

## ROMANIA'S LABOUR FORCE IN REGIONAL PROFILE AFTER THE ACCESSION TO THE EUROPEAN UNION

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### *Abstract*

*The paper approaches the issue of the labour force from Romania in regional profile at a decade after the accession to the European Union. The economic, political, technological and financial changes occurred at different aggregation levels have, profoundly, influenced the volume and structure of the labour force at national level. The analysis is based on statistical data available at national and European level and follows the evolution in regional profile. The result reveal an unprecedented dynamic of the national labour force and support the need for efficient public policies in the field of education and employment, adapted to the new coordinates of the economic activity.*

*Key words:* labour force, regions, structural changes

### INTRODUCTION

Throughout the 20<sup>th</sup> century, numerous economist but also representatives of the academic sector have approached the labour force dynamics based on the demand-offer relation, the influence of capital and other factors that determine the behaviour of the labour force. Early American researches from the 1930' pointed out that the unrealistic expectations of the private sector translates into anemic investments plans, determining the economy to follow a downwards trajectory and was advocating for the government's involvement through monetary and fiscal policy in supporting the employment rate's growth [5]. Others, identified a negative relations between the hourly salary level and the participation rate of adult workers on the labour market [16]. Decades later, some approaches shifted towards the determinant factors of the labour force's behaviour highlighting the importance of growth of women's participation on the labour market and of part-time labour. [1]. Other authors recognized, as main factors of the labour force participation, a combination between the economic stagnation and inflation, as well as a persistent, high level of unemployment in western European countries [17]. Researches approaching the labour force

at national and regional level and by urban-rural typology, have also been conducted in Romania. Some studies analyze the rural labour force by dynamics, starting from the demographic structure of rural population and its socio economic characteristics with an important role placed on the educational level, professional training and the re-conversion of rural labour force [10]. Others, focus on the participation of rural labour force, compared to urban labour force, pointing out the predominant nature of rural areas as a production space where primary sector's activities hold a high share of its economy [2]. Other authors consider the labour force as a restrictive factor for rural areas' development, having in view a set of characteristics of the rural space as accelerated ageing, low level of professional training, lack of investments and employment opportunities [12]. These researches developed by the academic sector have been complemented by others evolved from the economic and institutional sectors. Some reveal a specialization of Romanian economy in low competitiveness sectors at European level, which generate low added value and turn to cheap and unqualified labour force [11]; others evaluate the labour force market from the perspective of the entrepreneurial environment and its strategies for adapting to the new economic realities [7].

## MATERIALS AND METHODS

The present paper turns to the analysis of official statistical data, regarding the Romanian labour force, and following the typology of regions defined at European level – predominantly rural, intermediate and predominantly urban regions. The data has been extracted from the Tempo online database of the National Institute of Statistics [9] as well as from Eurostat database [3], and processed using standard statistical methods. The graphical representations (maps) have been created by the author based on a specific software for GIS representation – GeoDa.

## RESULTS AND DISCUSSIONS

Labour force represents a key element of human capital, both nationwide and at the other (regional, county, local) aggregation levels; its characteristics (volume, professional and vocational training, mobility) significantly influence the economic activity and the specific policies elaborated in this field. At the same time, labour force is influenced by the economic, political technological and financial changes produced at different aggregation levels [13]. Romania's integration into the European Union structures brought about new challenges for the economic activity and labour force, such as the free and fast movement of capital flows and commodities, as well as the great mobility of labour force, determining an unprecedented dynamics of labour, generated by the opportunities provided by its relocation in the developed member states while looking for jobs, which ensures much higher incomes than at national level. Without any doubt, the best product of Romania's export after 1989 was human capital, the vital force of any economy. Migration for employment was the most important component of national migration in the last decades, yet the intensity of this phenomenon has not been fully reflected by the official statistics [14].

“External migration was a very prompt and harsh reaction to the economic situation in the country, on the one hand, and to the

advantages provided by the migration to another developed country on the other hand” [4].

Labour market liberalization and the free movement of labour determined by Romania's EU membership led to the intensification of the migration phenomenon. According to the United Nations statistics, by the year 2016, more than 3.4 million Romanians had left to work abroad, or definitively settled their residence there. The financial support provided by them to their families who remained in the country contributed to the increase of their life quality, yet it was doubled by a series of socio-demographic problems: the depopulation of areas of origin, of rural areas in particular, the demographic ageing and degradation of family relations, mainly between the parents who left for work and their children looked after by their relatives [14].

All these added to internal factors, such as rural – urban migration and the strong demographic decline; all these together contributed to the current situation of labour force at national level, its adaptation to the new requirements with regard to the vocational training and stability on the labour market.

Romania's economy is heading towards an acute crisis of the labour market, which might grow stronger in the future, in the absence of integrated educational and employment strategies that should make it possible to develop the labour resources according to the new coordinates of the economic activity.

“There is probably no company in Romania that does not currently face the effects of staffing crisis. Whether we speak about IT programmers, engineers or finance experts, there are more and more companies claiming that they do not find qualified staff. As a proof, NIS statistics reveal that the number of vacancies almost doubled, from 38,625 in 2009 to 59,753 in 2016” [6].

Romania's labour resources have declined after the accession to the EU. They represent that category of population that has all the physical and intellectual capacities enabling it to carry out useful work in one of the activities of the national economy [8].

In the year 2006, Romania's labour resources totalled 13,801.6 thousand persons, out of which 51.75% men and 48.25% women. Out of total labour resources, the resources in the predominantly urban regions accounted for 10.88%, the remaining resources being almost equally distributed between the intermediate regions and the predominantly rural regions, i.e. 44.29% and 44.83% respectively. In the first two years of EU membership, the total labour resources began to decrease slightly, this phenomenon being followed by a period of growth at about the same rate. The year 2011, marked by the peak of the global economic and financial crisis, which had a strong impact in Romania, signals out the beginning of the decline: the labour resources gradually decreased nationwide (mainly in the period 2013-2014) to reach 12,481.1 thousand persons by the year 2015, by 9.56% lower than the value in the reference year.

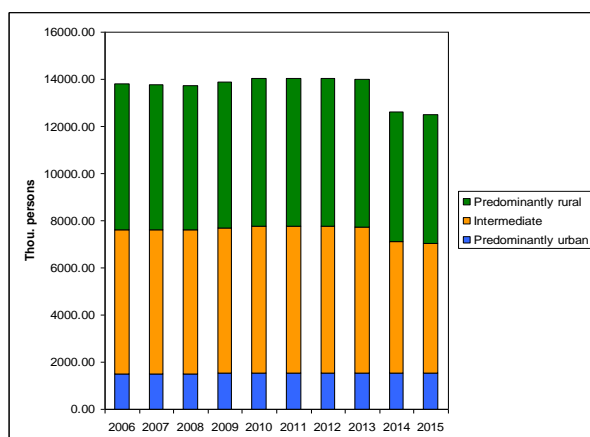


Fig. 1. Labour resources, according to urban-rural typology  
 Source: Own processing of Tempo Online NIS data.

**The strongest decline was found in the predominantly rural regions**, where the labour resources were down by 12.13% (750.6 thousand persons); the intermediate regions come next, with 9.85% (602.4 thousand persons). In the same period, in the urban regions, the labour resources slightly increased, by 2.16%; this phenomenon can be explained by the numerous employment opportunities provided by the urban area and the higher incomes that can be obtained. As regards the structure of labour resources, no significant changes were produced in the

investigated period, the variation being lower than 1 percentage point in terms of the increase of male resources, respectively the decrease in female labour resources.

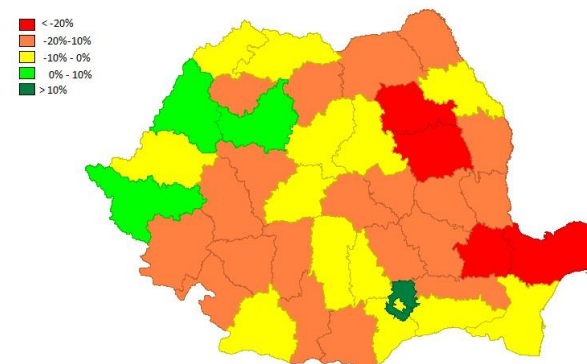


Fig. 2. Labour resources 2015/2006, by county  
 Source: Own processing GeoDa of Tempo Online NIS data

At county level, the most affected by the decline of the labour resources were the counties from the south-east and north-east regions, namely Neamţ, Tulcea, Brăila and Bacău (over 20%); at the same time, only four counties registered higher values compared to the reference year - Ilfov, Timiș, Bihor and Cluj.

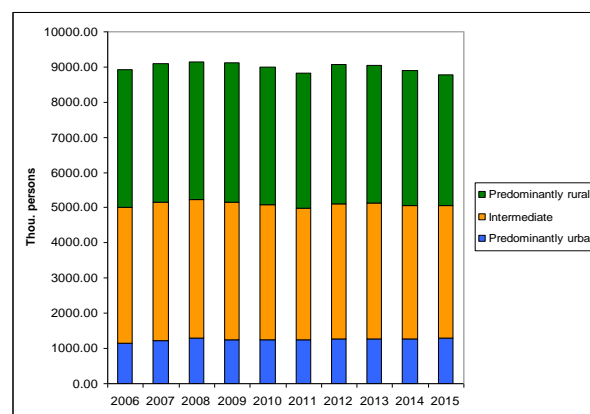


Fig. 3. Active civil population, according to urban-rural typology  
 Source: Own processing of Tempo Online NIS data.

**The labour supply decreased nationwide, throughout the investigated period, the most affected being the predominantly rural regions.** The active population represents the potential labour supply, including the employed civil population and the registered unemployed. In the reference year (2006), Romania's active civil

population totalled 8,929.8 thousand persons, out of which 52.95% men and 47.05% women. The predominantly rural regions included almost 44% of the active population, followed by the intermediate regions (about 43%) and the urban regions (almost 13%).

The first two years of EU membership were marked by the increase in number of the active civil population, mainly in the intermediate and predominantly urban regions, followed by three consecutive years when the number of the active population decreased, under the background of the global economic-financial crisis. The strongest impact was felt in the intermediate and predominantly rural regions, the active population decreasing by 270.1 thousand persons on cumulated basis in this period. After a temporary recovery in the year 2012, the active population resumed its downward trend, to reach 8,776.8 thousand persons at the end of the period, down by 1.71% than its value in the reference year. Throughout the period 2007-2015, the active civil population had successive periods of growth and decrease; **the predominantly rural regions were mostly affected by the decrease of the active population volume** (about 5%), followed by the intermediate regions, with about 2.5%, while the predominantly urban regions experienced a significant growth of the active population, by about 12%; in this context, at the end of the period, the share of active population in the predominantly urban regions represented about 15% of total active population. In terms of gender structure, the active population experienced a slightly increase of the share of male population – about 54%, compared to the reference year.

**The predominantly urban areas as polarizing centres for the workforce.** The indicator *Employed population* includes all the persons aged 15 years and over who were engaged in an economic activity producing goods or services for at least one hour during the reference period. In the investigated period, the employed population had a similar evolution to that of the active population, in close connection to this: a first growth period (2007, 2008), under the background of the economic activity dynamics generated by the

accession to the European Union, followed by three consecutive years of decline (2009-2011), which coincided with the restructuring of activity in the public and private sectors determined by the financial-economic crisis; the slight recovery in the year 2012 was followed by another period of three years of decline, with the active population reaching 8,340.60 thousand persons by the end of the period, down by 1.5% compared to the reference year (2006). In this case as well, throughout the investigated period, **the predominantly urban regions were the net beneficiary of the labour force transfer between the three regions** (mainly from the predominantly rural regions); in this case, the employed population increased by 12.8%, while in the predominantly rural and intermediate regions, the employed population volume decreased by 5.2% and 2.2% respectively.

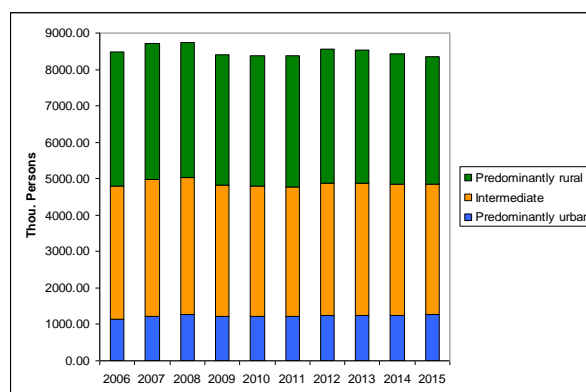


Fig. 4. Employed population, according to urban-rural typology

Source: Own processing of Tempo Online NIS data.

Besides the decrease in the volume of the employed population, changes were also produced in terms of its structure by main activity sectors in the period 2008-2015. At national level, **the most dynamic sector was the tertiary sector**, the sector of services, as this attracted an increasingly larger part of the labour force each year; in the year 2015 this sector accounted for 45.83% of total employed population, as against 41.92% at the beginning of the investigated period. At the same time, the secondary sector, the sector of industries and constructions, the second as share in total employed population, had an oscillating evolution, marked by consecutive

ups and downs, at the end of the period reaching a similar share to that in the reference period, i.e. around 30%. As regards the primary sector, i.e. agriculture, forestry and fisheries, after a consecutive growth period of its share in total employed population, in the period 2009-2012 (which confirms the hypothesis regarding **the character of the rural space, as a temporary space of refuge for the labour force**, in the economic recession periods), a decline period followed, to reach 24.02% in 2015 (as against 27.52% in 2008).

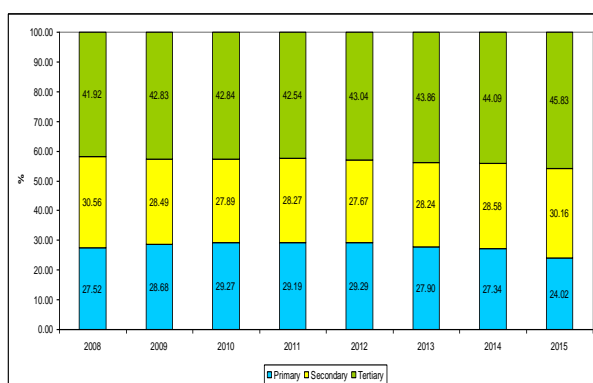


Fig. 5. Structure of employed population, by activity sectors  
 Source: Own processing of Tempo Online NIS data.

This situation is also present at the level of the urban-rural typology, with **the tertiary sector taking the largest share of the employed population** in all the three regions: predominantly urban – 71.33%, intermediate – 45.00%, predominantly rural – 37.76%, followed by the secondary sector, i.e. industry and constructions. The predominantly rural regions are an exception, where although the primary sector experienced a restructuring process in the investigated period, this continues to be the second activity sector in terms of its share in the employed population structure, with 33.40%.

The employed population structure continues to reveal a high share of employment in activity sectors with low productivity and value added (the primary sector), which is the largest share in EU, at great distance from the next countries in the ranking [15].

The counties from the south and north-east regions stand out in this hierarchy, values over 40% (population employed in the

primary sector - agriculture) being registered in Olt, Teleorman, Giurgiu, Călărași, Ialomița, Vaslui and Botoșani counties.



Fig. 6. Share of employed population in agriculture, 2015, by county  
 Source: Own processing GeoDa of Tempo Online NIS data

**The employment rate – increasing trend, yet continues to be under the EU level.** The employment rate of the population of working age at national level followed an upward trend in the period 2007-2015, yet continuing to be under the EU-27 average, by about 4 percentage points. Depending on the urban-rural typology, the most important increase of the employment rate was noticed in the predominantly rural regions, this exceeding the national average beginning with the year 2012, to reach 63.5% (71.7% in men and 54.9% in women) in the year 2015.

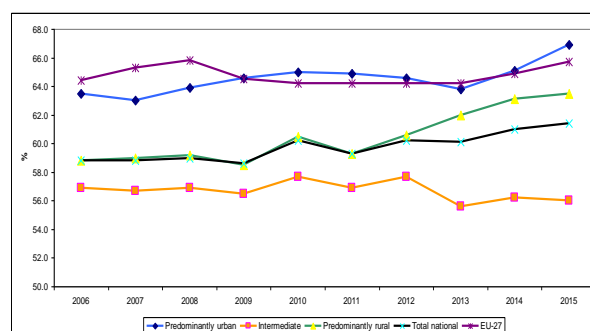


Fig. 7. Employment rate of the population of working age, according to urban-rural typology  
 Source: Own processing of Eurostat data.

As regards the **predominantly urban regions**, these had **the highest values of the employment rate**, throughout the investigated period; in the year 2015, the employment rate was 66.9% (74.4% in men, 59.9% in women). The only regions where a



decline was noticed in the employment rate in the period 2007-2015 were the intermediate regions, with values significantly lower than those in the urban and predominantly rural regions – at the end of the period, the employment rate in the intermediate regions was 56% (64.1% in the case of men and 47.8% in the case of women).

**Unemployment – decreasing trend, values under the EU average, yet continues to be high in the case of young population.**

Unemployment is another important indicator – expressed as number of persons looking for a job, as unemployment rate respectively.

The number of the unemployed people had a decreasing trend nationwide in the investigated period, to reach 623.9 thousand in 2015, by 14.34% less than its value in the reference year (2006)[3]. The structure of the unemployed by gender was 63.3% men and 36.7% women, quite similar to that in the reference year. According to the urban-rural typology, the regions where the number of the unemployed people decreased, in the period 2006-2015, were the intermediate regions (by 90.2 thousand persons) and the predominantly rural regions (by 16.6 thousand persons). In the same period, in the predominantly urban regions, the number of the unemployed rose by about 3%, under the background of rising unemployment among men. However, the predominantly rural regions still had the highest share in the total number of the unemployed – about 59%, followed by the intermediate regions – about 29% and the predominantly urban regions – 12%.

**Nationwide, the unemployment rate followed a trajectory similar to that of EU-27, yet with lower values compared to this.**

Under the background of the development of the economic activities in the first years of EU membership, unemployment rate began to decrease, as against the reference year, to reach a minimum value of 5.6% in the year 2008. The effects of the global economic-financial crisis that followed, transposed into the restructuring of the economic activities, both at national and European level, determined the increase of the unemployment rate up to 7.2% (2011), which is identical to its value in the reference year.

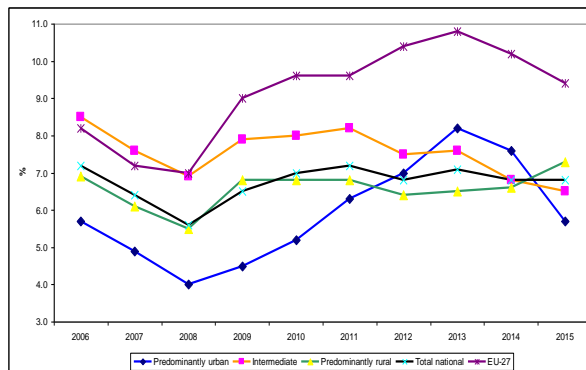


Fig. 8. Unemployment rate, according to urban-rural typology

Source: Own processing of Eurostat data

The effects were also felt after this moment, as the unemployment rate began to decrease slightly, with a relatively constant value around 6.8%, by 2.6 percentage points lower than the EU-27 level (year 2015). According to the urban-rural typology, the predominantly urban regions had lower unemployment rates in the investigated period as against the intermediary and predominantly rural regions, except for the years 2013 and 2014, to reach the value of the reference year by the end of the period, i.e. 5.7%. Although the predominantly rural regions had lower unemployment rates compared to the intermediate regions, throughout the investigated period, in the last year of the investigation (2015) they reached the highest value in the three regions, namely 7.3%, higher than the level in the reference year, i.e. 6.9%.

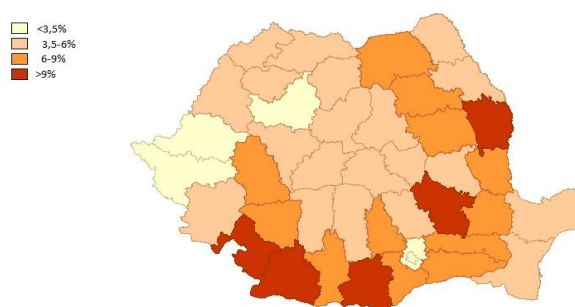


Fig. 9. Unemployment rate, 2015 by county

Source: Own processing GeoDa of Eurostat data

At county level, the highest unemployment rates in 2015 were concentrated in the south-west, north-east and south-east regions, while lower levels were registered by counties from central, north-west and west regions.

The unemployment rate in the young

population (15-24 years) also had a similar evolution in the predominantly rural regions, to reach 21.7% in the year 2015 (as against 20.7% - the value of the reference year), yet ranking second in size, next to that of the intermediate regions – 22.8%. Both values were above the national average – 20.6% and the EU-27 average – 18.6%. The predominantly urban regions were an exception, where the unemployment rate in the young population was under the (national and EU-27) reference values, with 18%. Unemployment in the young population represents a very important social problem; in order to solve this problem, efficient policies are needed in the field of education and employment. In the absence of these, the young people continue to depend on their families and are not motivated to carry out an income gaining activity. This type of socio-demographic pressure is also doubled by the **dependency rate**<sup>2</sup>, which reveals the level of support that the young generation and/or elderly people need from the population of working age. In the year 2016, **the young people's dependency rate** (calculated as ratio of population under 15 years old to the population of working age, 15-64 years) at national level, was 23.12%, above the EU average (21.99%), lower in the case of predominantly urban regions and the highest in the predominantly rural regions (24.30%). This situation is also found in the case of **the dependency rate of elderly people** (above 65 years), the predominantly rural regions having the highest value, 27.84%, yet under the EU average of 28.86%. Thus, the accelerated demographic decline that the predominantly rural regions from Romania had to face in the last decade, and the need for a strategic approach to their development, are highlighted once again.

## CONCLUSIONS

**Overall, in the period 2007- 2015, the labour force at national level followed a downward trend** in terms of volume indicators (resources, active population,

employed population), with consecutive periods of growth and decrease, being influenced by the changes determined both by the EU membership and by the economic restructuring that followed after the global economic-financial crisis of the period 2008-2011, whose effects can be also felt at present. Opening up the European-wide labour market for the citizens of the EU member states has generated unprecedented mobility of the local labour force mobility, looking for jobs to ensure a much higher level of incomes; at the same time, **at national level an increasing mobility between the rural and urban regions can be also noticed**, the latter having an upward evolution of the specific indicators, supported by the accelerated development and the multiple opportunities provided to labour force in terms of diversity of activities and higher incomes. At the same time, **the predominantly rural regions were mostly affected**, the specific volume indicators having significantly lower values as against those in the reference year. These add to a structure of employed population dominated by the primary sector (agriculture); its values, although decreasing throughout the investigated period, continue to be much higher than those at national and EU-27 level, which reveals a **still high dependency on agriculture of the population from these areas** and the lower opportunities, compared to the other employment areas in the secondary and tertiary sectors. The unemployment phenomenon also contributes to the overall picture, which mainly affects the young population (15-24 years) and having higher values than at national and EU-27 level; this calls for a deep reform of the educational system, in general, and of the technical education in particular, in order to ensure its correlation with the current requirements of the labour market as regards professional and vocational training, thus providing for real employment opportunities for the young population.

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