Torun Business Review 15(2) 2016 5-19

Torun Business Review

EU MEMBER STATE DISPARITY IN SOCIAL ECONOMIC COHESION PROGRESS

ONA GRAZINA RAKAUSKIENE[a], VIKTOR KOZLOVSKIJ[b]

[a] *Mykolas Romeris University, Lithuania*

[b] *Vilniaus Kolegija, Lithuania*

ABSTRACT

The paper presents the European Union member states' economic and social cohesion progress assessment. EU strategic documents and various researchers (of political science, sociology, economics and etc.) increasingly deliver. According to the authors with reference to the research, which results partly are presented here, two-speed European Union concept is not an exact reflection of the real situation. The article provides the research methodology and the European Union's economic and social cohesion progress evaluation based on the multi-level development concept. It should also be noted that there are currently significant divergence tendencies between European Union Member States groups.

ARTICLE INFO

Available online 3 June 2016

Keywords:
social cohesion,
multi-level European Union,
convergence,
divergence,
income inequality,
risk-of-poverty.

JEL: D00, E01, J32, O15.

Doi: 10.19197/tbr.v15i2.48

INTRODUCTION

Sustainable regional development and cohesion problems renew after the EU expansion, foremost due to the increasing inter-regional socio-economic differences in appreciation of both national and international levels. The researchers studies were used to show the widening gap between Eastern and Western European countries and regions; between the central and peripheral regions: and that metropolitan areas (often capitals) polarization takes place. Empirical studies have shown that within the EU there are significant social and economic disparities that are clearly reflected in the most recent reports on the EU's economic and social cohesion, which emphasizes that the internal differences increased primarily due to the Central and Eastern European countries joining.

More and more researches argue that Europe is divided into two parts – Western Europe and Eastern Europe, or Old Member States and New Member States. Development of mentioned two groups is going on different levels. That's how concept of development as 'two-speed' Europe appears. Our research shows that there is more than two development speeds in European Union. We separate four development levels. Moreover four-speed development takes place not only through macroeconomic indicators (such as GDP) analysis, but also when social indicators (for example, income inequality and risk-of-poverty) are observed.

Next important factor is economic difficulties in the World and Europe. 2008 year crisis and some years of recession wiped out in many years achieved economic and social progress and exposed structural weaknesses in the European economy. Complicated economic recovery with its low economic growth rate and high unemployment level become real challenge for European Union common future and cohesion.

The main goal of this study is to analyze European Union social cohesion progress in different time periods and show main results of mentioned research. This study introduces cohesion concept, discussion of its definition, relation with convergence perception, cohesion dimensions. Of course the focus is on social cohesion and its research indicators. For further analysis two indicators were chosen: income inequality and risk-of-poverty.

Research methodology is presented in the second part of this work. It includes methods of grouping of Member States, determination of time periods, choice of indicators and explanation of their counting methods. Countries were grouped in two ways: according to mentioned "two-speed" and "multi-speed" Europe concepts. Analyzed timeline is 15 years (from 2000 till 2014) and it was divided into three periods: before European Union enlargement in 2004, after enlargement and before recession and time of recession and recovery.

The research methods employed the monographic method, analysis and synthesis, statistical analysis and the graphic methods.

The main results and conclusions of this research reflect the social cohesion progress in European Union. In general permanent convergence process between Old and New Member States can be recognized. Situation becomes not so evident if countries are divided into smaller groups. In this case convergence process can be faced during the first two analyzed periods, but divergence appears during last period after recession. Moreover it can be recognized stable four development level European Union.

Finally, such tendencies are equitable to both economic (such as GDP) and social (income inequality, risk-of-poverty) indicators.

LITERATURE REVIEW – EU COHESION CONCEPT

In economics literature definition of *cohesion* is not a simple concept and can be interpreted in different ways (Calvo et al., 2004). For some, it means the territorial and social relations stability; for others, the process of convergence between regions and social groups, moreover, some scientists even narrow the concept till employment opportunities and preferred living standards. Cohesion policy's aim can be to equilibrate regional and social disparities within the transparent redistribution of GDP, employment, etc. Or *cohesion* can be directed to the maximal contribute from regions and social groups to the country's economic performance and so on (Chan, 2006; Hulse, 2007).

Authors consider that cohesion definition must contain two main attributes: first of all, cohesion means *equilibration of disparities*; and, secondly, *mutual development of all cohesion subjects*.

The concept of cohesion is closely related to convergence definition. According to US and Western European economists in the sixth decade of the twentieth century published theory, convergence is disappearance of economic, social, political and ideological differences owing to scientific and technical revolution (Montvilaitė, 2008).

Regarding to Maniokas (2003), the convergence is defined as the standardization or homogenization and is related to the modernization theory. Abramovitz and David (1996) treat convergence as drawing near of different economies in group of countries. Convergence in the context of the Maastricht Treaty was seen as rapprochement with high levels of productivity and living standards, with the ultimate goal – full membership in the Economic and Monetary Union.

Thus, the term convergence is very close to the concept of cohesion. However, it should be emphasized that the concept of cohesion, by definition, is more complex than convergence. Entirely, according to the difference of goals it can be said that convergence can be characterized by static position, while cohesion's nature is more dynamic and does not have terminal goal. In other words, cohesion, as the process does not end, and it is based on the principle of continuous development. In contrast, ultimate convergence can be achieved. Moreover convergence achievement not necessarily means development of all system operators.

Cohesion policy supports territorial, economic and social cohesion in the whole EU and its individual regions, in the countries' in macro-economic and micro-economic levels. Structural policy covers all EU countries and regions, all areas and sectors related to microeconomics. In our opinion, the cohesion policy is in a sense a broader concept for structural policy.

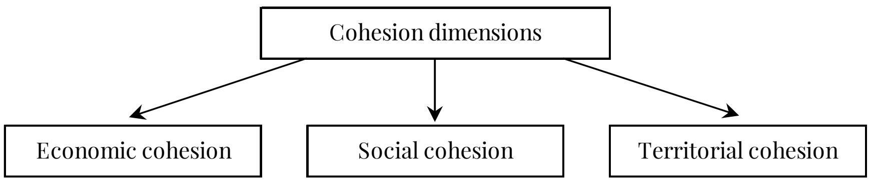

Fig. 1. Structure of cohesion (equal parts).
Source: own work.

The relationship between economic, social and territorial (regional) cohesions is not unambiguous and simple. Cohesion elements should be more or less equivalent (Fig. 1).

Almost all the reports (for example, Europe 2020; Economic, social and territorial cohesion reports, etc.) and studies (Barry, 2003; Garcia, 2003; Begg, 2003; etc.) reflect the same basic economic indicators of cohesion analysis: GDP, inflation, budget deficit, national debt, the interest rate, etc. In case that this paper's aim is to reveal social cohesion it will continue with social cohesion concept.

Social cohesion first of all is related to the quality of life of the population and its growth. This means equal employment availability, labour (and capital) horizontal and vertical mobility, education and health care disparities overcoming, career and material, spiritual, cultural, social status (career, material prosperity, a spiritual and cultural freedom, etc.) achievement equal opportunities, social and economic equality (Bachtler, 2007; Bernotaitė, 2008).

European Union Council in its social cohesion strategy (Battaini-Dragoni, 2003) appoints three definitions of social cohesion.

First of all, social cohesion is perceived as belonging to a common sense of values. Such social cohesion treatment for the first time mentioned by Emile Durkheim (Hulse, 2007; Stanley, 2001), who argued that the social cohesion of society is based on interdependence, loyalty and solidarity. Thus, social cohesion covers all social processes that help people feel their belonging to the same community and identify themselves as part of the community.

Another social cohesion perception is that social cohesion is a commitment and ability to work together: social cohesion is a situation where a group of people (defined geographical region, country, etc.) demonstrates the ability to cooperate, thus creating a change atmosphere (Dragojevic, 2001).

Third definition emphasizes the social connections and relationships, and identifying etymological sense of the term. For example, social cohesion is stable, cooperative and harmonious community promotion program.

In summary, social cohesion has such main component (Bachtlet et al., 2001):

- employment and income distribution (problem of unemployment, especially among young people, long-term unemployment, job creation, income distribution inequality and so on);
- social protection (social security, poverty reduction, social inclusion and so on);
- living conditions (housing, access to services and so on.);
- educational services (education accessibility, population education and literacy rates and so on);
- social services.

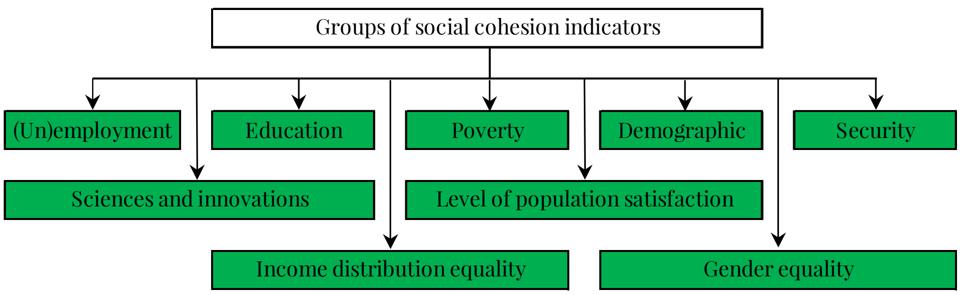

Fig. 2. Groups of social cohesion indicators.
Source: own work.

Regarding to all mentioned social cohesion concept details, other researches recommendations (such as Fitoussi, 2009; Easterlin, 2012) and EU cohesion policy documents (for example, the sixth Economic, social and territorial cohesion report) main social cohesion indicators' groups can be identified as (figure 2): (un)employment, income distribution equality, education, poverty, demographics, security, sciences and innovations, level of population satisfaction and gender equality.

All this groups of social cohesion indicators include mass of data. In this way, for example, (un)employment indicators' group includes different employment and unemployment indicators, such as total amount, change of it, by gender, by age, long-term unemployment and employment. No need to explain them all here. In this article two of the most important social cohesion indicators are being presented: income inequality and risk-of-poverty.

RESEARCH METHODOLOGY

Research methodology includes grouping of EU Member States, periods of time, choice of indicators and indicators' counting methods.

Object of research is social cohesion progress of EU Member States. For that purpose two grouping models are presented in this paper. First one means grouping of all EU Member States into two groups by their joining to alliance aspect (figure 3): Old Member States (EU-14) which joined union before 2004 and New Member States (EU-10) which joined union in 2004.

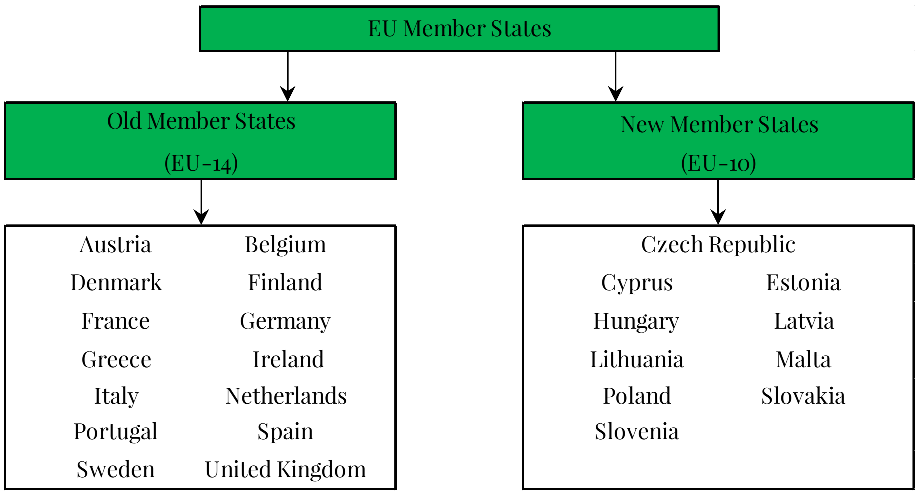

Fig. 3. EU Member States grouped by their joining to alliance period.
Source: own work.

This grouping is in line with popular concept of two-speed Europe (Lambertini, 1992; Molle, 2006; Gogas, 2009; Dabrowski, 2010; Hadjimichalis, 2011; Breuss 2013). As it can be noticed there are 14 countries counted as Old Members (except of Luxemburg) and 10 countries as New Members (except of Romania, Bulgaria and Croatia) in mentioned model. This is so because most statistics of Luxemburg is much higher than other EU countries' (for example, Luxemburg GDP is almost 3 times higher than EU average) and it perverts results. Other three mentioned countries joined EU after 2004. Further-more Romania and Bulgaria statistics is usually much worse than other ten members. In case of Croatia there is a lot of missing statistical data for elder periods of time.

Second grouping model is based on multi-speed EU idea. All mentioned 24 EU countries are divided into four groups by their economic development level (figure 4). Allocation criterion is Gross Domestic Product (GDP). Comprehensible that it is used conditional value of GDP. This means GDP per capita according to purchasing power parity compared with EU average level.

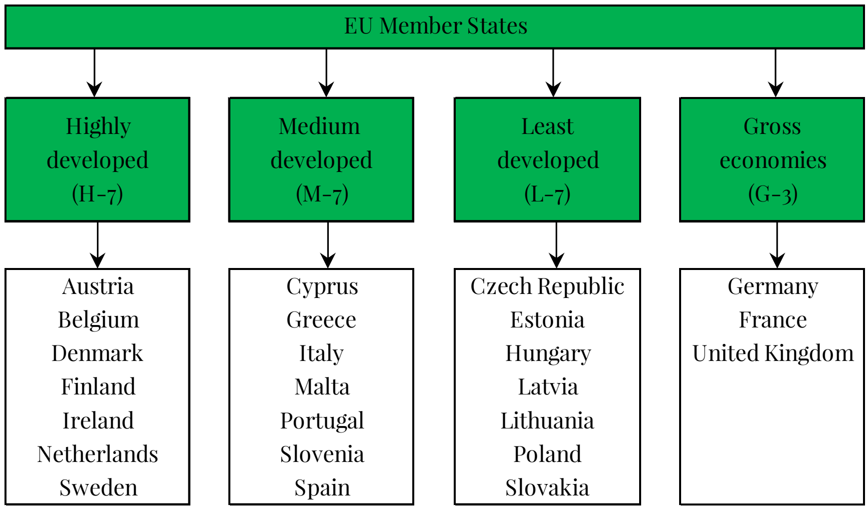

Fig. 4. EU Member States grouped by their economic development level.
Source: own work.

The last grouping was made with statistic data analysis computer program SPSS using clustering function according to the last 10 years (2005-2014) GDP.

So the first group of countries is counted as highly developed (H-7): Austria, Belgium, Denmark, Finland, Ireland, Netherlands and Sweden, – countries which GDP level (counted as average for analysed period) is around and higher than 110% of EU average level. The second group of EU members is named medium developed (M-7): Cyprus, Greece, Italy, Malta, Portugal, Slovenia and Spain, – countries which GDP is between 110% and 80% of EU level. The third group is low developed (L-7) countries: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia, – countries which GDP level is under 80% of EU average. The last group considered from three biggest EU economies – gross economies (G-3): Germany, France and United Kingdom. These countries' GDP level is around 110-120% of EU average.Next step is to determine period of time to analyze. In this article analyzed timeline is 15 years (from 2000 till 2014). This timeline is divided into three periods:

- I period between years 2000 and 2004 – time before biggest EU enlargement;
- II period includes years from 2005 till 2008 – time of both after EU enlargement and economic growth;
- III period after year 2009 – time of economic recession and unstable recovery.

The third stage is to choose indicators. Extent of paper doesn't allow presenting many of indicators. That's why in this article only three indicators are included. One of them is macroeconomic indicator GDP which is used as research base. Other two indicators are income inequality and risk-of-poverty as main social indicators.

Inequality of income distribution (as it is counted by EUROSTAT) is the ratio of total income received by the 20% of the population having the highest income (top quintile) to the total income of the 20% of the population having the lowest income (bottom quintile). The risk-of-poverty rate is the share of people with an equalised disposable income (after social transfer) below the risk-of-poverty threshold, which is set at 60% of the national median equalised disposable income after social transfers. Of cause it should be noticed that this indicator does not measure wealth or poverty, but low income in comparison to other residents in that country, which does not necessarily imply a low standard of living. Still mentioned indicators are reasonable in case not current numbers but tendencies are essential in this work.

Regarding to indicators' counting method it must be mentioned that some indicators are counted as conditional values. For example, for GDP EU-28 value has been taken as a base (EU-28 equals 100%) and current country's value recounted proportionally to this. Risk-of-poverty is conditional value by itself. Only income inequality numbers are current.

Next step was data grouping. Income inequality indicator for group of countries (for example Highly developed H-7) was counted as simple average. GDP and risk-of-poverty values for groups were counted by simplified standard deviation formula:

$$V = \frac{1}{n} \sum_{i=1}^{n} (c_i - X)$$

where
V – grouped value,
C_i – country indicator's value,
X – EU base value (100% for GDP; current value for risk-of-poverty),
n – number of countries in group.

RESEARCH FINDINGS – INEQUALITY FEATURES OF EU MEMBER STATE SOCIAL COHESION

Analysis shows that the EU Member States are characterized by a large disparity in the development during 2000-2014 periods. Moreover, EU countries face the convergence and divergence processes in the economic cohesion at the same time. For further analysis there were selected three indicators: GDP per capita (at purchasing power parity) as main EU macroeconomic wellbeing indicator, income inequality and risk-of-poverty as main social indicators. Development of the EU distinguished into three phases: before the EU's biggest enlargement 2000-2004, following this enlargement for the period 2005-2008 and decline after the global crisis and recovery period in 2009-2014.

EU Member States disparity in GDP level

Analysis of the relative GDP changes leads to the conclusion that the EU's economic cohesion policy is relatively effective during the period of economic prosperity, but encounters difficulties during the economic downturn.

In general permanent convergence process between Old and New Member states can be recognized. Figure 5 shows that both EU-14 and EU-10 are tending to EU average during all analyzed periods. Especially high convergence can be noticed before economic crisis in late 2008. Although there can be seen some slowdown (from EU-10 position) convergence takes place even during time of economic difficulties. *This slowdown is the first sign of cohesion weakness during economic recession*.

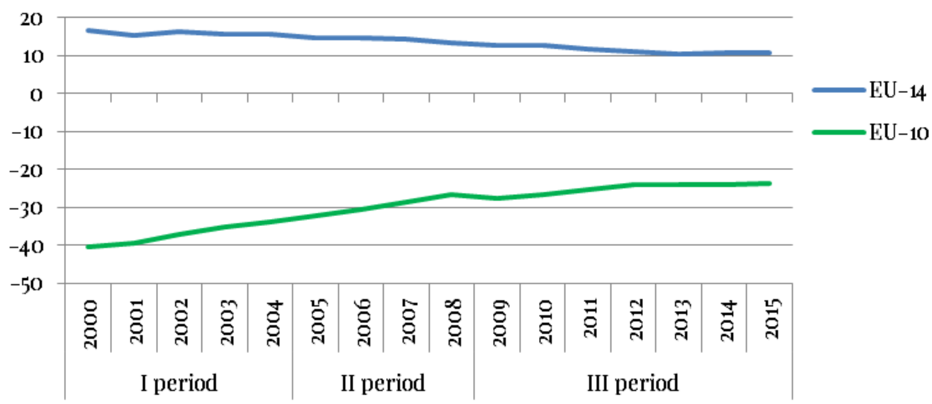

Fig. 5. Consolidated modified standard deviation of GDP of EU-14 and EU-10.
Source: own work.

Situation becomes not so evident if countries are divided into smaller groups. In figure 6 it can be seen that convergence between Old and New member states becomes possible mostly because of the least developed countries (L-7) higher growth rates. At the same time medium developed countries (M-7), despite of their gap compared with EU average, show no or weak convergence in first two periods. Situation changes during the last period when M-7 countries start to divergence from EU average.

As it can be seen first three groups of countries (H-7, G-3 and M-7) stay at relatively same level during all analyzed period.

Moreover it is interesting that the strongest convergence between these three groups was exactly during economic recession in 2008 and 2009. Simultaneously least developed EU countries stopped to draw closer. This happened mostly because of Baltic States where economic downfall was biggest in EU at that moment.

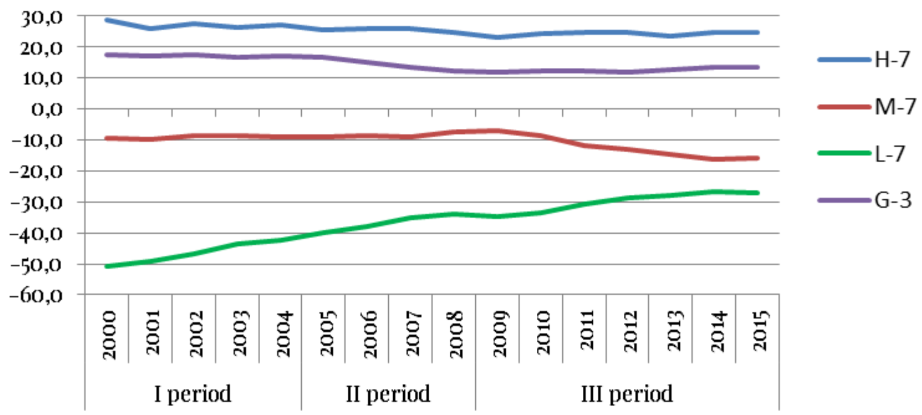

Fig. 6. Consolidated modified standard deviation of GDP of Member States grouped by development level.
Source: own work.

Made research affirms that there are four levels of development in the European Union. The first level is the most developed countries (H-7) with a relative GDP about 25-30% higher than the European Union average throughout all the period. The other group members are three big countries (G-3) with a relative GDP about 10-20% higher than the European Union average during all analyzed timeline. The third group is medium developed countries (M-7) with about 10% behind the European Union average (and recently even moving away from it). The last group concludes the least developed countries (L-7) which are rapidly catching up others and quickly approaching the European Union average.

In concern it can be seen tendency that less-developed countries are more vulnerable than those more developed during the recession time.

EU Member States disparity in income inequality

Analysis of *income inequality shows very similar results in comparison with GDP analysis*. Despite that income inequality data shows strong convergence process between Old and New Member states situation becomes not so clear if countries are grouped into smaller groups (by development level).

As it is shown by statistics (Fig. 7) the joint European Union income inequality indicator's value is quite stable: since 2005 value of it is around 5.0, and during the all analyzed period ranged from 4.5 to 5.0.

At the same time it is worth noting two phenomena. The first one, there has been a *sharp increase in income inequality just before European Union's enlargement*: in 2003 the indicator's value was 4.6; in 2004 it was already 4.8; in 2005 – 5.0. After 2005 EU income inequality indicator remained being at rate 5.0.

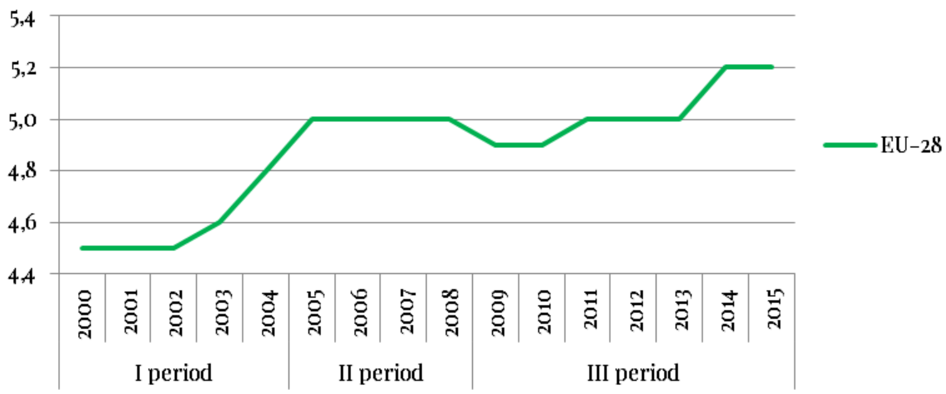

Fig. 7. EU Inequality of income distribution level (quintile).
Source: own work.

The second phenomena is that during the recession income inequality rate slightly dropped (in 2009 and in 2010 it was 4.9). At the same time, in the beginning of recovery it returned to the 5.0 value.

After European Union countries division into two groups: New members (EU-10) and Old members (EU-14) – clear trend of convergence can be noticed (fig. 8). In addition, it should be confirmed that consolidated average income inequality in New Member States is always greater than in Old ones.

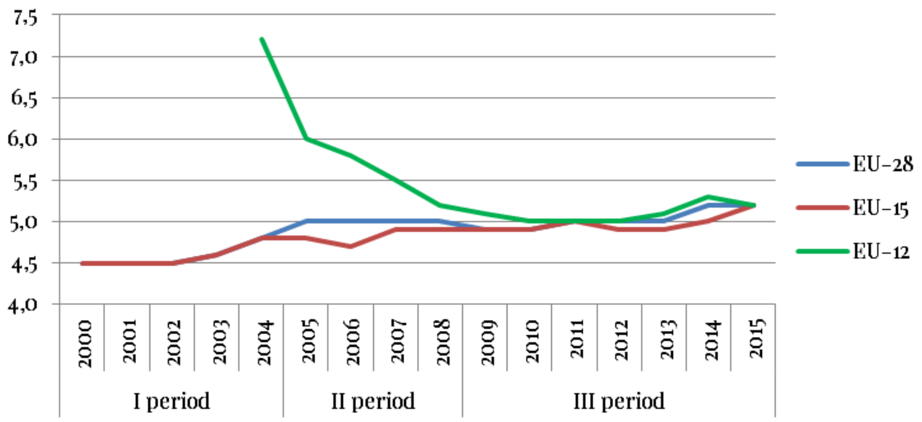

Fig. 8. Consolidated average income inequality (80/20) of Old and New Member States.
Source: own work.

Despite the fact that till the year 2004 Eurostat does not include all required data (part of the EU-10 Member States statistics is omitted, so it is impossible to count all the EU-10 group's general rate till 2004), it can be noted that since 2004 new Member States consolidated income inequality rate always declined, while in 2010-2011 it reached the European Union average value. Along old Member States consolidated income inequality indicator's value slightly increased until 2011 as long as it became equal to both EU-10 and European Union value (5.0).

Thus, strong *cohesion process* of income inequality values *can be observed* between Old and New Member States *during economic growth*.

Also it should be noted that since 2011 divergence trend appears: EU-10 income inequality has slightly increased and again became higher than the EU-28. At the same time EU-14 consolidated income inequality slightly decreased and fell below the EU-28 rate.

It can be concluded for New Member States: *although during recession consolidation between different income groups can be seen it disappears in the beginning of recovery period*. So this shows that *higher income groups feel economic recovery foremost*.

Another step is to analyze and group countries by development level (H-7, M-7, L-7 and G-3). Due to lack of official statistic data it is impossible to compare all mentioned countries groups for all provided periods (from 2000 till 2014). That's why this time analysis is made just for two last periods: II period from 2005 till 2008 and III period from 2009 till 2014.

Analysis allows descrying some tendencies. First of all, *income inequality and economic development are relative* (it can be noticed reverse dependence among them). The higher development level of the Member States is the lower is income inequality (Fig. 9). Especially brightly it can be seen in most developed countries (H-7).

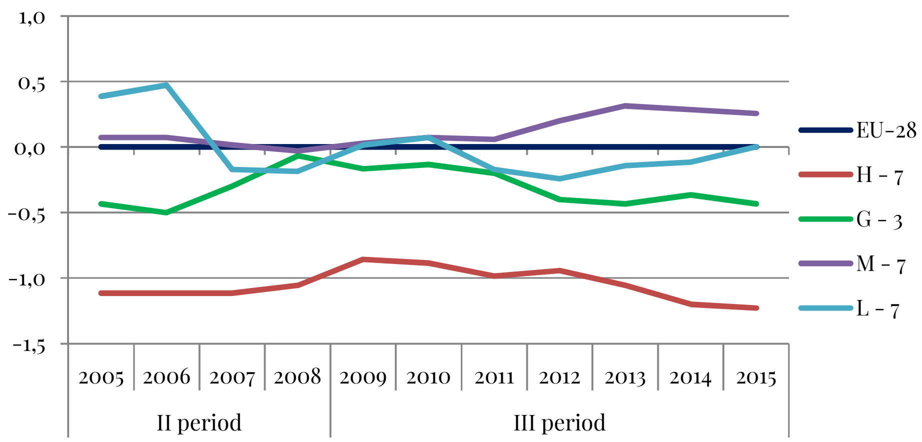

Fig. 9. Consolidated modified standard deviation of income inequality of Member States grouped by development level.
Source: own work.

Other repeatedly observed trend is that *during economic growth* (from 2004 to 2008) income inequality assessment goes *strong cohesion* way. Meanwhile, the *economic downturn and subsequent recovery period brings noticeable trends of indicator's divergence*: more developed countries (H-7 and G-3) which have lower income inequality go equalization way. While the less developed countries (M-7 and L-7) where income inequality is higher become more unequal. This is especially noticeable in medium developed countries (M-7). M-7 income inequality value increases till its maximum after 2011 and continues to grow further.

EU Member States disparity in risk-of-poverty

Due to lack of official statistic data it is impossible to compare mentioned countries groups for all provided periods (from 2000 till 2014). That's why analysis is made just for two last periods: II period from 2005 till 2008 and III period from 2009 till 2014.

Risk-of-poverty analysis shows almost the same results as it was laid out earlier in GDP and income inequality analysis. This denotes that *countries' grouping by development level was made properly*. There are *four levels of Member States in European Union*: highly developed countries (in our case H-7), medium developed countries (M-7), low developed countries (L-7) and three Gross economies (G-3). All this groups of countries have their own development speed and cohesion between these groups is not an obligation.

Moreover the same tendencies of convergence and divergence processes can be seen for risk-of-poverty indicator as it was for income inequality and GDP. First, it can be noticed strong convergence between Old and New Member States during period of economic growth (till 2008), convergence stop during recession and slow convergence during recovery (fig. 10).

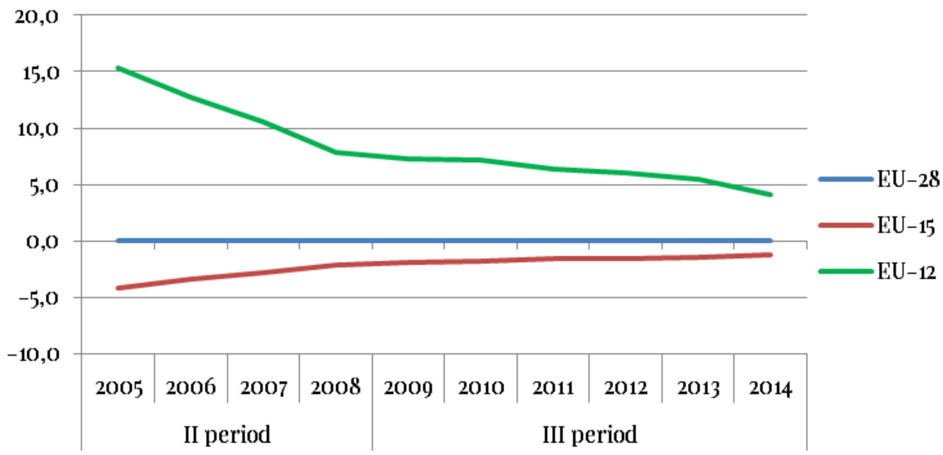

Fig. 10. Consolidated modified standard deviation of risk-of-poverty of Old and New Member States.
Source: own work.

Second similarity can be spotted if countries are divided into four groups by economic development level (H-7, M-7, L-7 and G-3). *During economic growth* (from 2004 to 2008) risk-of-poverty indicator goes *strong cohesion* way (fig. 11).

Meanwhile, the *economic downturn and subsequent recovery period brings some trends of indicator's divergence*. It is natural that risk-of-poverty becomes higher in time of economic difficulties. So it increased in all countries in 2009 and 2010. But in less developed countries it increased more. As consequence some divergence process appeared.

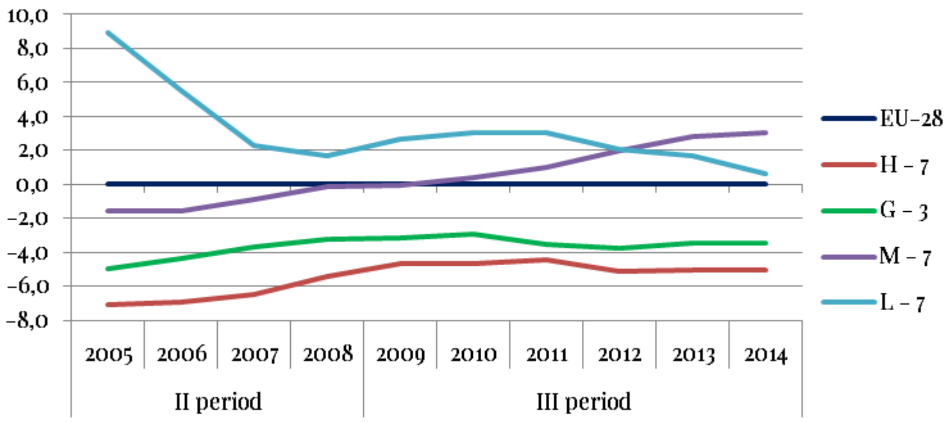

Fig. 11. Consolidated modified standard deviation of risk-of-poverty of Member States grouped by development level.
Source: own work.

After peak in 2009 and 2010 more developed countries (H-7 and G-3) started slowly decrease risk-of-poverty level in their countries. Least developed countries (L-7) made it as well. As a result after 2011 conservative convergence sets in. Only medium developed countries (M-7) become sad exception. As risk-of-poverty rate started to increase in mentioned group after 2009 so it continued to grow for all last years.

It is important to indicate that *less developed countries faces higher risk-of-poverty level* in comparison with more developed ones. In addition to smaller GDP and higher income inequality rates it can be assert that *less developed countries faces lower standards of living*. Moreover (by cohesion approach) if during economic growth period indicators moved closer to European Union average level during recession period *situation in mentioned countries groups becomes worse*.

CONCLUSIONS

Cohesion concept has not been fully explored and is sufficiently complicated. In any case, two key elements are important for the understanding of the cohesion definition:

- *development* – it can't stop, regression of at least one party can't be part of cohesion;
- *convergence* – economic and social indicators must draw near.

In addition it should be noted that most distinguishes three types Cohesion: economic, social and territorial.

Research shows that there are four development levels In European Union: highly developed countries, medium developed countries, less developed countries and gross economies. Moreover *development of three groups* (highly developed H-7, medium developed M-7 and gross economies G-3) *is quite stable and cohesion progress between them is impalpable*. From other hand least developed countries (L-7) pursue others. That's why *convergence between Old Members and New Members can be recognized*.

It can be expected that the current least developed EU Member States will reach mentioned three more developed countries groups development level and stay on one of them. Then cohesion progress will become much lower.

In general permanent convergence process between Old and New Member states can be recognized. Situation becomes not so evident if countries are divided into smaller groups (four groups in our case). Economic and social cohesion progress could be faced between all mentioned groups of countries till 2008. *After economic crisis and during complicated recovery period (from 2008 till 2014) divergence can be noticed*. Especially it can be spot between highly developed (H-7) and medium developed (M-7) countries.

Analysis of social indicators (income inequality and risk-of-poverty) changes leads to the conclusion that the European Union *cohesion progress* can be noticed *during the period of economic prosperity*, but *encounters difficulties during the economic downturn.* In concern it can be seen tendency that *less-developed countries are more vulnerable than those more developed during the recession time.*

REFERENCES

Abramovitz, M., David, P.A. (1996). Convergence and Deffered Catch-up: productivity leadership and the waning of American exceptionalism. *Mosaic of Economic Growth.* Stanford university press.

Bachtler, J., Gorzelak, G. (2007) Reforming EU cohesion policy: a reappraisal of the performance of the Structural Funds. *Policy Studies*, *28(4)*, 309-326.

Bachtler, J., Downes, R., McMaster, I., Toepel, K., Weise, Ch. (2001) The Impact of EU Enlargement on Cohesion. *Background Study for the 2nd Cohesion Report.*

Barry, F. (2003). Economic Integration and Convergence Processes in the EU Cohesion Countries. *JCMS, 41*, 897-921.

Battaini-Dragoni, G., Dominioni, S. (2003). *Conference on Social Cohesion.* The Council of Europe's Strategy for Social Cohesion.

Begg, I. (2003). Complementing EMU: Rethinking Cohesion Policy. *Oxford Review of Economic Policy*, *19*, 161-179.

Bernotaitė, K. (2008) Europos Sąjungos sanglaudos teisinės prigimties problemos. *Jurisprudencija, 107(5)*, 71-78.

Breuss, F. (2013). Towards a New EMU. *WIFO Working Papers,* No. 447.

Calvo, M. A. M., Cuadrado-Roura, J. R. & Garrido-Yserte, R. (2004) Economic and Social Cohesion in the EU: a critical approach, *44th European Congress of The Regional Science Association*. Porto, Portugal.

Chan, J., Ho-Pong, T. & Chan, E. (2006). Reconsidering social cohesion: Developing a definition and analytical framework for empirical research. *Social Indicators Research, 75*, 273-302.

Dabrowski, M. (2010). The global financial crisis: Lessons for European integration. *Economic Systems*, *34(1),* 38-54.

Dragojevic, S. (2001). Social cohesion and culture: contrasting some European and Canadian approaches and experiences. *Culturelink review*.

Easterlin, R.A., Angelescu, L. (2012). *Modern economic growth: Cross Sectional and Time Series Evidence, in Kenneth C. Land, ed., Handbook of Social Indicators and Quality of Life Research,* New Your and London: Springer;

Fitoussi, J.-P., Sen, A. & Stiglitz., J.E. (2009). Report by the Commision on the Measurement of Economic Performance and Social Progress. Paris: Commision on the Measurement of Economic Performance and Social Progress. Retrieved from http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf;

Garcia, I. P. (2003). Spanish Regional Policy: Economic and Social Cohesion in the European Union. *IAER, 9,* 79-83.

Gogas, P., Kothroulas, G. (2009). Two speed Europe and business cycle synchronization in the European Union: The effect of the common currency. *MPRA Paper No. 13909.*

Hadjimichalis, C. (2011). Uneven geographical development and socio-spatial justice and solidarity: European regions after the 2009 financial crisis. *European Urban and Regional Studies, 18(3)*, 254-274.

Hulse, K. & Stone, W. (2007). Social Cohesion, Social Capital and Social Exclusion. *Policy Studies, 28,* 109-128.

Lambertini, L., Miller, M., Sutherland, A. (1992). Inflation Convergence with Realignments in a Two-speed Europe. *The Economic Journal, 411(102)*, 333-341.

Maniokas, K. (2003). *Europos Sąjungos plėtra ir Europeizacija*. Vilnius: Eugrimas.

Molle, W. (2006). *The Economics of European Integration– Theory, Practice, Policy*. Ashgate Publishing Company.

Montvilaitė, K., Ruplienė, D. (2008). Lietuvos ekonominės konvergencijos tvarumas valstybės finansinės padėties kontekste. *Ekonomika ir vadyba: aktualijos ir perspektyvos, 4 (13),* 303-312.

Stanley, D. (2001). Holding the centre: what we know about social cohesion. *Strategic Research and Analysis and the Social Cohesion Network*.

Stiglitz, J.E. (2009). Towards a better measure of well-being. *The Financial Times*. September 13.