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Structural Funds as Instruments for Regional Economic Development in Lithuania

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In Lithuania, as in other countries of the world, economic and social development of the regions differs, therefore, the EU regional policy goal is to ensure equal regional economic and social development, decrease of regional divergence and growth of regional market competitiveness.

The article deals with the theories of regional economic convergence and divergence, their reflections in current regional economic development policy; Structural funds as stimulating means of regional convergence; Structural fund impact on regional development in Lithuania; and relationship between regional economic and social development level and Structural fund allocation level. Based on Structural fund allocation level in different Lithuanian regions, current status of Structural fund allocation among the regions is analyzed and its key issues are disclosed.

Keywords:

Regional economic development, Regional convergence, Regional divergence, Structural funds, Single Programming Document.

Introduction

Economists have proved that co-operation among the regions leads to economic development and increases regional competitiveness, whereas, distinctive diversities among the regions hinder these indispensable changes. Regional development diversities caused the appearance and development of the theories of divergence. As it is claimed in the European Union Commission Report (Sixth Periodic Report, 1999), a competitive and economically developed region sustains high income and employment level even under the circumstances of strong local and international competition. As regional competitiveness depends on the density of competitive enterprises, regional competitive advantages, developed infrastructure and favorable governmental policy on regional development (Charles, Benneworth, 1996), the European Union aims that its regional policy would ensure equal economic and social development of all EU regions, decrease their divergence and secure competitiveness in local and global mar-

Structural funds, being financial mechanisms of regional policy, have become one of the driving forces that stimulate regional development. Originally established to reduce diversities between town and country in the EU through regional economic and social development by expanding opportunities of less favored regions in common market, EU Structural funds have become a powerful tool for regional development and regional strategic planning in relevant application of re-

gional financial policy mechanisms.

Actually, the assistance of Structural funds is constantly oriented toward backward regions (with a GDP per capita below 75 % of the average) and focused mainly on productive investments, infrastructures and business development.

The EU Commission reports state that the structure of the Lithuanian economy has become similar to that of the EU-15 and other new EU members. Still, the disparities between Lithuania and the EU average are huge. Implementation of regional convergence policy and allocation of financial resources for the development of backward regions slow down the development of economically powerful regions. Financial resources of developed regions are allocated for the reduction of backwardness of economically less developed regions. Thus, under Single Programming Document (SPD), European Commission allocated 895.2 million EUR for Lithuania to promote economic and social development in the period of 2000-2006.

The article deals with the impact of Structural funds on regional development in Lithuania, and the correlation between the levels of regional economic and social development and structural allocation of resources. Based on the EU Structural fund financial resource allocation level for different Lithuanian regions, current status of Structural fund resource distribution among the regions is analyzed and the key issues are disclosed.

Problem – evident divergence among regions causes different levels of regional development and competitiveness, which result in diversified productivity, innovations, labor skills and infrastructure. There is still lack of detailed research on the analysis of the EU Structural funds as regional policy development and convergence reinforcement tools.

Article objective – to assess the correlation between regional economic development level and ability to absorb the EU Structural funds in Lithuania.

Research methods – systematic scientific literature analysis taking into account current opportunities of the EU Structural fund financial resource allocation for the Lithuanian regions.

Regional Economic Development Theories

Regional problems are the disparities in levels of income, rates of growth of output and employment, in levels of economic inequality among geographic regions of a country arising from unequal growth rates of economic activities. Higher income areas are invariably in the centers where population, government and industry are located.

Theories of regional convergence or divergence are long run. In general, *convergence* theory is the theory that explains the tendency of poorer countries or regions to grow faster than richer ones. Along with globalization and competitiveness, the theme of convergence has spilled over into public discussions on policies and prospects of developing countries and regions.

Already Marshall (1898) focused on factors determining the location of industries such as agglomeration and spillover effect meaning scale effects external to all companies in a region's industrial district. Schumpeter (1934) gave a star role to enterprises when explaining that an economic growth of a country is related to their ability to commercialize inventions into profitable innovations.

Two different lines of research can be usefully distinguished. The first one has been traced by macroeconomists interested in applying the inter-regional scale analysis as a tool originally developed for the international one: cross section regressions between growth rates and initial levels of per capita incomes (Barro and Sala-i-Martin, 1991, 1992, Maxwell and Hite, 1992). The regional development, free competition and factor mobility will tend to equalize factor returns across region within a state. Assuming factor mobility, labor will migrate from low to high wage areas; leading regions would serve to a rise of productivity and wages in the poorer regions, and, in the long run, these disparities would be self-corrected. This new tendency explains why, at the regional level, it is not necessary to distinguish absolute and conditional convergences because regions within a country are likely to converge to the same steady state. In recent literature (Barro and Sala-i-Martin, 1991, Cardoso, 1993, Quah, 1996, Badinger, Muller and Tondl, 2004) different concepts of convergence have been introduced. The most used ones are the following: absolute convergence and conditional convergence. Absolute convergence theories explain that poor countries and regions grow faster than rich ones in the same steady state. Before explaining the conditional convergence hypothesis, the structural characteristics of the regions, such as the tendency of saving, rate of growth of the population, levels of technology, institutions, policies and so on, must be examined. The dispersion of per capita GDP levels must decrease over time.

The interest in *regional convergence*, therefore, seems to be derived from the principle interest, which is in international convergence (Blanchard, 1991). The same scheme proposed by the authors for international convergence analysis fits to explain regional convergence with the only difference that the mobility of capital labor has been introduced accelerating the press of convergence according to the neoclassical model. In this way, the essential role of spatial factors in the regional convergence may be neglected (Chesshire and Carbonaro, 1995).

In sum, the economic theories do not provide unambiguous predictions about convergence or divergence of per capita income levels across countries or regions, but they identify a series of factors that are capable in principle generate either convergence or divergence. At some risk of oversimplifying, scientists classify growth models into two families according to their convergence predictions (de la Fuente, 2000).

According to the pattern that poorer countries or re-

gions grow faster than their richer neighbors, to be poor in some extent is an advantage. Finally, it means that the distribution of relative income per capita across territories will tend to stabilize in the long run; this is a sample of convergence. The first condition for convergence is the existence of decreasing returns to scale in capital when the output grows less than proportionally with the stock of capital. This implies that marginal productivity will decrease with capital accumulation, reducing the incentive to save and the contribution to grow of a given volume of investment, and creating the tendency for growth to slow down over time (Maxwell and Hite, 1992). The same mechanism generates a convergence prediction in the cross-section: poor countries or regions will grow faster than rich ones. When the pattern of explanation is that the return on investment is increasing with the stock of capital per worker, favoring rich regions that tend to grow faster and increase their lead at the expense of poorer; this is considered to be a sample of divergence.

The second factor to consider either convergence or divergence in progressing in the region is the development and implementation of new technologies in the region. If countries differ in generating and adopting new technologies, their long-term growth rates will distinguish. Technical progress could be an important divergence factor, but there are forces that point in the opposite direction. As Gerschenkron (1952), Abramovitz (1986), Dowrick and Nguyen (1989) and de la Fuente (2000) pointed out, the public good properties of technical knowledge have an international dimension to favor less advanced countries or regions to absorb foreign technologies without impediment. The resulting process of technological catch-up can contribute to convergence, particularly with the example of industrialized and fairly developed countries that exploit the advantages derived from technological imitations.

In addition to decreasing returns and technological diffusion, the literature identifies the third mechanism of convergence that, although featured less prominently in theoretical models, works through structural change or the reallocation of productive factors across the sectors (de la Fuente, 2000).

The perceived failure of optimistic convergence models motivated the search for the alternatives and contributed to the development of new theories incorporating various divergence facts.

Economists distinguished two classes of divergence theories. The first one, called a *cumulative growth theory*, states that economic development may result in a speedy growth of sharp differences among the regions when rich regions develop fast, while poor ones remain in the same stage of development or even decline (Mankiw, 1995, Faberberg, 1996). This theory is the best example of divergence theories, based on the critics of relative superiority theory that is usually applied to international trade (Rodrik, 1997). According to the cumulative growth theory, market forces can not guarantee distribution of production factors or income because richer regions attract capital, qualified labor force, and other production factors to the disadvantage of poorer regions, and in such circumstances rich regions develop more rapidly, which makes regional disparities more visible (Fan and Casetti, 1994, Faberberg and Verspagen, 1996). Otherwise, the cumulative development

may result in diseconomy of developing agglomerations, which at some point later starts to hinder speedy economic development, so the divergence produces not only negative social consequences (living standard in peripheral regions is lower than in the center), but economic (production factors are not effectively used) as well. In the peripheral regions as well as in the center, the difference between the labor demand and supply may increase: in the center the capital may be ineffectively used due to the lack of labor force, while, in the periphery, there may be lack of qualified labor force (Hardy, 1995, Alden, Boland, 1996). This inadequacy results not only in the increase of unemployment in the country but also in the increase of inflation.

Another popular divergence theory is growth pole theory. It emphasizes the theoretical factor and states that economic development concentration in most urbanized areas creates agglomerations. The theory rests on the ability of the main industry sectors to attract the related business and form the growth pole (Cohen, 1992, Swan, 1995). Such agglomerations and localizations are speeding economic development and are considered to be a perspective economic development model, which could explain successful development of Irish economy in recent years.

The capital and labor might not be perfectly mobile, and persistent disparities among regions may exist in production technology, economies and diseconomies of scale and obstacles to the market mechanism. Therefore, regional disparities can be self-perpetuating, and, in the absence of intervention in support of the forces, self-reinforcing. New industry and trade may be attracted where industry and trade already exists and necessary infrastructure is more developed than in other areas.

This gravitation process causes the intra-country polarization, by which relatively developed areas continue to grow fast clustering in "poles of development" providing new investments, exploiting economies of scale and growing at the expense of other regions of the economy, while relatively backward regions experience cumulative economic decline. The unbalanced growth within the borders of countries may cause problems for sustainable and balanced economic growth of a global market.

The emphasizing of the importance of local human resources and creation of favorable conditions for business in periphery rests upon the goals of the EU structural policy and helps to promote the convergence theories and policies.

Structural Funds and Regional Convergence

Regional policies usually take the instruments to handle sustainable growth as government assistance for investment in new and existing industry to help solve the problems due to regional unemployment, decentralization and slow growth, public expenditure on infrastructure, general subsidies, negative inducement when the centralization is controlled and etc.

In the EU, as well as in Lithuania, state aid destroying perfect competition is banned, but a special dispensation is provided for aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment to aid facilitation of the development of certain economic areas (Treaty of European Community, 1992). These statutes define the

regulation of national aid in order to limit resulting distortions of competition.

To promote regional development and convergence in the Community, an integrated regional policy based on the regional activities of the structural funds as structural policy financial instruments has been formed. The regulations laying down general provisions on the Structural Funds are Council Regulations (EC): No 1260/99, No 1447/2001, and No 1105/2003.

Meanwhile, there are four funds to fight unemployment and stimulate the growth in poor regions, and the Cohesion fund financing directly individual environment and transport projects, namely, the European Regional Development Fund (ERDF) contributing mainly to finance infrastructure, job-creating investments, local development projects and aid for small firms; the European Social Fund (ESF) promoting projects solving social regional problems, financing education and professional learning, R&D growth, social economic projects, the educational and professional learning systems development; the Guidance Section of the Agricultural Guidance and Guarantee Fund (EAGGF) helping in both the development and the structural adjustment of rural areas, whose development is lagging behind, by improving the efficiency of their structures for producing, processing and marketing agricultural and forest products; the Financial Instrument for Fisheries Guidance (FIFG) supporting the modernization and renovation of fishing industry and the European Cohesion Fund (ECF) called the fifth Structural fund providing assistance in the fields of the environment and transport infrastructure of common interest with a view of promoting economic and social cohesion and convergence between separate regions.

To improve the effectiveness of structural measures, three *objectives* have been set for the years 2000-2006 (Regulation (EC) No 1260/1999):

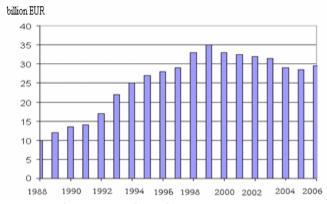
Objective 1: promote the development and structural adjustment of regions, whose development is lagging behind, i.e., whose average per capita GDP, is less than 75% of the European Union average. Two thirds of the Structural Fund operations concentrate on Objective 1 and almost 20% of the EU total population is affected by measures taken under this objective.

Objective 2: contribute to the economic and social conversion of regions in structural difficulties other than those eligible for the new Objective 1. It covers areas undergoing economic change, declining rural areas, depressed areas dependent on fisheries and urban areas in difficulty. Objective 2 covers not more than 18% of the EU population.

Objective 3: gather all the measures for human resource development outside the regions eligible for Objective 1.

Assistance is constantly focused on backward regions (with a GDP per capita below 75 % of the average) and concentrates mainly on productivity investments, infrastructures and business development. For 2000-2006 budgetary periods, 18 billion EUR have been allocated to the Cohesion fund (at the moment, gross domestic product (GDP) per capita of Luxembourg is twice that of Greece).

Now, the EU spends about one third of its budget on backward regions. Those regions that lag behind in their development, undergo restructuring or face specific geographical, economic or social problems are to be put in a better position to cope with their difficulties and to benefit fully from the opportunities offered by the single market. Over the seven-year budget planning period (for the years 2000-2006), about 213 billion EUR have been allocated for structural policy (Figure 1).



Source: Politique regionale – Inforegio, http://www.europa.eu.int/regional_policy/

Figure 1. The EU allocations from Structural and Cohesion Funds for regional development in the years of 1988-2006, billion EUR

From year 1988, the EU considerations for structural policy have increased. The EU allocated 10 billion EUR from its budget to support the structural policy expanding aims and priorities of Structural funds and increasing allocations to finance them. In 1999, there were 35 billion EUR allocated for the structural policy instruments to realize the structural policy aims. By stressing the influence of structural policy on so-called purely economic determinants of

the location of economic activity – comparative advantage and agglomeration – EU influenced the regional economic development of regions. The best study in this area, Midelfart-Knarvik and Overman (2002), find that EU structural policy with its financial instruments affected the geographical location of industry. From year 2000, the financing of structural policy decreased due to the EU enlargement when the preparation for the accession of 10 candidate states was financed to satisfy the convergence requisitions. The second reason of structural allocations decrease was the shake-up of structural policy and reformation of sponsorship priorities. In the years 2000-2006, the total Structural Funds budget has amounted to 195 billion EUR excluding the European Cohesion Fund.

To improve the effectiveness of the appropriations committed in the regions whose development is lagging behind, the new rules have been provided for significant concentration of funding on Objective 1: 135.9 billion EUR or 69.7% of the total allocation goes to Objective 1 promoting the development and structural adjustment of regions, whose development is lagging behind. Another significant part of about 43 billion EUR or 24% of the total allocations goes to contributing to the economic and social conversion of regions and to human resources development. A part of allocations (21 706 million EUR) was dedicated to accelerate the development of new EU formers for the period of 2004-2006 (EUDEL, 2004).

The EU Structural funds have become a means of financial assistance for the EU regional problem solution. Performing the role of intermediary between policy theories and economic-social factors, they help governments to implement economic development programs and to control regional economic development by reducing divergence and increasing convergence (Figure 2).

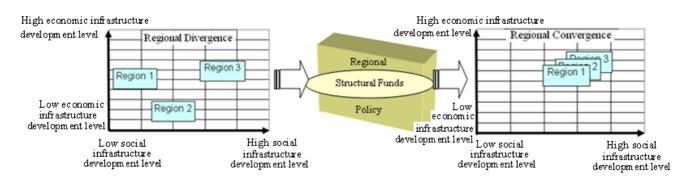


Figure 2. The Structural Funds impact on regional convergence promotion/implementation among regions

Figure 2 depicts the EU regional policy and its financial instruments in the role of intermediary between regional divergence and convergence. Economic and social infrastructure development levels define regional development level indicators. Economic infrastructure development level is determined by agglomeration density, transport and communication infrastructure, GDP per capita, foreign investments and unemployment level in the regions, while social infrastructure development level is defined by skilled labor density, human resources, life quality and state social policy. The economic and social development gaps among the regions hinder versatile co-operation due to a lot of diversities taking into account the above-mentioned indicators. As shown in Figure 2, the

implementation of regional policy might approximate economic and social infrastructure indicators that would precondition regional convergence.

In general, the Structural fund support helps to unify regional economic and social infrastructure development level by reducing the gap between the best and the worst developed regions and by facilitating their mutual cooperation. The Structural fund support aims at regional convergence because businesses and industries, when planning to get subsidies from the Structural funds, try to set up the Single Programming Document priorities that comply with business, the EU long-term and state regional convergence strategies.

Structural Fund Programs Encourage Sustainable Regional Development in Lithuania

Regional problems differ among countries in nature and intensity. The EU Commission reports state that the structure of the Lithuanian economy has become much more similar to that of the EU-15 and other new EU members. Disparities between Lithuania and the EU average are still huge (Table 1).

Table 1

Disparities between Lithuania and the EU (in year 2002)

Indicator	Lithuania	EU average	Assessment of disparity
Gross Domestic Product (GDP) per capita	39.1 %	100 %	Large
Unemployment	13.1 %	7.7 %	Large
Labour Productiv- ity	41.7 %	100 %	Large
Unit Labour Cost Growth	-0.5 %	-0.4 %	Small
Total Employment Growth (annual change in em- ployed population)	+4 %	1.3 %	Large
Total employment rate	59.9 %	64.3 %	Small

Source: Single Programming Document, 2004-2006.

Lithuania had neither means of regional policy within the scope of economic and social development nor institutions responsible for regional policy till 1998. The first Act on Regional Development of the Republic of Lithuania was adopted only in 2000.

Regional diversities intensified in the period of transition to market economy. The gap of GDP per capita between the best and the worst developed Lithuanian regions increased 2.6 times, and, within the regions, even more.

According to the data in Table 1, in 2002, the Lithuanian GDP per capita comprised 39.1 % of the EU average. Economists assess that regional divergence between the Lithuanian regions and the EU average is rather big. Despite the fact that the Lithuanian economy has been developing rapidly, the diversities between the Lithuanian and the EU regions remain quite big taking into account other regional development level indicators such as the EU unemployment rate (the latter tends to decrease when regional economic development level goes up) or labor productivity that comprises 41.7% of the EU average. Indeed, due to very rapid economic development in recent years, Lithuania excels the EU in employment growth (Table 1).

It should be noted that the implementation of regional convergence policy and allocation of financial resources for the development of backward regions slow down the growth of economically developed regions. The resources that should have been allocated for developed regions are used to overcome the backwardness of other regions. On this ground, under the Single Programming Document (SPD), the European Commission allocated 895.2 million EUR to Lithuania for promoting economic and social development in the period of 2000-2006 (Figure 3).

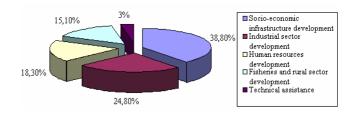


Figure 3. Split of Structural fund allocations among sectors in years 2000-2006

Figure 3 demonstrates the split of the total Structural fund allocations among the main fields based on the level of regional development, namely, 347.1 million EUR or 38.8 % of Structural fund resources have been assigned to the development of economic and social infrastructure projects; 222.4 million EUR or 24.8 % are assigned to the development of industrial sector projects; about 163.8 million EUR or 18.3 % – to the projects of human resources; to the measures in the fisheries and rural sector development – about 135.0 million EUR or 15.1 %; to the technical assistance – about 26.9 million EUR or 3 % of Structural fund resources (Single Programming Document, 2003).

Research shows that due to uneven regional economic and social development, regional convergence is disrupted, and geographically bigger region or union development and competitiveness in the global market are impaired. In spite of the substantial EU support to the Lithuanian structural development, the Lithuanian regions can rarely submit exact data on regional human resources and infrastructure capacity that might be attractive to capital investment or search for investors who might comply with regional specifics. Therefore, the first EU structural support programming stage was only a trial to forecast regional development and its prospects by using the EU Structural funds.

Relation Between Regional Socio-economic Development Level and Capacity of Assimilation of Structural Allocations

Under the data supplied by the Lithuanian Business Development Agency (LBDA), 192 applications were registered in July-November 2004. The planned expenditures amounted to 728.4 mio. LTL.

Taking into account regional convergence level in Lithuania, some disproportion has been observed in the applications for the EU structural financial support. Most of the applications were submitted by the regions with the centers in the biggest towns of Lithuania: Vilnius – 57 applications, Klaipeda – 29 and Kaunas – 26. Correlatively, most of the projects are planned to be implemented in Vilniaus region – 47, Klaipeda region – 30 and Kaunas – 23 (Table 2).

Regional divergence can be observed on the country level – economically developed regions tend to receive the biggest share of the EU structural financial support. Though the EU considers Lithuania to be one region, within the country, the structural financial resources are allocated unproportionately.

Regional economic and social development level is usually determined under the following economic indicators: regional GDP share in country economy, regional

contribution to country industrial production, unemployment rate and attraction of direct foreign investment. We will try to measure the Lithuanian regional development diversities under the indicators of the regional GDP share in country economy and regional contribution to total industrial output of the country.

As per data of Table 2, taking into account the financial resource accumulation and repartition among the regions under the submitted applications for the Structural funds, it should be highlighted that 80 applications or 42 % of the total application number have been submitted by three economically well-developed regions of Lithuania – Vilnius, Klaipeda and Kaunas.

Assessing the Lithuanian regions under regional share of GDP in total country economy, it should be indicated that the above-mentioned three regions create the GDP share of 37325 mio. LTL or 64.5 %: Vilnius – 19851 mio. LTL or 33.4 %, Kaunas – 10793 mio. LTL or 19.2 %, and Klaipeda – 6681 mio. LTL or 11.9% (2003). The fewest number of applications was submitted by Taurage (7 applications), Telsiai (8) and Utena (6) regions. Meanwhile, all together, these three regions create app. 6122 mio. LLT or 10.9 % of country GDP, i.e., less than Klaipeda region (11.9% of country GDP) (www.std.lt, 2004).

Table 2
Repartition of applications by place of registration and project realization

Region	Repartition of applications by place of registration	Repartition of applications by place of project realization
Alytus	14	14
Kaunas	26	23
Klaipėda	29	30
Marijampolė	9	8
Panevėžys	16	15
Šiauliai	20	18
Tauragė	7	9
Telšiai	8	8
Utena	6	8
Vilnius	57	47
Geographically not restricted	-	12
Total	192	192

Source: Data indicated in applications (www.lvpa.lt).

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It could be concluded that Vilnius, Kaunas and Klaipeda regions, creating app. 64.5% of country GDP, could attract more than 50 % of the EU Structural fund

resources that have been allocated for the reduction of regional economic backwardness.

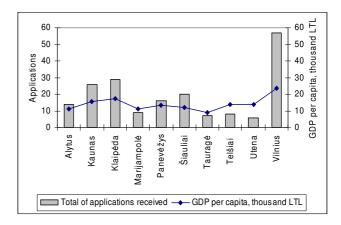


Figure 4. Ratio of application number and GDP per capita, thou. LTL, 2004

Based on the data of Figure 4, it could be stated that regions with the highest GDP per capita submit the biggest number of applications for Structural fund subsidies, while regions with lower GDP per capita tend to submit very few applications.

Looking through the ratio of the number of applications and GDP per capita in the regions, we can see that the biggest ratio is in Vilnius region followed by Kaunas, Klaipeda and Siauliai regions (Figure 5).

Results in Figure 5 correlate with the previous results. Under the ratio of the number of applications received to regional GDP per capita, the same regions are in the leading position as under the ratio of application number to the share of GDP in country economy. Comparison with the previous results highlights one non-conformity that can be observed on the ratio of application number to regional GDP per capita, namely, Siauliai region appears among the leaders with regional GDP per capita, thou. LTL making 1,639 applications. As in previous results, the fewest number of applications to regional GDP per capita thou.LTL falls to Marijampole (0,81 application to regional GDP per capita thou.LTL), Taurage (0,804), Telsiai (0,575) and Utena (0,437) regions.

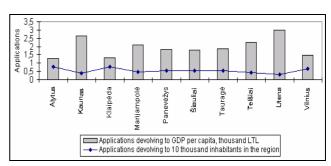


Figure 5. Applications devolving to GDP per capita, thou. LTL and 10 thou. Inhabitants in the region, 2004

Meanwhile, regional sales share of country industrial output corresponds with the same trends as regional GDP proportions: Vilnius region sells 18.7 % of country industrial production, Kaunas – 19.6 %, Klaipeda – 12.0%. However, with regards to regional sales share of country industrial

output, Telsiai region excels Vilnius, Kaunas and Klaipeda regions by selling 23.4% of country industrial production. In this case, particular attention should be drawn to the fact that more than 90% of Telsiai regional sales share within the scope of 23.4% at country regional level is being created by "Mažeikių nafta" (21 % of country GDP). Taurage and Utena regional shares of the country industrial output comprise 1.2 % and 3.4 % respectively.

Taking into account regional economic development level indicators, the results are very similar - all economic indicators of Vilnius, Kaunas and Klaipeda regions with very few exceptions exceed the other Lithuanian regional indicators. Greater regional result differences can be found with regards to the ratio of application number to 10 000 inhabitants (Figure 5). According to the ratio of application number to 10 000 inhabitants, the leading regional position is taken by Vilnius with 0,68 application to 10 000 inhabitants and Klaipėda (0,77), however, the mentioned regions are excelled by Alytus region with 0,78 application to 10 000 inhabitants. Being so far the most Structural fund consuming region, Kaunas ranks at the end of the list according to this ratio, i.e., 0,39 application to 10 000 inhabitants. The other regions occupy the same positions as according to their competitiveness based on the above-mentioned economic and social indicators.

Despite recent results and taking into account the analyzed regional economic and social development level indicators such as regional GDP, regional input into country industrial production and their ratio to regional application number, it could be stated that market laws are applicable to Structural fund resource allocation among the regions. Economically developed regions that are business, foreign investment and labor force attraction centers, accumulate the most of the Structural fund allocations

Comparing statistical regional economic development indicators with the EU Structural fund application ratio, it becomes obvious that the most economically developed regions accumulate the sizeable part of regional convergence resources. Despite the EU and memberstates continuous regional development policy and statistical Structural fund allocation data, it is possible to forecast interregional development level according to the statistical Structural fund allocation data on the analyzed regions.

Conclusions

- Economic theory identifies forces with contrasting implications on income dynamics. Convergence mechanisms feature prominently in the neoclassical and catch-up models that have dominated in literature until recently. The perceived failure of optimistic convergence models motivated the search for alternatives and contributed to the development of new theories incorporating various facts of divergence.
- Traditional regional economics gives reasons for the concentration of activities in a few areas leaving behind peripheral regions: economies of scale and agglomerations, increase of labor market due to search

- and match effects, monopoly power generated by innovation leadership, externalities associated to the generation of productive knowledge and etc.
- 3. It could be stated that with the implementation of regional convergence policy and the allocation of financial resources to increase the development level of lagging behind regions, the development of economically strong regions slows down. The should be resources for economically developed regions are allocated to overcome the backwardness of less economically developed regions.
- 4. Regional economic and social development diversities hinder regional convergence and disrupt continuous development and global competitiveness of geographically bigger regions and unions.
- 5. Even though the EU Structural funds are not the most efficient way to ensure economic growth, the carried out research proves that they reduce regional development diversities and stimulate the economic growth of the country.
- 6. Taking into account the analyzed regional economic and social development level indicators such as regional GDP in country economy, regional share of country industrial production, unemployment rate, labor force compensation factor and direct foreign investment, and their relation to regional application number, it could be asserted that market laws are applicable to Structural fund resource allocation among the regions. Economically developed regions that are business, foreign investment and labor force attraction centers, accumulate the most of the Structural fund allocations.
- 7. Comparing statistical regional economic development indicators with the EU Structural fund application ratio, it becomes obvious that the most economically developed regions accumulate the sizeable part of regional convergence resources. Despite the EU and member-states continuous regional development policy and statistical Structural fund allocation data, it is possible to forecast interregional development level according to the statistical Structural fund allocation data on the analyzed regions.

References

- Abramovitz, M. Rapid Growth Potential and Its Realization, in Thinking about Growth and Other Essays on Economic Growth and Welfare. Cambridge U. Press, 1989. 187-219 p.
- Badinger, H. Regional Convergence in the European Union, 1985-1999: A Spatial Dynamic Panel Analysis / Badinger, H., Muller, W.G., Tondl, G // Regional Studies 38 (3), Carfax Publishing, England, 2004. 241-253 p.
- Barro, R. Convergence Across States and Regions / Barro, R., Sallai-Martin X // Brookings Papers 1:107-82, 1991.
- Barro, R. Convergence / Barro, R., Salla-i-Martin X // Journal of Political Economy 100:223-51, 1992.
- Blanchard, O.J. Comments and Discussion of Barro and Salla-i-Martin "Convergence across states and regions" / Brookings Papers 1:159-174, 1991.
- Canova, F. The Poor Stay Poor: Non-convergence across Countries and Regions / Canova, F. and Marcet A. // CERP Discussion Paper no. 1265, 1995.
- 7. Cappelin, A. The Impact of EU Regional Support on Growth and

- Convergence in the European Union / Cappelen A., Castellacci F., Fagerberg J., Verspagen B. // Journal of Common market Studies 41 (4), Springer-Verlang, USA, 2003. 621-644 p.
- Cardoso, A.R. Regional Inequalities in Europe Have They Really Been Decreasing / Applied Economics 25 (8), Routledge, London, 1993. 1093 – 1100 p.
- Charles, D. The Competitiveness Project: North East Regional Competitiveness Report. Part 1: Overview and Summary/ D. Charles, P. Benneworth. 2004–09–25. Available from the Internet: http://searc.global.epnet.com
- Chesshire P. Convergence Divergence in Regional Growth Rates: An Empty Black Box? / Chesshire P. and Carbonaro G. in: Amstrong H.W., Vickerman R.W. (eds) Convergence and Divergence Among European Regions. London, 1995. 89-111 p.
- 11. Cohen, D. Tests of the "convergence hypothesis": a critical note. CERP Discussion Paper, 1992, No. 691.
- De la Fuente, A. Convergence Across Countries and Regions: Theory and Empirics // EIB Papers, 2000, Vol. 5, No. 2.
- Dowrick, S. OECD Comparative Economic Growth 1950-85: Catchup and Convergence / Dowrick, S. and Nguyen, D. T // American Economic review 79 (5), 1989. 1010-1030 p.
- Europos Komisijos Delegacijos Lietuvoje duomenų bazė. Prieiga per internetą: <www.eudel.lt>
- Faberberg, J. Heading for divergence? Regional Growth in Europe Reconsidered / Journal of Common Market Studies 34 (3), 1996. 431-448 p.
- Fan, CC. The Spatial and temporary dynamics of US regional income inequality, 1950-1989 / Fan, CC. and Casetti E // Ann Reg Sci 28, 1994. 177-195 p.
- Gerschenkron, A. Economic Backwardness in Historical Perspective. Chicago University Press, 1952.
- Krugman, P. Development, Geography and Economic Theory. Cambridge, MA: The MIT Press, 1995.
- Lewis, W.A. The Theory of Economic Growth. London: George Allen and Unwin 1995
- Mankiw, G. The Growth of Nations / Booking Papers on Economic Activity I, 1995. 275-326 p.
- 21. Maxwell, P. The Recent Divergence of Regional per Capita Incomes: some evidence from Australia / Maxwell, P. and Hite, J.C. // Growth and Change 32 (winter), 1992. 37-53 p.
- Porter, M. E. The Competitive Advantage of Nations. New York: The Free Press, 1990.
- 23. Quah, D. Empirics for economic growth and convergence / European Economic Review 40, 1996. 1353-1375 p.
- Rodrik, D. Has globalization gone too far? Washington, DC: Institute for International Economics, 1997.
- Selingson, Mitchell A. Development and Underdevelopment: The Political Economy of Global Inequality (Second Edition) / Selingson, Mitchell A., Passe-Smith, John. T. // Lynnc Rienner Publishers, Inc, USA, 1998.
- 26. Single Programming Document 2004-2006. Available from the Internet: <www.finmin.lt>
- Swan, D. The Economics of the Common Market. New York: Penguin Books, 1995.

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Struktūriniai fondai kaip regioninės ekonomikos vystymo priemonė Lietuvoje

Santrauka

Ryškėjanti divergencija tarp šalies regionų sąlygoja skirtingą regionų išsivystymo bei konkurencingumo lygį, kurį paprastai lemia skirtingas gamybos našumas, inovacijos, darbo jėgos kvalifikacijos kėlimas, infrastruktūros plėtra, stabdo ekonominę bei socialinę plėtrą Europos ar pasauliniu mastu.

Ekonomistai įrodė, jog regionų bendradarbiavimas yra kelias į ekonominę plėtrą bei regionų konkurencingumo didinimą, o ryškėjanti divergencija tarp atskirų regionų stabdo šiuos būtinus poky-

čius. Regionų vystymosi skirtingumai sąlygojo konvergencijos bei divergencijos teorijų atsiradimą ir nagrinėjimą. Europos Sąjungos Komisijos ataskaitoje (Sixth Periodic Report, 1999) teigiama, jog konkurencingas ir ekonomiškai stiprus regionas išlaiko aukštų pajamų ir užimtumo lygį, netgi veikiant tiek vietinei, tiek tarptautinei konkurencijai. Kadangi regiono konkurencingumas priklauso nuo jo konkurencingų įmonių tankio, regiono turimų konkurencinių pranašumų, išplėtotos infrastruktūros bei palankios regionų vystymuisi vyriausybės vykdomos politikos (Charles, Benneworth, 1996), Europos Sąjunga siekia, jog jos vykdoma regioninė politika garantuotų visų ES regionų tolydų ekonominį bei socialinį vystymąsi, mažintų jų divergenciją ir taip užtikrintų konkurencingumą tiek vietinėje, tiek pasaulinėje rinkose.

Konvergencijos teorija aiškina skurdesnių šalių ar regionų spartesnio augimo tendenciją labiau išsivysčiusių regionų atžvilgiu, kuomet periferiniai regionai gali naudotis labiau išsivysčiusių regionų pasiekimais (Barro and Sala-i-Martin, 1991; Cardoso, 1993; Quah, 1996; Badinger, Muller and Tondl, 2004). Intensyvejant globalizacijos procesams bei konkurencingumui, regionų konvergencijos būtinybė tampa vis aktualesnė priimant šalių ar regionų vystymosi politikas. Pastarojo meto tyrimai rodo, kad, nepaisant regionų konvergencijos teorijų taikymo regionų plėtroje, regionų skirtingumai tik didėja (ES pavyzdžiu). Optimistiniams konvergencijos modeliams nepasiteisinus, imta kalbėti apie regionų divergenciją ir jos teorijas, teigta, jog turtingesni regionai pritraukia kapitalą, tapdami verslo ir pramonės traukos centrais, taip vystydamiesi dar greičiau ir didindami atotrūkį nuo periferiniais likusių regionų (Fan and Casetti, 1994; Faberberg and Verspagen, 1996), bei apie būdus regionų divergencijai sustabdyti. Vis daugiau dėmesio skiriama regionų konvergencijos politikai ir jos vykdymą užtikrinančioms priemonėms.

Regioninės politikos finansiniais instrumentais laikomi struktūriniai fondai tapo viena iš jėgų, skatinančių tolydų regioninį vystymąsi. Sukurti ES sanglaudai jos pirminių plėtrų metu skatinti, tiesiogiai skatinant ekonominį bei socialinį regionų vystymąsi, didinant atsiliekančių regionų galimybes bendroje rinkoje, ES struktūriniai fondai tapo galinga priemone skatinant regionų vystymąsi bei įgalinant regionus diegti strateginius planavimus, norint pasinaudoti šiomis finansinėmis regioninės politikos priemonėmis. Struktūriniais fondais siekiama regionų konvergencijos, nes pramonė bei verslai, planuodami gauti subsidijas iš struktūrinių fondų, stengiasi kurti Bendrojo programavimo dokumento prioritetus atitinkančias verslo strategijas, taip realizuodami ilgalaikes Europos Sąjungos bei šalių Vyriausybių numatytas regionų konvergencijos strategijas.

Struktūrinių fondų finansinė parama skiriama labiausiai atsilikusiems ES regionams paremti (BVP mažiau nei 75% nuo ES regionų vidurkio) ir orientuojama į ekonominės bei socialinės infrastruktūros plėtrą, verslo vystymą, ilgalaikių investicijų skatinimą.

Ekonomistų vertinimu, regioninė divergencija tarp Lietuvos regiono ir ES vidurkio yra gana didelė. Nepaisant spartaus Lietuvos ekonomikos vystymosi, skirtumai tarp Lietuvos ir ES regionų lieka ganėtinai dideli vertinant ir kitus regionų išsivystymo lygio indikatorius: ES nedarbo lygį (pastarasis turi tendenciją mažėti regiono ekonominiam išsivystymo lygiui didėjant), darbo jėgos produktyvumą, kuris sudaro 41,7% ES vidurkio. Tiesa, dėl itin spartaus ekonomikos vystymosi pastaraisiais metais, Lietuvos užimtumo augimas didesnis už ES vidurki.

Regionų skirtumai labai padidėjo perėjimo į rinkos ekonomiką laikotarpiu. Vienam gyventojui tenkančios BVP dalies skirtumai geriausiai ir blogiausiai išvystytuose Lietuvos regionuose padidėjo 2,6 karto, o pačiuose regionuose – dar daugiau. Reikia atkreipti dėmesį, jog iki 1998 metų Lietuvoje nebuvo nei regionų politikos priemonių, atskirų nuo kitų socialinės ir ekonominės plėtros priemonių, nei už regionų politiką atsakingų institucijų, nes pirmasis Lietuvos Respublikos regioninės plėtros įstatymas buvo priimtas tiktai 2000 metais. Stengiantis realizuoti regionų konvergencijos politiką ir skiriant finansines priemones atsiliekančių regionų vystymosi lygiui didinti, lėtėja ekonomiškai stipriausių regionų vystymasis. Stipriųjų regionų lėšos skiriamos ekonomiškai silpnesnių regionų atsilikimui mažinti. Šiuo pagrindu pagal Bendrąjį programavimo dokumentą (BPD) Europos Komisija skyrė Lietuvai 895,2 mln. eurų skatinti ekonominiam bei socialiniam vystymuisi 2000—2006 metams.

Tyrimai rodo, jog, atsiradus ekonominio ir socialinio išsivystymo netolygumams, tarp regionų sutrikdoma regionų konvergencija ir nuo to nukenčia tolydi geografiškai didesnių regionų ar sąjungų plėtra bei konkurencingumas pasaulinėje rinkoje. Tačiau, nepaisant Lietuvos struktūrinei plėtrai skiriamos didžiulės Europos Sąjungos paramos, Lietuvos regionai retai galėtų pateikti tikslius duomenis apie

žmogiškuosius išteklius regione, apie regiono infrastruktūrinius pajėgumus, kurie būtų patrauklūs kapitalui į regioną pritraukti, apie investuotojų, atitinkančių regiono specifiką, paieškas, labiausiai paramos reikalingą regiono sritį ir t.t. Todėl pirmasis ES struktūrinės paramos programavimo etapas buvo tik bandymas nuspėti regionų plėtrą ir perspektyvas, pasitelkus ES struktūrinius fondus.

Vertinant regionų konvergencijos lygį Lietuvoje, pastebimi netolygumai teikiant paraiškas ES struktūrinei finansinei paramai gauti. Daugiausia paraiškų gauta iš apskričių, kurių centrai yra didieji Lietuvos miestai: Vilnius, Kaunas, Klaipėda. Šalies mastu pastebima regionų divergencija - ekonomiškai stipriausiems regionams tenka daugiausia ES struktūrinės finansinės paramos. ES mastu Lietuva laikoma vienu regionu, tačiau žemesniame lygyje, t.y. šalies viduje, struktūriniai asignavimai pasiskirsto netolygiai. Vertinant Lietuvos regionus pagal regionuose sukuriamą BVP dalį šalies ekonomikoje, reikia pažymėti, kad minėtos trys apskritys sukuria 37 325 mln. Lt vertės, arba 64,5 %, šalies BVP: Vilnius — 19 851 mln. Lt, arba 33,4 %, Kaunas — 10 793 mln. Lt, arba 19,2 %, ir Klaipėda — 6 681 mln. Lt, arba 11,9% (2003 m.). Mažiausiai paraiškų pateikta iš Tauragės, Telšių ir Utenos apskričių. Palyginimui, šios trys apskritys sukuria apie 6 122 mln. Lt, arba 10,9 %, šalies BVP, t.y. mažiau nei Klaipėdos regionas (11,9% šalies BVP) (2003 m.). Vadinasi, Vilniaus, Kauno ir Klaipėdos regionai, kartu sukurdami apie 64,5% šalies BVP, gebės pritraukti daugiau nei 50 % ES struktūrinių fondų lėšų, skirtų atsiliekančių regionų ekonominio vystymosi atotrūkiui mažinti. Regionuose kuriuose BVP gyventojui yra didžiausi, paraiškų struktūrinių fondų subsidijoms gauti pateikiama daugiausia. Atsiliekančiuose regionuose pagal BVP dalį vienam gyventojui paraiškų pateikiama mažiausia.

Pagal pateiktų paraiškų santykį su BVP, sukuriamu vienam gyventojui, pirmauja tie patys regionai kaip ir vertinant pateiktų paraiškų santykį su regionuose sukuriamomis BVP dalimis šalies ekonomikoje. Tik tarp pirmaujančių regionų atsiradęs Šiaulių regionas papildo jų sąrašą. Kaip ir ankstesniuose apskaičiavimuose, mažiausia

paraiškų dalis sukuriamai 1000 Lt BVP vienam gyventojui daliai regione tenka Marijampolės, Tauragės, Telšių ir Utenos regionams.

Vertinant visus ekonominio regionų išsivystymo lygio rodiklius, gauti rezultatai labai panašūs – visi ekonominiai rodikliai Vilniaus, Kauno ir Klaipėdos regionų (su retom išimtim) pranoksta kitų Lietuvos regionų rodiklius. Didesnių rezultatų neatitikimų randama tik vertinant paraiškų skaičių, tenkantį 10 000 regiono gyventojų tarp regionų. Pagal pateiktas paraiškas, tenkančias 10 000 regiono gyventojų, tarp pirmaujančių regionų išlieka Vilniaus bei Klaipėdos regionai, tačiau juos lenkia Alytaus regionas. Lig šiol tarp daugiausia struktūrinių lėšų pasisavinsiančių regionų minėtas Kauno regionas šiuo atveju lieka vienas iš paskutiniųjų. Likę regionai išsidėsto ta pačia tvarka kaip ir vertinant jų konkurencingumą pagal anksčiau minėtus ekonominius bei socialinius rodiklius.

Atsižvelgiant į išanalizuotus regionų ekonominį ir socialinį išsivystymo lygį įvertinančius rodiklius, regione sukuriamą BVP dalį šalies ekonomikoje, regiono indėlį į sukuriamą šalies pramonės produkcijos dalį bei jų santykį su regionams tenkančių paraiškų skaičiumi, galima teigti, kad rinkos dėsniai galioja ir struktūrinių fondų lėšų pasiskirstymui regionuose. Stipriausieji regionai, būdami verslo struktūrų, užsienio investicijų ir darbo jėgos traukos centrais, pritraukia didžiausias struktūrinių fondų lėšas.

Palyginus statistinius ekonominius regionų išsivystymo rodiklius ir paraiškų struktūrinėms ES lėšoms gauti santykį, tampa akivaizdu, jog labiausiai ekonomiškai išsivystę regionai pritraukia didžiąją dalį regionų konvergencijai skirtų lėšų, nepaisant ES ir šalių vyriausybių tolydžios regionų plėtros politikos, ir pagal statistinius struktūrinių lėšų panaudojimo rodiklius šalies regionuose galima numanyti atskirų regionų išsivystymo lygį tarp kitų pagal statistinius struktūrinių lėšų įsisavinimo rodiklius įvertintų regionų.

Raktažodžiai: regionų ekonominis vystymasis, regionų konvergencija, regionų divergencija, struktūriniai fondai, Bendrasis programavimo dokumentas.

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