

# THE COMPARATIVE ANALYSIS OF DEVELOPMENT DISPARITIES IN THE REGIONS

AURELIAN IONUT CEAUDESCU

“CONSTANTIN BRÂNCUȘI” UNIVERSITY OF TÂRGU-JIU

30 EROILOR STREET, TARGU-JIU, GORJ, ROMANIA, ionutaurelian81@yahoo.com

## **Abstract:**

*The development necessarily implies economic growth, with the economy's productive potential determinants, but also the ability to mobilize its potential for recovery.*

*The effort for recovery should be correlated with the demand for business results in the regional market or on other markets, demand that is dependent on the solvency of the same level of economic development. Addressing the economic growth can be done in terms of mobilized economic potential, taking into account the used factors of production and the result of the economic activities or, from the ability to mobilize the growth factors through the economic development level.*

**Key words:** *economic growth, regional disparities, regional market*

**JEL classification:** *R10, R11, R12*

The develop and implement a regional development policy in Romania has started (with the operation of the PHARE 1996) outline of development regions.

The 42 counties were ranked on the basis of sectoral and global indexes, and after analyzes resulted eight development regions. The process of defining the eight development regions involved the identification of bordering counties with similar economic and social profiles, followed by re-grouping of the regions of similarity based on functional relationships between counties, such as communications infrastructure in developing regions.

The eight development regions of Romania are as follows (Fig.1):

- ☑ **Region 1 - Nord-Est:** Bacău, Iași, Suceava, Botoșani and Vaslui
- ☑ **Region 2 - Sud-Est:** Brăila, Buzău, Constanța, Galați, Tulcea and Vrancea
- ☑ **Region 3 - Sud:** Argeș, Dâmbovița, Călărași, Ialomița Giurgiu, Prahova and Teleorman
- ☑ **Region 4 - Sud-West:** Dolj, Gorj, Mehedinți, Olt and Vâlcea
- ☑ **Region 5 - Vest:** Arad, Hunedoara, Caraș-Severin and Timiș
- ☑ **Region 6 - Nord-Vest:** Bihor, Cluj, Sălaj, Bistrița-Năsăud, Maramureș and Satu-Mare
- ☑ **Region 7 - Central:** Sibiu, Alba, Brașov, Covasna, Harghita and Mureș
- ☑ **Region 8 - București:** Bucharest and Ilfov County.



Figure 1 Geographical map of the 8 development regions of Romania

Source: <http://www.mdrt.ro/dezvoltare-regionala/programul-operational-regional-2007-2013>

Next we perform a comparative analysis of development disparities in the regions using the indicator considered to be the most eloquently to determine the level of economic development, namely GDP per capita. GDP growth per capita in the developing regions of Romania are presented in Table 1.

TABLE 1

**GDP growth per capita in developing regions of Romania the national average**

Region	GDP per capita						
	2000	2002	2004	2006	2008	2009 <sup>1</sup>	2011 <sup>2</sup>
<b>Romania</b>	100	100	100	100	100	100	100
<b>1.NE</b>	70,0	69,3	69,3	64,5	63,3	62,4	62,4
<b>2. SE</b>	88,9	85,9	90,8	85,0	84,0	83,8	84,0
<b>3. S</b>	81,5	80	83,6	83,8	84,7	84,0	83,6
<b>4. SV Oltenia</b>	83,8	79,9	83,5	78,1	79,3	78,8	78,9
<b>5. V</b>	102,6	108,3	114,7	116,3	114,0	113,3	112,8
<b>6. NV</b>	93,0	94,1	97,3	93,6	92,9	93,6	93,7
<b>7.Centru</b>	107,1	108	104,3	99,7	101,5	102,2	102,3
<b>8.București-Ilfov</b>	206,8	208,2	190,6	219,3	218,2	221,7	221,3

Sursa: **Romanian Statistical Yearbook 2009, National Commission of Prognosis**

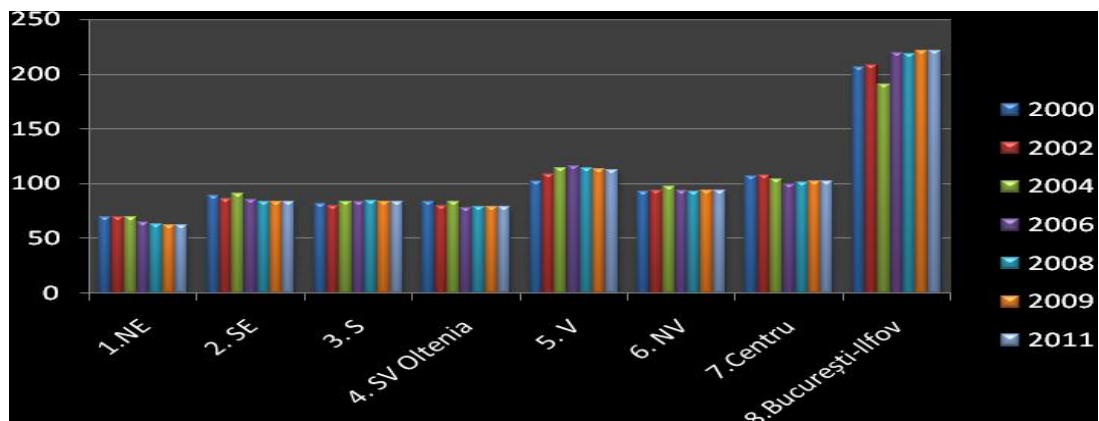
The analysis of data from the table reveals that in terms of GDP per capita, Western Region is in rank 2 in the country, being surpassed only by the Bucharest-Ilfov. Gross Domestic Product per capita of the Western Region is in 2008, 114.0% of GDP per capita at the national level, resulting in a high level of economic development of the region.

Western Region and Bucharest-Ilfov region are the only regions in the country where the disparity index of GDP per capita towards national average that was always positive. Is noted also that since 2008 has been a decrease in the level indicator (114.0% for 2008, 113.3% for 2009, projected data), while the forecast for 2011 shows the same

<sup>1,2,3,4</sup> Estimates of National Commission of Prognosis

decreasing rate, decrease that is due largely to national and international economic crisis.

West Region and Bucharest-Ilfov region are the only regions of the country where the disparity index of South / West Oltenia found in the 7th place among developing regions of Romania, the largest inter-regional disparity is recorded from the Bucharest-Ilfov while the South has a similar situation, followed a short distance, the North - East. For an overview we plot the data in Table 1:



**Fig. 2 Dynamics of GDP per capita for developing regions of Romania**

**Source:** Romanian Statistical Yearbook 2009, National Commission of Prognosis

Regarding the center region is noted that throughout the period 2000-2011 it ranked third among the eight development regions and stood almost every year above the national average. Gross domestic product per capita, by 101.5 million lei, is 1.5% higher than the national average (in 2008) and Central Region places a distant third, from Bucharest-Ilfov Region and Western Region.

From the data analysis presented in the graphic results and that the North - East, shows the lowest regional gross domestic product per capita, something that shows that the region has the highest level of poverty. North-East is within the group of the poorest regions of regional development which also includes: South East, South-Muntenia, Oltenia and North West South West and which are below the national values of the indicator set.

Developments in recent years show that we can speak of a continuing economic disparities between regions. The ratio between the maximum (Western region) and minimum (North - East) per capita gross domestic product, remains constant (in comparison to Bucharest region that has a very high GDP per capita).

From Figure 2, it is noted that GDP per capita in the period 2000-2006 has seen a significant increase in only two of the eight development regions of Romania: the West and Bucharest-Ilfov region. This indicator shows an increase of approx. 40% for Bucharest-Ilfov, while for other regions, the increases are less than 10%, or even stagnating (South - West Oltenia, North - West). From Figure 2, it is noted That GDP per capita in the 2000-2006 Period HAS seen a Significant Increase in only Two of the eight Development Regions of Romania: the West and Bucharest-Ilfov region. This indicator shows year Increase of approx. 40% for Bucharest-Ilfov, while for Other Regions, the increases have Less than 10%, or Even stagnating (South - West Oltenia, North - West). Growth FOLLOWED the west-east direction, proximity to Western Markets by acting as growth factor delivery. Although Some Statistical Data shows oscillations in time, due to local economic Factors and shows how to Significant Growth HAS HAD Geographical component is concentrated in the underdeveloped Areas north - eastern border with Moldova and the South, Along the Danube.

For 2009-2011, the same figure we can see a decrease in GDP per capita for all regions. Underdevelopment appears to be largely correlated with the prevailing unemployment and rural activities and with the inability to attract foreign direct investment. Continue to have an overview will be to determine each region's contribution to national GDP (Table 2):

**TABLE 2**

**The share of national GDP in developing regions**

Region \ Year	Romania	1.NE	2. SE	3. S	4. SV Oltenia	5. V	6. NV	7.Centru	8.București-Ilfov
2000	100	12,0	11,6	12,2	9,3	9,4	11,8	12,7	21
2002	100	12,3	11,3	12,4	8,6	9,7	11,9	12,6	21,1
2004	100	12	11,9	12,9	8,9	10,3	12,3	12,2	19,4
2006	100	11,1	11,2	12,8	8,3	10,4	11,8	11,7	22,5
2008	100	10,6	10,8	12,7	8,1	9,7	11,2	11,1	25,3
2010 <sup>3</sup>	100	10,8	11,05	12,7	8,3	10,1	11,8	11,9	23,0
2012 <sup>4</sup>	100	10,8	11,07	12,7	8,3	10,1	11,8	11,8	23,1

Source: Own calculations based on Statistical Yearbook 2009, National Commission for Prognosis

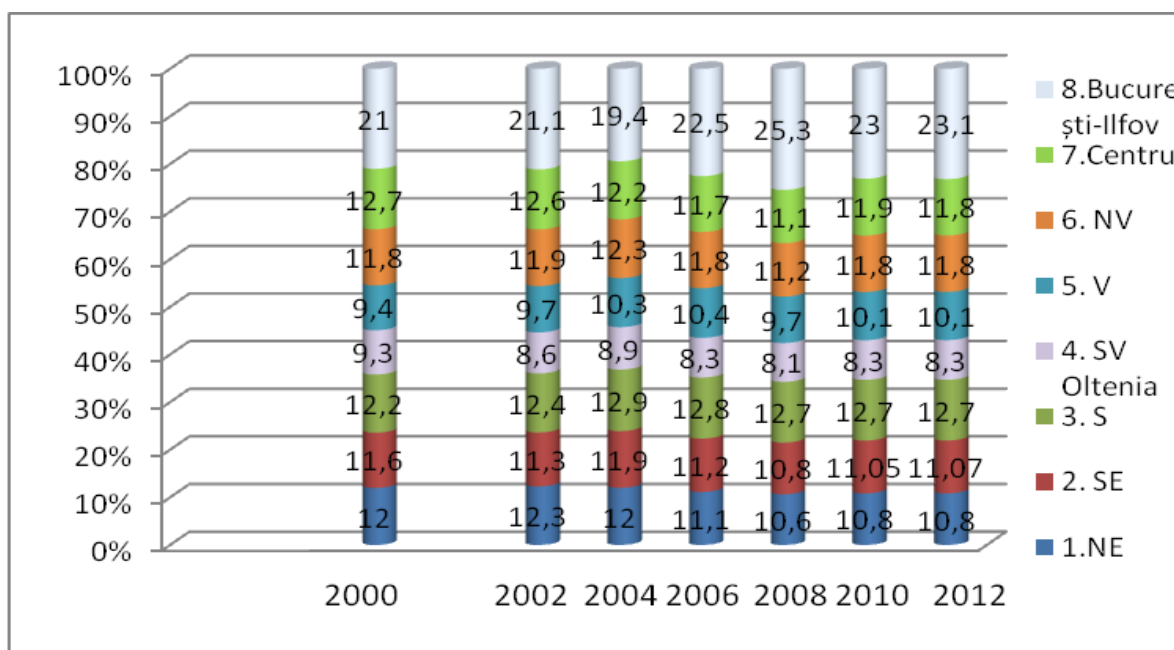


Fig.3. Regions contribution to gross domestic product National (own calculations)

The largest contribution to the national GDP has the Bucharest-Ilfov, in 2008 it contributed 25.3% of total national GDP.

Centre Region's gross domestic product has, in 2008, 11.1% of Romania's gross domestic product, which places the region on the 4th place on this indicator, after the South-Muntenia and Northwest regions which in 2008 takes the second and third place.

Western Region is the only region of the country whose participation to the share of national GDP had almost always a positive development during 2000 -2006, but for the next period 2008-2010 reveals a halt to this positive development

With a GDP that is 10.8% (2008) of the country's economy, South-East Region ranks on the 5th place, while per capita, this indicator is below the national average. The Southeast region participated in Romania's GDP at a rate of between 11.6% and 11.3%

at the beginning of the reporting period (2000-2002) in 2006 reaching 11.2%, respectively 10.8% in 2008.

Western Region ranks seven among the developing regions in the country in terms of size of GDP. This contributes to the creation of approximately 10% of Romania's GDP. The explanation for the reduced value of this indicator in the Western Region is the small size of the West region compared to other regions in Romania.

Western Region, the region ranked seventh in terms of contribution to GDP, ranked two in terms of GDP per capita, as well as the Central Region, which indicates a better labor productivity.

Regional GDP of South-West Oltenia region is approximately 8.5% of the national total, placing Oltenia the last in the interregional tables.

North-East, the region ranked sixth in 2008, in terms of contribution to GDP, it ranks last in terms of GDP per capita. The contribution of this region to the regional GDP, encountered a decrease from 12.0% in 2000 to 10.6% in 2008 and, according to National Forecast Commission forecast it will remain relatively constant over the period 2010 -2012.

In 2012, according to the National Commission for Prognosis, Bucharest will remain the largest contribution (23.1%), South, North - West and Central with weights ranging between 10.1 and 11.8%, and North - South East - East will provide 10.8% and 11.07% of GDP throughout the economy.

Gross domestic product is the indicator most often used to establish the macroeconomic situation and the effectiveness of different sectors. Regional sectors contribution to GDP, for the time period of 2005-2012, in the eight development regions in Romania is shown in Table 3.

TABLE 3.

**The share of regional GDP sectors**

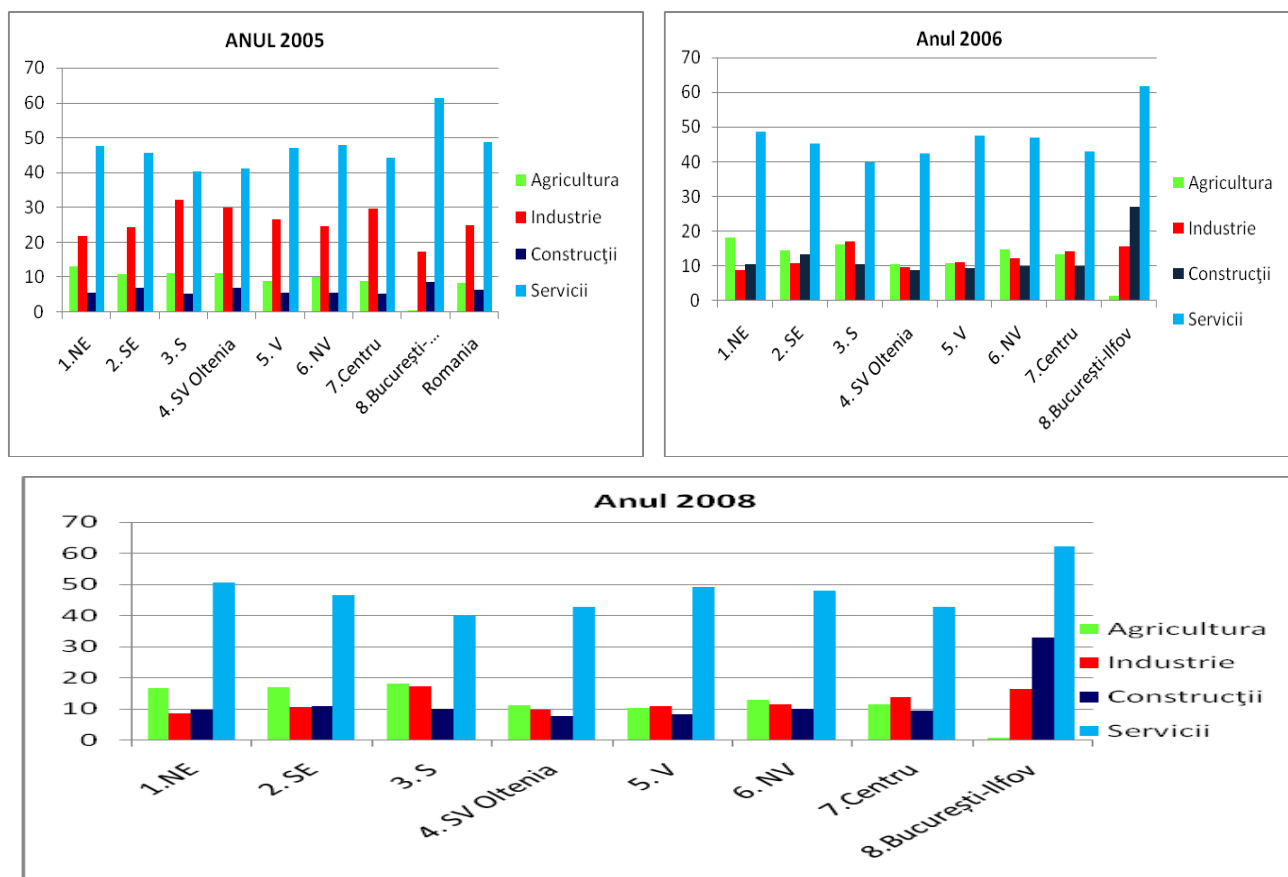
Year 2005									
Region \ Sector	Romania	1.NE	2. SE	3. S	4. SV Oltenia	5. V	6. NV	7.Centru	8.Bucu rești-Ilfov
Agriculture	8,4	13,3	11,0	11,1	11,1	9,0	10,2	9,1	0,6
Industry	24,8	21,9	24,5	32,1	29,9	26,7	24,7	29,7	17,3
Construction	6,5	5,5	7,1	5,2	7,0	5,7	5,5	5,3	8,8
Services	48,6	47,5	45,6	40,3	41,2	47,0	47,9	44,3	61,2
2006									
Agriculture	12,7	18,1	14,5	16,2	10,6	10,7	14,7	13,3	1,4
Industry	16,9	8,9	10,7	17,0	9,8	11,0	12,1	14,3	15,6
Construction	7,0	10,4	13,3	10,6	8,9	9,3	10,1	10,0	26,9
Services	48,6	48,8	45,3	39,7	42,4	47,5	46,9	42,9	61,7
2008									
Agriculture	6,5	16,8	17,2	18,2	11,3	10,3	13,0	11,7	1,0
Industry	22,9	8,7	10,8	17,3	9,8	11,0	11,6	13,9	16,4
Construction	10,5	9,7	10,9	10,1	7,8	8,3	10,1	9,6	33,0
Services	49,5	50,7	46,7	40,2	42,7	49,1	48,0	42,8	62,3

Source: Own calculations based on Statistical Yearbook 2010;

Analyzing the data in Table. 3 as well as the graphic representation (fig. 4) in their share of the sectors that hold in the regional GDP highlights the following:

- The service sector in all developing regions brings a contribution over 40% of regional GDP; even if the percentage is almost half the contribution of all sectors, the breakdown of activities shows that sub-sector of tourism and low value added activities predominate. in the Bucharest - Ilfov services sector brings a contribution over 60% of regional GDP, thus resulting to be the main source of wealth for the region.

The contribution of this sector to regional GDP grew in all regions of the country during the period under review;



**Fig. 4. Graphical representation of the sectors share of regional GDP**  
Source: Graphical representation of data in Table 3.

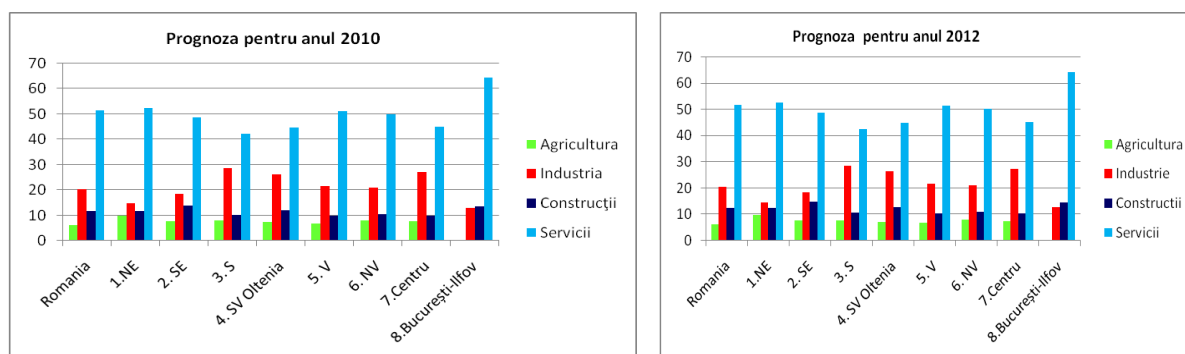
To analyze the sectors in regional GDP ratio forecast for the coming years we will use the data in Table 5:

**TABLE 5**

**Sector shares in regional GDP forecast**

Year 2010									
Region \ Sector	Romania	1.NE	2. SE	3. S	4. SV Oltenia	5. V	6. NV	7.Centru	8.București-Ilfov
<b>Agriculture</b>	6,2	10,0	7,8	7,9	7,4	6,8	8,1	7,7	0,3
<b>Industry</b>	20,4	14,7	18,6	28,6	26,2	21,7	21,0	27,2	12,8
<b>Construction</b>	11,7	11,8	14,0	10,2	12,1	9,9	10,4	9,8	13,7
<b>Services</b>	51,6	52,5	48,8	42,3	44,8	51,3	50,1	44,9	64,3
2012									
<b>Agricultura</b>	6,1	9,7	7,6	7,7	7,2	6,7	7,9	7,5	0,3
<b>Industria</b>	20,4	14,6	18,5	28,6	26,3	21,7	21,0	27,2	12,8

<b>Construcții</b>	12,4	12,5	14,8	10,8	12,7	10,4	11,0	10,3	14,5
<b>Servicii</b>	51,5	52,5	48,6	42,3	44,7	51,2	50,1	45,0	64,0
*** <i>Prognosis in territorial - Spring 2009 version, www. cnp.ro,</i>									



**Fig. 5. Graphical representation of the sectors share of regional GDP forecast**

Source: Graphical representation of data in Table 5

The industry has still a high contribution to regional GDP increased on average more than 20%, except in regions, North East and South East regions where the contribution industry has experienced a decrease in 2008 compared to 2005 by about 10%.

The contribution of this sector increased in the regions: South-Muntenia, Oltenia, South West, West and Centre. This entire region in South-Muntenia, industry has a high proportion in the districts of North, here being placed its most important urban centres : Ploiesti, Pitesti and Targoviste which constituted and still constitute growth poles and centers of polarization for us industrial activities in addition to the existing traditional and foreign investment.

Agriculture contributes to a lesser extent in GDP in all regions, ranging from 1% values in Bucharest-Ilfov region and approximately 16.8% of GDP in the North-East sector share in GDP regional knowledge of a decrease in 2008 compared to 2006. Although agriculture has a small contribution to regional GDP in this sector activates over half of regional employment, which shows the low level of productivity in the field.

Comparing this structure with that of Romania's Gross Domestic Product, results that in the regions (except for the Bucharest-Ilfov) is much better represented the industry, agriculture has a weight similar to that national recorded one, while services and construction differences are still less than the national values.

Looking at the forecast for next year shows that the contribution of services to GDP has exceeded the contribution of industry in GDP, which shows the positive trend of development of the tertiary sector, a sign of a modern economy, and national trend. We also speak of an increase "quality" of gross domestic product of all regions. Share of agriculture and forestry declined while the share of services in regional GDP has increased over the same period.

The building contribution to regional GDP for the period analyzed remains constant at about 10-12%.

We conclude that the gap between development levels of different regions are the result of their differential endowment of natural and human resources, and relatively specific staff development (economic, technological, demographic, social, political, cultural) that have shaped development throughout history. This led to the predominance of agriculture as an economic force in regions where climatic conditions

were favorable, the heavy industry in areas that have found the resources of iron ore and coal industries and the concentration of services in the administrative centers.

These consequences are felt in full until all counties are facing economic problems, in particular with issues of restructuring.

## REFERENCES

1. Băbăiță Ilie, Silasi Grigore, Duță Alexandrina – „ Macroeconomics” – Ed. Orizonturi Universitare, Timișoara, 1999;
2. Constantin Daniela Luminița – „ *Fundamental Elements of Regional Economics*” – Ed. Economică, Bucharest,2005;
3. Constantin Daniela Luminița – “*Regional economy*”,Ed. Oscar Print Bucharest,1998;
4. Iuhas Valeriu – „ *The Regional Economic Development*”, Ed. Emia, Deva, 2004;
5. Jula, D., *Regional economy*, Ed. Estfalia, Bucharest, 2002 ;
6. Jula D., Ailenei D., Jula N., Gârbovean A., *Development economy*, Ed. Viitorul Românesc, Bucharest, 1999
7. Popescu Rodica Caludia(coordonator) – „ *Regional disparities in Romania's Social-Economic Development*” – Ed. Meteor Press, Bucharest, 2003;
8. \*\*\* Romanian Statistical Yearbook 2008
9. \*\*\* Romanian Statistical Yearbook 2009
10. \*\*\* Romanian Statistical Yearbook 2010
11. \*\*\* The site of the National Commission for Prognosis, [www.cnp.ro](http://www.cnp.ro)