REGIONAL DISPARITIES OF THE EUROPEAN UNION LABOR MARKETS

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Abstract: *The regional unemployment disparities are a common feature of the labor market in many EU countries. Nowadays, not only the existence but also the dynamics of these regional disparities are a very important issue. This is the reason why, in the present paper, we intend to identify and analyze the evolution of these differences, at the beginning of the XXIst century, as well as the possible causes that might generate them. In order to reach these objectives, we have collected, analyzed and interpreted the data obtained from various researches, statistical reports and databases. Our results show that, even if the regional disparities in employment and unemployment in EU states have diminished at the beginning of the XXIst century, they significantly started to increase after 2009, in the context of the economic and financial crisis. Some of the causes that determined the regional unemployment disparities in EU might be the level and the power of unions, the labor productivity and mobility, the labor market institutions and regulations.*

Keywords: labor market; regional disparities; unemployment; employment rate.
JEL Classification: J21; O47.

INTRODUCTION

The regional labor market can be regarded as a process of coordination between the labor supply and demand, in a well-defined territory that can be economically described, analyzed, managed and planned, called region. The essential attribute of a region is the common interest regarding the welfare and development in order to stimulate the socio-economic progress.

At the European Union level it was created a unitary territorial system called NUTS (Nomenclature of Territorial Units for Statistics), organized in 5 levels, of which the most important are the first three ones. The EU regional development policy, whose main objectives are the convergence, the regional competitiveness and the labor employment and the European territorial cooperation, is implemented at NUTS II level.

The members of European Union represent a large set of diverse regions. Considering the labor market outcomes, they differ from the point of view of unemployment rates, wages and industry structure (Midelfart-Knarvik et al., 2000). Some studies have pointed out that the regional labor market disparities, especially those in unemployment rates, are more visible in EU countries than in many other developed states. For example, an OECD (2005) study shows that 8 of the 10 countries with the largest regional unemployment rates disparities are EU countries.

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Midelfart-Knarvik et al. (2000) show that the industry structure is also very diverse across the European Union and there are strong chances to become even more diverse. From the point of view of revenues, Barro and Sala-i-Martin (1991) show that per capita incomes tend to converge but there are still significant inequalities between the European regions.

According to an OECD (2005) report and to a study of Janiak and Wasmer (2008), labor market regional disparities represent one of the major factors that may impede the European cohesion and may even threaten the viability of European Monetary Union. Moreover, Bayoumi and Eichengreen (1993) underlined that these differences make Europe more vulnerable to the asymmetric shocks.

Analyzing the causes of these regional disparities, the economists have pointed out multiple factors. For example, some researchers have suggested that the large regional unemployment rate disparities in the EU are caused by institutional factors such as tight labor and product market regulation and inflexible housing markets. Herwatz and Niebuhr (2011) have focused on the labor demand and discovered that regulations affecting wages can explain a large part of regional labor market disparities in European Union.

From the point of view of the factors that could diminish these EU regional disparities of the labor markets, Nahuis and Parikh (2004) consider that labor mobility can play a significant role in reducing them. Analyzing the income disparities, Che and Spilimbergo (2011) have noticed that regional convergence in GDP in an economy is facilitated by domestic financial development, trade and current account openness, better institutional infrastructure and labor market reforms.

Considering that the regional unemployment disparities represent one of the most important problems of the EU labor markets, in the present paper we intend to identify and analyze the evolution of these differences, at the beginning of the XXIst century, as well as the possible causes that might generate them. In order to reach these objectives, we have collected, analyzed and interpreted the data obtained from various researches, statistical reports and databases.

1. CAUSES OF THE EU REGIONAL UNEMPLOYMENT DISPARITIES

Many analysts have tried to explain the regional unemployment disparities from the European Union, among the most cited causes being the level and the power of unions, the labor productivity and mobility, the labor market institutions and regulations.

Regarding the impact of wage bargaining institutions on regional unemployment rate disparities, Longhi et al. (2005) underline that regional unemployment rate disparities are the lowest in those states where income bargaining is either very highly or very lowly centralized, decreasing

with collective bargaining coverage. Moreover, they conclude that regional unemployment rates augment with specialization in those economies with an intermediate level of bargaining coordination and diminish with specialization in countries with either low or high levels of bargaining coordination.

Huber (2013) considers that, in a country, the regional unemployment disparities are influenced by two types of factors: on one hand there are the differences in regional productivity and amenities and, on the other hand, there are the labor mobility, the real estate market and the wage flexibility. To all these aspects, Huber (2013) adds a demographic factor, showing that a higher population density diminishes the unemployment rates in low unemployment regions but has no effect in high unemployment rate areas.

Some analysts, such as Felbermayr and Prat (2011), considered that the unemployment may be significantly influenced by the regulations from the goods and services' market, because these regulations may reduce the economy's capability to create new jobs. They concluded that regional unemployment rate disparities may increase when there is high real estate market rigidity and may diminish with a lower degree of regulation on the goods and services' market.

Unlike Felbermayr and Prat (2011) opinions, Solow (2000) considers that responsible for the unemployment disparities in the European Union economies is the low level of demand for goods and services. This reduced demand generates a low output growth and, consequently, a decrease in the labor demand. However, the empirical evidences offered by Eichhorst et al. (2010) show that the effects of GDP reductions on the labor demand and unemployment during the nowadays economic crisis are very different among EU countries.

The unemployment differences between European countries may also be attributed to more rigid labor market institutions from Europe (Nickell, 1997). The same idea can be found at Blanchard and Wolfers (2000) or Bertola et al. (2002), which have underlined the fact that the institutions may represent potential determinants of these disparities. Other studies have mentioned that there is a strong positive correlation between centralization, net replacement rates and regional autonomy, on one side, and size of regional unemployment rate disparities, on the other side (Blanchard and Giavazzi, 2003).

Considering all these aspects related to the emergence of the regional unemployment disparities, in the next part of the present paper we analyze the way in which these differences have evolved after 2000.

2. THE EVOLUTION OF THE REGIONAL UNEMPLOYMENT DISPARITIES IN EUROPEAN UNION

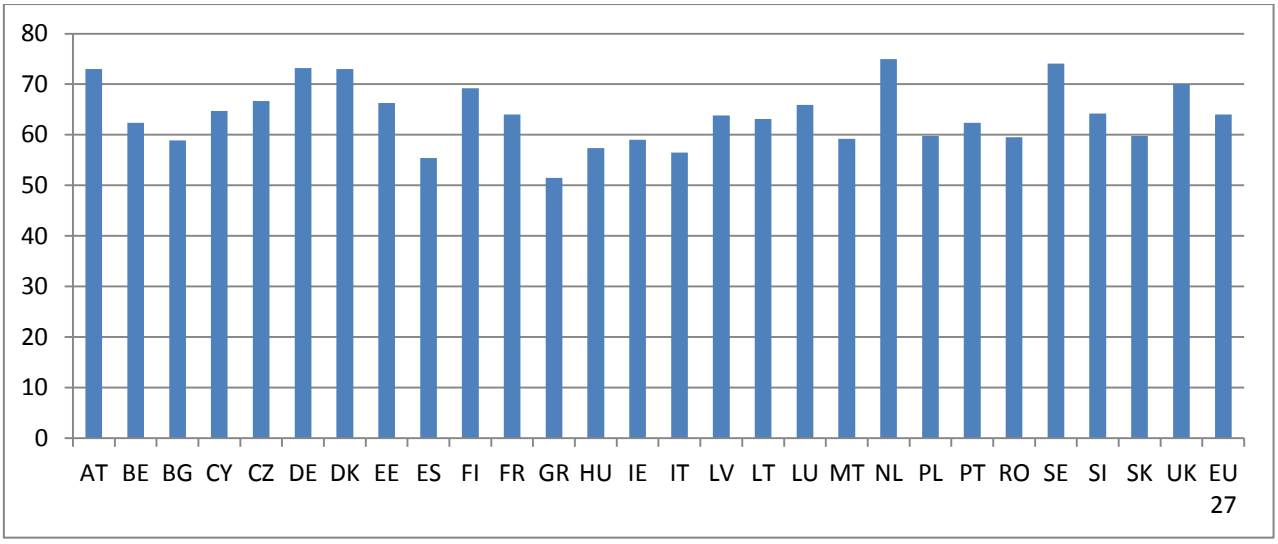
According to European Commission reports (2013a), a region is considered to be "underperforming" if its employment rate is relatively low compared to the national employment rate (below 90% of the national figure) or if its unemployment rate is relatively high compared to the national rate (above 150% of the national figure). The same denomination is also used for the comparisons among the EU regions.

At the beginning of the XXIst century, the unemployment in EU was on a downward trend. If in 2000 there were about 20 million people unemployed in EU-27, representing 9% of the total labor force, in the first quarter of 2001 this number had dropped to 19 million and the unemployment rate to 8.5% (European Commission, 2013b). After 2001, it followed few years of increasing unemployment, until 2005, when it started a period of steadily declining in unemployment, which lasted until the first quarter of 2008. Between the second quarter of 2008 and the middle of 2010, the unemployment level in EU increased by more than 7 million, the 9.7% rate being the highest value recorded since 2000.

According to the European Commission report from 2013, between 2011 and 2012, it was noticed an increase in the unemployment rate in 16 EU countries, the highest ones being reported in Greece (+6.6 percentage points), Cyprus (+4.0 percentage points), Spain (+3.3 percentage points), Portugal (+3.0 percentage points), Italy (+2.3 percentage points) and Bulgaria (+1.0 percentage points). Among all these states, Spain remained the country with the highest overall unemployment rate for the fifth year in a row, in 2012 this rate reaching 25.0%. Meanwhile, during the same period of time, the unemployment rate has diminished in 9 member states and remained constant in two, Hungary and Ireland (European Commission, 2013a). Between 2011 and 2012, the highest decreases in the annual average unemployment rates were noticed in the Baltic countries: Estonia (-2.3 percentage points), Lithuania (-2.0 percentage points) and Latvia (-1.3 percentage points).

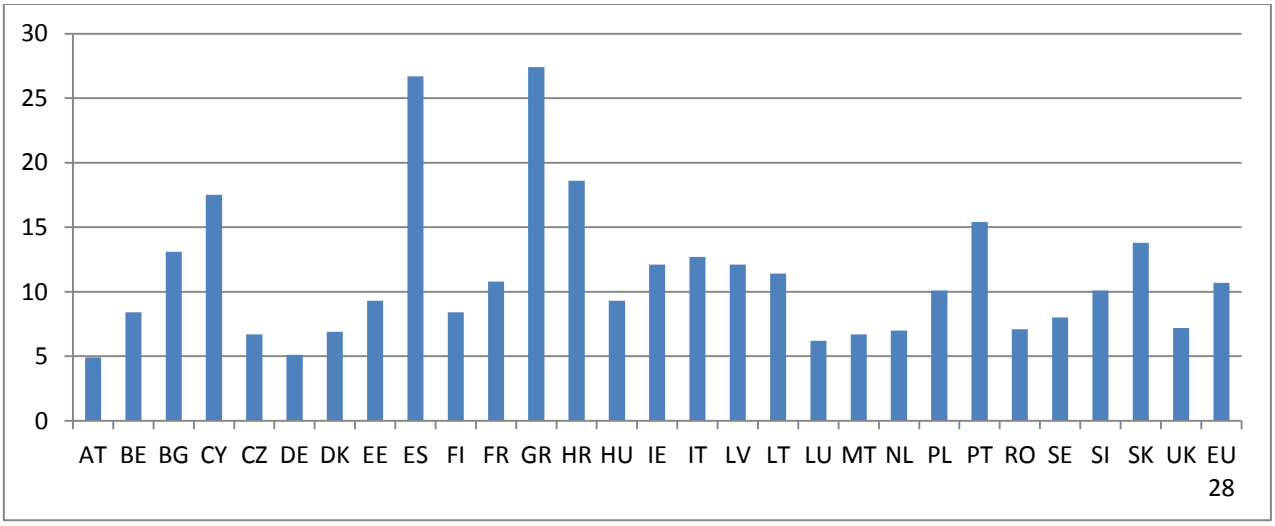
According to the statistical information offered by a survey conducted by Teichgraber (2013), the EU labour markets also had a different evolution of employment rates in 2012 (see Figure 1), fact that led to a greater increase in the differences between the member states. Therefore, compared to the EU average (64.2%), the employment rate for the population aged between 15 and 64 was higher in eleven countries, the highest rates being noticed in Netherlands (75.1%), Sweden (73.8%), Germany (72.8%), Denmark (72.6%), and Austria (72.5%). On the opposite situation there were ten member states, which had an employment rate below 60 %. The lowest employment rates were recorded in Greece (51.3%), Spain (55.4%), Italy (56.8%) and Hungary (57.2%).

Figure 1 - Employment rates in EU countries in 2012



Source: Adapted from Teichgraber, M., 2013, Labour market and labour force statistics - European Union Labour force survey - annual results 2012, Eurostat, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Labour_market_and_labour_force_statistics

Figure 2 - Unemployment rates in EU countries in 2013*



Source: Adapted from European Commission, 2013a, Regional labour market disparities, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Regional_labour_market_disparities
*For UK and Greece, the data is for October 2013; for Estonia (EE) and Hungary – data is for November 2013; for Latvia – data is for the third trimester of 2013.

Looking at the statistics, it can be seen that, during the nowadays economic crisis, the unemployment did not affect the EU member states in the same way or to the same extent, the labor market differences across the EU-27 being on an ascending trend. These unemployment differences still persisted in 2013 (see figure 2), when the unemployment rate increased in fourteen member states, fell in thirteen and remained at the same level as in 2012 only in Sweden (European Commission, 2013a).

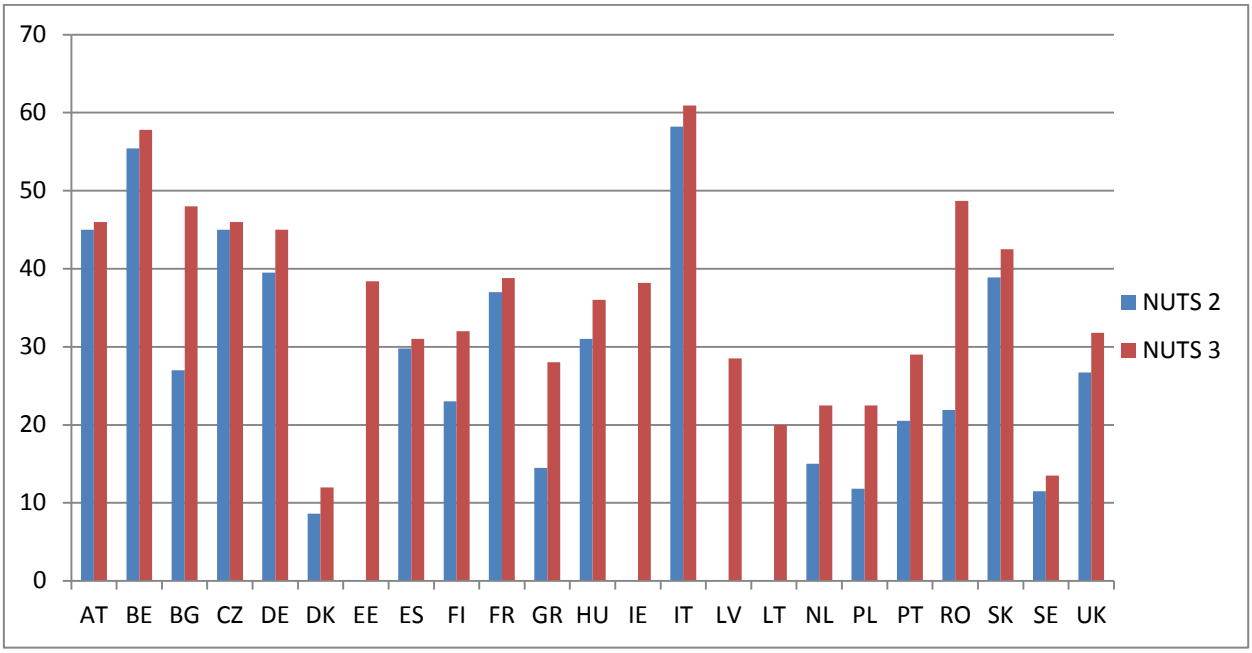
From the point of view of regional disparities in employment and unemployment, it was noticed that these gaps have diminished during the period 2002 - 2006. Despite these general labor market improvements, almost 20% of the EU active population still lived in the underperforming regions from the point of view of unemployment.

The statistical data show that the number of underperforming regions has not changed too much during the period 2002 - 2006 (European Commission, 2013a). Therefore, while in 2006, at NUTS 2 level, there were 51 underperforming regions out of 255 from the point of view of employment, in 2002 the number of these regions was 52. In the areas where the employment rates were relatively low compared to the European Union average, there were 20.6% of the working population aged between 15 and 64, in 2006. From the point of view of unemployment, at NUTS 2 level, there were 43 underperforming regions out of 261, in 2006, compared to 46 regions in 2002.

Therefore, depending on the region, the population can be affected to a greater or lesser extent. According to these statistics, in 2006, at NUTS 2 level, the less affected active population could be found in Spain, Greece and France, where the percentage did not exceeded 2.5%, while in Austria, Belgium, Czech Republic and Italy, the percentage was over 20%. From all the EU countries, the highest percentage was registered in Italy (27.5%), due to the division that exists between the northern and southern regions. While in the northern part the unemployment rates were relatively low (between 3.0% and 7.5%), in the southern regions these rates ranged from 10.0% up to 13.5%. (European Commission, 2013a). This highest value, which was more than five times higher than Italy's lowest regional unemployment rate, was recorded in Sicilia. The second country after Italy with the highest dispersion of unemployment rates was Belgium. In this country, the lowest unemployment rate was 4.2%, registered in 2 regions, while the highest one was 17.6%, more than four times superior to the lowest rate, in the region surrounding the capital Brussels.

These differences could also be noticed when determining the dispersion of the regional unemployment rates (see figure 3). As it can be seen in figure 3, from all EU states, in 2006 the highest dispersion values were observed in Italy and Belgium, both for NUTS 2 and NUTS 3 level. In Bulgaria and Romania it can be noticed a particular situation compared to the rest of the EU countries: while at NUTS 2 level the dispersion was well below other member states, at NUTS 3 level it can be found a significant higher dispersion. This difference could be explained through the large variability between NUTS 3 level regions belonging to one NUTS 2 level region. A good example for this could be the NUTS 2 level Bulgarian region Yugoiztochen, where the unemployment rate was of 8.1%. The region comprises other NUTS 3 level regions which have unemployment rates ranging from 4.5% to 17.1%.

Figure 3 - Dispersion of unemployment rates in the EU states, at NUTS 2 and NUTS 3 level, in 2006



Source: Adapted from European Commission, 2013a, Regional labour market disparities, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Regional_labour_market_disparities

In the case of Latvia, Lithuania, Estonia and Ireland the dispersion of unemployment rates could only be measured at NUTS level 3. However, as it can be seen from the figure 3, the dispersion for these states was relatively reduced compared to other EU countries.

In the case of Cyprus, Luxembourg, Malta and Slovenia it could not be determined the dispersion of unemployment rates neither for NUTS 2 nor for NUTS 3 level, because the first three states have only one NUTS 2 and one NUTS 3 region and Slovenia has 2 NUTS 2 regions.

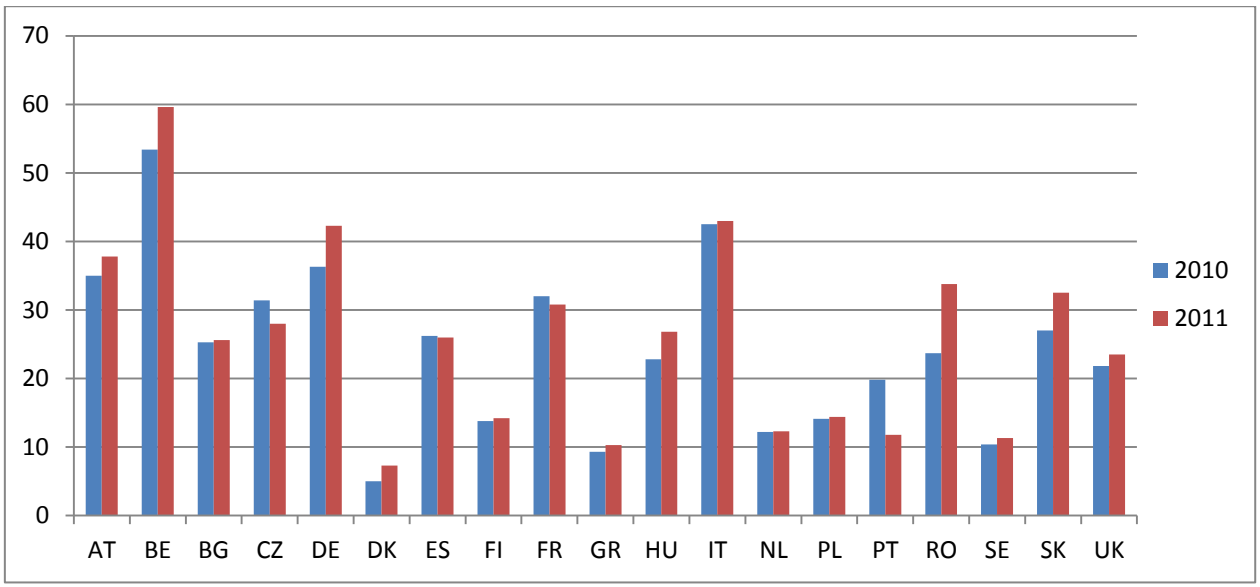
If during 2002-2006 it can be noticed a general reduction in the regional dispersion of unemployment rates, the economic and financial crisis has brought an increase in this dispersion, which was visible especially after 2009. In 2010, almost 70 % of the NUTS 2 regions in the EU states recorded higher unemployment rates, compared to previous year, while only 10 % of the regions achieved significant reductions (Prado and Zdrentu, 2011). As a consequence of these differences in regional performances, the cohesion in the labor markets continued to deteriorate.

In 2011, the dispersion of regional unemployment rates increased in most of the member states, compared with the previous year, the only exceptions being Czech Republic, Spain, France and Portugal, where the regional disparities declined (see figure 4).

In 2011, the highest dispersions of unemployment rates were noticed in Belgium (59.6 %), followed by Italy (43.0 %) and Germany (42.3 %). In the opposite situation there were Denmark, Greece and Sweden, which had the lowest disparities in regional unemployment rates in 2011, of 7,3%, 10,3% and, respectively, 11,3%. However, the low dispersion from these three states does not

always reflect a positive evolution of the labor markets. For example, Greece had small regional disparities in unemployment rates, during the analyzed period, but all its NUTS 2 regions recorded high unemployment rates (over 14 %), in 2011. This demonstrates that the dispersion only indicates the disparities between regions and not the overall level of unemployment.

Figure 4 - Dispersion of unemployment rates in EU, at NUTS 2 level, in 2010 and 2011



Source: Adapted from Prado, L., Zdrentu, B, 2011, *Regional labour market: higher unemployment rates and increasing disparities in 2010*, Eurostat, http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-060/EN/KS-SF-11-060-EN.PDF and from European Commission, 2013a, *Regional labour market disparities*, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Regional_labour_market_disparities

In the case of Cyprus, Estonia, Ireland, Latvia, Lithuania, Luxembourg, Malta and Slovenia, it could not be determined the dispersion of unemployment rates because they have only one or 2 NUTS 2 regions.

In 2012, the differences in unemployment rates between EU regions continued to increase, the lowest rates, from the 270 NUTS 2 regions, being registered in Salzburg and Tirol (both 2.5 %), in Austria, and Tübingen, Oberbayern and Trier (all 2.7 %), in Germany (European Commission, 2013c). Meanwhile, the highest rates were observed in the regions of Ceuta (38.5 %), Andalucía (34.6 %), Extremadura and Canarias (both 33.0 %), from Spain, and Dytiki Makedonia (29.9 %), in Greece.

According to a report of European Commission released in May 2013, among the 270 NUTS-2 regions of the member states, in 2012, 53 had an unemployment rate of less than 5.2 %, which represented half of the EU average. At the opposite site, there were 25 regions with a rate higher than 20.8 %, which represented the double of the EU average.

CONCLUSIONS

At the beginning of the XXIst century, the unemployment in EU countries had a sinuous trend. The financial and economic crisis that started in the end of 2007 significantly influenced the labor markets, the unemployment rate registering a sustained increase, after the second quarter of 2008, in most of the member states. Looking at the statistics, it can be noticed that the unemployment did not affect all the countries in the same way or to the same extent, the labor market differences across the EU-27 being on an ascending trend.

From the point of view of regional disparities in employment and unemployment, it was noticed that these differences have decreased during the period 2002 - 2006. Regarding the unemployment, at NUTS 2 level, there were 43 underperforming regions out of 261 in 2006, compared to 46 regions in 2002. Despite these improvements of the labor markets, in 2006 almost 20% of the EU active population still lived in the underperforming regions. From all the EU states, the highest dispersion of unemployment rates was observed in Italy and Belgium, both for NUTS 2 and NUTS 3 level.

If between 2002 and 2006 it can be noticed a general reduction in the regional dispersion of unemployment rates, the economic and financial crisis has brought an increase of this dispersion, more visible especially after 2009. Therefore, starting with 2010, in most of the member states, the dispersion of the regional unemployment rates has increased each year. Consequently, the cohesion in the labor markets continued to deteriorate, fact that has considerable implications within the context of economic and social union in Europe.

This is the reason why the national governments, together with the EU leaders, try to find solutions to reduce these gaps, in order to consolidate and harmonize the socio-economic environment of the member states.

REFERENCES

Barro, R.J., Sala-i-Martin, X. (1991), *Convergence across states and regions,* in *Brookings Papers on Economic Activity*, no. 1, pp. 107–182, Washington, D.C.: Brookings Institution.

Bayoumi, T., Eichengreen, B. (1993) *Shocking Aspects of European Monetary Integration*, in Torres, F., Giavazzi, F. (eds.), *Adjustment and Growth in the European Monetary Union*, pp. 193–229, Cambridge: Cambridge University Press.

Bertola, G., Blau, F., Kahn, L. (2002) *Comparative analysis of labor market outcomes: Lessons for the US from international long-run evidence*, in Krueger, A., Solow, R. (eds.), *The roaring nineties: Can full employment be sustained?*, pp. 159-218, Russell Sage and Century Foundations.

Blanchard, O. Giavazzi, F. (2003) *Macroeconomic Effects Of Regulation And Deregulation In Goods And Labor Markets*, The Quarterly Journal of Economics, vol. 118, no. 3, pp. 879-907.

Blanchard, O., Giavazzi, F. (2003) *Macroeconomic Effects of Regulation and Deregulation in Goods and Labor Markets*, The Quarterly Journal of Economics, vol. 118, nr. 3, pp. 879-907.

Blanchard, O., Wolfers, J. (2000) *The role of shocks and institutions in the rise of European unemployment: The aggregate evidence*, Economic Journal, vol. 110, pp. C1-C33.

Che, N. X., Spilimbergo, A. (2011) *Structural Reforms and Regional Convergence*, IMF Working Paper, accessed on December 2013 at http://www.imf.org/external/pubs/ft/wp/2012/wp12106.pdf

Eichhorst, W., Escudero, V., Marx, P., Tobin, S. (2010) *The impact of the crisis on employment and the role of labour market institutions*, IZA Discussion Paper No. 5320, Bonn, accessed on January 2014 at http://ftp.iza.org/dp5320.pdf

European Commission (2013a) *Regional labour market disparities*, Eurostat, accessed on July 2013 at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Regional_labour_market_disparities

European Commission (2013b) *Unemployment statistics*, Eurostat, accessed on September 2013 at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics

European Commission (2013c) *Unemployment statistics at regional level*, Eurostat, accessed on September 2013 at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics_at_regional_level

Felbermayr, G., Prat, J. (2011) *Product Market Regulation, Firm Selection and Unemployment*, Journal of the European Economic Association, vol. 9, no. 2, pp. 278-317.

Herwartz, H., Niebuhr, A. (2011) *Regional labor demand and national labor market institutions in the EU15*, Research Papers 112, Hamburg Institute of International Economics, accessed on February 2014 at http://www.eale.nl/Conference2009/Programme/PapersF/add101901_kpyeA8k8WU.pdf

Huber, P. (2013) *Labour Market Institutions and Regional Unemployment Disparities*, Working Paper no. 29, accessed on December 2013 at

http://www.foreurope.eu/fileadmin/documents/pdf/Workingpapers/WWWforEurope_WPS_no029_MS95.pdf

Janiak A., Wasmer, E. (2008) *Mobility in Europe - Why it is low, the bottlenecks and policy solutions*, European Economy Economic Papers 340, European Commission DG-Economic and Financial Affairs, Brussels, accessed on January 2014 at http://ec.europa.eu/economy_finance/publications/publication13173_en.pdf

Longhi, S., Nijkamp, P., Traistaru, I. (2005) *Is Sectoral Diversification a Solution to Unemployment? Evidence from EU Regions*, *Kyklos*, vol. 58, no. 4, pp. 591-610.

Midelfart-Knarvik, K.H., Overman, H.G., Redding, S.J., Venables, A.J. (2000) *The Location of European Industry*, European Commission Economic Papers, No. 142, European Commission, Brussels, accessed on January 2014 at http://ec.europa.eu/economy_finance/publications/publication11136_en.pdf

Nahuis, R., Parikh, A. (2004) *Factor mobility and regional disparities. East, West, home's best?*, European Network of Economic Policy Research Institutes, Working Paper no. 26, accessed on February 2014 at http://econpapers.repec.org/paper/eprenepwp/026.htm

Nickell, S. (1997) *Unemployment and labour market rigidities: Europe versus North America*, Journal of Economic Perspectives, vol. 11, pp. 55-74.

OECD (2005) *Employment Outlook 2005*, Paris: OECD.

Prado, L., Zdrentu, B. (2011) *Regional labour market: higher unemployment rates and increasing disparities in 2010*, Eurostat, accessed on December 2013 at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-060/EN/KS-SF-11-060-EN.PDF

Solow, R. (2000) *Unemployment in the United States and in Europe: A contrast and reasons*, in *The European Unemployment Problem*, vol. 46, pp. 1-12, Ifo Studien.

Teichgraber, M. (2013) *Labour market and labour force statistics - European Union Labour force survey - annual results 2012*, Eurostat, accessed on January 2014 at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Labour_market_and_labour_force_statistics.