

Employment and Regional Inequality in Romania

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Abstract: It is no doubt that thinking about inequality plays a part in the judgments and actions of politicians, sociologists, economists and ordinary people, too. This paper examines which factors substantially influenced regional employment. Labour market, employment and unemployment have been the subject of various researches and the labour market object has been subject of dispute. Employment and unemployment are both decomposed and analyzed through separate components (such as: full employment, effective employment, atypical employment, precarious employment, regional/local employment etc., respectively, total unemployment, partial or hidden unemployment, technical and structural one and so on). The specific literature about the regional inequalities considered the income per capita as the most relevant indicator measured by Gini coefficient. Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. At regional level we studied several indicators that generate regional disparities, and influence employment quality such us: employment rate, tertiary and medium employment, unemployment rate, occupied population in informal sector, employment in primary sector, rural employment, female employment. We developed a scoring based on the deviation from the average of a group of key indicators and devised a map of employment quality resulting from multi-criteria analysis.

Keywords: employment sensitivity; Gini index; multi-criteria analysis

JEL Classification: E24; R12; R15

1. Introduction

There are many possible pathways among the structure, intensity and quality of employment, and regional inequality: from the point of view of outcomes (Frías, Iglesias & Vazquez, 1998; Amiel and Cowell, 1998, Hull, 2009; Herman, 2011 s.o.; Boldea M., Parean M. and Otil M., 2012, s.o.), or decentralization (Lessmann, 2011 and others), in terms of poverty or welfare (World Bank, 2007; Chelliah and Shanmugam, 2007; Sivakumar, 2012 etc.).

Employment, in or outside the labour market area, became a strategic objective, so that, the public and/or private companies will follow the right employment degree to reach wellness. Implicitly, employment becomes strategic objective only when

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productivity and GDP per capita are capable to secure a decent satisfaction of the basic needs. (Perț, 2002; EU, 2000 and 2010)

Regarding the regional disparities between the 8 Romanian development regions, in a previous study carried out for the period 2000-2008, we measured the convergence degree by α -convergence and σ -convergence; the results have shown the fact that the disparities between development regions grew. (Patache and Grama, 2011) So, it is a fact that income, quality of employment, poverty or welfare are unevenly distributed into territorial profile.

The present study aims to answer the question: *Is employment concentrated and what is the quality of its distribution in territorial profile?*

2. Research Methodology

The methodology proposed in this article is based on two steps:

First point of view is concerned with the analysis of regional disparities regarding employment in relation to the coefficients of concentration/diversification (also known as indices of geographic distribution) – Gini coefficient.

Second, we devised a map of employment quality based on multi-criteria analysis.

3. Employment Concentration/Diversification

Measuring the concentration degree of an activity in a region is based the Lorentz curve and the Gini coefficient.

The interpretation of concentration coefficients shows, in case they are close to zero level, the state of “equity”, balance or proportion between the different analyzed elements.

The formula used to calculate the Gini coefficient (G) is the following (with values on the interval $[1/n^{0.5}; 1]$ and n = number of observations):

$$G = \sqrt{\sum_{i=1}^n g_i^2} \quad (1)$$

where: g_i specific weight of the indicator

The Gini-Struck coefficient (GS) is calculated as:

$$GS = \sqrt{\frac{n \sum_{i=1}^n g_i^2 - 1}{n - 1}} \quad (2)$$

The Struck concentration coefficient represents the corrected form of the Gini coefficient; the values may be in the interval [0; 1]; the minimum possible value (zero) is independent of the number of considered categories, which allows comparison with other structures.

If the value of the coefficients exceeds 0.3, there is a relative concentration that can be mentioned and taken into account, and if the value is higher than 0.5, then we can speak of a high concentration.

The evolution of employment in the 8's regions as presented in the figure below reveals a decrease in the number of employed persons in 2008, and even more in 2009, except Bucharest-Ilfov region. This region during the period of economic boom, 2000-2008, generated employment increase, even in 2009 in spite of the fact that the regional GDP slowly decreased. In 4 regions (North East, South East, South- Muntenia, South West Oltenia), economic growth caused reductions in the number of employed persons, maybe, as a result of a better labour productivity generated by the restructuring of economic activities. Year 2010, in terms of employment, shows out of the crisis for 3 regions North-East, North West and Bucharest –Ilfov - the last one seems have not been touched by economic crisis, only 1.1 decrease in GDP 2009/2008- all other regions are still continuing crisis downtrend in 2010.

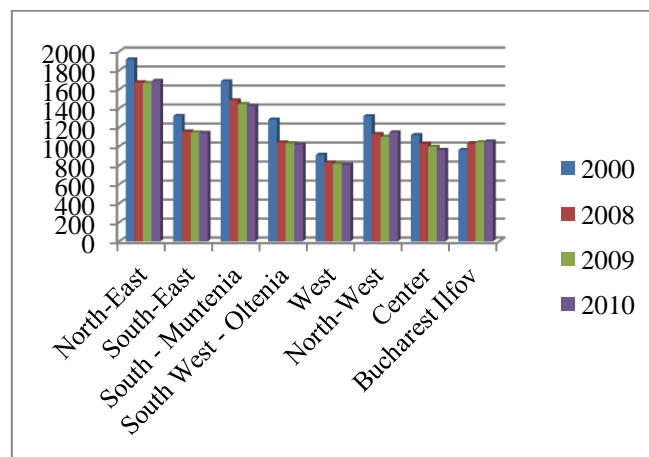


Figure 1. Regional employment evolution, period 2000-2010

Source: Data based on the Romanian Statistical Yearbook 2011, NIS, Bucharest

In 2000, the level of Gini/Struck coefficients reveals that *there is a concentration of employment in the eight development regions*, the value of the Gini coefficient being around 0.363 and the value of the Struck coefficient being 0.522. Compared with 2000, in 2010 there is a slight decrease in the degree of concentration of employed population (the Gini coefficient was 0.362 and the Struck coefficient was 0.520). (see Figure 2)

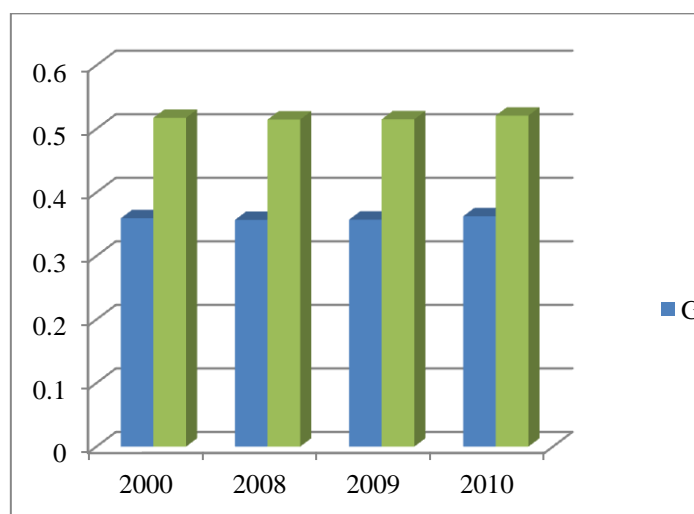


Figure 2. Regional concentration of employment, period 2000-2010

Source: Data based on the Romanian Statistical Yearbook 2011, NIS, Bucharest

But we still don't answer at *what is the quality of its distribution in territorial profile?*

4. Employment Quality Regional Distribution Map

At regional level we studied several indicators that generate regional disparities such as: on one hand, employment rate, tertiary and medium employment, both with positive impact, and, on the other hand, unemployment rate, occupied population in informal sector, employment in primary sector, rural employment corrected with share of rural population, female employment corrected with share of female population with negative influence on employment quality.

In 2010 these indicators are presented at regional level as shown in Figure 3.

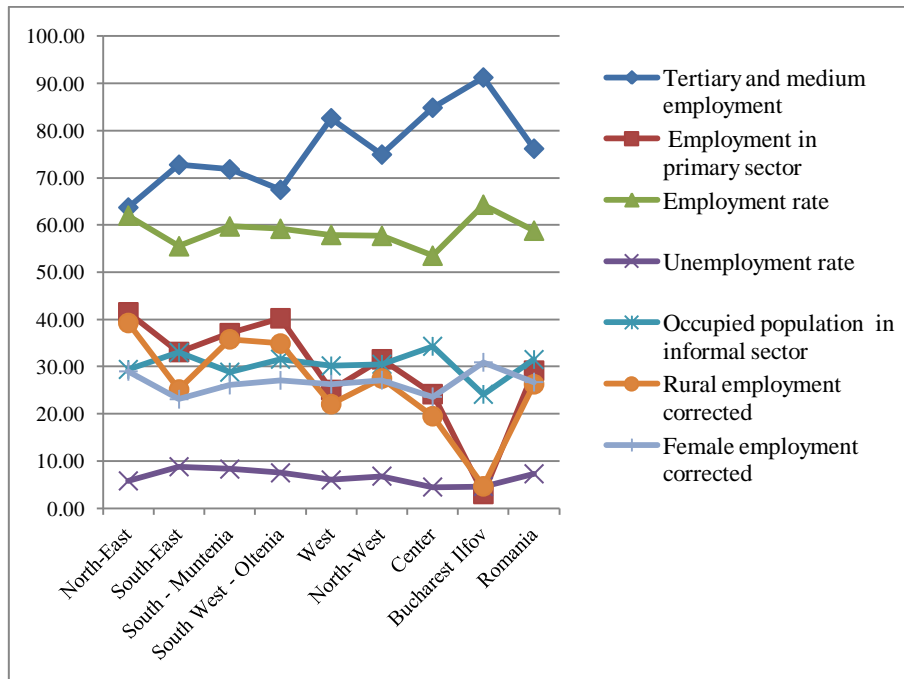


Figure 3. Indicators of employment quality at regional level in 2010

Source: Author's calculation based on the Romanian Statistical Yearbook 2011, NIS, Bucharest

The occupied population in informal sector was calculated on the premise that in urban areas, most of the working population are employed in the formal sector (almost 86%), while in the rural areas are employed just over a third (35.0%). The share of employment in the informal sector has relatively close values, in both areas of residence (urban 12.6%, rural 13.7% respectively).

In contrast, the household sector is insignificant in urban areas (1.6%), but mostly important in rural areas (51.3%). (Voinea, Albu et al, 2011)

We developed a scoring based on the deviation from the average of above mentioned indicators with an equal step (maximum value of the indicator divided by 3).

The map of employment quality resulting from multi-criteria analysis is shown in Figure 4.

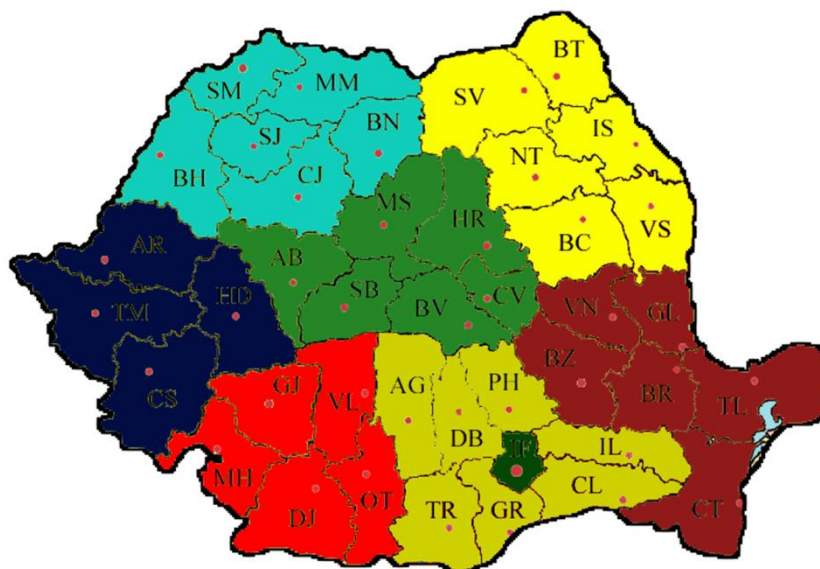


Figure 4. Employment quality distribution at regional level

3 regions recorded a high quality of employment, in this order: Bucharest-Ilfov (with 27 points), Center (13) and West (7). The North West region has a good quality of employment (0); employment quality of North East (-3) and South Muntenia (-4) must be improved; and the lowest ranked regions are South West – Oltenia (-7) and South East (-6).

5. Conclusions

Increasing employment is an ongoing concern of both governments and the European and global institutions, but we must not lose sight of the elements that ensure its quality. Finally, let's remember a memorable paragraph by Milton & Rose Friedman: "For example, the supporters of tariffs treat it as self-evident that the creation of jobs is a desirable end, in and of itself, regardless of what the persons employed do.

That is clearly wrong. If all we want are jobs, we can create any number - for example, have *people dig holes and then fill them up again*, or perform other useless tasks. Work is sometimes its own reward. Mostly, however, it is the price we pay to get the things we want. Our real objective is not just jobs but productive jobs-jobs that will mean more goods and services to consume." Our study claims the reader comments, the critical and constructive ones, so that this model to be refined to perfection.

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