

## Regional Economic Development and Disparities in Romania

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### Abstract

The origins of the socio-economic processes determining disparities are defined by history hand in hand with the new forces acting in a spatial dimension. In the period following the '89 events the inequalities in the economic processes can best be detected in the formation of the labor market, the distribution of GDP per capita on a regional level, but there are also new factors influencing the inequalities in territorial development, like foreign investments, the concentration in space of SMEs as well as the territorial structure of R&D activities. The scope of this study is to define the certain disparities manifested in some aspects of the economic processes with the help of mathematical and statistical techniques, mostly the processes that can also be interpreted as indicators of competitiveness. Many studies have pointed out that the lack of infrastructure, the regional position, the territorial structure of the economy, the differences in entrepreneurial activity are acting not only in favor of the regional differences in development, but they also greatly influence the falling in line with the European economy and territorial competitiveness. The analysis of the regional differences of these economic processes could contribute not only to the delimitation of the areas for future development strategies, but also for the interventions aiming at diminishing territorial inequalities and establishing territorial cohesion.

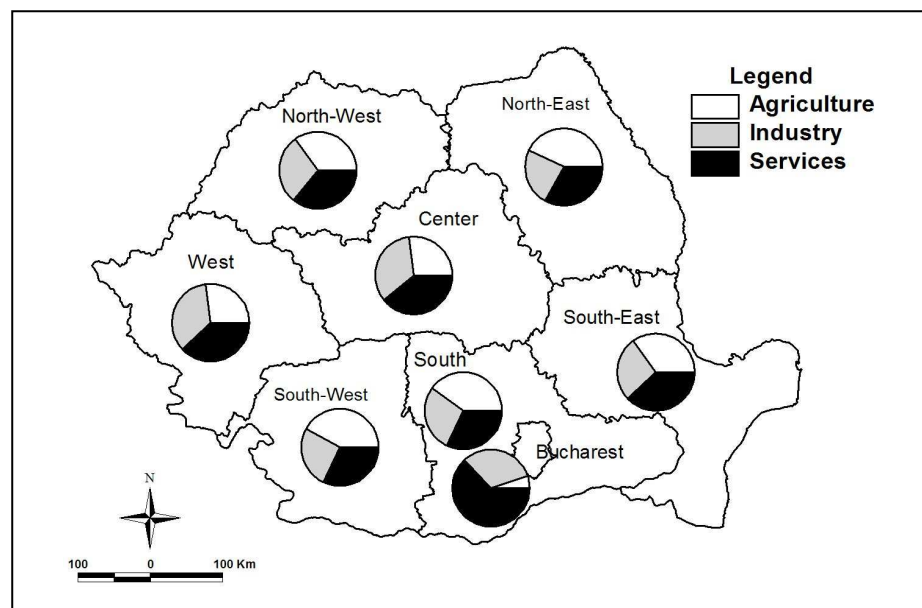
**Key words:** competitiveness, regional disparities, GDP per capita, foreign direct investments, small and medium sized enterprises

### 1. The Evolution of Employment in the Main Sectors of the Economy

The evolution in time of the employment is best reflected by the analysis of unemployment and the distribution in space of the main sectors of the economy. Before 1990 – thanks to the forced industrialization of the communist regime – most of the active population, according to the official statistics was working in the industry, the rate of those working in agriculture was barely above 20%, and those working in services was a little above 30%. In the same time with the recession following the revolution (restructuring, unemployment, inflation, indebtedness) the reorganization of the sectors took place, leading to the termination of tens of

thousands of jobs. The rate of layoffs was highest in Brasov County, specialized mostly on building trucks and tractors, Hunedoara County, where the negative consequences were mostly felt in the metallurgic and extractive industries, but the process of deindustrialization had the worst effect on certain mono-industrial regions, specialized on non-ferrous materials and coal mining – Gorj, Maramures and Harghita Counties, that were declared crisis-regions beginning with the year 1999. The direct consequence of these processes was the imminent decrease of the number of those working in the industry (between 1992 and 2000 the rate of miners occupied in ore extraction fell by 62% and that of those in the coal extraction by 55,8%) and the rise of unemployment [1]. Besides this, the attractiveness and influence of cities that gave the basis for commuting in the past began losing power. As a direct consequence, this functional relationship began manifesting itself in completely different dimensions (suburbanization, forced migration).

**Figure 1. The Territorial Distribution of the Employment in the Main Sectors of the Economy**



Source: Statistical Yearbook of Romania - 2006, INS, Bucharest

As a result to the above mentioned, the rate of people working in the industry fell from 43,1%, registered in the early 1990's to a mere 30% at the beginning of the new millennium., with the remaining part of the active population beginning to work in self sufficient agriculture and a smaller part in some kinds of services. So in Romania, instead of post communist modernization tendencies, a strong „agriculturalization” started to take shape [2]. The rate of those working in agriculture had risen from 28,6% to 41,4%, that lead to the formation of a ruralized agrarian society (mostly Botosani, Vaslui, Giurgiu, Teleorman counties, where the rate of those employed in agriculture reached a staggering 60%). These booming numbers were also supported by the land reforms of the nineties, when the once taken farmlands and forests were attributed to their rightful owners. This also explains the high rate of self-sufficient farmers in 2000 (41,1%), and although there was a slight decrease after that (31,9% in 2005), this is by far insignificant considering the 4% rate found in developed countries.

At a regional level, the highest rate of those working in agriculture (2005) can be found in the South-West, South and North-East Regions (more than 40%), which are – not only from this point of view – the poorest regions of Romania. The existing territorial disparities are even more obvious if we examine the data at the county level, because in some southern

counties the rate of people working in this sector can be as high as 55%. Thanks to the forced industrialization of the 70's, some southern cities, acting as centers in a ruralized environment (Turnu Magurele, Zimnicea, Alexandria, Videle, Giurgiu, Oltenita, Calarasi, Slobozia, Fetesti) and the un-diversified economies of their surroundings could not adapt to the requirements of the transition period and market economy. In contrast, the more diverse economic profile of the northern counties of the South Region has not only lead to the increase in business of the industrial corporations (which was 45.9% in 2003), but they are also the targets of foreign investments (Renault – Pitești, Holcim – Câmpulung Muscel, Samsung COS – Târgoviște). The most disadvantaged are the rural settlements, because the lacks of jobs lead to the emigration of the young population, thus forming the most problematic regions of the country. The counties of the North-East Region also excel from this point of view, lead by Botosani (52,9%) and Vaslui (51,2%) as well as those from the South-West Region: Mehedinti (48,1%) and Olt Counties (49%). These areas are perfect examples of the inter-regional migration and the process of people moving back to their place of origin that took place contrary to the movement of the socialist years as well as the increase of the market garden agriculture. The problem is made even more severe by the high level of ruralization of these areas, the poor state of the infrastructure that do not make these regions too attractive from the point of view of foreign investors.

**Table1. The concentration of the people working in the main sectors of the economy at county level**

	Hirschman-Herfindahl index						
	1995	2000	2001	2002	2003	2004	2005
Agriculture	<b>0.0270</b>	0.0273	0.0273	0.0272	0.0272	0.0272	<b>0.0271</b>
Industry	<b>0.0397</b>	0.0367	0.0383	0.0372	0.0369	0.0402	<b>0.0381</b>
Services	<b>0.0497</b>	0.0485	0.0505	0.0515	0.0537	0.0503	<b>0.0558</b>

Source: Own calculations based on the data from Statistical Yearbook of Romania (1990-2006)

According to the Herfindahl-index used to express concentration, the territorial distribution of those working in agriculture has shown a slight increase at the beginning of the 90's, becoming somewhat stabilized after that, which can be explained by the fact that while before 1989, agricultural activity was concentrated in certain parts of the country, in our days this form of occupation is spread out more evenly, although an increase can be observed in almost every county. While this process contributed to the diminution of some existing differentiations, at a global scale it contributed to the increase of territorial disparities. The decrease of the concentration index regarding industrial workers is related to the decline of the huge industrial complexes, a process that was mostly felt in Brasov, Gorj, Hunedoara, Prahova, Galati counties. The increase from the beginning of the new millennium can mostly be attributed to the territorial concentration of the so called tractive sector, the construction industry, emphasizing the growing disparities even more. A rise in the concentration of those working in services can be observed as well, which can be perceived as a shift towards a competitive market economy and can be explained by the numerous new jobs established by foreign investments mostly in this sector. The sedentation of foreign capital is very much related to the economic development of the target areas, that is why it is concentrated mostly in the Capital and the more developed Regions, like Bucharest, Center, West and South-West Regions. In the case of the last two, their proximity to the border can be considered an important factor, especially regarding Hungarian capital, the main factor remaining the high level of development and urbanization, contributing to the strengthening of the employment sector.

The increased growth in the services sector is more common in the transylvanian Regions, in contrast with the eastern Regions, but the significant differences within certain regions are also influenced by social parameters, the network of settlements and the development of the infrastructure. Whilst in the West Region the rate of the personnel working in services can be considered fairly homogenous (around 38%), in the North-West Region there are significant differences between Satu-Mare, dominated by agriculture (almost half of the population being employed in this sector, the rate of those working in services barely reaching 29%) and Cluj Counties, dominated by services (43,3%). Such piercing differences can also be found between Harghita, characterized by a high rate of industrial workers and a strengthening agricultural sector and Brasov Counties, also nicknamed the citadel of tourism.

## 2. Regional disparities regarding unemployment

The powerful decrease of the population, the generalization of demographic aging and the deindustrialization process have lead to the gradual decrease of the occupied population (mostly in the industrial sector), greatly contributing to the rise of unemployment. Unemployment, as a socio-economic phenomenon has appeared for the first time in Romania in the last 40 years, being very impartial: its negative effects being felt in under-developed as well as in industrially developed regions.

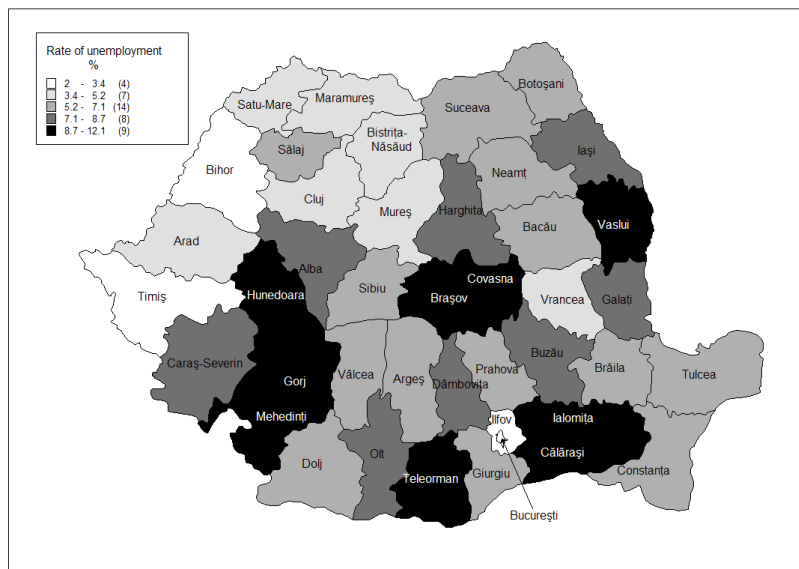
A severe increase can be observed in the decade long evolution of unemployment, not considering the 1994-1996 and the 1999 to present, 4,2% decrease period that were mostly induced by political measures and reforms aiming to combat unemployment. The main goal following the economic fallback after the revolution (1994-1996) was to modernize and restructure the huge industrial complexes, paving the way for future privatizations. Thus, the implementation of reforms in order to combat unemployment was facilitated by two new laws: the 75/1993 Law, that provided financial support for economic entities and institutions hiring the unemployed, as well as the 57/1994 Law, that accorded preferential credits to SMEs, in which at least half of the workers were previously unemployed [3]. Thus, after the rate of unemployment at the country level rose from 3% in 1991 to 11,9% in 1994 it fell back again to 7,6%. The new rise following the year 1997 was determined by the restructuring and cutback of large industrial corporations, the large number of personnel laid off by the decaying of the extractive industries, that lead to the rocketing of unemployment, in 1999 reaching a staggering 13,2% (it reached 21,3% in Hunedoara County – which was one of the most thriving counties of Southern Transylvania; 18% in Braila County). Thus in the following period, the interventions considered the opportunities lying in privatization and restructuring a priority, managing to decrease unemployment to 5,9% nowadays.

Unemployment reached its peak in 1999, when the number of those registered as unemployed reached 1 million. By this time there wasn't a single settlement without the necessity to resolve the dysfunctions induced by the massive layoffs. This has lead to de diminution of territorial disparities regarding unemployment and the beginning of a leveling-off process. In the following period, the inequalities on the labor market started rising again, because the generalized unemployment following the revolution gradually gave place to new jobs. The areas where unemployment became generalized for the first time became the worst situated territories, whilst in the regions that were better endowed regarding the labor market unemployment became stabilized at a much lower level.

The highest rate of unemployment during the analyzed period can be found in the North-East (6,8%) and Center Regions (7,3%), due to the restructuring of mono-industrial areas and the lowest rate of unemployment can be found in the proximity of Bucharest (2,4%), the North-West (4%) and West (5,1%) Regions, mostly in the border counties, but the

explanation lies in the more diverse economic structure of these areas. Adding to the advantages resulting from their position are the high level of foreign, mostly Hungarian investments in the Banat area as well as the extensive re-training programs for the better exploitation of the existing workforce.

**Figure 2. The Rate of Unemployment in the Year 2005**



**Source: Statistical Yearbook of Romania - 2006, INS, Bucharest**

As a sum-up, in the period following the political juncture, only the North-West Region managed to hold down the levels of this indicator, that was situated well below the average in 2005 (4%). Here, the pre-eminent values are represented by Cluj (4,4%), Maramures (4,5%) and Salaj (6,1%) Counties. While in Cluj the high rate of layoffs was induced by the fallback in turnover of the Metallurgic and Wire Plant from Cimpia Turzii, the CUG heavy machinery plant and the Iris porcelain factory (that were successfully privatized afterwards), in Bistrita Nasaud and Salaj counties the rise of unemployment was mainly caused by their detrimental situation and the high rate of people occupied in agriculture.

For the analysis of the relationship between the number of those employed and the unemployed we will be using the so called Dual-Index, which greatly reflects the duality and great distance between the developed and under-developed counties.

**Table 2. The Dispersion Indices of Unemployment**

	1993	1994	1995	1996	1997	1998	2000	2001	2002	2004
<b>Weighed Std. Deviation</b>	34.25	34.82	34.75	<b>41.10</b>	31.83	31.09	28.27	30.77	31.34	34.36
<b>Weighed Rel. Amplitude</b>	1.48	1.33	1.33	<b>1.58</b>	1.16	1.25	1.13	1.32	1.45	1.28
<b>Dual Index</b>	1.69	1.71	1.73	<b>2.04</b>	1.70	1.64	1.56	1.62	1.70	1.33

**Source: Own calculations based on data from the Statistical Yearbook of Romania (1990-2005)**

The values of both the relative dispersion and the dual index are most appealing in the year 1996, when the difference between Neamt County, plagued by severe unemployment and Gorj County, characterized by a higher rate of activity reaches its peak (five times higher). This period coincides with the gradual restructuring of the light industry in Moldova, which began immediately after the revolution, whilst in Gorj, the large number of personnel laid off as a consequence of the poor competitiveness of the extractive industry only began enhancing the statistics of the unemployed beginning with the year 1997. Around the end of the decade

the duality starts increasing once again, that can only be explained as being the result of the existing long-term unemployment. This rate of unemployment was particularly high among the male population (9,5% in 2004), but also the most vulnerable age bracket, those between 15-24 years. Analyzing the rate of those benefiting from professional adaptation aid and dole we can observe that the higher the level of education, the less people benefit from them. The rate of those with a high education, benefiting from unemployment benefit on the contrary, is the highest in counties with universities looking back to century old traditions (Cluj, Timis, Brasov, Bucuresti, Iasi). This confirms our standpoint sketched above, according to which the problem is still most severe among the newly graduated entrants of the labor market.

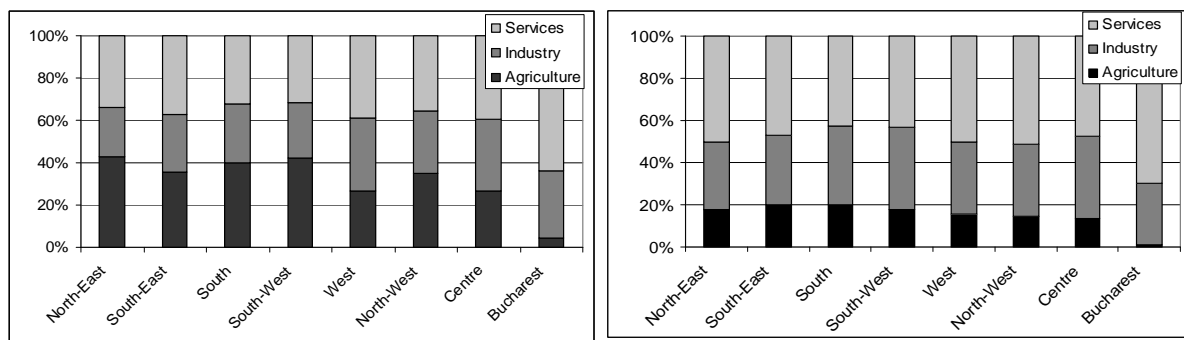
As we could see, the policies aiming at reducing present and future unemployment really have to consider the perspectives of newly graduates entering the labor market; they will have to ensure the means for life-long learning for those with a higher education. In our days, this is absolutely indispensable for establishing competitiveness in our flaring economy.

### 3. Economic structures: crisis areas and growth poles

The restructuring that took place after the political junction has lead to the formation of a wide range of crisis areas and has greatly contributed to homogenizing the spatial spreading of agriculture. The south-Transylvanian axis, considered a stable pole for the economy has collapsed, the restructuring of the whole economy acted in favor of the agriculture. Agriculture in this period had a security role in employment [4]. But there is still the problem, that the rate of those working in this sector is much higher than its contribution to the country’s GDP, the production of new values that reflects the subsistential character, as the negative consequence of the political juncture.

While in the case of the North-East, South and South-West Regions rate of farmers exceeded 40% in 2005, the contribution of this sector to the country’s GDP was a mere 15%. This is also supported by the fact, that appliances and machines needed for technologic structural change, the traditional ways of production and the lack of a new production culture is unable to boost the competitiveness of the sector. We could also say that on those territories, where agriculture is predominant, competitiveness is low because it „sucks away” the GDP that could be produced with a higher rate of services and industrial activity [5].

Figure 3. The relation between the rate of those working in the main sectors of the economy and the GDP produced, 2005



Source: Statistical Yearbook of Romania - 2006, INS, Bucharest

The industrial workers and the values produced show a somewhat more balanced situation, but the present and future tractive sector will first of all be that of services. This is confirmed by the fact that the amount of GDP produced by the service sector is well above the rate of people working in this field. Thus in our days the regions that can be considered the

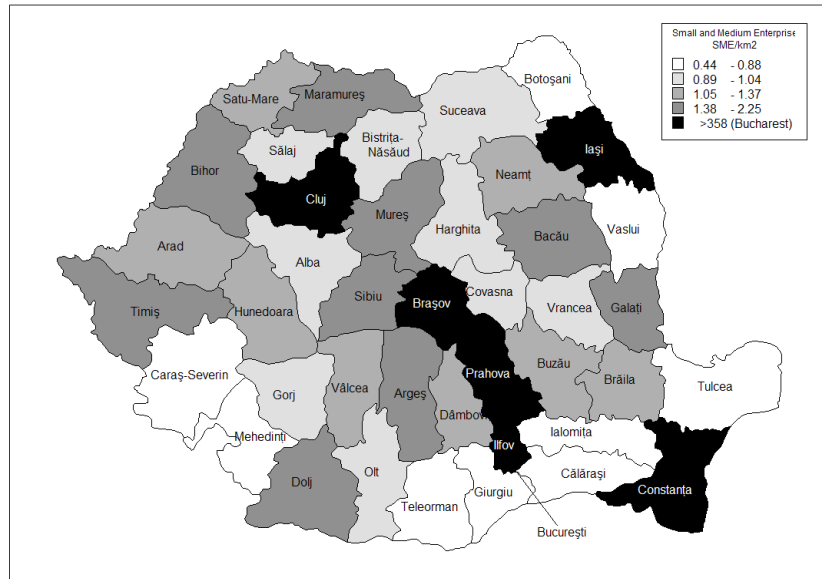
roots of growth poles are those, which were able to successfully implement the new elements of the market economy that came after the revolution. Banks and business services, the upsurge of tourism and the processing industry are the propulsors of the economy. Besides Bucharest (62,1%), the North-West Region also excels from the point of view of GDP produced in the service sector (45,5%), but the West Region is also close with its 44,8%. Thus the Arad-Timisoara-Oradea axis linked by Cluj to the Brasov-Pitesti and Bucuresti-Constanta development axis can be considered future growth poles. The areas that find it difficult to break free from this crisis situation, besides the south-Transylvanian counties are the less developed ones situated in the North-East and South, battling with a high level of ruralization. The gap in development between these two types of regions contributes to the further rise of regional disparities.

#### 4. Factors Contributing to the New Forms of Territorial Inequalities in Development

The relation between the high rate of people working in agriculture and the GDP produced by the sector does not lead to the rise of the competitiveness of these areas. *Foreign investments* play a crucial role in the evolution of the spatial structure of employment, mostly in the diminution of the role of the agricultural sector, in the increase of competitiveness, because they facilitate economic growth, they create new jobs and they increase the competition on the market. While investments in the early nineties were around 100 million euro, in 2005 the invested capital grew to 5,2 billion, confirming the strong relationship between economic development and foreign investments. This is also very much related to the amelioration of the business environment, the economic and political stabilization, the liberalization of legislations regarding the establishment of mixed capital companies, but also the proximity of the EU accession, contributing year by year to the increase of the invested foreign capital. Examining the investments by each sector of the economy, we can immediately see the dominant role of the industrial sector, which was facilitated by the low prices of properties, cheapness, qualification and traditional character of the labor force. In the past years, the main field was the automotive component industry, which indicates, that in the future industry could become a pretty much competitive domain, mostly the sectors with a high added value. As in the case of SMEs, R&D activities, or regional GDP, foreign investments are also very much concentrated in space, mostly focusing on big cities, like Cluj, Constanta, Galati, Arges and the Capital. In these areas, the FDI per capita is between 500 and 1000 euro, in contrast with some other counties from Moldova or Muntenia, where it barely reaches 100 euro.

The territorial spread of *Small and Medium Sized Enterprises* is considered nowadays the key factor of a competitive economy. The urging of entrepreneurial activities is indispensable in a transitional economy, together with making the state property a private property. The number of newly registered firms grew exponentially during the first years following the 1989 events, but the growth came to a halt in the mid 90's. Because most of the medium size enterprises were formed by cutting down the big ones, which were not too competitive, to say the least (old technologies), this was a huge setback for future development. In the case of small firms, besides the lack of capital, the cyclic periods of the transition period have also had a negative effect: high rate of inflation – thus rising interest rates, scaring many entrepreneurs from taking bank loans [6]. The stabilizing of the number of SMEs in the nineties can be correlated with the widespread economic crisis, but also the sudden decrease of demand. The new strengthening of SMEs came together with the new millennium, the number of registered firms reaching the 1994 level of 400.000 in 2004.

Figure 4. The Territorial Distribution of Small and Medium Sized Enterprises in the Year 2004



Source: Statistical Yearbook of Romania - 2006, INS, Bucharest

Analyzing the territorial distribution of enterprises, 35% of the country's SMEs can be found in Transylvania, supporting the largest number of such economic actors after Bucharest following the revolution. County level analyses show great differences. While Cluj, Brasov, Prahova, Constanta, Iasi Counties each hold almost 1/5 from the country's SMEs, the worst situated ones like Giurgiu, Ialomița, Mehedinți, Călărași, Sălaj, Botoșani, Covasna and Tulcea barely have 6%. The hierarchy is somewhat modified if we consider the density of enterprises, but even so, the highest density can be found in the Western border area, running like axes through the different parts of Transylvania, skipping the poorest regions, counties like the Eastern and Southern parts of the country as well as the interior periphery of the Szekelyfold. Although Alba and Caras Severin Counties have excelled through their high level of industrialization during the socialist years, after the 1989 events they could not adapt to the requirements of the market economy, being the starting points in delimiting today's crisis areas. Besides the weak entrepreneurial activity in these regions, there were also severe social tensions that were strengthened even more by the high rate of unemployment. A kind of relation can be pointed out between unemployment and the density of SMEs, meaning that low unemployment is characteristic in areas with a high SME density – mostly in the western counties and Cluj and vice-versa, in the widespread crisis areas, where unemployment is high, living standards and wages are low and buying power is poor the number of firms finding this environment attractive is also quite small.

Table 3. The correlation between FDI per capita, GDP per capita and SMEs

		FDI/pers.	GDP/pers.	SMEs/1000 pers.
FDI/pers.	Pearson Correlation	1	.777**	.677**
	Sig. (2-tailed)	.	.000	.000
	N	42	42	42
GDP/pers.	Pearson Correlation	.777**	1	.887**
	Sig. (2-tailed)	.000	.	.000
	N	42	42	42
SMEs/1000 pers.	Pearson Correlation	.677**	.887**	1
	Sig. (2-tailed)	.000	.000	.
	N	42	42	42

\*\* . Correlation is significant at the 0.01 level (2-tailed).



The spatial distribution of SMEs shows a high level of concentration, appearing in large numbers mostly in medium sized and large cities but is also correlated with the level of development and the territorial concentration of foreign investments. This is also supported by the correlation calculated for the two indexes mentioned above.

As we could see, the strongest connection can be found between the GDP per capita and SMEs per 1000 inhabitants, but there is also a strong correlation between foreign investments per capita and the concentration of firms (that is correlated with the territorial distribution of the new SMEs established by foreign owners as well).

The effect of SMEs on employment has gradually been increasing from the mid 90's and nowadays more than 65% of the employed people in the country are presently working in firms with personnel of less than 250 people. Today it is characteristic to every developed country, that large enterprises are no longer capable of establishing any new jobs, this responsibility falls on the shoulders of small and medium size enterprises, which will expectedly raise the rate of those employed here even more.

On the whole we can say that the „winner counties” going upwards in the hierarchy were those where the entrepreneurial spirit, environmental influences and regional endowments have not only made the region attractive for foreign investors, but also in the eyes of the indigenous ones. Thus, these regions (mostly the North, Center and Bucuresti-Ilfov Regions) have acquired multiple advantages, because not only the rate of foreign investments, but also the GDP per capita, the higher rate of SMEs, the business environment and the infrastructure further contributes to their competitiveness and their position in the Romanian spatial structure. The so called losers of the transition are henceforward the peripheral, mostly agrarian territories, where the high rate of unemployment doesn't favor the sedentation of large capital enterprises. This spatial distribution further deepens the inequality gap, acts in favor of disruption and a dually developing economy.

We must briefly mention the expansion of *research and development activities* and its spatial distribution, because nowadays, the presence or lack of such institutions defines the competitiveness of the knowledge-based economy, advanced production technology, the falling in line with more developed countries.

The number of research and development institutes financed by the state has been continuously increasing since the beginning of the nineties, but despite this fact, the rate of people employed in the R&D sector is only around 0,9%. The R&D sector shows an even higher concentration than the ones above, in fact most of the employees working in research and development are concentrated in the capital and a few large university centers. These are mainly Bucharest, Cluj, Brasov, Timis, Craiova, Iasi and Mures counties, where a large number of universities either hold research departments of their own or they collaborate with other research centers that have settled close by.

The number of those working in research centers projected on 1000 inhabitants hides significant territorial differences. The most R&D workers can be found in the Bucharest, disposing of traditions regarding high education (21,3 research workers per 1000 inhabitants), Iasi (7,8), Dolj (7,6) and Cluj (6,7) Counties. In essence, these four cities hold 40% of the workers involved in research and development. From this point of view, the worst situation can be found in Harghita, Ialomita, Teleorman, Vrancea and Olt counties, where the lack of the R&D sector is reflected by the rate of research workers (less than 0,6).

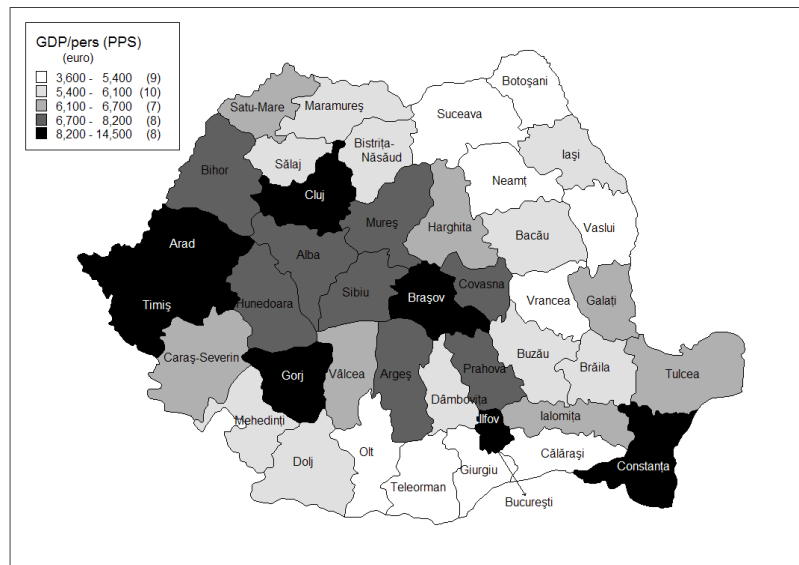
If we give the R&D expenditures of counties in the percent of the GDP, the existing differences at high level of concentration are even more obvious. Even though R&D expenditures in the EU are stagnating at around 1,84%, which is far below the objective adopted in 2000 and renewed in 2005 in the Lisbon Strategy – respectively 3%, in Romania these spending barely reach 0,2%. As we can see, the R&D expenditures are somewhat

different from the rate of those employed in the sector, but the highest step of the hierarchy is still occupied by Bucharest, followed by Arges, Cluj, Iasi and Dolj Counties. The R&D activities in the rest of the country can be discarded. From this aspect, the lowest rates of the indices are in Harghita, Vrancea and Giurgiu Counties. Although the R&D sector is indispensable in a knowledge based and competitive economy, in the case of Romania there is still much room for improvement. Hopefully, the 10% increase of the R&D budget adopted in the country's Development Plan (for the 2005 – 2010 period) will be able to further increase the strengthening of technological and research activities.

## 5. The Development of the Romanian Counties Based on the GDP per Capita

The intense polarization of the country is further enhanced by the analysis of territorial disparities at the county level. The highest GDP can be found in Bucharest (14.426), followed by Timis and Cluj Counties, but above average values can also be found in Brasov, Arad, Sibiu, Bihor and Mures Counties as well (between 7500-8500 euro). Although the development of the Transylvanian counties is confirmed by previous analyses even in this somewhat smaller region the heterogeneity is obvious. Whilst in Romania, the average GDP per Capita calculated on Purchasing Power Parity is around 7300 euro, the Transylvanian average was a little higher in 2004, reaching 7400 euro.

**Figure 5. The Territorial Distribution of GDP/capita in the year 2004**



Source: The Author Based on Data From Eurostat

As we could see, the highest values can mostly be found in Transylvanian counties, that is greatly influenced by their regional position, the proximity to Western European Countries, the openness that gave them the ability to absorb the foreign capital. We cannot discard the vast traditions of these areas, their favorable position in the past centuries that was emphasized by the fact, that these regions were also part of the Austrian-Hungarian Monarchy. Thanks to their more developed infrastructure, the further developments that had taken place during the communist years were easier to implement, than in certain underdeveloped, purely industrialized areas [7]. As we already mentioned, somewhat higher values can also be found on the Gorj-Valcea-Arges-Prahova axis completed by Constanta at the South-East end, counties that have disposed of a developed industry as early as the 19<sup>th</sup>

Century. We could say that the southern areas are characterized by a dual spatial structure: the northern counties with more diverse economic structure (chemical-, automotive-, construction industry) acting in consequence as destination for foreign investments (Renault-Pitești, Holcim –Campulung Muscel). In contrast, the evolution of their southern neighbors was pretty much defined by the forced industrialization of the seventies, nowadays struggling with the transition to a market economy and restructuring. The lowest values of GDP can be found in the peripheral – from a spatial point of view as well - Botosani, Vaslui, Giurgiu, Olt and Teleorman Counties.

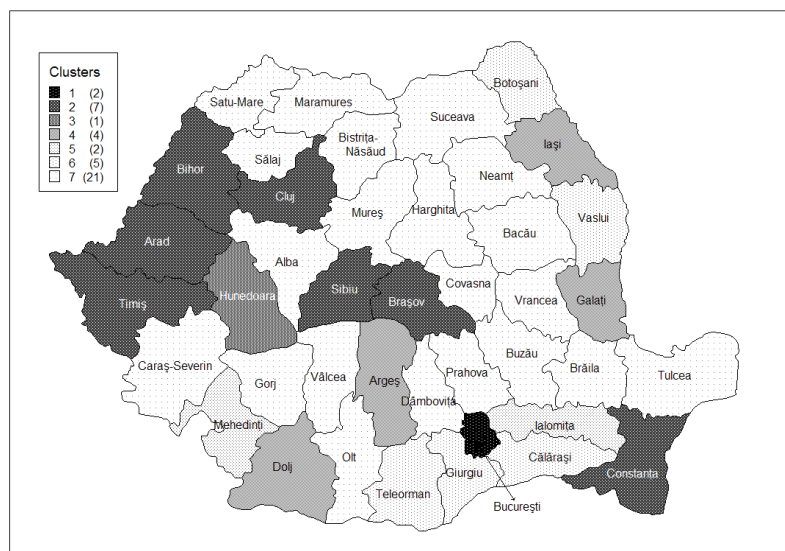
On the whole, if we define development by measuring the GDP, the most developed areas are those from the central and western parts of the country.

After studying these economic processes which also determine the competitiveness of regions, I would like to analyze their complex spatial pattern with the help of the cluster analysis. The main advantage of this method is that we can group our different territories using more indicators at the same time, the different areas being put in different clusters depending on how similar these different territories are according to the selected indicators. For this, I have selected the already mentioned economic variables and I consider it is important to examine how the counties group together according to these indices:

- GDP/pers. (PPS, euro), 2004
- Urban population (%), 2005
- Rate of unemployment (%), 2005
- Employees from research-development activity per 1000 civil employed (person), 2005
- Employees from services (%), 2005
- Active population (%), 2005
- Tertiary education of the school aged population (%), 2005
- SMEs/1000 inhabitants, 2005
- FDI/person (euro), 2004

After the first step, we have 2 clusters: Bucharest breaks away from the rest of the counties, which is not surprising given the fact that the GDP per capita, the FDI, the rate of those working in R&D activities, the number of SMEs and those with a university degree is the highest, unemployment on the other hand is the lowest in the entire country.

**Figure 6. The Grouping of Romanian Counties with the help of Cluster Analysis**



**Source: author**

In the second step we get 3 clusters: besides Bucharest, another group of developed countries takes shape: Arad, Bihor, Constanta, Sibiu, Brasov, Timis and Cluj Counties, with considerable traditions in the field of research and high education. The concentration of SMEs, the GDP and FDI, the rate of people working in services also shows a high level of concentration, being the most concentrated - apart from the Capital. In all, these regions form the group of areas with complex advantages.

In the 3<sup>rd</sup> step, together with the separation of Hunedoara County, a new group of counties emerges: Iasi, Dolj, Galati and Arges. The breaking away of the traditionally developed Hunedoara, looking back to centuries of industrial development was induced by the process of deindustrialization, where the generalized unemployment is still the source of many social dysfunctions even in our days. Although the above mentioned counties could be characterized with an average level of development, in each case we can observe the significantly higher levels of one of the analyzed indexes. So in the case of Arges and Galati the FDI are above the average, in Iasi and Dolj Counties the number of people with a university degree and as a consequence, the rate of those working in the R&D sector.

In the fourth and last step we can delimit 7 clusters, from which, apart from those mentioned above we should consider at least two other groups: Ialomita with Mehedinti, respectively Botosani, Giurgiu, Vaslui, Teleorman and Calarasi. Based on the indexes analyzed, both groups are considerably behind: their high level of ruralization and unemployment not being able to lure much foreign capital. Companies, backed up by the rate of agricultural workers and the GDP produced, as well as the low rate of those with a high education which is naturally correlated with the level of R&D activity.

These regions could very well be called those with complex disadvantages, because considering the indices strongly correlating with competitiveness, these are the worst situated areas in the whole of the country.

**Conclusions**

The main factors contributing to the articulation of the spatial structure are the labor market and unemployment, but the new differentiating factors, like foreign investments, distribution of SMEs, regional GDP further increase the gap between the developed, competitive and dynamic and the so called crisis areas.

In conclusion, the changeover to a market economy, the consequences of restructuring have led to the forming of a West – East duality. The proximity of western markets has been beneficial for the counties forming the thin and dynamic line called the gates to the European Union, the Eastern areas being characterized by the preponderance of peripheral counties.

We could say that the winners of the privatization and restructuring processes of the last 15 years or so were the regions that were able to effectively adapt to the requirements of the new and innovative activities. By this they acquired certain comparative advantages, that further strengthened their position occupied in the country's spatial structure (Timis, Cluj, Bihor Counties). The so called losers of the transition were henceforward the peripheral, agrarian areas, where the high rate of unemployment, low income did not act as an allurements for large capital enterprises. We can find Bistrita-Nasaud, Salaj, Satu-Mare and Maramures Counties in this category. Although the GDP per capita unmistakably points out the Transylvanian Regions as the most developed ones, there are significant differences within these areas. The diminution of these only depends on the successful implementation of regional policies elaborated on different levels and the rational distribution of resources in the hands of local administrations.

The inequalities of the economic space can greatly be influenced by adequate interventions towards a more homogenous spatial structure and the establishment of territorial cohesion. In this sense, from the concepts drawn up in the Regional Development Plans, the priorities should be the sections regarding infrastructure, human capital and the labor market. Recent analyses have also pointed out, that the most severe social dysfunctions following the revolution were those related to unemployment. Making the business environment more attractive, the stimulation of SMEs, the development of the R&D sector and the establishment of an information society, touristic potential and the amelioration of the chances of the rural population could contribute to the diminution of inequalities not only in certain historical regions, but also at the level of the whole country. In the near future, territorial planning and regional policies, the cooperation between local, regional and nationwide institutions will have a much more significant role in diminishing inequalities, so that Romania (and its historical regions) can be a more competitive and more dynamic part of the European Union.

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