total employment), and the minimum values in the Northwest region (around 8.5% of total national employment) (Figure 2). Bridging the gap was due to the fact that the level of employment has increased in all regions of the country.

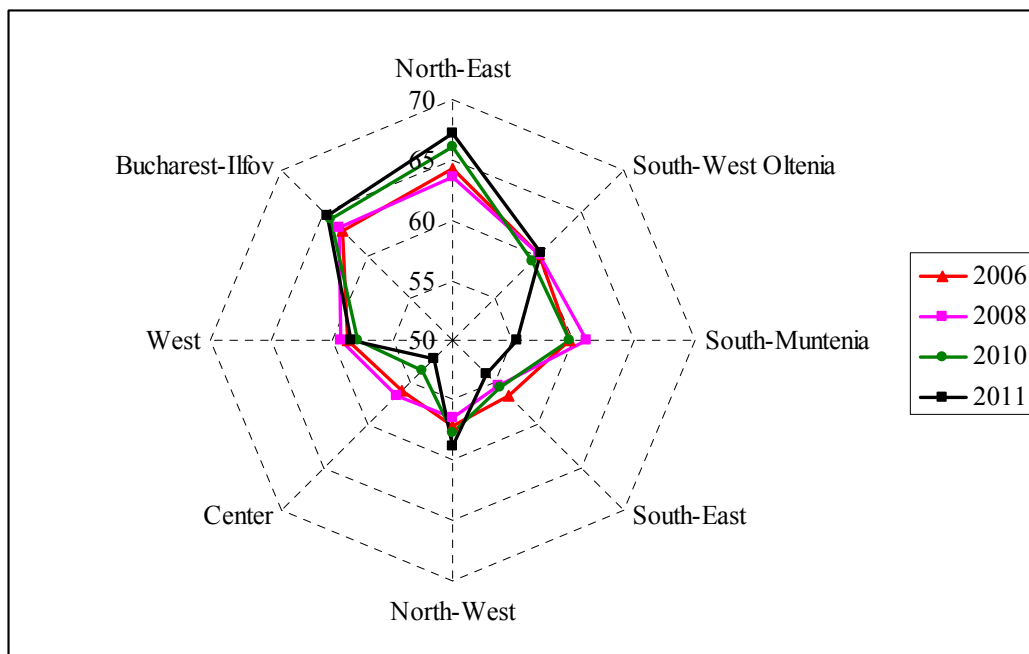
Figure 2 Disparity index of employment to the national average



Source: Romanian Statistical Yearbook 2007-2012, authors' calculations

It also has improved *employment* in less developed regions where the rate of employment is sharper than in the other (Figure 3). Thus, in 2010 compared to 2006, in the North-East it grew by 3 percentage points while in the South-Muntenia region decreased by 4.3 percentage points. Year 2006 only in South West regions, Northwest Bucuești-Ilfov and put the growth of the employment rate.

Figure 3 Evolution of the employment rate on major development regions of Romania during 2006-2011



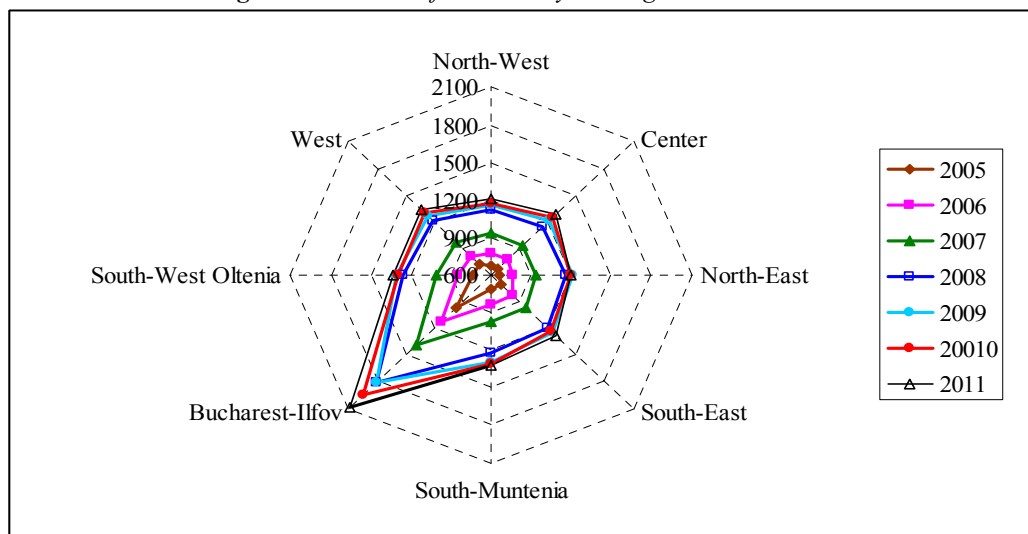
Source: authors' calculations based on data from Statistical Yearbook of Romania 2007-2012

In 2011 the North East Region with 14.3% to help fill the country with total while the highest rate of employment in agriculture, forestry and fisheries of 20.3%. At the opposite pole lies West region as contributing to the total occupation of the country with only 9.7%.

In terms of *net monthly average nominal wage* discrepancies of regions began to diminish during the reporting period, however, the ranking of the regions from the point of view of the major changes that have been known. So if in 2005 the level of earning net monthly average nominal in the Center represent the level of 67.67 earning net monthly average nominal in Bucharest-Ilfov Region in 2011 the lowest nominal average monthly net salary was registered in the northeast (57.47% level is only earning net monthly average nominal in Bucharest-Ilfov Region).

2005-2011 has registered an increase of earning net monthly average nominal at NACE in the section for each region (Figure 4) territorial disparities of income, however, are complemented by maintenance discrepancies in terms of unemployment, even though this phenomenon has seen a reduction in recent years.

Figure 4 Evolution of net monthly earnings at NACE section



Source: authors' calculations based on data from Statistical Yearbook of Romania 2007-2012

During the period 1992-2011 the Romanian population decreased 6.3%. *The decrease in Romania demography* is due to demographic powerful fertility decrease, increased death rate and emigration (especially during the period 1991-1992).

South-Muntenia region and Nord-Est have the largest share of the population aged 65 years and over in the total population (16.97% 16.63% respectively with effect from 1 July 2011). Most of the young population is registered by the Northeast Region, where, on July 1st 2011 saw 19.95% population aged 0-14 years, negative record is owned by the West region with a share of the young population of 8.83%. If the country register a surplus of young population towards the old there are regions where this proportion is reversed: Bucharest-Ilfov South-Muntenia, Southwest, Southeast and West.

However the demographic dependency rate recorded the highest values in the North-East Region because of the high level of the "pressure" of young people aged 0-14 years of age over adults – over 20.65% while highest pressure exerted by the elders to record in the Southwestern regions of Oltenia and Muntenia South that 14 elderly per 100 adults, respectively, 7.8 14 elderly per

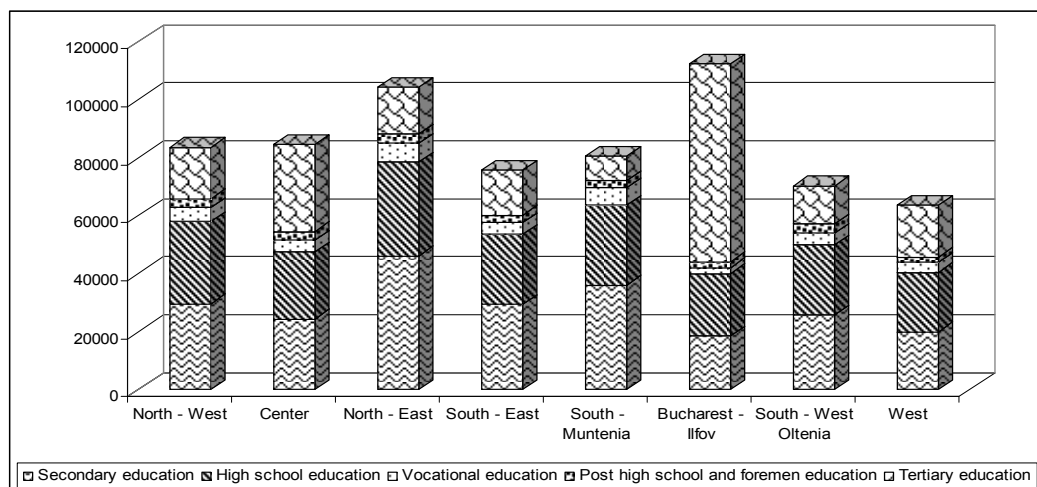
100 adults. Bucharest-Ilfov region although noticed for the number and share of the aged from the viewpoint of demographic dependence present a good situation because the proportion of adults was the highest in the whole country. The capital has always been a pole of attraction power in internal migration due to the degree of social and economic development of the area.

At the regional level, in 2011, the *life average* is 75,55 years in Bucharest-Ilfov Region and 73,31 in the West region, a strong difference is given by the residence area and gender. Spread the greatest gender difference was almost 8 years for women in South-Muntenia Region, while the on average the strogest differentiation was registered in Bucharest-Ilfov Region (2.58 years in favor of urban population). Note the difference in extremely small (0.68) between life average in the West region, which shows the living conditions almost similar on the two types of habitat.

The regional profile, *education level*, with the largest increase in terms of the school population included is higher education, particularly since the 2000s, after the appearance of private education and dissemination of public and private education through open universities or their subsidiaries in the cities.

Regarding the distribution of the population enrolled in tertiary education in development regions, in the academic year 2010/2011, in Bucharest-Ilfov Region was 30.91% of all enrolled students. The share of students in the North-Western Regions, North-East, Center and West is about 11.34% and 14.6% (Figure 5). These regions constitute immigration centres for other regions, in terms of higher education. In Bucharest, the share of the population the higher education tuition is much higher than in the case of other types of schools, the majority of the school population registered in this type of education coming from southern and Eastern regions, regions with lower weights of school population registered in higher education.

Figure 5 Number of graduates in territorial and levels of education, school/academic year 2010/2011



Source: authors' calculations based on data from Statistical Yearbook of Romania 2007-2012

Working abroad is an important source of income for a significant part of the population. Currently, one out of ten households receive income from international migration. Households with migrants have a larger number of long term assets compared to households which have the same socio-economic profile, but without experience of migration.

Nationwide, about 10% of the volume of each type of investment over the past five years is realized with the help of international migration. In terms of the type of expenditure – the most

important are the investments in housing (expansion/modernization and construction or purchase), followed by the purchase of household appliances, cars and other goods. Productive activities financed with money from migration are different depending on the environment in the rural residential – money is invested mainly in agriculture, while the type in urban environment money is invested in other types of businesses.

The intensity of the phenomenon were stressed especially after 2002, together with the liberalisation of movement in the Schengen area for Romanians. Currently, the phenomenon of temporary migration for working abroad is approximately three times higher than in 2002.

Moldova, Muntenia and Oltenia are historical regions in which temporary labour migration shall prevail over the temporary departure of tourism-sightseeing, more common in Western Transylvania, Dobruđja and Bucharest.

Currently, Italy and Spain are the main destinations of Romanians who work abroad.

Migration flows have a more balanced territorial distribution compared with those of immigration, the main sources of emigration during the year 2011 as the Bucharest-Ilfov region, West, and North-East. Sizes of more modest emigration were recorded during this period in South-Muntenia region and the South-West Oltenia.

If it is natural that areas with a higher unemployment rate than the average to hold greater potential of migration among the workforce, it is found that the Bucharest-Ilfov region, characterized by low numbers of unemployed, is also a major source of emigration, but its features are different from other areas of the country.

In the case of the Bucharest-Ilfov region, a high share in the number of migrants hold that people with a higher professional qualification, who decide to leave the country motivated by increased chances of affirmation and of obtaining very high incomes compared to those in Romania, as well as young people attracted by the prospects of specialization or continuing their studies in better conditions.

There are a number of arguments for further decreasing the final migration in the future, the reduction of temporary migration for work and return a portion of the Romans leave to work abroad:

- Economic recession that continues in Europe, economic growth forecasts are increasingly more pessimistic in countries where most of romanian migrants are concentrate. Construction, which have so far attracted many romanian migrant workers are among the first areas affected by the reduction of economic activity, with negative consequences on the employment of immigrants is already felt. Italy and Spain, two of the key destinations for humane and Romans, are no longer attractive in the present

- The scarcity of labor in the country, especially in the construction and continued growth of salaries, linked to a large extent with this deficit. The emigration of important parts of the work force has created a shortage of labour in many sectors of activity in Romania (construction, textile and footwear, food industry, trade, health, etc.)

Thus, the negative impact it has on the size and quality of the labour force employed in Romania is manifested in several directions: the departure abroad of a significant part of the highly qualified workforce (brain-drain), the brain-brain-win-loss is disadvantageous to Romania under the qualitative aspect, in view of the fact that the skill level of people coming in Romania is lower than those leaving the country, the processes of brain circulation and brain regain, ageing of the workforce in some sectors (e.g. R & D), which is partly influenced by migration, etc.

At the regional level, there are major disparities in terms of the number of redundant. These variations are due to several factors, among which:

- i) The structure of the local economy-economic sectors have been affected in different ways by the crisis-which it is observed and at the level of local/regional economies;

- ii) Influence of workers with floating domiciliu: big cities such as Iași, Cluj, Timisoara and Bucharest drew manpower from the adjacent counties, they are among the first fired at the beginning of the crisis.

However, regionally there were discrepancies before the crisis, they have just had a tendency in recent quarters emphasis.

Given the low values of the unemployment rate at the national level, it can be affirmed that the layoffs that occurred in the year 2012 did not produce imbalances in the evolution of unemployment, and the counties that have been confronted with this phenomenon have found solutions for economic recovery reflected and in alleviating problems in terms of employment.

At territorial level, according to data provided by the national employment Agency employment, the number of unemployed grew in 36 counties, the largest increases in residential districts: Alba (with 2.301 persons), Hunedoara (with 1.124), Harghita (with 958), Valcea (with 943), Arges (with 907), Galați (with 901) and Vaslui (with 876).

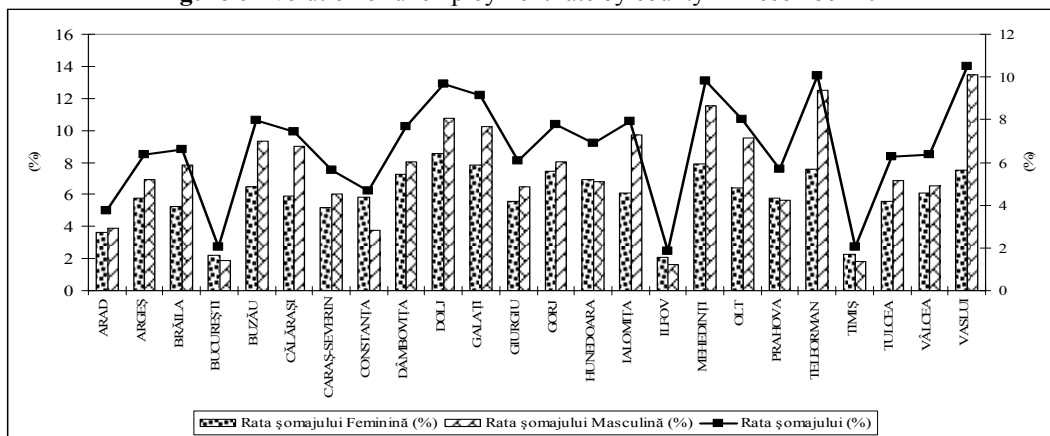
The number of unemployed fell in 5 counties, namely: Buzau (with 313), Maramureș (with 292), Suceava (with 245), Iași (with 168 persons) and Ontario (with 38 persons). In Bucharest the number of unemployed fell by 125 people.

The counties with the highest unemployed rate from the total number of unemployed are: Dolj (77,25%), Teleorman (76,86%), Galați (73,14%), Satu Mare (73,04%), Iași (72,68%), Buzău (70,56%) and Brăila (70,37%).

The unemployment rate fell in the counties: Buzau (with 0,16 pp), Maramureș (with 0,14 pp), Suceava (with 0,11pp), Iași (with 0,06pp) and Ilfov (with 0,02pp). In Bucharest the unemployment rate fell by 0,02pp. The largest increases in unemployment rate were registered in the counties like Alba with 1.34pp, Ialomița 0.74 pp, Harghita with 0.67pp, Hunedoara with 0.68 pp, Vâlcea with 0,57 0pp, Valcea with 0.54pp and Sălaj with 0.50 pp.

The highest levels of unemployment have been achieved in counties: Vaslui (10,48%), Teleorman (10,04%), Mehedinți (9,80) Dolj (9,69%), followed by counties: Galați (9,14 m), Alba (8,71%), Olt (8,01%) and Buzau (7,98%) (Figure 6).

Figure 6 Evolution of unemployment rate by county in December 2012



Source: National Agency for Labour Force Employment

The regions with the highest rates of unemployment were Southwest, South, Southeast and Central rural regions where activities are prevailing. These are regions with pronounced disparities even within them, where, predominantly agricultural counties coexists with the most developed ones (Table no.2).

Table 2 Total number of unemployed and the unemployment rate by counties and regions in December 2012

Regiunea/ județul	Total șomeri		Indemnizație șomaj: 75%		Indemnizație șomaj 50%		Someri Neindemnizați		Rata șomaj **
	Total	Femei	Total	Femei	Total	Femei	Total	Femei	
Sud-Est	69572	29684	19190	9110	5151	2622	45231	17952	6.62
Sud - Muntenia	87880	36611	23818	9618	8137	3892	55925	23101	7.12
Sud-Vest Oltenia	75565	31391	18298	7473	7312	3725	49955	20193	8.41
Vest	34120	15861	16031	7261	3440	1808	14649	6792	4.03
București- Ilfov	25069	13464	9936	5494	1599	804	13534	7166	2.01
Nord -Est	78203	30799	22115	8284	8083	4132	48005	18383	6.18
Nord-Vest	54710	23928	19641	8995	5190	2744	29879	12189	4.52
Centru	68656	29057	21218	9185	5314	2843	42124	17029	6.41

** calculated on the civil active population 01.01.2012, communicated by INS

Source: National Agency for Labour Force Employment

Bucharest regions, West and Northwest, have reached the lowest levels of unemployment, these areas being advantaged by their lower dependence on the primary sector (Bucharest-Ilfov region), and the proximity of Western markets (areas West and Northwest), as well as high capacity they have in attracting foreign direct investment.

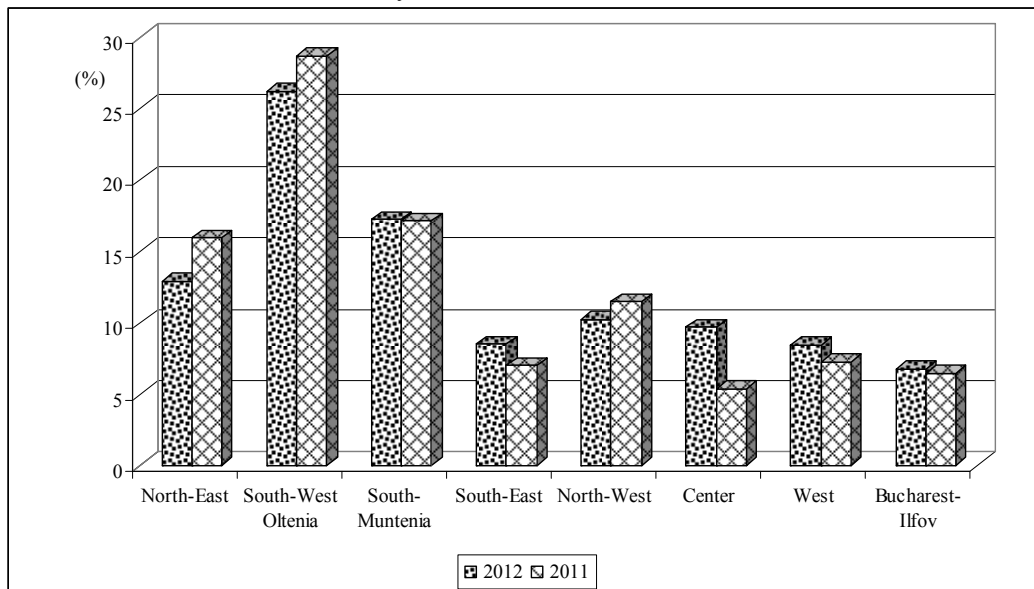
The counties with the largest proportion of the unemployed who receive unemployment allowance in accordance with the Law No. 76/2002 with secondary education were recorded in the County of Prahova (47.677), with secondary-school studies or post secondary and higher education in Bucharest (3030 persons ,respectively 2392 persons).

At territorial aspect, in 2012, with the highest values both in terms of *the rate and the average annual number of job vacancies* were registered in Bucharest-Ilfov region and northeast (0,73% for each one, and the average annual number of job vacancies was 6.7 thousand vacancies, i.e. 3.6 thousand vacancies). Characteristic of the Bucharest-Ilfov Region is the fact that the annual average number of job vacancies has represented 27% of the number of job vacancies across the country. At the opposite pole, both in terms of the rate and the average annual number of job vacancies at the lowest levels it has known the region South-West Oltenia (0.36%, respectively 1.2 thousand vacancies), followed by the Southeast (0,42% respectively 1.9 thousand vacancies).

The phenomenon of labour migration calls for the development of at least three relevant themes: management of legal migration, fight against illegal migration and the integration of legal migrants into receiving societies.

In order to achieve the general objective " Facilitate the free movement and increase the awareness of workers in EU Member States or the signatories to the agreement on the EEA, as well as in countries with which Romania has concluded bilateral agreements in the field of employment", the EURES advisers led by EURES and International Relations have offered Mediation in 2011 and 2012, counselling and information services mediationa number of these 16.496, 17.318 persons looking for a job in the European countries (see Figure 7).

Figure 7 Percentage distributions of persons seeking employment in countries of the EU / EEA, mediated by EURES advisers in 2011 and 2012



Source: *Employment, Mobility, Unemployment and Unemployed Social Protection*, Ministry of Labour, Family and Social Protection

Thus, in 2011, the number of workers, for countries with average workers with which bilateral agreements were signed between governmental institutions (Germany, France and Switzerland) was 72.875, while, in the same period of 2007, the number of workers was 37.639, which represents an increase of 35.286 people.

In terms of the area of origin of international workers, both in the year 2011, most applicants have a contract to work abroad originated in geographical area (22.913), which represents 31.4% of the total number of people internationally.

Conclusions

Comparative analysis of the evolution of macroeconomic indicators at the level of the eight development regions of Romania have revealed a number of disparities and desprinerea, from which conclusions may be drawn:

- unbalanced development between the West and East of the country;
- economic development followed a West-East direction, the proximity of Western markets acting as a growth promoter;
- chronic underdevelopment is concentrated in the Northeastern Region on the border with Moldova and in the southern regions along the Danube;
- industrial restructerea monindustriale cities had a strong negative impact on the labour market at regional level;
- migration was more accentuated in 2011 in the Centre;
- restructuring of industry, internal and external migration are factors that have led to the decline of small towns and medium-sized enterprises;
- increasing the proportion of the importance of Bucharest in Bucharest-Ilfov Region compared to the general situation of the development of the other regions.

The process of reducing discrepancies between developed areas and those lagging behind is one of duration and is carried out with small steps. Even if growth rates are higher than in areas with a low level of development, yet not stagnating economies developed regions but are also on an uptrend it is reflected in reduced intensity gaps. For this reason, reducing territorial disparities should be a core component of the National Strategy of regional development, and development Planners to the regions.

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