ASSESSMENT OF THE LABOUR MARKET SITUATION IN THE VISEGRAD GROUP CAPITAL REGIONS

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Abstract: *Over time, social, economic, historical and political events in countries have established conditions for uneven regional development. Uneven regional development is conditioned by resources of the region, such as physical characteristics, human resources, technical, economic and social conditions. Economic and social developments in the state and individual regions have a direct impact on the labour market. The differences in the labour market are sensitively perceived, because of the potential for disproportionate differences in the living standard of inhabitants of individual regions. In most countries, the best-performing regions are the capital regions. The aim of the paper is to examine and evaluate the situation on the labour market in the capital regions of the Visegrad Group (Bratislavský kraj, Praha, Közép-Magyarország and Mazowieckie) using selected indicators of labour market. We use the time series analysis of selected indicators, mathematical-statistical methods, comparison and synthesis in this article. The statistical data are drawn from the Eurostat database. Our research has shown that the best results of the labour market indicators are reported by the region of Praha.*

Keywords: *labour market, human resources, employment, unemployment, long-term unemployment, tertiary education, Visegrad Group, capital regions.*

1. INTRODUCTION

Economic and social development of the country is directly influenced by the situation on the labour market. The labour market represents the space where the labour forces try to get the most advantageous employment and employers try to get suitable employees.

We evaluate the labour market situation in the Visegrad Group (V4) capital regions (Slovak Republic: Bratislavský kraj, Czech Republic: Praha, Hungary: Közép-Magyarország, Poland: Mazowieckie) in this article. We examine the development of employment rate, unemployment rate, long-term unemployment rate and the share of population with tertiary education with the aim to find out similarities respectively disparities on the labour market development in the regions of the mentioned countries.

We use the time series analysis of selected indicators, mathematical-statistical methods, comparison and synthesis in this article. We use the scoring method methods of multi-criteria evaluation. In scoring method, each parameter is assigned the region, which scored the best value, 100 points, and other regions are assigned indicator points as follows:
- if the maximum value is the best value (employment rate, tertiary education):

$$b_{ij} = \frac{x_{ij}}{x_{j\,max}} \times 100 \qquad (1)$$

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- if the minimum value is the best value (unemployment rate, long-term unemployment rate):

$$b_{ij} = \frac{x_{j\,min}}{x_{ij}} \times 100 \quad (2)$$

where:

x_{ij} = the value of j-th variable in the i-th region
x_{jmax} = highest value of the j-th variable
x_{jmin} = lowest value of the j-th variable
b_{ij}= the scores of the i-th region for the j-th variable.

Next, the integral variable d_i, as the sum of the points for the indicators set for each region is calculated. The best results of observed variable reach the region in which the integral indicator d_i reaches the maximum value.

The statistical data are drawn from the Eurostat database [1]. The analyzed period is the period 2007-2017.

2. THEORETICAL FOUNDATIONS OF THE LABOUR MARKET AND HUMAN RESOURCES

The labour market is a complexly interconnected environment with an array of factors. On one hand, economic effects, in fact the level of economy, influence labour demand. On the other hand, social-demographic effects such as the level of education or age structure of population influence labour supply and thus represent a counterforce. [2] Labour market is not only sensitive about the changes which happen inside the economy of the particular country, but also about the processes which are in progress in the world economy. [3] Labour market works with the most valuable capital of the economy - human capital which is **also work carrier.**

The labour market situation influences upon standard of living of the region citizens, employers and it contributes to the overall region level. The decisive indicators by which the situation on the labour market is evaluated are employment, unemployment and long-term unemployment. These indicators belong to the most important indicators of the regional disparities which are used in the studies of authors such as [4] - [9].

In the country, the biggest differences exist between underdeveloped (rural, peripheral) and metropolitan regions, respectively regions located around capital city. In the most cases metropolitan regions are the most developed. Authors [9] state, that concentration of financial, socio-cultural, economic and informational flows of society development in large cities and areas of their influence in the region (regional metropolises), as well as realization of socially significant functions in modern conditions, are important determinants of the country's efficient mechanisms of spatial policy development. Authors [11] state that in developed regions wealth and experience sharing are cumulated.

According to the mentioned authors perpetual increase of regional diversifications can lead to a concentration of capital, labour and technologies in developed regions. These can result in heavy load of the developed region infrastructure, environment protection and social security.

In underdeveloped regions, there is a tendency for drain of capital, technologies and labour force.

In general, capital cities are the richest regions in country. [12] The capital city of any country is the center of social, cultural and notably economic activities in the country. These cities are the target of migrated labour force which is looking for better working fulfilment compare to their birthplaces. The companies with statewide coverage are located in the capital cities. In these cities, there is significant concentration of capital and economic activities.

3. EVALUATION OF THE LABOUR MARKET SITUATION IN THE V4 CAPITAL REGIONS

We evaluate the labour market situation in the V4 capital regions using these indicators: employment rate, unemployment rate, long-term unemployment, population aged 25-64 with tertiary education.

Employment is an important indicator of the economy's health. Employment can be defined as the engagement of working population in the process of creating new products and services. Employment is analyzed through the employment rate indicator, which is the share of the number of working people aged 15-64 on the total population aged 15-64, expressed as a percentage (Figure 1).

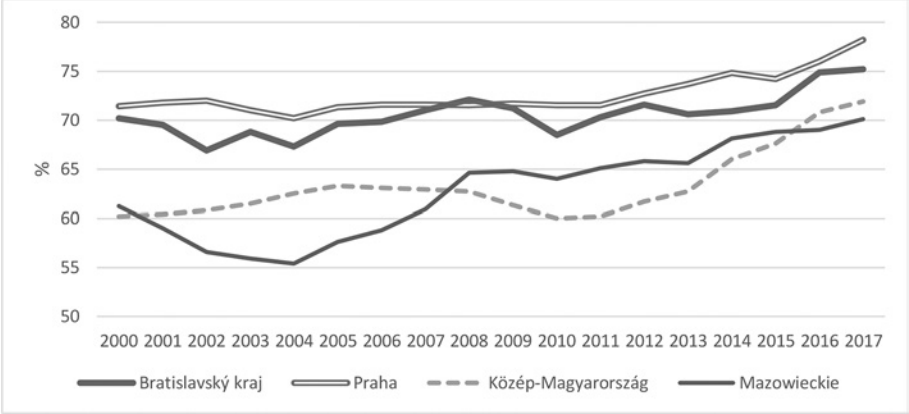

Figure 1: Comparison of employment rates in V4 capital regions (%)

The Figure 1 indicated that there were fluctuations in employment rates in the V4 capital regions with an upward trend towards the end of the period under analysis. The highest employment rates were in the regions of Praha (without 2008), Bratislava region was ranked second. The lowest employment rate was recorded in Mazowieckie in 2001-2006 and 2016-2017, and in Közép-Magyarország in other years.

Unemployment is a negative phenomenon in the economy which is associated with labour market imbalances. Unemployment is a situation in the labour market where someone of working age is not able to get a job but would like to be in employment. Figure 2 shows the development of unemployment rates in capital regions of V4 countries.

The Figure 2 shows fluctuations in unemployment rates over 2000-2017. The highest unemployment rates were recorded in 2003 in Mazowiecke region (16.8%). There is a large distance the Mazowieckie region from other regions in the early years of the review period.

In the following years, the unemployment rates declined, and rose from 2008 as a result of the global economic crisis. The unemployment rate declined in recent years. The lowest unemployment rate is in the Praha region (only 1.9% in 2008; 1.7% in 2017).

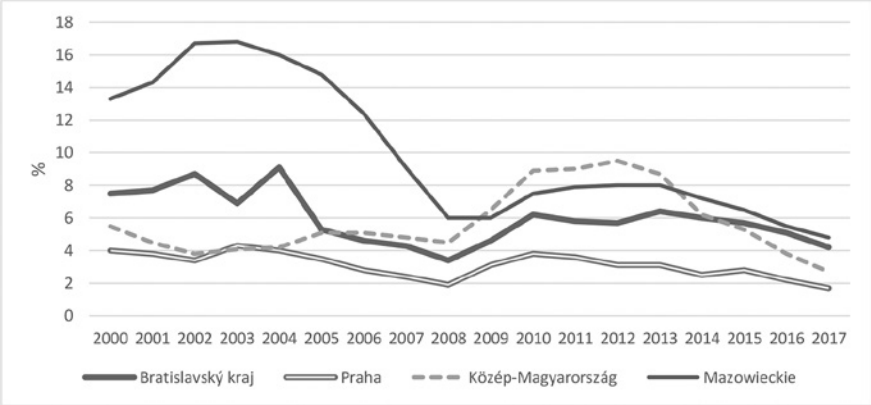

Figure 2: Comparison of unemployment rates in V4 capital regions (%)

The evolution of unemployment had also an impact on the evolution of the long-term unemployment. **Long-term unemployment** (unemployment longer than one year) has negative economic, social and psychological consequences for society and affected individuals. Long-term unemployment reflects structural changes in the labour market, regional disproportions in the supply of and demand for work or labour migration. The development of long-term unemployment is examined on the basis of the long-term unemployment rate, which is the percentage of the number of long-term unemployed in the total number of economically active population.

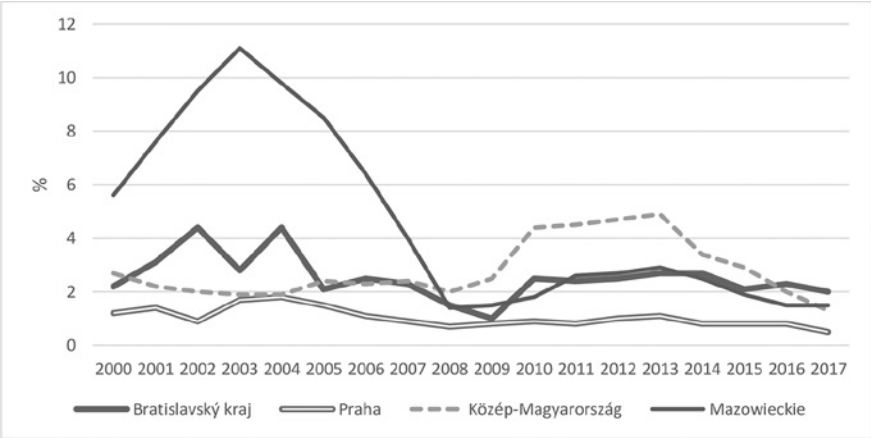

Figure 3: Comparison of long-term unemployment rates in V4 capital regions (%)

Like the rate of unemployment, the highest long-term unemployment rate was recorded in Mazowieckie region in 2003 (11.1%). However, it was gradually decreasing and it dropped below 2% in recent years. The best region for long-term unemployment was the Praha region where the unemployment rates stood below 2%, and towards the end of the analyzed period even below 1%.

The quality of human resources depends on the level of obtained education. Education plays a significant role in the societal development. Education helps improve the standard of living and quality of life. **Tertiary education** can substantially contribute to sustainable economic growth and human capital development. We evaluate the quality of human resources by indicator population aged 25-64 with tertiary education (levels 5-8). The shares of population with tertiary education in V4 capital regions are shown in Figure 4.

In 2000, the highest share of persons with tertiary education was in the Bratislava region (26.1%), the worst situation was in Mazowieckie region (15.1%). The rate of persons with tertiary education was increasing in analyzed period, except for Közép-Magyarország region in recent years. The largest share of population with tertiary education was in Praha region in 2017 (45.6%). The participation in education is very high because of young people participate in permanent education.

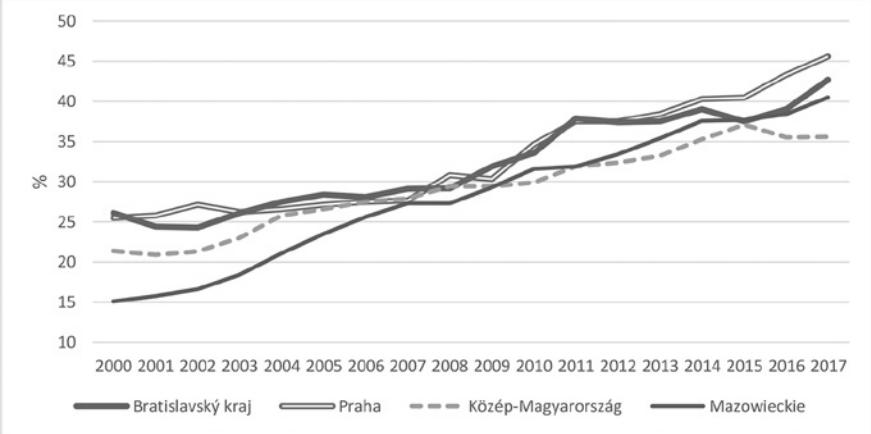

Figure 4: Comparison of tertiary education shares in V4 capital regions (%)

4. FINAL ASSESSMENT OF THE LABOUR MARKET SITUATION IN V4 CAPITAL REGIONS

We realized the final evaluation of the labour market situation by means of the selected indicators using scoring method. The results are depicted in Figure 5.

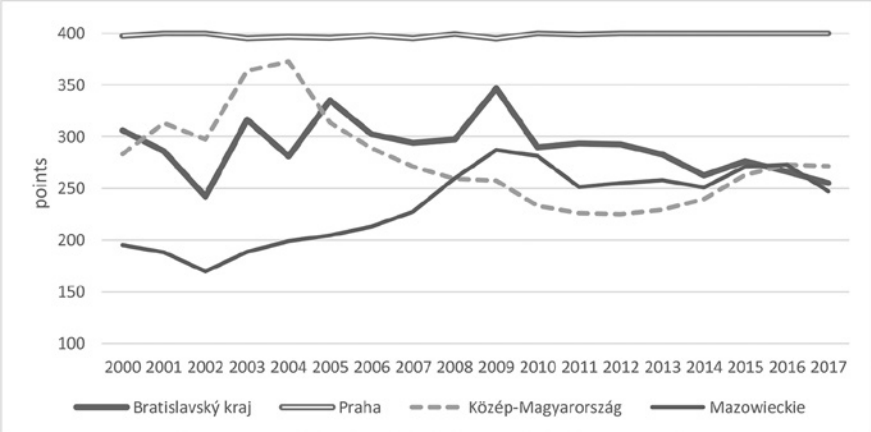

Figure 5: Result of scoring method in V4 capital regions

The Figure 5 shows that the highest scoring was in the Praha region in all analyzed period. The evaluation of other regions is shuttled. In recent years, other regions got almost the same evaluation. However, they have the biggest distance from the Praha region. Region Mazowieckie got the worst evaluation in 2002 (169.70 points).

5. CONCLUSION

The labour market development of the Visegrad Group countries has been influenced notably by the changes which were in progress during events such as: economic transformation, entering the EU and also world economic crisis. These events contributed to the fact, that economic and social disparities between the capital regions and main regions are decreasing insufficiently.

The significant disparities at a level of regions produce many problems and many negative accompanying consequences in a particular state. Distinctively, labour market disparities are very sensible themes where there are decisions about utilizing or not utilizing the most valuable production resource – human capital.

The aim of the paper was to examine and evaluate the situation on the labour market in the capital regions of the Visegrad Group (Bratislavský kraj, Praha, Közép-Magyarország and Mazowieckie) using selected indicators of labour market: employment rate, unemployment rate, long-term unemployment rate and the share of population with tertiary education.

We have found out by means of research that Czech region Praha achieves the best results in all four examined labour market indicators comparing to capital cities and all regions of Visegrad Group. We used scoring method to proof this fact. It also pointed to the fact that just in this region there is the biggest stability on the labour market during observed time period.

REFERENCES

[1] Eurostat. (2018) *Database*, available at: https://ec.europa.eu/eurostat/data/database.
[2] Dohnalová, Z., Lipková, J. (2013) Development of Labour Market in the Czech Republic in Comparison to the Employabilty of University graduates, *Trends Economics and Management*, Vol. VII, Iss. 14.
[3] Ivanová, E. (2010) Vplyv globálnej hospodárskej krízy na trh práce v SR, *Sociálno-ekonomická revue,* Vol. 8, No 3 (2010), pp. 22-26.
[4] Quadrado, L., Heidman, W., Folmer, H. (2001) Multidimensional Analysis of Regional Inequality: The Case of Hungary, *Social Indicators Research*, Vol. 56, No. 1, pp. 21–42.
[5] Förster, M., Jesuit, D., Smeeding, T. (2005) Regional poverty and income inequality in Central and Eastern Europe: evidence form the Luxembourg Income Study, In: Kanburand, R., Venables, A. J., eds.: *Spatial inequality and development*. Oxford, Oxford University Press, pp. 311-347.
[6] Soares, J. O., Marquês, M. M. L., Monteiro, C. M. F. (2003) A multivariate methodology to uncover regional disparities: a contribution to improve European Union and governmental decisions, *European Journal of Operational Research*, Vol. 145, Iss. 1. pp. 121-135.
[7] Blažek, J. (2005) Trends to Regional Disparities in the Czech Republic in Pre-Accession Period in European Context, *Geographia Polonica*, 78, 2, pp. 91-106.
[8] Goschin, Z., Constantin, D., Roman, M., Ileanu, B. (2008) The Current State and Dynamics of Regional Disparities in Romania, *Romanian Journal of Regional Science*, Vol. 1, No. 2, pp. 80-105.
[9] Měrtlová, L. (2012) Porovnání regionálních disparit v regionech České republiky, *XV. mezinárodní kolokvium o regionálních vědách,* Brno: MU, pp. 81-90.

[10] Melnyk, M., Synyutka, O., Kushniretska, O. (2016) Spatial policy of regional metropolis development in Ukraine: conceptual principles of formation, *Economic Annals-XXI* (2016), 159(5-6), pp. 43-47.
[11] Liua, B., Xua, M., Wanga, J., Xiea, S. (2017) Regional disparities in China's marine economy, *Marine Policy*, Vol. 82, pp. 1-7.
[12] Hudcovský, M. (2017) Do ktorého hlavného mesta z krajín V4 sa oplatí mladým migrovať za prácou? *Monitor hospodárskej politiky*, Vol. 1, No. 3, pp. 3-5.