REGIONAL ASPECTS OF THE ROMANIAN LABOUR MARKET. IMPLICATIONS FOR ECONOMIC DEVELOPMENT

Abstract
The quantitative, qualitative and structural improvement of the labour market in order to increase the level of development is a major objective of any country or region. In our study we aim to highlight the peculiarities of the labour market at regional level, focusing on the following elements sectors of activity, labour productivity, educational level, employment and unemployment rate. Moreover, we intend to observe the relationship between the structure of the labour market and regional economic development, in order to show that disparities in the level of regional development can be explained by the disparities in the employment structure. The results of our study highlight the necessity for change in the structure and quality of employment in order to assure the conditions for a balanced regional development in Romania.

Keywords: employment, economic sector, professional status, labour productivity, regional development

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ASPECTE REGIONALE AL PIEŢEI FORŢEI DE MUNCĂ DIN ROMÂNIA. IMPLICĂRI ASUPRA DEZVOLTĂRII ECONOMICE

Emilia HERMAN
Postdoctoral researcher at the Bucharest Academy of Economic Studies
Lecturer Ph.D., Faculty of Economics and Administrative Sciences, The "Petru Maior" University of Targu-Mures
E-mail: emilia_herman@yahoo.com

Rezumat
Imbunătăţirea cantitativă, calitativă şi structurală a pieţei forţei de muncă în scopul creşterii gradului de dezvoltare reprezintă un obiectiv major al oricărei ţări sau regiuni. In studiul nostru ne propunem să evidenţiem particularităţile pieţei forţei de muncă din România, la nivel regional, concentrându-ne pe următoarele elemente: sectoare de activitate, statut profesional, productivitatea muncii, nivel educaţional, rata ocupării şi a şomajului. De asemenea, intenţionăm să surprindem legătura dintre structura pieţei forţei de muncă și dezvoltarea economică regională, pentru a arăta că disparităţile în nivelul de dezvoltare regional pot fi explicate prin disparităţile în structura ocupării. Rezultatele studiului nostru evidenţiază necesitatea schimbării structurii şi calităţii ocupării în vederea asigurării condiţiilor pentru o dezvoltare regională echilibrată pe teritoriul României.

Cuvinte cheie: ocuparea forţei de muncă, sector economic, statut profesional, productivitatea muncii, dezvoltare regională
1. LABOUR FORCE–THE INDISPENSABLE RESOURCE TO ECONOMIC DEVELOPMENT

From the attitudinal controversies over labour – some for labour and others for capital – a point of view emerged according to which labour is and will remain the supreme value that will characterize society also in the future.

Every country and region’s progress and development is due to the labour that its inhabitants do. The more this labour reaches a higher qualitative level, the more visible results are, and the better the quality of life is. Thus, in appreciating the level of development and civilization a country or a region reaches, we need to take into account the level, quality and structure of the labour market. Therefore, we cite our national poet Mihai Eminescu (1941), who wrote: “the state’s civilization is economic civilization...”, and “wealth is not air or land, but the power of the arms and where arms are missing or the quality of production is bad we cannot talk about a wealthy country”. Among the first to have acknowledged the extremely important role of labour in economy were the mercantilists when they highlighted that “people’s welfare consists mainly in wealth, and wealth in labour” (A. de Montchrêstien). On the other hand, in Human Development Report UNDP (2010), it is highlighted that people are the real wealth of a nation, and people are both the beneficiaries and the drivers of human development, as individuals and in groups.

The ever changing conditions, which the economy needs to face, produce periodically equally significant mutations related to labour market. The labour resource is permanently solicited to produce something else, with increasingly higher productivities, the content of its work changes, new skills, qualifications and abilities being needed. „We are what we produce” (Giarini and Liedtke, 2001) state some specialists, man’s value in society being determined by the value of his activity, by the value of his work.

In our paper we aim to analyse some aspects that reflect the level, quality and structure of the Romanian labour market, at regional level, in order to emphasize the implication of this market for economic development.

2. DEVELOPMENT REGIONS IN ROMANIA. DISPARITIES IN THE LEVEL OF ECONOMIC DEVELOPMENT

In Romania, according to Law 151/1998 eight development regions were created: Centre (C), West (W), South-East (SE), North-West (NW), North-East (NE), South-West Oltenia (SW), South-Muntenia (S) and Bucharest-Illfov (B-I), that constitute the creation, implementation and evaluation framework of the
regional development policy. They do not actually have an administrative status or legislative and executive councils and their main function is to obtain funds from the European Union.

As in other European countries the most developed region is the one that includes the capital, and the less developed are the border areas. In Romania the underdeveloped areas are concentrated in the north-east, at the border with Moldova and in south, across the Danube. Except for the Bucharest-Ilfov region, whose situation in the economic landscape is completely special, economic growth followed a west-east direction (having a significant geographic component), the west markets’ proximity acting as a growth spreading factor (Government of Romania GR, 2005).

Statistical data in fig. 1 reflect the positive trend of GDP/capita (expressed in euro), as indicator that expresses the level of economic development, in all eight development regions, between 1999 and 2008. Despite this visible progress, there are still negative significant gaps recorded, on the one hand of the development regions compared to the Bucharest-Ilfov region, and on the other hand, of Romania compared to EU-27.

In 2009, according to data in fig. 2, which present the ranking of the eight regions of Romania in terms of GDP per capita (expressed in lei/capita), on the first place we have the Bucharest-Ilfov region, and on the last one the North-East region. The North-East region is marked by its dependence on agriculture and a high level of ruralisation as well as by the proximity to the border with Moldova and Ukraine. The same thing is valid, to a certain extent, for the South-Muntenia region, which also depends on agriculture and where the Danube acts as a barrier in the cross-border trade. Benefiting from their closer position to the western markets and their more reduced dependence on the primary sector, West, North-West şi Centre regions have attracted more foreign investors, fact which has significantly contributed to their development.
As far as the regional structure of GDP is concerned, in 2009, Bucharest-Ilfov region was on the first place, contributing to the creation of GDP by 25.5%, a lot more than the contribution of the other regions, contribution which varies from 8% (South - West Oltenia) to 13.2% (South - Muntenia). If we analyse the regional structure of GDP compared to the regional structure of civil employed population, we notice that in some regions the contribution to GDP is higher compared to the contribution to civil employment and vice versa. The regions in the first category (Bucharest-Ilfov, West), where the relationship between the contribution to GDP and the contribution to employment is higher than one, are characterized by a higher labour productivity compared to the other regions where the relationship is below one, according to fig. 3 si 4. For example, the North-East region occupies the second position as far as the contribution to employment is concerned (14.4%), but only the forth one related to the contribution to the creation of GDP (10.4%), thus assuring the conditions for the existence of a lower productivity, even the lowest in all regions.

Taking into consideration that economic development is strongly influenced by the human resource, and the disparities in the level of development are determined by the existing disparities on the labour market, we shall analyse the main regional gaps in the Romanian labour market.

3. ROMANIAN LABOUR MARKET AT REGIONAL LEVEL

Labour market has a central role within economy, focusing on man and his interests. The equilibrium between labour force demand and supply, between full employment and growth of labour productivity is an integrating part, an indispesble component of the general economic equilibrium, of economic development implicitly (Stiglitz and Walsh, 2005).
The evolution of the labour resource at the level of the development regions was, in the last decade (1999-2009), under the impact of some economic, demographic and social phenomena. The Romanian labour market was characterised by regional differences in size and composition. Differences can be seen in employment rate, unemployment rate, in employment structure by sectors of activity, socio-professional categories, in productivity, education level, etc. Between 1999 and 2009, the employment regional rates were convergent in Romania, but in a negative way, recording a decline in almost all regions (except for the Bucharest-Ilfov region). The statistical data in fig. 5 highlight that at EU-27 level, at the same period, the average employment rate increased, from 63.1% to 64.6%, while in Romania it decreased from 63.2% to 58.6%. Thus, in 2009, Romania was at 6 percentage points (p.p.) difference from the objective set in Lisbon for 2010 – an employment rate for the working-age population (15-64 years) of 70%. If in 1999 the highest level of this indicator (of 68.4%) was reached in the South-West Oltenia region, in 2009, this performance was reached by the Bucharest-Ilfov region. On the last place, there is the Centre Region in 1999, as well as in 2009. One can notice the dramatic fall in the employment rate in the South-West Oltenia and North-West regions, by over 8 p.p., almost double compared to the decline recorded at national level (of 4.6 p.p.). The regional disparities remained relatively constant, considering the fact that the variation interval from one region to the other, in 1999, was between 59.5% and 68.4%, and in 2009, between 55.1% and 63.8%. The fact that in the North-East and South-West Oltenia regions, the highest employment rates are recorded, after the Bucharest-Ilfov region, it does not mean that we talk about an efficient employment, if we take into account that in these regions there is the lowest level of development.
As far as the unemployment rate is concerned, between 1999 and 2009, in five of the eight regions (except for the Centre, South-West Oltenia and South Muntenia regions) a fall was recorded. According to statistical data provided by Eurostat (fig. 6), in 2009, a year marked by the reduction of the economic activity determined by the economic crisis, an increase in the unemployment rate was recorded as compared to the previous year in all development regions. On the other hand, it is noticed that, in the period analysed, regional disparities regarding the unemployment rates increased, the level of the unemployment rate recorded in the eight regions being, in 2009, in the interval between 4% (the Bucharest-Ifov region) and 10.7% (the Centre region), compared to the unemployment variation interval, in 1999, between 5% (the South-West region) and 7.7% (South-East).

It is worth noticing that in 1999 as well as in 2009, Romania recorded values of the unemployment rate below the average level recorded in EU-27 of 8.9%. The only development region, where an unemployment rate above the European average was recorded, is the Centre region, with an unemployment rate of 10.7%. The lower unemployment rate at national level compared to the one at European level, on the one hand, and the one in the less developed regions North-East and South-West Oltenia compared to the national one, on the other hand, reflects the fact that subsistence agriculture, indicated by the high employment in agriculture (fig. 7), and the migration for working abroad have had a protection effect on the labour market against a higher unemployment level.

Although the level of the unemployment rate is more reduced, the problems of the Romanian labour market are far from being solved. At EU-27 level, empirical evidence suggest that, in the EU developed countries, a higher employment level is recorded compared to the one in the EU less developed countries (for example, Bulgaria, Romania). Inside Romania, a negative relationship between the development level of the regions and the employment rate is identified, but this relationship is statistically insignificant (the value of the Spearman correlation coefficient calculated based on the data on the employment rate and GDP/capita, in 2009, for the eight development regions is of 0.06), fact which highlights that, in Romania’s development regions, a higher employment rate does not reflect and is not reflected by economic development. In order to emphasise the real problems existing on the labour market and the gaps at regional level, it is important to highlight the aspects related to: employment structure by activity sectors, professional status, labour efficiency, education level etc.

The current employment sectoral structure in Romania is different compared to the one of the EU-27, being the result of a process of slow economic restructuring and the alternation, in the transition period, of the positive economic growth periods with the negative ones. According to data in fig. 7 in Romania,
in 2009, 40.9% of the employed population worked in services, 30.1% in industry and constructions, and 29.1% in agriculture.

In the last decade, the tendency recorded in the employment structure, from the point of view of the activity sector where the employed population works, was positive, meaning that the employed population in agriculture decreased and the one employed in the secondary and tertiary sector increased. This reorientation of the labour force towards non-agricultural sectors can be correlated with the creation of new jobs in the urban area, in the context of the growth of the private sector in economy, but also of the fact that some localities were declared towns (Government of Romania (GR), 2005). However, compared to the average level reached by the EU-27, Romania has a significant gap to recover.

In the two less developed regions (North-East and South-Vest Oltenia), the highest share of employment in agriculture is recorded (48.2%, 47.1% respectively), but also the most reduced employment in services (31.1%, 29.7% respectively). The region that records the highest share of employment in the industrial sector is the West region, followed by the Centre region. The service sector represents the main provider of jobs in the Bucharest-Ilfov region, where the share of employment in services is of 73.3%, a lot above the national average (40.9%). The distance between the Bucharest-Ilfov region and the other regions, from the point of view of the share of civil employed population in services, is due to the rapid growth of the sector of businesses in the services field, the relatively high rate of attendance in higher education, a factor which supports the growth of services.

The sectoral structure existing at the development regions level leaves a mark on the employment structure from the viewpoint of professional status - the situation of an employed person, depending on the way of earning income from his activity (NIS, 2011). Status in employment (employees, employer, self-employed and contributing family worker), represents a criterion depending on which the
performance of using labour resources and the level of security of the income earned by working are assessed.

According to data from the Eurostat, for 2009 (fig. 8), the share of employees in total employment ranges from 47.9% in the North-East region to 94.8% in Bucharest-Ilfiov region, with a national average of 67.2%. Only in four regions, the national average level of salaried work is exceeded (Bucharest-Ilfiov, Centre, West and South-East).

From the statistical analysis on the employment sectoral structure and salaried work, it results that in the regions where employment on agriculture is high, the share of employees in total employment is reduced, and vice versa (fig. 9). The value of the Spearman correlation coefficient of -0.996, shows that between the two indicators there is a very strong, statistically significant inverse relationship. This fact confirms once again that high rates of employment in the less developed regions do not also imply a quality employment. A high share of self employment in Romania is focused in agriculture, this being considered subsistence agriculture and regarded as employment with low income. On the other way, between employment in services and salaried work a significant positive correlation is identified (Spearman coefficient=+0.879), in the development regions where services represent an important provider of jobs and salaried work is higher, reflecting a high qualitative level of employment and a higher productivity (Bucharest-Ilfiov, Centre, West).

The current structure of economy and employment is reflected also by the population’s level of education, which shows the deficit of people with tertiary education also after 20 years since the transition to the market economy started, under the circumstances in which, in Romania, the employed
population with such an education represents only 15.4% of total employment, compared to the average level in EU-27 of 29.4% (fig. 10).

From the point of view of the education level of the employed population at regional level, in 2009, in the Bucharest-Ilfov region 32.9% of the employed population have a higher education level and only 8.4% have the lowest one. In the other regions the differences are significant, moreover as far as the share of employment attaining the primary education level is concerned. Thus, the North-East and South-West Oltenia regions record maximum values (35.8%, 32.1% respectively), the double of the minimum value, recorded in the Centre region of 15.1%. As far as the secondary education level of the employed population is concerned, the differences from one region to the other are more reduced, the maximum value being recorded in the Centre region (69.6%), and the minimum one in the South West Oltenia region (54.1%).

In the economic literature, it is stated that a better educated population, having a qualification corresponding to the market’s needs is characterized by higher employment rates and an efficient employment (Giarini and Liedtke, 2001). The results of the statistical analysis obtained based on the data that show the relationship between employment in services and the level of higher education, presented in fig. 11, indicate that in the development regions where there is a higher share of employment in services, there is also a higher level of the employed population with higher education, and vice versa; a direct relationship of average intensity being identified between the two variables (Spearman correlation coefficient= +0.550). On the other hand, in the regions where the employed population in agriculture is higher, the level of higher education of the
employed population is lower. This fact reflects that, at regional level, between employment in agriculture and employment with higher education there is a negative relationship, (Spearman correlation= -0.733), which does not assure the conditions of an employment with a high qualitative level, a high level of labour productivity respectively.

The change in the employment sectoral structure, i.e. the growth in employment in the tertiary sector, implies, first of all, the change of the employment structure from the point of view of the education level. The global tendencies are to increase the share of complex, superior qualified labour, and to reduce simple, unqualified labour, reason for which the level of professional training has a significant importance in the creation and enhancement of labour resources.

Although Romania is far from the average values recorded at the EU-27 level (according to fig. 10), we have to notice the positive tendency in the last decade, of growth in the share of population with a higher level of education, to the detriment of employment with a lower level of education. An educated and qualified labour force represents an important factor in an economy of competitive knowledge.

4. IMPLICATIONS OF THE EMPLOYMENT STRUCTURE FOR REGIONAL ECONOMIC DEVELOPMENT

The regional employment, by economic sectors being one of the most important and relevant characteristics of employment, reflects defining features of one region, among which: the level of development and the level of efficiency in using the labour resource in the three sectors or on the scale of the entire region.

The study of the correlation between the employment structure by sector and economic development (GDP/capita level), based on the statistical data from eight development regions, highlights significant relationships, as shown in fig. 12:

- Between the share of employed population in agriculture and the level of GDP/capita, there is a strong inverse correlation (Spearman correlation= -0.80). The more reduced the share of employment in agriculture is, the higher the development level of the region, labour productivity being, usually, more reduced compared to the other activity sectors.
The correlation between employed population in industry and constructions (the secondary sector) and GDP/capita is direct, but of average intensity (Spearman correlation = +0.467), meaning that the growth in employment in this sector is accompanied by the increase in the level of economic development due to the growth in productivity.

Between the share of employment in services and the level of economic development, as in the case of the secondary sector, a direct correlation is identified, but of an increased intensity (Spearman correlation = +0.957), fact which reflects that at the development regions level, GDP/capita increases as the share of employed population in services increases too, and vice versa.

If we analyse the relationship between employment in services and the level of development based on the data at county level that form the development regions, we can notice within the development regions that the composition of the regions in Romania lacks coherence (fig. 13). For example, the **South-East region** is considered a very heterogeneous one, as it combines counties from three very different historical provinces, which means that the region’s counties (Braila, Buzau, Constanta, Galati, Tulcea, Vrancea) are not very well connected and they face very different economic performance. From the point of view of the relationship between employment in services and GDP/capita, inside this region a high heterogeneity is noticed, under the circumstances in which employment in services of 32.08% and the level of economic development (GDP/capita=13396.71 lei) is reached in Vrancea county (where most of the jobs are created in agriculture), and the maximum one of employment in services (of 48.9%)
and that of economic development (GDP/capita=27633.45lei) is reached in Constanta (county where the services sector generates most of the jobs).

![Graph showing the correlation between GDP/capita and employment in services at county level in Romania, 2009.](image)

**Figure 13** - *Direct correlation between economic development and employment in services at county level, 2009*

Source: Own calculations based on data from [6] and [7]

The results of the statistical analysis based on the Spearman correlation coefficient, carried out in order to establish the intensity of the relationship between the share in civil employed population in services and GDP/capita, highlights that at the level of the 41 counties, in 2009, there is a strong direct correlation (Spearman correlation=+0.817) between employment in services and the level of economic development: the counties with a low employment in services are characterized by a low level of development (Teleorman, Giurgiu,Valcea, Olt, Botosani, etc), and in the ones where the share of the employed population is high also the level of development is high (Ilfov, Constanta, Cluj, Timisoara, Brasov, Sibiu and Bucharest). According to data in fig. 13, the counties in the category- low employment in services and low economic development, are part of different development regions, but the ones in the east and south of Romania are predominant. On the other hand, in the category, High employment in services and economic development, we find counties in the west and centre of Romania (except for Constanta, Ilfov and Bucharest).
Together with employment by sectors, the professional status of the employed population is also relevant to the appreciation of development at regional level. The analysis of the data in fig. 14 highlights that in the regions where the economic development level is higher there is a high or very high salaried work expansion rate. In these regions most of the employed population benefits at least theoretically of a status with lower risks and a higher social protection (these being possible if we also take into consideration the material support – a high GDP/capita level), as compared with the self-employed and family worker.

From the statistical analysis carried out based on the data regarding the share of employees in civil employment and GDP per capita, in 2009, at the level of the eight development regions, it is noticed that between the two variables there is a very strong relationship (Spearman correlation =+0.933). Thus, the less developed regions are characterized by a more reduced salaried work (North-East, South-West Oltenia, South Muntenia), compared to the developed regions (Bucharest-Ilfov, West, Centre), where salaried work is higher, in these latter regions, a higher level of salary as well as social security being assured. At the level of the 41 counties, in 2009, between the share of employees in total employment and GDP per capita, a direct strong correlation is identified, thus confirming that at county level the direct relationship between the level of development and the level of salaried work (Spearman correlation=+0.845).
According to data presented in fig. 16 in the counties with a low and very low development level (Valcea, Teleorman, Giurgiu, Botosani, Olt, Vrancea, Suceava, etc), the salaried work expansion rate is reduced and very much reduced. These counties have, generally, a low employment in services and in secondary sector, but high in the primary sector. At the other pole, we have counties with a high level of development accompanied by a high rate of the share of employees in employment. The higher salaried work expansion rate is obtained either because of the high share in services (counties Constanta, Timisoara, Brasov, Ilfov, Cluj, Bucharest, etc), or a high share in industry and constructions (Prahova, Hunedoara, Galati, Gorj, Bihor, Arges, etc), being known that, in Romania, most of the workers in agriculture have the status of either self-employed, or contributing family workers.

In the economic literature (Baumol, Litan and Schramm, 2007), there is the opinion according to which the economic development depends on the labour productivity respectively being emphasised that between economic development and productivity there is a direct relationship. This correlation is verified also in Romania, at regional level, for 2009 (Spearman correlation $= +0.917$, which indicates a very strong positive relationship). According to data in fig. 15, in the less developed regions, labour productivity is reduced, on the contrary in the more developed regions, labour productivity is high, fact which highlights the necessity to increase labour productivity in order to reduce the gaps between the eight development regions in the country, as well as the gap between Romania and the other EU countries. We mention that, in Romania, in 2009, labour productivity was only of 47.9% compared to the average recorded at the EU-27 level.
5. CONCLUSIONS

The results of this research highlight that, at the level of the eight development regions in Romania, disparities in the level of development can be explained by disparities existing on the labour market. In the more developed regions (Bucharest-ilfov, West, Center) labour productivity, employment in services, the expansion rate of salaried work, the share of population with higher education in total employment have a higher level compared to the other less developed regions, the hypothesis according to which there is a significant relationship between these employment indicators and GDP/capita is confirmed.

For increasing the level of development, but moreover a balanced regional development, some measures must be taken in order to transform the structure and quality of employment, meaning the growth in the share of employed population in services, labour productivity, salaried work, level of education etc. (precisely in the less developed regions of Romania: North-East, South-West Oltenia, South-Muntenia).

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