## COHESION POLICY AND DEVELOPMENT OF THE EUROPEAN UNION'S REGIONS IN THE PERSPECTIVE OF 2020

### THE JOHN PAUL II CATHOLIC UNIVERSITY OF LUBLIN

# INSTITUTE OF POLITICAL SCIENCE AND INTERNATIONAL AFFAIRS



# COHESION POLICY AND DEVELOPMENT OF THE EUROPEAN UNION'S REGIONS IN THE PERSPECTIVE OF 2020

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## The Challenges of the Community's Cohesion Policy

Cohesion Policy of the European Communities and the European Union, the beginnings of which date back to the second half of the 50s of the 20th century and are associated with the creation of the European Economic Community, from the beginning has been focused on bridging the differences in the socio-economic development of European countries and regions covered by the integration activities. This policy has been gradually improved in order to meet the cohesion challenges in the changing internal and external conditions in which the Community and the European Union have functioned. At the moment, one of the biggest challenges faced by the European Union is effective competition with the old and newly formed global economic powers in specific conditions created by globalization. This results in the necessity to continue the modernization of the community economy and to promote building of the knowledge-based economy which today is based on knowledge, innovations and a highly qualified staff.

Deciding on the spectacular socio-economic development, and with a view of achieving a high level of competitiveness on the global scale, the European Union adopted along with the Lisbon Strategy (2000-2010) and the Europe 2020 strategy (2010-) a demanding and costly action plan in many fields. One of the basic tasks of the Community connected with its ambitious development plans is now the effective realisation of Cohesion Policy and the efficient implementation of the related Europe 2020 strategy. The disparities still

present in the socio-economic development of countries and regions in Europe, as well as serious problems of the Community related to, among others, budget deficits and growing debt in many Member States, the functioning of the Economic and Monetary Union and the euro zone, have been dramatically deepened after 2008 by the global financial and economic crisis. It meant that the effectiveness of the implementation of the above mentioned development strategies of the European Union, as well as the efficiency of the realisation of EU Cohesion Policy has become insufficient to ensure the rapid development of the Community and the achievement of competitive advantage on the international arena.

The current situation is forcing the European Union to improve and intensify intervention measures which can improve the socio-economic and territorial cohesion of the Community, as well to accelerate the development of its underdeveloped, peripheral regions. Additionally, better organizational solutions should be sought and financial instruments of support and stability should be improved by means of which it will be possible to protect the European Union from the effects of potential future crises that may be caused by both external and internal factors. The 5th Cohesion Report of the European Commission from 2010 pointed not only to the progress achieved by the Community in the implementation of Cohesion Policy but also to its deficiencies, and the urgent need to intensify activities related to, inter alia, counteracting the effects of climate change, natural environment protection, reduction of industrial emissions, increasing energy production from renewable sources and closer coordination of Cohesion Policy with other Community policies.

The discussion about the shape and the continued implementation of EU Cohesion Policy cannot ignore its local, regional dimension, especially in the face of the territorially growing Community and the connected problems of the broadly understood cohesion. This policy, and especially the support from the EU Structural Funds are of particular importance for the new Member States of the Community, which must make up for the development delays in various areas, and also for the countries that joined the European Union some time ago and are developing rapidly mainly due to European aid funds.

According to the author of this paper, the issue of consensus of the Member States of the Community in respect of the matters which are essential for its development is now crucial for the development of the European Union, including the implementation of one of the most important policies of the Community, which is Cohesion Policy. At the earlier stages of European integration, economic integration of countries of the Old Continent, when the free trade area, customs union and the single European market were built, such an agreement at that time was not as important as it is today. The consensus in question gained importance during the construction of the Economic and Monetary Union, at the same time becoming a prerequisite for the achievement of full economic and political integration in the future. We should not forget that this integration is one of the most important goals of the European project serving the realization of the idea of building the harmoniously functioning Community of European countries having the characteristics of a homogeneous European state. The logic and objectives of European integration should make the leaders of European countries, as well as the European Union Leaders realise that, regardless of the experienced difficulties and costs of integration born by everyone in varying degrees, we cannot give up attempts to achieve that consensus on the most important economic issues, and also on issues related to the European Union's foreign policy and its leaders. Without understanding across boundaries and over conflicting interests of the Member States, the Community will not be able to cope with many problems, among others, with the problems of the euro zone and the single European currency and the growing Union's cohesion problems generating huge costs. The indicated consensus, which is also a kind of compromise between the interests of the individual Member States of the European Union, their egoism and interests of the Community as such and the idea of European integration, is today one of the biggest challenges facing the European Union, which will decide about its future. The purpose of this study is to provoke a discussion on the implementation of EU Cohesion Policy in the perspective of 2020 and the related important specific issues affecting this policy in the changing internal and external conditions in which the European Union operates.

Undertaking the discussion, which, according to the editor and the co-authors of the publication, should be of interest not only to the scientific community, but also to representatives of the world of politics, administration and local government, is particularly important at the present time due to challenges brought by globalization and the associated changes in the social and economic spheres. The specific issues undertaken by the co-authors of the publication concerning, inter alia, the competitiveness of European regions, the efficient use of the structural support of the European Union or Community's energy policy, fit well in the ongoing discussion on the future of Community Cohesion Policy and the reasonableness of demands for radical changes in this policy, which will be of major importance for the functioning of the European Union and the future of the Old Continent. The 2007-2013 programming period, which ended not so long ago, prompts also to attempts to summarize the realisation of the policy we are interested in, in the previous financial perspective of the European Union, both in terms of efficiency in the use of aid funds by individual Member States, as well as the effectiveness of the implementation of EU Cohesion Policy at different fields and levels.

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# The Impact of Cohesion Policy on Competitiveness of Regions in the European Union

#### Abstract

In economic life competitiveness is one of the fundamental sources of mobilization and creativity. Over time competitiveness has gained a lot in importance. It has become a key priority for governments, regional and local authorizes as well as the key concept defining the direction of the ongoing debate on the future of the European Union. Nowadays it is one of the most important determinants of regional development. This paper comprises an overview of key concepts related to the phenomenon of competitiveness and reviews some theoretical aspects—associated with it. At the same time the author of the paper focuses on the assumptions and main goals of cohesion policy of the European Union, its value added for growth and finally its impact on regional competitiveness. In this paper the author is trying to find out whether European Union cohesion policy can deliver economic—development and contribute to regional competitiveness.

Key words: Cohesion policy, competitiveness, regions, European Union

### Introduction

In economic life competitiveness is one of the major sources of mobilization and creativity. The concept of competitiveness has gained in importance in recent years. It has been widely discussed and explored by theoretical researchers, academics and policy-makers across the world. It is understood as a dynamic phenomenon and one of driving forces of modern economic processes. Since the notion competitiveness entered the public debate it has become a key priority for governments, regional and local authorities and simultaneously a prominent theory in the assessment of countries or regions development position. Competitiveness is also one of the key concept defining the direction of the ongoing debate on the future of the European Union. It also takes a lot of interest in the study of the regional development strategy and policies of individual countries or regions. Although, there is no doubt that this phenomena has an immense impact on regional growth and economic performance, there is a problem with defining and measuring it<sup>1</sup>.

There is a large number of studies concerning competitiveness but there is no generally accepted definition. The conceptual evolution of the notion of competitiveness provides a methodology framework for varied approaches that have been used by different researchers. The applied definition is usually appropriate for a specific research or policy objective, but generally competitiveness is a relative and still elusive concept. The Organisation for Economic Cooperation and Development (OECD) defines competitiveness as the degree to which a state can produce goods and services that should pass the test of international competition and at the same time maintain and develop its incomes at the national level, in the conditions of market liberalisation<sup>2</sup>.

The European Union perceived the improvement of competitiveness in Europe's lagging regions as vital to the pursuit of social cohesion. In the European Competitiveness Report competitiveness is "understood to mean a sustained rise in the standards of living of a nation or region and a level of involuntary unemployment as low as

M. E. Porter, C. H. M. Ketels, *UK competitiveness: Moving to the next stage*, DTI Economic Paper no 3, London: Department of Industry and Trade 2003.

<sup>&</sup>lt;sup>2</sup> Technology and the Economy – the Key Relationships. Report on the Technology/ Economy Programme, Paris: OECD 1992.

possible"<sup>3</sup>. M. E. Porter, the precursor and one of the leading researchers in fields of competitiveness, outlined his conceptual framework of competitiveness in book "*The Competitive Advantage of Nations*"<sup>4</sup>. In his definition of competitiveness the central role takes the productivity perceived as a key determinant of the level of prosperity. The World Economic Forum describes competitiveness in a similar way. This institution defines competitiveness as the "set of institutions, policies and factors that determine the level of a productivity"<sup>5</sup>. According to Haar and Meyer-Stamer competitiveness of a territory is "the ability of a region to generate high and rising incomes and improve the livelihoods of the people living there"<sup>6</sup> so in this approach the emphasis is placed on the benefits to people living in a particular territory.

At first, competitiveness was mainly analysed at the micro (a firm) and macro (national) level. However, over time the regional aspect of the phenomenon has gained in importance. It has been caused be the growing meaning of the region as an economic entity and important participant of global economic processes. Regions defined as administrative units operating "below" the national level and simultaneously "above" the local administrative level are much better suited to establish relations between business, science and research and to identify the entities they can work effectively with. The global crisis underlined the need for regional authorities to be closely involved in creating and implementing strategies in key sectors for competitiveness and growth such as: education, the environment, public services and social policies.

A competitive region is such a region where the optimal structural relations between production factors, in changing conditions,

<sup>&</sup>lt;sup>3</sup> Competitiveness and Economic Reforms. European Competitiveness Report, Brussels: European Commission 2006.

<sup>&</sup>lt;sup>4</sup> M. E. Porter, *The competitive advantage of nations*, New York: Free Press/Macmillan 1990.

<sup>5</sup> The Global Competitiveness Report 2014-2015, Geneva: World Economic Forum 2014.

<sup>&</sup>lt;sup>6</sup> J. Haar, J. Meyer-Stamer, *Small firms, Global Markets: Competitive Challenges in the New Economy*, New York: Palgrave Macmillan 2008.

are used to improve inhabitants' standard of living, attract new investors and encourage multipurpose development of the area<sup>7</sup>. There is no doubt that there is a strong need to support initiatives aimed at strengthening the processes of growth and competitiveness. Problems and discrepancies arise when it comes to identifying factors referred to as crucial for the development of competitiveness. The discussion also applies to the selection of appropriate methods and techniques for comparing the level of competitiveness of distinguished regions.

The overall regional competitiveness is determined by a set of different factors like human and social capital, technological progress, natural resources, technical, economic and social infrastructure as well as policy of the local authorities. Some features of competitiveness are not easily measurable e.g. local governance or the nature of the risk-taking environment.

Undoubtedly, competitiveness and prosperity depend on the capacity of people and business to make the best use of all of territorial assets. In a globalized world competitiveness also depends on building links with other territories in order to ensure the use of assets in a coordinated and the most effective way<sup>8</sup>.

Regional competitiveness is not a directly measurable economic category. It is a function of complex variables and usually depends rather on a set of factors. The competitiveness of a region can be measured in different ways: analyzing one or several factors of competitiveness, using theoretical models of competitiveness or creating composite indices<sup>9</sup>. What is more, there are no common competitive strategies which could be applicable to all types of regions, thus each region should form a unique strategy for increasing its competitiveness. In globalized and strongly internationalized world competitiveness

W. Ciechomski, Czynniki determinujące konkurencyjność regionu, [In:] Partnerstwo w regionie, J. Karwowski (ed.), Szczecin: PTE 2004.

Regions and the European Economic and Social Committee. Green Paper on Territorial Cohesion turning territorial diversity into strength, Brussels, COM (2008) 616 final.

V. Snieska, J. Bruneckien, Measurement of Lithuanian Regions by Regional Competitiveness Index, "Inzinierine Ekonomika-Engineering Economics" 2009(1), pp. 45-57.

is the cornerstone of sustainable development. In order to meet the challenges of today's global economy regions "are forced" to permanently strengthen and develop their competitive capabilities.

The main goal of this paper is first to present the value added of cohesion policy and after that to prove the impact of this policy on regional competitiveness in the European Union, so the paper is structured as follow. First the assumption, goals and the role of cohesion policy are presented. Afterwards the economic performance and competitiveness of EU regions is outlined, and finally the impact of cohesion policy on regional growth and competitiveness is proved.

## 1. The role of Cohesion Policy

Cohesion policy is one of the most important community policies and simultaneously one of the pillars of European integration. The European Union Treaty set a number of objectives for Cohesion Policy. One of the most important was to reduce economic, social and finally also territorial disparities providing significant support to less developed regions in the European Union<sup>10</sup>. That is why, cohesion policy and its funding instruments – the European Regional Development Fund, the European Social Fund and the Cohesion Fund have concentrated on economic and social aims<sup>11</sup>. In the following 7-years financial perspectives some of the assumptions, rules and goals (table 1) of cohesion policy have changed a lot, but the improvement of economic performance of European Union regions and standard of living of their inhabitants is constantly in the heart of the policy.

Art. 158 of the Treaty of the European Union.

<sup>&</sup>lt;sup>11</sup> Cohesion Policy and Sustainable Development Supporting Paper 2 Cohesion Policy Performance, London: Institute for European Environmental Policy 2010.

Table 1. The objectives of cohesion policy of the European Union

Perspective	Objectives
2000-2006	Regions lagging behind in developmental terms Cohesion Fund Economic and social conversion Training systems and employment policies Interreg III URBAN II EQUAL Leader+ Rural development and restructuring of the fishing sector beyond objective 1
2007-2013	Convergence Regional competitiveness and employment European Territorial Cooperation
2014-2020	Investment in growth and jobs (less developed, transition and more developed regions) European Territorial Cooperation

Source: European Commission 2007, 2011.

There is no doubts, that European Union cohesion policy provides assistance to disadvantaged regions and localities. It is also an expression of solidarity between EU countries and regions. Nowadays, cohesion policy should also play an important role in building the proper conditions for fostering competitiveness. The importance of competitiveness as the most effective tool of improving cohesion is emphasized in cohesion reports. They are published every three years and provide general information and more detailed regional statistics with regard to the assumption and targets of economic, social and territorial cohesion. They also usually launch a wide public consultation on challenges faced by European Cohesion Policy. Nowadays, the European Union is trying to find a new shape of cohesion policy that allows to reduce inequality and at the same time to contribute to meeting the objectives of the Europe 2020 Strategy. According to the new Strategy launched by the European Commission in March 2010 there are four main priorities i.e.: innovation and research, the digital agenda, support for SME-s and the

low-carbon economy<sup>12</sup>. At the heart of interest of the agenda is the achievement of "smart, sustainable, inclusive growth brought about through greater coordination of national and European policy"<sup>13</sup>. The strategy identifies seven flagship initiatives that the European Union should realize to improve growth and development (table 2). Cohesion policy objectives tightly correspond to the Europe 2020 Strategy.

Table 2. The seven flagship initiatives of European Union

Flagship initiative	The main aim
Innovation Union	To improve framework conditions and access to finance for research and innovation to ensure that innovative ideas can be turned into products and services that create growth and jobs.
Youth on the Move	To enhance the performance of education systems and facilitate the entry of young people into the labour market.
A Digital Agenda for Europe	To speed up the roll-out of high-speed Internet and reap the benefits of a digital single market for households and firms.
Resource-efficient Europe	To help decouple economic growth from the use of resources, support the shift towards the low-carbon economy, increase the use of renewable energy sources, modernize the transport and promote energy efficiency.
An Industrial Policy for the Globalization Era	To improve the business environment, notably for SME-s and to support the development of a strong and sustainable industrial base able to compete globally.
An Agenda for New Skills and Jobs	To modernize labour markets and empower people by developing their skills throughout the life cycle with a view to increase labour participation and better match labour supply and demand, including through labour mobility.

<sup>&</sup>lt;sup>12</sup> Communication from the Commission –Europe 2020. A strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010 COM(2010) 2020.

The Europe 2020 Competitiveness Report: Building a More Competitive Europe, Geneva: World Economic Forum 2012.

European Platform against Poverty	To ensure social and territorial cohesion such that the benefits of growth and jobs are widely shared and people experiencing poverty and social exclusion are enabled to live in dignity and take active part in society.
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Source: Europe 2020. A strategy for smart, sustainable and inclusive growth, European Commission, Brussels 2010; The Europe 2020 Competitiveness Report: Building a More Competitive Europe 2012, World Economic Forum.

Cohesion policy is the EU's main investment policy. It targets all regions and cities in the European Union in order to support job creation, business competitiveness, economic growth, sustainable development and improve citizens' quality of life<sup>14</sup>. What is more, cohesion policy encourages regions and cities from different EU Member States to work together and learn from each other through joint programmes, projects and networks with tangible impacts on every aspects of economic life, including innovation, accessibility, education, business, employment or the environment.

The crisis that affected the European regions has reinforced the need for a new approach to EU cohesion policy. For the period 2014-2020 cohesion policy has set 11 thematic objectives supporting growth<sup>15</sup>:

- 1) Strengthening research, technological development and innovation;
- 2) Enhancing access to, and use and quality of information and communication technologies;
- 3) Enhancing the competitiveness of SMEs;
- 4) Supporting the shift towards the low-carbon economy;
- 5) Promoting climate change adaptation, risk prevention and management;
- 6) Preserving and protecting the environment and promoting resource efficiency;

Johannes Hahn, European Commissioner for Regional Policy, 2014.

<sup>&</sup>lt;sup>15</sup> An introduction to European Union Cohesion Policy 2014-2020, Brussels: European Commission, June 2014.

- 7) Promoting sustainable transport and improving network infrastructures;
- 8) Promoting sustainable and quality employment and supporting labour mobility;
- 9) Promoting social inclusion, combating poverty and any discrimination:
- 10) Investing in education, training and lifelong learning;
- 11)Improving the efficiency of public administration.

The economic crisis was also one of the reasons why in the last few years the European Union has undertaken a substantial amount of initiatives and changes in the area of cohesion policy (table 3).

Table 3. The most important changes of the reform of Cohesion Policy

Reform of cohesion policy	The main aim
Smart specialization	To stimulate investments in sectors in which regions have a competitive advantage to provide for jobs in the region.
More synergy between the European funds	To encourage and make it easier for the relevant actors at all levels (Member States, regions, European Institutions) to use multi-fund programmes and ensure the coordination of different EU policies and instruments.
Better economic governance without automatic punishment for the regions	To facilitate necessary investments in growth and jobs in the regions.
Easier access to capital for SME's	To give SME's more support and access to credit with the use of loans, guarantees and equity or venture capital.

Source: Future of Cohesion Policy 2014-2020 – Key achievements, EPP Group Regi-Coter, 2014.

Since 1986 the main interest of cohesion policy has been focused on economic and social aspects. The Lisbon Treaty and the EU's new strategy introduced a third important dimension: territorial cohesion. It was caused by the recognition that the geographical conditions

have also a crucial impact on competitiveness. There is not one description of territorial cohesion. In accordance with the definition created by the European Commission it can be understood as concentration and density, connecting territories, cooperation or regions with specific geographical features<sup>16</sup>. Territorial cohesion highlights the need for an integrated approach to addressing problems on an appropriate geographical scale which may require local, regional and even national authorities to cooperate. Improving territorial cohesion implies better coordination between sectoral and territorial policies and improved coherence between territorial interventions<sup>17</sup>. Strengthening territorial cooperation is vital to meet all the objectives of economic, social and territorial cohesion<sup>18</sup>.

# 2. The economic performance and competitiveness of European Union regions

The crisis that the global economy witnessed in 2008 had widespread effects on both more and less developed regions in the whole European Union. The crisis had a huge influence on national and regional budgets, limiting funding in many areas and consequently led to increases in poverty and social exclusion in many European regions and countries. Public investment declined in the EU by 20% in real terms between 2008 and 2013. In countries like Greece, Spain or Ireland the decline was around 60%. At the same time in the central

Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee Green Paper on Territorial Cohesion Turning territorial diversity into strength, COM(2008) 616 final.

Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee, Green Paper on Territorial Cohesion Turning territorial diversity into strength SEC(2008) 2550.

The Committee of the Regions. White Paper on Multilevel Governance, Brussels: Committee of the Regions 2009.

and eastern European countries public investment fell by a third<sup>19</sup>. As a result, the disparities between EU regions have started to grow again after a long period of convergence. The number of people at risk of poverty and exclusion has grown significantly since the start of the crisis (table 4). The crisis has also reversed the process of convergence of regional GDP per capita and unemployment within the EU. The overall impact of the crisis on GDP and employment between 2007 and 2011 was the highest in the three Baltic States, Ireland, Greece and Spain.

Table 4. Poverty and social exclusion in the EU, 2005-2011

	2005	2006	2007	2008	2009	2010	2011
At risk of poverty or exclusion	25,6	25,2	24,4	23,5	23,1	23,4	23,2
At risk of poverty	16,4	16,5	16,5	16,4	16,3	16,4	16,9
Very low work intensity*	10,3	10,5	9,6	9,0	9,0	10,0	10,0
Severe material deprivation	10,7	9,8	9,1	8,4	8,1	8,1	8,8

\* population aged 0-59

Source: Eurostat

Undoubtedly, regional growth depends on a combination of labour productivity and the employment rate. Regional disparities in unemployment among the EU 27 regions remain high. More than one region in three has the unemployment rate above 10%. The highest rates were observed in Spain, Greece and in the overseas departments of France. In the top 30 regions in terms of unemployment 29 are located in these three countries<sup>20</sup> (table 5).

Sixth Report on economic, social and territorial cohesion "Investment for jobs and growth. Promoting development and good governance in EU regions and cities", Brussels: European Commission, July 2014.

The urban and regional dimension of the crisis. Eighth progress report on economic, social and territorial cohesion, Luxembourg: European Commission 2013.

Table 5. Regions with the highest unemployment rates in 2012

MS	Region	GDP growth 2007-2010,
		%
ES	Ciudad Autonoma de Ceuta	38.5
ES	Andalucía	34.6
ES	Extremadura	33.0
ES	Canarias	33.0
EL	Dytiki Makedonia	29.9
ES	Melilla	28.6
FR	Reunion	28.6
ES	Castilla-La Mancha	28.5
ES	Region de Murcia	27.9
EL	Sterea Ellada	27.8

Source: The urban and regional dimension of the crisis. Eighth progress report on economic, social and territorial cohesion. European Commission, Luxembourg 2013.

Widening regional disparities are undermining one of the key goals of the European Union and cohesion policy. High unemployment is a threat to social cohesion leading to poverty and social exclusion and it is one of the most important incentives for people to leave their regions. Unemployment of the young (people aged 15-24) (table 6) can have a long-lasting negative effect. Regional disparities in youth unemployment rates among the EU 27 regions are pronounced - with differences up to 13 times between regions experiencing the highest and the lowest youth unemployment rates<sup>21</sup>.

Table 6. Regions with the highest youth unemployment rate

MS	Region	Youth unemployment rate, 2012
EL	Dytiki Makedonia	73
ES	Ciudad Autonoma de Ceuta	71
ES	Canarias	63

<sup>21</sup> Ibidem.

ES	Andalucia	62
ES	Extremadura	62
EL	Peloponnisos	61
ES	Ciudad Autonoma de Melilla	61
EL	Ipeiros	60
EL	Kentriki Makedonia	60
EL	Sterea Ellada	59

Source: The urban and regional dimension of the crisis. Eighth progress report on economic, social and territorial cohesion. European Commission, Luxembourg 2013.

The level of GDP per capita is closely related to global economic performance. Its change over time shows the pace of economic development. The GDP per capita distribution highlights very large gaps in economic output existing across regions and Member States of the EU. In 2009, the GDP per capita ranged from 331% of the EU average (Inner London, UK) to 27.3% (Severozapaden, Bulgaria). The leading regions were Inner London in the United Kingdom (332% of the average), the grand Duchy of Luxembourg (266%) and Brussels in Belgium (223%). Among 39 regions exceeding the 125% level, the majority were from Germany, the Netherlands, Italy and Austria. The regions with the highest GDP per capita (table 7) are mainly capital regions located in Western and Northern Europe. Simultaneously, there were 65 regions below the 75% level. In this group fifteen were Polish regions, seven came from the Czech Republic and the same number from Romania, six from Hungary and five from Bulgaria<sup>22</sup>.

Regional GDP per capita in 2009: seven capital regions in the ten first places, Eurostat Newsrelease, STAT/12/38, 13 March 2012.

Table 7. Regions with the highest GDP per capita in PPS

MS	Region	GDP per head in PPS, EU27=100
UK	Inner London	328
LU	Luxembourg (Grand-Duche)	266
BE	Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest	223
DE	Hamburg	203
FR	Ile de France	180
NL	Groningen	180
SK	Bratislavsky kraj	176
CZ	Praha	172
SE	Stockholm	168
AT	Wien	165

Source: The urban and regional dimension of the crisis. Eighth progress report on economic, social and territorial cohesion. European Commission, Luxembourg 2013.

There are no doubts, that competitiveness in the European Union has a strong regional dimension. There are still robust disparities between EU regions. One of the most significant is visible in the geographical distribution of GDP, but there are many others in various fields.

In the debate concerning the future of cohesion policy and its role in enhancing competitiveness, the Regional Competitiveness Index (RCI) may play a critical role. It was first published in 2010 as a composite index mapping the economic performance and competitiveness of EU NUTS 2 level for all member states as well as the strengths and weaknesses of particular regions. The index is based on 11 pillars organized in 3 groups concerning basic, efficiency and innovative drivers of competitiveness (table 8), wherein the efficiency and innovation groups are crucial for highly advanced regions. The score of the ratio shapes within the range from 0 (the lowest level of competitiveness) to 100 (the highest). The Index was composed to tackle different factors of competitiveness at the regional level. It is based on 73 mostly regional indicators that are relevant to competitiveness and is applied to NUTS 2 regions<sup>23</sup>.

European Union Regional Competitiveness Index (RCI) 2013, Luxembourg: European Commission 2013.

Group	Pillars
Basic (important for less developed regions)	Quality of institutions     Macro-economic stability     Infrastructure     Health     Quality of primary and secondary education
Efficiency (important for all regions)	6. Higher education and lifelong learning 7. Labour market efficiency 8. Market size
Innovation – important for intermediate and for the developed regions	9. Technological Readiness 10. Business sophistication 11. Innovation

Table 8. The drivers of competitiveness

Source: EU Regional Competitiveness Index (RCI) 2013, European Commission, Luxembourg 2013.

The weights (table 9) for each group depend on the GDP per capita of the region, one of the primary indicators of the economic performance. It presents the relative strength and productivity of the regional economy and sometimes is also considered as a proper indicator of the standard of living in a given territory.

Table 9. Weights used in the construction of the regional competitiveness index 2013

GDP per capita (PPS) in 2009 (EU- 28=100)	Basic	Efficiency	Innovation	Total
<50	35	50	15	100
50-75	31.25	50	18.75	100
75-90	27.5	50	22.5	100
90-110	23.75	50	26.25	100
>110	20	50	30	100

Source: EU Regional Competitiveness Index (RCI) 2013, European Commission, Luxembourg 2013.

The findings of RCI 2013 revealed that the most competitive region in the European Union is Utrecht (it took the first position also in 2010). In the best group (table 10) we could find the London area and also the area including Oxford. It is worth emphasizing that eight of the top-ten regions in 2013 took the same location with respect to 2010. The group of regions with the worst performance included Bulgarian region Severozapaden, the Greek region Notio Aigaio and two southern Romanian regions Sud-Est and Sud-Vest Oltenia.

Considering the results it is possible to notice that there are some countries like Germany where the level of competitiveness does not differ markedly between regions whereas in others like Romania, Slovakia or France the gap between the capital city region and the second most competitive region is very wide<sup>24</sup>.

Table 10. The most competitive EU regions according to RCI 2013

Region	RCI 2013
Utrecht	100
London area (Inner London, Outer London, Bedfordshire, Hertfordshire and Essex)	94
Berkshire, Buckinghamshire and Oxfordshire	94
Region of Stockholm	93
Surrey, East and West Sussex	91
Region of Amsterdam (Flevoland and Noord-Holland)	90
Region of Frankfurt (Darmstadt)	89
Region of Paris (Ile de France)	89
Region of Copenhagen (Hovedstaden)	89
Zuid-Holland	88

Source: EU Regional Competitiveness Index (RCI) 2013, European Commission, Luxembourg 2013.

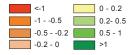
Ibidem.

The distribution of RCI 2013 scores across EU regions is presented at the map below (figure 1). The higher the class, the higher the level of regional competitiveness<sup>25</sup>.

1:30 000 000

Figure 1. Regional Competitiveness Index-RCI 2013

Index values range from low (negative) to high (positive)



Source: EU Regional Competitiveness Index (RCI) 2013, European Commission, Luxembourg 2013.

<sup>&</sup>lt;sup>25</sup> Ibidem.

# 3. The impact of cohesion policy on regional growth and competitiveness

The significance and impact of EU cohesion policy on competitiveness of European regions can be seen in many areas (table 11). Cohesion policy has contributed to boosting the competitiveness of many regions through investments in innovation, education, health or ITC. It has also supported business start-ups and enabled people to gain new qualifications and experiences. Cohesion policy has also contributed to engaging local and regional authorities to get involved in European debates and policymaking, as well as to exchange experiences and mutual learning across EU regions.

For 20 years cohesion policy has consistently proven its added value in many fields and on many different levels. It has also become an important tool for supporting the strategy for growth and jobs in all EU territories and it complements other policies such as those dealing with education, employment, the environment, energy, research and innovation. European cohesion policy which currently represents one-third of the Community budget, has a real financial leverage and inter-institutional partnership effects, boosted by the use of public-private partnership and financial tools of the European Investment Bank. The leverage effect of European cohesion policy can also be seen in its capacity to encourage harmony at European level between local, regional and national strategic development priorities<sup>26</sup>.

The impact of cohesion policy on competitiveness of EU regions is not unequivocal. That is why, there are many evaluation aimed at assessing the role of cohesion policy in fostering the regional growth. However, overall, around EUR 336 billion is allocated to national and regional programmes under the Investment for growth and jobs (IGJ) goal. The resources are divided in the following way: EUR 187.5 billion to the ERDF, EUR 63 billion to the Cohesion Fund and EUR 85 billion to the ESF<sup>27</sup>.

<sup>&</sup>lt;sup>26</sup> The Committee of the Regions. White Paper on Multilevel Governance, Brussels: Committee of the Regions 2009.

European Union Regional Competitiveness Index (RCI) 2013, Luxembourg: European Commission 2013.

Cohesion policy has also contributed to increasing income in the poorest regions: their GDP per capita grew from 60,5% of the EU-27 average in 2007 to 62,7 in 2010. What is more, GDP in the countries that entered the Union in or after 2004 is expected to increase by around 2,4% per year between 2007 and 2025<sup>28</sup>.

Table 11. The key achievements of EU cohesion policy

Field	Achievements	
Creating jobs and growth	- income in the poorest EU regions increased with GDP per capita growing in these areas from 60,5% of the EU average in 2007 to 62,7% in 2010; - estimated 594000 new jobs were created from 2007 to 2012.	
Investing in people	- every year, around 15 million people take part in thousands of projects cofinanced by the European Social Funds (ESF) across the EU; - 2.4 million participants in ESF actions supporting access to employment found a job within 6 months (2007-2010).	
Supporting enterprises	- 198000 small and medium-sized enterprises received direct investment aid; -77800 start-ups were supported; - 262000 jobs were created in SMEs.	
Strengthening research and innovation	- 61000 research projects were supported; - 5 million more EU citizens were covered by broadband connectivity; - 21000 new long-term research jobs were created.	
Improving the environment	<ul> <li>- water supply systems were modernized benefiting 3.2 million citizens;</li> <li>- 9400 projects improved the sustainability and attractiveness of towns and cities.</li> </ul>	
Modernizing transport	-1200 km of roads and 1500 km of railway lines helped to establish the efficient trans-European transport network (TEN-T).	

Source: An introduction to EU Cohesion Policy 2014-2020 European Commission 2014.

<sup>&</sup>lt;sup>28</sup> *Making Europe's regions and cities more competitive, fostering growth and creating jobs*, Luxembourg: Publications Office of the European Union 2014.

In 2014-2020 Cohesion Policy will guide the investment of a third of the EU budget to help achieve the EU-wide goals of growth and jobs and reduce economic and social disparities. With a total budget over EUR 450 billion (including national co-financing) for the 2014-2020 programming period, Cohesion Policy will be the main investment instrument<sup>29</sup>. That is why, one of the great challenges and priorities will be to ensure the effectiveness of these funds. Undoubtedly the financial support should foster the competitiveness and growth of EU regions.

It is expected that, thanks to Cohesion Policy, in the main beneficiary countries GDP could be on average 2% higher and employment around 1% higher during the implementation period. Certainly, the period 2014-2020 will be the unique chance for less developed regions to improve their overall economic performance, but it is worth remembering that the effectiveness of cohesion policy largely depends on many different factors like e.g. the quality of the business environment in which it operates. But there is no doubt that in the long term cohesion policy should be treated as one of the fundamental instruments of the European Union aimed at fostering the regional competitiveness and growth.

### **References:**

An introduction to European Union Cohesion Policy 2014-2020, Brussels: European Commission, June 2014.

Ciechomski W., *Czynniki determinujące konkurencyjność regionu*, [In:] *Partnerstwo w regionie* (ed.) J. Karwowski, Szczecin: PTE 2004.

*Cohesion Policy 2007-2013, Commentaries and Official Texts*, Luxembourg: Office for Official Publication of the European Communities 2007.

Cohesion Policy 2014-2020: Investing in growth and jobs, Luxembourg: Publications Office of the European Union 2011.

<sup>&</sup>lt;sup>29</sup> Sixth Report on economic, social and territorial cohesion "Investment for jobs and growth. Promoting development and good governance in EU regions and cities", Brussels: European Commission, July 2014.

- Cohesion Policy and Sustainable Development. Supporting Paper 2 Cohesion Policy Performance, London: Institute for European Environmental Policy 2010.
- Communication from the Commission –Europe 2020. A strategy for smart, sustainable and inclusive growth, Brussels: European Commission, 3.3.2010 COM(2010) 2020.
- Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee, Green Paper on Territorial Cohesion Turning territorial diversity into strength, Brussels: European Commission, COM(2008) 616 final.
- Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee, Green Paper on Territorial Cohesion Turning territorial diversity into strength, Brussels: European Commission, COM(2008) 2550.
- Competitiveness and Economic Reforms. European Competitiveness Report, Brussels: European Commission 2006.
- European Union Regional Competitiveness Index (RCI) 2013, Luxembourg: European Commission 2013.
- European Competitiveness Report 2006. Competitiveness and Economic Reforms. Communication from the Commission, Brussels: European Commission, COM(2006)697 final.
- Future of Cohesion Policy 2014-2020. Key achievements, Brussels: Publications Team Press and Communications Service EPP Group in the European Parliament 2014.
- Haar J., Meyer-Stamer J., Small firms, Global Markets: Competitive Challenges in the New Economy, New York: Palgrave Macmillan 2008.
- Investment for jobs and growth. Promoting development and good governance in EU regions and cities, Sixth Report on economic, social and territorial cohesion, Brussels: European Commmission 2014.
- Making Europe's regions and cities more competitive, fostering growth and creating jobs, Luxembourg: Publications Office of the Euorpean Union 2014.
- Porter M. E., *The competitive advantage of regions*. New York: Free Press 1990.

- Porter M. E., Ketels C. H. M., *UK competitiveness: Moving to the next stage. DTI Economic Paper no 3.*, London: Department of Industry and Trade 2003.
- Regional GDP per capita in 2009: seven capital regions in the ten first places, Eurostat Newsrelease, STAT/12/38, 13 March 2012.
- Regions and the European Economic and Social Committee, Green Paper on territorial cohesion turning territorial diversity into strength. Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee, Brussels: European Commission, COM(2008) 616 final.
- Sixth Report on economic, social and territorial cohesion "Investment for jobs and growth. Promoting development and good governance in EU regions and cities", Brussels: European Commission, July 2014.
- Snieska V., Bruneckien J., Measurement of Lithuanian Regions by Regional Competitiveness Index, "Inzinerine Ekonomika Engineering Economics" 2009(1), pp. 45-57.
- Technology and the Economy the Key Relationships. Report on the Technology/ Economy Programme, Paris: OECD 1992.
- The Committee of the Regions. White Paper on Multilevel Governance, Brussels: Committee of the Regions 2009.
- The Economic Conditions of Enterprise Functioning. The Global Competitiveness Report 2014-2015, Geneva: World Economic Forum 2014.
- The Europe 2020 Competitiveness Report: Building a More Competitive Europe, Geneva: World Economic Forum 2012.
- The Global Competitiveness Report 2014-2015, Geneva: World Economic Forum 2014.
- The urban and regional dimension of the crisis. Eighth progress report on economic, social and territorial cohesion, Luxembourg: European Commission 2013.

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# Region in the Innovation Policy and Knowledge-Based Economy of the European Union

#### Abstract:

In this research work, the author focuses on the analysis of the region in the innovation policy and the knowledge-based economy of the European Union. In the changing world, the representatives of the EU want the EU to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion. Specifically, the Union has set five ambitious objectives - employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy. The main objective of the research task is to give a comprehensive analysis of the innovation policy and the knowledge-based economy from the regional perspective and the programme Europe 2020. This mainly concerns the increase of the importance of innovation policy and knowledge-based economy in the region, the Triple Helix model constructed advantages, programme Europe 2020.

**Keywords:** region, innovation policy, knowledge-based economy, regional development, Triple Helix model, constructed advantage, sustainable and inclusive economy, productivity and social cohesion, Europe 2020.

### Introduction

Europe 2020 focuses on achieving smart growth of the European Union. At the beginning of the second decade of 21st century, there are signs that the adjustment in the EU economies is progressing. Financial market situation has improved on the backdrop of the steady implementation of the reform agenda, including the advancements in the European Monetary Union (EMU) architecture, and by the important policy decisions in the euro area, including by the European Central Bank (ECB). The significant reform efforts in the vulnerable Member States are also bearing fruit: leveraging has decreased in the private and public sectors and competitiveness is improving in countries with large competitiveness gaps creating conditions for further adjustment going forward. Exports are contributing increasingly to improvements in large current account deficits, which bodes well for the lasting nature of the correction. The large growth differences among the EU countries are also a reflection of the ongoing adjustment: temporarily lower or negative growth is often a feature of deep adjustments, but they open the way for more sustainable growth and convergence. The Program Europe 2020 is the European Union's growth strategy for the coming decade and especially for the new budget perspective 2014-2020. The main objective of the research task is to give a comprehensive analysis of the innovation policy and knowledgebased economy from the regional perspective and the programme Europe 2020. This mainly concerns the increase of the importance of innovation policy and knowledge-based economy in the region, the Triple Helix model constructed advantages, programme Europe 2020.

# 1. The increase of the importance of innovation policy and the knowledge-based economy in the region

According to the new theory of growth being the best theoretical foundation for the concept of the innovation system, the primary factor influencing the economic growth is the endogenous technical progress. In the endogenous theories workers are seen as an element

capable of active interaction and creating changes in the production process, and therefore a huge role in increasing productivity is ascribed to human capital and knowledge. It was Schumpeter who first recognized the importance of knowledge in the economy by his reference to 'new combinations of knowledge' at the heart of innovation and entrepreneurship¹. Nonaka and Takeuchi² also show that Marshall³ recognized that "Capital consists in a great part of knowledge and organization (...) knowledge is our most powerful engine of production (...) organisation aids knowledge".

Typically, however, neoclassical economics neglected what was not contained in price information and made no effort to add to economic knowledge by trying to measure its economic contribution. Thereafter, Hayek<sup>4</sup> identified the division of knowledge as the really central problem of economics as a social science<sup>5</sup> and saw its key question how localized knowledge held by fragmentary firms and individuals nevertheless produces the ordered market demand and supply. "The most significant fact about this system is the economy of knowledge with which it operates, or how little the individual participants need to know in order to be able to take the right action. In abbreviated form, by a kind of symbol, only the most essential information is passed on, and passed on only to those concerned"<sup>6</sup>.

A further progenitor of the view that knowledge is a most important economic resource was Penrose<sup>7</sup>. She founded what has now

J. Schumpeter, *The Theory of Economic Development*, Oxford: Oxford University Press 1911, p. 57.

<sup>&</sup>lt;sup>2</sup> I. Nonaka, H. Takeuchi, *The Knowledge-Creating Company*, Oxford: Oxford University Press 1995.

Marshall A., *Principles of Economics*, London: Macmillan 1916, p. 115.

F. Hayek, *The use of knowledge in society*, "American Economic Review", 35(1945), pp. 519-530; F. Hayek, *Individualism and Economic Order*, Chicago: The University of Chicago Press 1948, p. 33-57.

<sup>&</sup>lt;sup>5</sup> F. Hayek, *Individualism and Economic Order*, Chicago: The University of Chicago Press 1948, p. 51.

<sup>&</sup>lt;sup>6</sup> Ibidem, p. 86.

E. Penrose, The Theory of the Growth of the Firm, Oxford: Oxford University Press 1959.

evolved into the "dynamic capabilities of firms" approach to microeconomics<sup>8</sup>. She referenced the firm's characteristics as an administrative organization<sup>9</sup> and home to accumulated human and material resources. The latter are inputs to the rendered services, and these are the product of the firm's accumulated knowledge. "A firm's rate of growth is limited by the growth of knowledge within it, but a firm's size by the extent of administrative efficiency" 10. In effect, in the words of Nonaka and Takeuchi<sup>11</sup>, "the firm is a repository of knowledge" 12. Penrose 13 also acknowledged that had the term been available in the 1950s, she would have referred to the dynamic capabilities of firms residing in knowledge networks<sup>14</sup>. Thus, Penrose<sup>15</sup> noted the following crucial feature of the massively increased value of transferable knowledge to the wider economy for the firm. "The rapid and intricate evolution of modern technology often makes it necessary for firms in related areas around the world to be closely in touch with developments in the research and innovation of firms in many centres"16. Importantly, Penrose continues, the rise of business knowledge networks represents a metamorphosis in the contemporary economy. The key to the knowledge-based economy is at least partly revealed as this metamorphosis in the nature of industry organization to facilitate interaction with valuable knowledge, and

D. Teece, G. Pisano, *The dynamic capabilities of firms: an introduction*, "Industrial and Corporate Change", 3(1996), pp. 537-556.

after A. Marshall, *Principles of Economics*, London: Macmillan 1916; R. Coase, *The nature of the firm*, "Economica", 4(1937), pp. 386-405.

E. Penrose, The Theory of the Growth of the Firm, Oxford: Oxford University Press 1995.

I. Nonaka, H. Takeuchi, *The Knowledge-Creating Company*. Oxford: Oxford University Press 1995.

<sup>&</sup>lt;sup>12</sup> Ibidem, p. 34.

E. Penrose, op. cit.

M. Quéré, Knowledge dynamics: biotechnology's incursion into the pharmaceuticals industry, "Industry and Innovation" 10 (2003), pp. 255-273.

<sup>&</sup>lt;sup>15</sup> E. Penrose, op. cit.

<sup>16</sup> Ibidem.

not to conceal it, as was common in the previous phase of the global economy<sup>17</sup>.

Whereas the concept of a "knowledge economy" emerged within the context of the economic analysis of the quality of the input factors in the production process<sup>18</sup>, the term "knowledge-based economy" finds its roots in more recent discussions from a system perspective<sup>19</sup>. National governments, for example, need a system perspective for developing science, technology, and innovation policies<sup>20</sup>. The modern approach to innovation, namely the so-called chain model, underlines the complexity of the innovation process and the uncertainty of its results, which often increase the need to return to the earlier stages. The chain model shows at the same time that applied research may lead to fundamental discoveries, which means that innovation of companies depends on the quality of relations between others companies that generate knowledge and innovation in the economy<sup>21</sup>. Companies are a critical element in the innovation system, and their health determines the competitiveness of countries and social well-being.

By the second half of the 1950s, it became increasingly clear to both policy makers and economic analysts that the continuing growth rates of Western economies could no longer be explained in terms of traditional economic factors such as land, labour, and capital.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

J. Schumpeter, *The Theory of Economic Development*, Oxford: Oxford University Press 1911.

e.g. D. Sahal, *Patterns of Technological Innovation*, Reading, MA: Addison Wesley 1981; D. Sahal, *Technological Guideposts and Innovation Avenues*, "Research Policy", 14(1985), pp. 61-82.

R. R. Nelson (ed.), Government and Technical Progress: A Cross-Industry Analysis, New York: Pergamon 1982.

E. Wójnicka, Interactions in the innovation process as a factor of competitiveness of Companies, 2010

<sup>(</sup>source: http://www.4pm.pl/artykul/interakcje\_w\_procesie\_innowacyjnym\_jako\_czynnik\_konkurencyjnosci\_przedsiebiorstw\_czesc\_1-37-54.html).

The "residue"<sup>22</sup> had to be explained in terms of the upgrading of the labour force, surplus generated by interaction effects, and more generally the role of knowledge in the economy<sup>23</sup>. The Organization for Economic Co-operation and Development (OECD) was created in 1961 in order to organize and to coordinate science and technology policies among its member states, that is, the advanced industrial nations. This led in 1963 to the Frascati Manual in which parameters were defined for the statistical monitoring of science and technology on a comparative basis<sup>24</sup>.

It is a short step to link insights like these to the earliest work to operationalize a notion of the "knowledge economy" arising from the pioneering work conducted by Machlup<sup>25</sup>. He sought to identify those sectors with a heavy concentration of knowledge assets. He next attempted to map the production and distribution of knowledge sectors in the United States economy. Machlup classified knowledge production into six major sectors: education, R&D, artistic creation, communications media, information services, and information technologies. He showed that these account for the largest sectoral share of GDP and employment in the economy, and predicted that this share was destined to grow both absolutely and relatively over time. With brief interventions from Eliasson<sup>26</sup> and Burton-Jones<sup>27</sup>, who further specified the knowledge intensity of sectors by value and

M. Abramowitz, Resource and Output Trends in the United States since 1870, "American Economic Review" 46 (1956), pp. 5-23; OECD, The Residual Factor and Economic Growth, Paris: OECD 1964.

N. Rosenberg, Perspectives on Technology, Cambridge: Cambridge University Press 1976.

Cooke, P., Leydesdorff, L., Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

<sup>&</sup>lt;sup>25</sup> F. Machlup, The Production and Distribution of Knowledge in the United States, Princeton: Princeton University Press. 1962.

<sup>&</sup>lt;sup>26</sup> G. Eliasson, S. Fölster, T. Lindberg, T. Pousette, and E. Taymaz.., *The Knowledge Based Information Economy*, Stockholm: The Industrial Institute for Economic and Social Research 1990.

A. Burton-Jones A., Knowledge Capitalism, Oxford: Oxford University Press 1999.

labour qualifications respectively, on reach the statements of the Organization for Economic Cooperation and Development<sup>28</sup> calling for the measurement of the knowledge intensity of national and regional economies<sup>29</sup>.

The research into the innovations in companies conducted in the Community Innovation Survey I in the countries of the European Union have demonstrated that there is much more interaction and cooperation among the elements of the innovation system that occurs at the level of the region than the country. This results in the emphasis in recent years to research the potential and the regional innovation systems. In response to the need and assuming greater efficiency of the actions taken nearer to the entities, most regions that possess their own local authorities create their own policy and proinnovation strategy. The reflection of the importance of the regional level for the innovation process are the European Union programs supporting the creation of regional innovation strategies – RIS, regional initiatives for the innovation and technology transfer – RITTS, and similar national programmes as e.g. InnoRegio in Germany<sup>30</sup>.

The regionalization is to extract the spatial units of relatively homogeneous characteristics (geographical, demographic, cultural, economic) in order to ensure the proper growth pace for regions by giving them a specific amount of self-control. This causes a problem of the content-relation nature of the topics under the freedom of decision-making. Among the regions that are weak and strong, crucial and peripheral, stagnant and developing, we distinguish border regions called also the cross-border regions. Their particularity is that they are situated along the borders separating adjacent two or more countries. In view of the processes of globalization, the role of regional cooperation will increase. In the future corporatism and

OECD, The Knowledge-Based Economy, Paris: OECD 1996; OECD, S&T Indicators: Benchmarking the Knowledge-Based Economy, Paris: OECD 1999.

OECD/Eurostat, Proposed Guidelines for Collecting and Interpreting Innovation Data, "Oslo Manual", Paris: OECD 1997.

<sup>&</sup>lt;sup>30</sup> "Economic Bulletin" (2002).

regionalism may become the dominating factors in the development of the world economy.

Studies of the knowledge-based economy focus not only on human capital, but also on the sectoral characteristics of the knowledge factor<sup>31</sup>. Technological trajectories and regimes shape innovation systems, but with the dynamics different from those of economic or geographical factors<sup>32</sup>. The recombination of the economic dynamics of the market, the dynamics of knowledge-based innovation, and governance generate the system perspective. An innovation system can then be defined at the national level<sup>33</sup>, at the regional level<sup>34</sup>, or in terms of a dynamic model like the Triple Helix of university-industry-government relations<sup>35</sup>.

R. R. Nelson (ed.), Government and Technical Progress: A Cross-Industry Analysis, New York: Pergamon 1982; K. Pavitt, Sectoral patterns of technical change: towards a taxonomy and a theory, "Research Policy" 13(6), 1984, pp. 343-373.

R. R. Nelson, S. G. Winter, An Evolutionary Theory of Economic Change, Cambridge, MA: Belknap Press of Harvard University Press 1982.

C. Freeman, Technology Policy and Economic Performance: Lessons from Japan, London: Pinter 1987; C. Freeman, Japan, a New System of Innovation, [In:] G. Dosi, C. Freeman, R. R. Nelson, G. Silverberg and L. Soete (eds.), Technical Change and Economic Theory, London: Pinter 1988, pp. 31-54; B. A. Lundvall, Innovation as an Interactive Process: From User-Producer Interaction to the National System of Innovation, [In:] G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete (eds.), Technical Change and Economic Theory, London: Pinter 1988, pp. 349-369; B. A. Lundvall (ed.), National Systems of Innovation, London: Pinter 1992; R. R. Nelson (ed.), National Innovation Systems: A comparative study, Oxford and New York: Oxford University Press 1993.

P. Cooke, Regional innovation systems: competitive regulation in the new Europe, "Geoforum", 23(1992), pp. 365-382; P. Cooke, M. Heidenreich, H. Braczyk, Regional Innovation Systems, London: Routledge 2004.

<sup>&</sup>lt;sup>35</sup> H. Etzkowitz, L. Leydesdorff, The Dynamics of Innovation: From National Systems and "Mode 2" to a Triple Helix of University-Industry-Government Relations, "Research Policy" 29(2), 2000, pp. 109-123; L. Leydesdorff, Epilogue, [In:] L. Leydesdorff and P. v. d. Besselaar (eds.), Evolutionary Economics and Chaos Theory: New Directions for Technology Studies, London/New York: Pinter 1994, pp. 180-192.

The general argument about the salience of the organization of knowledge in the sectoral, skills, and spatial composition of the economy embraces the position of Castells<sup>36</sup>, who is widely known for the observation that productivity and competitiveness are, by and large, a function of knowledge generation and information processing, and that this has involved a Penrose-type metamorphosis entailing a different mode of thinking about economies. Thus, the balance between knowledge and resources has shifted so far towards the former that knowledge has become by far the most important factor determining standards of living, more important than land, capital, or labour. Today's most advanced economies are fundamentally knowledgebased<sup>37</sup>. Even neo-classicists, like Paul Romer, recognize that technology (and the knowledge on which it is based) has to be viewed as an equivalent third factor along with capital and land in leading economies<sup>38</sup>. Inevitably this leads to issues of the generation and exploitation of knowledge. How is the system of knowledge production organized and controlled?<sup>39</sup>

In the knowledge-based economy, inequality is generated by mechanisms of inclusion and exclusion only partially overlapping those of the traditional (capitalist) economy. With less emphasis, one can also say that another variant of capitalism is induced<sup>40</sup>. The mechanisms of inclusion and exclusion are no longer tightly coupled to one's class position in the production process as in the industrial

M. Castells, *The Rise of the Network Society*, Oxford: Blackwell 1996.

J. Dunning (ed.), *Regions, Globalisation and the Knowledge-Based Economy*, Oxford: Oxford University Press 2000.

P. Romer, *Endogenous technical change*, "Journal of Political Economy" 98(1990), pp. 338-354.

R. D. Whitley, The Intellectual and Social Organization of the Sciences. Oxford: Oxford University Press 1984; R. D. Whitley, National Innovation Systems, [In:] N. J. Smelser and P. B. Baltes (eds.), International Encyclopedia of the Social and Behavioral Sciences Oxford: Elsevier 2001, pp. 10303-10309; L. Leydesdorff, The Challenge of Scientometrics: The Development, Measurement, and Self-Organization of Scientific Communications, Leiden: DSWO Press/Leiden University 1995.

<sup>&</sup>lt;sup>40</sup> P. A. Hall, D. Soskice (eds), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press. 2001.

economy. The geographical component can be expected to play an independent role in the knowledge-based dynamics because the newly emerging system is grounded in communication networks<sup>41</sup>.

It is important to underline that the core city moves away statistically from the periphery, in the intensity with which it accumulates knowledge-based activities. Simultaneously, new high technology satellite towns "swarm," to use a Schumpeterian term, around the mother city. Even static analysis reveals this pattern, with some satellites scoring much higher than the main city around which they aggregate. Peripheral islands and regions or localities may score as low as 37% of the index average of 100% compared to 157% for Stockholm<sup>42</sup>. Compared to GDP disparities, a five-to-one ratio in the knowledge economy measure is approximately twice that given by measuring economic welfare differences more conventionally<sup>43</sup>.

Hence, for the industries of the future, the core cities are highly privileged in most countries while the peripheries are generally impoverished and becoming more so, presaging major out-migration of youth and the metamorphosis of such areas into socially deserted or playground economies. The policy imperative to devise mechanisms by which non-metropolitan regions may, in future, participate in the knowledge-based economy is clearly overwhelming.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

e.g. Aegean Islands in the EU context; P. Cooke, C. de Laurentis, The Index of Knowledge Economies in the European Union: Performance Rankings of Cities and Regions. Regional Industrial Research Paper 41, Cardiff: Centre for Advanced Studies 2002; R. Danell, O. Persson, Regional R&D Activities and Interaction in the Swedish Triple Helix, "Scientometrics" 58(2), 2003, pp. 205-218.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

### 2. The Triple Helix model constructed advantages

An efficient innovation system introducing innovation and competitiveness of companies must have the proper linkages between science and industry. The scientific and technical policies of countries moving towards the knowledge based economy favour the linkage between universities and industry. At the same time, the science sector should fall within the network of links with local, regional, national and foreign partners. As a result of such an activity the boundaries between institutions shall disappear, and the entire system becomes more dynamic. The national policy can affect the science sector more than companies, so stronger links between science and industry can be inspired by the reform of the educational system.

It has been suggested that the idea of absolute advantage in foreign trade originates with Adam Smith and was developed by Ricardo and Torrens into comparative advantage and was further developed by Marshall and Ohlin. Foray and Freeman<sup>44</sup> re-introduced it yet scarcely explored it. More attention has been devoted to it in comparison to other well-known forms of economic advantage by De la Mothe and Mallory<sup>45</sup>, as follows:

□ Comparative Advantage. Regions have been a focus for economists who have viewed them through the lens of development economics usually set in a framework of comparative advantage. This idea, deriving from David Ricardo and trade theory, explained economic welfare in terms of initial resource endowments traded between regions and nations. Thus, cotton goods enjoying a comparative production advantage from mercantile and climatic conditions in northwest England were traded with Port wine from Portugal's

<sup>&</sup>lt;sup>44</sup> D. Foray, C. Freeman, Technology and the Wealth of Nations: The Dynamics of Constructed Advantage. London: Pinter 1993.

J. de la Mothe, G. Mallory, Industry-Government Relations in a Knowledge-based Economy: the Role of Constructed Advantage. PRIME Discussion Paper 02-03, University of Ottawa: Program of Research in Innovation Management and Economy 2003.

Norte region enjoying a comparable mercantile and climatic comparative advantage. While policies were not excluded from such an analysis, they mainly added up to forms of mercantilism, and Ricardo advocated intervention regarding technological change. The overwhelming framework which government policy gave rise to and which promoted comparative advantage was laissez-faire<sup>46</sup>.

□ Competitive Advantage. By the mid-1970s, visible cracks were appearing in the economic models and frameworks that characterize pure comparative advantage. Thus, countries with a large labour supply would naturally export goods that were labour-intensive (e.g., China), while countries that were technologically advantaged (e.g., the United States) produced and exported technologically advanced products. The paradox arose when advanced economies exported labour-intensive goods as well as technologically intensive goods. The key weakness was the failure to acknowledge technological process change as well as product innovation as being endogenous to economic growth. Krugman<sup>47</sup> and Porter<sup>48</sup> (1990, 1998) noted the competitive advantage of firms in which distributed supply chains and the role of large domestic markets became accepted, and saw this advantage as central to explanations of inter-firm and firm-market success. Intra-industry trade and localized demand conditions for market competitiveness were highlighted. But no explanation was offered for why some regions prosper while others do not. The emphasis on markets meant that funding and policy support by the public sector was largely ignored<sup>49</sup>.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

<sup>&</sup>lt;sup>47</sup> P. Krugman, Development, Geography and Economic Theory, Cambridge: MIT Press 1995.

M. Porter, The Competitive Advantage of Nations, New York: The Free Press 1990; M. Porter, On Competition, Boston: Harvard Business School Press 1998.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

- □ Constructed Advantage. The analytic observations of the two preceding perspectives do not embrace the new dynamics of innovations and the capacity to exploit them which are essential to growth. The "new competitive advantage" highlights regional development economics, the dynamics of which draws upon constructed advantage. This knowledge-based construction requires interfacing developments in various directions:
- Economy regionalization of economic development; "open systems" inter-firm interactions; integration of knowledge generation and commercialization; smart infrastructures; strong local and global business networks.
- <sup>a</sup> Governance multi-level governance of associational and stakeholder interests; strong policy-support for innovators; enhanced budgets for research; vision-led policy leadership; global positioning of local assets.
- Knowledge infrastructure universities, public sector research, mediating agencies, professional consultancy, etc. have to be actively involved as structural puzzle-solving capacities.
- <sup>o</sup> Community and culture cosmopolitanism; sustainability; talented human capital; creative cultural environments; social tolerance. This public factor provides a background for the dynamics in a Triple Helix of university-industry-government relations<sup>51</sup>.

Hence, constructed advantage is both a means of understanding the noted metamorphosis in the economic growth activity and a strategic policy perspective of practical use to business firms, associations, academics, and policy makers. In the Triple Helix model constructed

M. Best, The New Competitive Advantage, Oxford: Oxford University Press 2001.

L. Leydesdorff, H. Etzkowitz, Can "the Public" be Considered as a Fourth Helix in University-Industry-Government Relations? Report of the Fourth Triple Helix Conference, "Science and Public Policy" 30(1), 2003, pp. 55-61.

advantages have been conceptualized as the surplus value of an overlay of relations among the three components of the knowledge-based economy: (1) the knowledge-producing sector (science), (2) the market, and (3) governments. Those places with research universities witness a growing demand for knowledge transfer to industry and, through government, to society<sup>52</sup>. Moreover, the spread of universities is reasonably uniform in advanced industrial countries. For research knowledge, industry and government can be expected to pay more for privileged access to knowledge-based growth opportunities by funding research, stimulating closer interactions among the three institutional partners, subsidizing infrastructure (e.g., incubators and science parks), and stimulating academic entrepreneurship skills and funding<sup>53</sup>.

Early work on regional innovation systems<sup>54</sup> attempted to capture the integrative and interactive nature of the knowledge-based economy examined from the regional perspective. The list of networking partners includes the base institutions like universities, research laboratories, research associations, industry associations, training agencies, technology transfer organizations (TTOs), specialist consultancies, government development, technology and innovation advisory agency programme-funding, and private investors. This knowledge exploration, examination and exploitation base supports the innovation efforts of large and small firms in many industries. Not all interactions are only intra-regional; many are also national and global, but in the

H. Etzkowitz, L. Leydesdorff, The Endless Transition: A "Triple Helix" of University-Industry-Government Relations, "Minerva" 36(1998), pp. 203-208;
 H. Etzkowitz, A. Webster, C. Gebhardt and B. R. C. Terra, The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm, "Research Policy" 29 (2), 2000, pp. 313-330.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

P. Cooke, Regional innovation systems: competitive regulation in the new Europe, "Geoforum" 23(1992), pp. 365-382; P. Cooke, K. Morgan, The regional innovation system in Baden-Württemberg, "International Journal of Technology Management" 9 (1994), pp. 394-429.

most accomplished regional economies like Baden-Württemberg, a majority of such institutional networking interactions were regional, and on such regular terms that the networking had become systemic<sup>55</sup>.

It may be concluded that as the base of knowledge evolves institutionally, an increasing portion of the economy becomes knowledge -intensive. One key difference, however, is that science-based industries like genomics, research, software and nanotechnologies generate value from producing analytical knowledge while most others create value from exploiting synthetic or symbolic knowledge. Thus, the old definition of the knowledge economy in terms of a few important and growing sectors is redundant, while the structural idea of the knowledge-based economy linking the knowledge generation subsystem (mainly laboratory research) to the knowledge-exploitation system (mainly firms and, say, hospitals or schools) via technology transfer organizations in regional innovation systems is analytically useful<sup>56</sup>.

The effect of the growth in importance of regional (and other) innovation systems is to pervade the regional and other economies with scientific, synthetic and symbolic knowledge to a greater extent than ever before. The organization of pure and applied knowledge can increasingly pervade the economy when scientific and technological knowledge is institutionally produced and systematically controlled. R&D management and S&T policies at relevant government levels enlarge the set of options. These, however, are not fixed but evolving distributions in which some regions are more developed as knowledge-based economies than others. Hence, the post-1970s fascination with "high-tech" regions worldwide. Today, however, as the Triple Helix perspective suggests, with universities and their related research laboratories spread throughout most regions, many more economies have the chance to access not only yesterday's "global" knowledge

P. Cooke, Regional innovation systems, clusters and the knowledge economy, "Industrial and Corporate Change" 10(2001), pp. 945-974.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

announced on the Internet and exploitable by all, but local knowledge of potentially high value generated from research conducted in relation to regional capabilities. Thus, as the knowledge base becomes pervasive, the knowledge economy is further reinforced<sup>57</sup>.

The Triple Helix challenge is picked up also in an attempt to identify the factors that affect the ability of universities both to create new knowledge and to deploy that knowledge in economically useful ways and thereby contribute to economic growth and prosperity. It seems, therefore, that constructed advantage based on regional innovation systems that transceive over long distances as well as through regional networks is becoming the model of choice for achieving accomplished regional economic development. Leydesdorff argues that the knowledge base of an economy can be considered as a second-order interaction effect among Triple Helix interfaces between institutions and functions in different spheres. Proximity enhances the chances for couplings and, therefore, the formation of technological trajectories. In this manner, connections between regional innovation systems and markets (an understudied aspect in the broad field of innovation studies) may be facilitated<sup>58</sup> (Cooke & Leydesdorff, 2006).

The key driver of the problems is Europe's structural innovation gap: compared to its competitors, Europe's patenting performance is weak and it lags behind in developing new products, new processes and new services. To boost productivity and growth, it is critically important to generate breakthrough technologies and translate them into new products, processes and services. Europe has taken an early technological lead in many key technology areas, but in the face of growing competition its advantage is tenuous, and has not translated into an innovative and competitive lead. A timely and targeted European policy is needed for bridging the "valley of death" if Europe is to remain competitive<sup>59</sup>.

<sup>&</sup>lt;sup>57</sup> Ibidem.

P. Cooke, L. Leydesdorff, Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.

<sup>59</sup> SEC(2011) 1428 final Volume 1, Commission Staff Working Paper Executive Summary of the Impact Assessment Accompanying the Communication from the

This key driver is underpinned by the following structural problem drivers:

- Insufficient contribution of research and innovation to tackling societal challenges
- Insufficient technological leadership and innovation capability of firms
- □ The need to strengthen the science base
- □ Insufficient cross-border coordination

The European Union recognizes the urgency of the situation, and is responding with new policy strategies. An efficient innovation system introducing innovation and competitiveness of companies must have the proper linkages between science, industry and governance. This requires a change in attitudes of companies to this cooperation as well as the reform of the public sphere of research and development in the direction of greater adjustment of its research and of the directions and methods of education to the needs of the economy. The scientific and technical policies of the countries moving towards the knowledge based economy favour the linkage between universities, industry and governance, competitive and based on cooperation forms of funding the scientific research, which is to strengthen the functions of learning in supporting and generating innovation. At the same time, the science sector should fall within the network of links with local, regional, national and foreign partners. As a result of such an activity the boundaries between institutions shall disappear, and the entire system becomes more dynamic. The national policygovernance can affect the science sector more than companies, so stronger links between science, industry and governance can be inspired by the reform of the educational system.

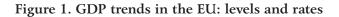
Commission "Horizon 2020 -The Framework Programme for Research and Innovation", Brussels, 30.11.2011.

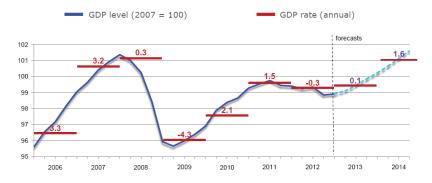
### 3. Europe 2020

It is important to underline that the Innovation Union is one of the seven flagship initiatives of the Europe 2020 strategy for a smart, sustainable and inclusive economy. The Innovation Union plan contains over thirty actions points, with the aim to do three things:

- □ make Europe into a world-class science performer;
- □ remove obstacles to innovation like expensive patenting, market fragmentation, slow standard-setting and skill shortages which currently prevent ideas getting quickly to the market;
- revolutionise the way public and private sectors work together, notably through Innovation Partnerships between the European institutions, national and regional authorities and business.

The Innovation Union is the European Union strategy to create an innovation-friendly environment that makes it easier for great ideas to be turned into products and services that will bring the economy growth and jobs (Figure 1, Figure 2). The Annual Growth Survey for 2013 launches the 2013 European semester for economic policy coordination, which ensures





Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to

the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

that Member States align their budgetary and economic policies with the Stability and Growth Pact and the Europe 2020 strategy. It is the basis for building a common understanding about the priorities for action at the national and EU level as the EU seeks to return to a path of sustainable growth and job creation.

Figure 2. Number of people employed in the EU (in millions)

Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J. M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

The Annual Growth Survey should feed into national economic and budgetary decisions, which Member States will set out in Stability and Convergence Programmes (under the Stability and Growth Pact) and National Reform Programmes (under the Europe 2020 strategy) in April 2013. These programmes will form the basis for the European Commission's proposals for country-specific recommendations in May 2013.

Table 1. Global competitiveness index 2012-2013

Rank	Country					
1	Switzerland					
2	Singapore					
3	Finland					
4	Sweden					
5	Netherlands					
6	Germany					
7	United States					
8	United Kingdom					
9	Hong Kong SAR					
10	Japan					
12	Denmark					
16	Austria					
17	Belgium					
21	France					
22	Luxembourg					
27	Ireland					
34	Estonia					

Rank	Country					
36	Spain					
39	Czech Republic					
41	Poland					
42	Italy					
45	Lithuania					
47	Malta					
49	Portugal					
55	Latvia					
56	Slovenia					
58	Cyprus					
60	Hungary					
62	Bulgaria					
71	Slovak Republic					
78	Romania					
81	Croatia					
96	Greece					

Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa.eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

It must be emphasized that the EU economy is slowly starting to emerge from the deepest financial and economic crisis in decades. However, although important action has already be taken and positive trends are beginning to emerge, there remains some distance to the recovery (Table 1).

To restore confidence and return to growth, it is essential that Member States maintain the reform momentum, and for this reason the Commission recommends focusing on the same five priorities that were identified in last year's Survey (Figure 3):

- Pursuing differentiated, growth-friendly fiscal consolidation
- □ Restoring normal lending to the economy
- □ Promoting growth and competitiveness for today and tomorrow (Table 1, Figure 3)
- □ Tackling unemployment and the social consequences of the crisis
- □ Modernising public administration.

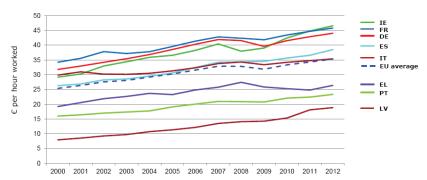
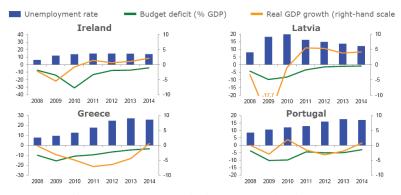


Figure 3. Productivity levels and trends 2000-2012 (hourly productivity levels in Euro per man hour)

Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu.tra-00. pdf. Access, 24.01.2014.).

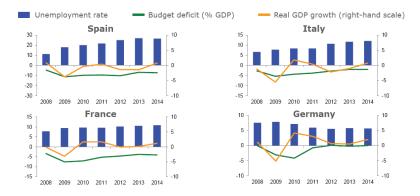
The deleveraging and adjustment process is inevitable and the main task of policy makers is to manage it and alleviate the associated economic and social consequences. Fiscal adjustment has to continue along the path of a differentiated growth-friendly consolidation strategy in view of the high debt levels and long-term challenges to public finances. However, as fiscal consolidation can have negative growth effects in the short term, it should be conducted in a growthfriendly manner, that is, the speed of consolidation has to be differentiated across countries according to their fiscal space, to strike the right balance between potential negative growth effects and the risks to debt sustainability. The Stability and Growth Pact and the central role of structural budget balances (Figure 4, Figure 5, Figure 6, Figure 7, Figure 8) therein offer the appropriate framework to guide the differentiated speed of adjustment (Figure 9); while focusing the consolidation on the expenditure side, there is a need to devise an overall growth-friendly mix of revenue and expenditure, with targeted measures within the available fiscal space to protect key growth drivers while ensuring efficiency of expenditure.

Figure 4. Trends in GDP, unemployment and budget deficits in selected Member States (1)



Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

Figure 5. Trends in GDP, unemployment and budget deficits in selected Member States (2)



Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa.eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

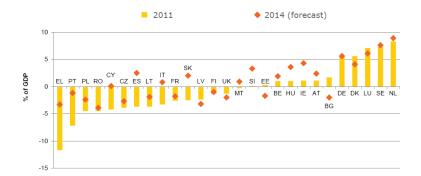
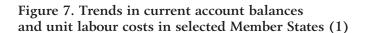
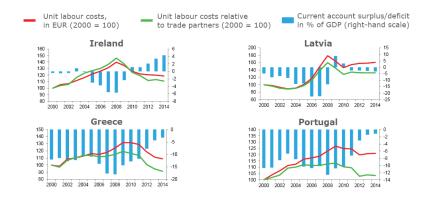


Figure 6. Current account balances (% of GDP)

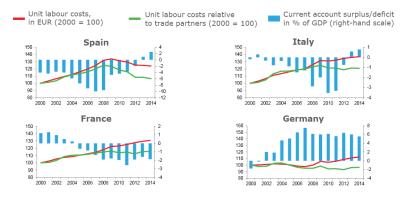
Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa.eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. access, 24.01.2014.).





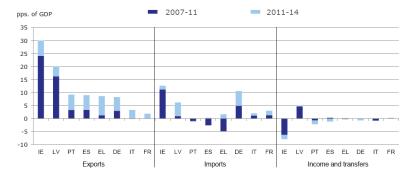
Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J. M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

Figure 8. Trends in current account balances and unit labour costs in selected Member States (2)



Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

Figure 9. Changes in the composition of current account adjustment



Source: Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec.europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00. pdf. Access, 24.01.2014.).

Additionally, the credibility of consolidation and its positive effects are enhanced if it is anchored in a credible medium-term fiscal framework and accompanied by reforms addressing the long-term sustainability issues stemming from the ageing population<sup>60</sup>.

### Final remarks

In the second decade of the 21st century and especially in the new budget perspective 2014-2020, on the backdrop of the changing world order, the European Union faces a series of crucial challenges: low growth, insufficient innovation, and a diverse set of environmental and social challenges. Europe 2020, the EU's comprehensive long-term strategy, recognizes these challenges and argues that Europe faces a moment of transformation. The solutions to all of these problems are linked. It is precisely by addressing its environmental and social challenges that the European Union will be able to boost productivity, generate long-term growth and secure its place in the new world order.

In the view of the new theory of economic growth, knowledge is the primary factor in determining productivity. According to the new theory of growth being the best theoretical foundation for the concept of the innovation system, the primary factor influencing the economic growth is the endogenous innovation and technical progress. In the endogenous theories workers are seen as an element capable of active interaction and creating changes in the production process, and therefore a huge role in increasing productivity is ascribed to human capital and knowledge.

Macro-economic report to the communication from the Commission Annual Growth Survey 2013, COM 750 final Brussels, 28.11.2012.

### **References:**

- Abramowitz M., Resource and Output Trends in the United States since 1870, "American Economic Review" 46 (1956), pp. 5-23.
- Best M., *The New Competitive Advantage*, Oxford: Oxford University Press 2001.
- Burton-Jones A., *Knowledge Capitalism*, Oxford: Oxford University Press 1999.
- Castells M., The Rise of the Network Society, Oxford: Blackwell 1996.
- Coase R., The nature of the firm, "Economica" 4(1937), pp. 386-405.
- Cooke P., Regional innovation systems: competitive regulation in the new Europe, "Geoforum" 23(1992), pp. 365-382.
- Cooke P., Knowledge Economies, London: Routledge 2002.
- Cooke P., Morgan K., *The regional innovation system in Baden-Württemberg*, "International Journal of Technology Management" 9 (1994), pp. 394-429.
- Cooke P., *Regional innovation systems, clusters and the knowledge economy*, "Industrial and Corporate Change" 10(2001), pp. 945-974.
- Cooke P., De Laurentis C., The Index of Knowledge Economies in the European Union: Performance Rankings of Cities and Regions. Regional Industrial Research Paper 41, Cardiff: Centre for Advanced Studies 2002.
- Cooke P., Heidenreich M., Braczyk H. (eds.), *Regional Innovation Systems*, London: Routledge 2004.
- Cooke P., Leydesdorff, L., Regional Development in the Knowledge-based Economy: The Construction of Advantage, "The Journal of Technology Transfer" 31(2006), pp. 5-15.
- Danell R., Persson O., *Regional R&D Activities and Interaction in the Swedish Triple Helix*, "Scientometrics" 58(2), 2003, pp. 205-218.
- De la Mothe J., Mallory G., *Industry-Government Relations in a Knowledge-based Economy: the Role of Constructed Advantage. PRIME Discussion Paper 02-03*, University of Ottawa: Program of Research in Innovation Management and Economy 2003.
- Dunning J., (ed.) *Regions, Globalisation and the Knowledge-based Economy*, Oxford: Oxford University Press 2000.
- "Economic Bulletin" (2002).

- Eliasson G, Fölster S., Lindberg T., Pousette T. and Taymaz E. (eds.), *The Knowledge Based Information Economy*. Stockholm: The Industrial Institute for Economic and Social Research 1990.
- Etzkowitz H., MIT and the Rise of Entrepreneurial Science, London: Routledge 2002.
- Etzkowitz H., Leydesdorff L. (eds.), *Universities and the Global Knowledge Economy: A Triple Helix of University-Industry-Government Relations*, London: Pinter 1997.
- Etzkowitz H., Leydesdorff L., *The Endless Transition: A "Triple Helix"* of University-Industry-Government Relations, "Minerva" 36(1998), pp. 203-208.
- Etzkowitz H., Leydesdorff L., *The Dynamics of Innovation: From National Systems and "Mode 2" to a Triple Helix of University-Industry-Government Relations*, "Research Policy" 29(2), 2000, pp. 109-123.
- Etzkowitz H., Webster A., Gebhardt C. and Terra B. R. C., *The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm*, "Research Policy" 29 (2), 2000, pp. 313-330.
- Foray D., Freeman C. (eds.), *Technology and the Wealth of Nations: The Dynamics of Constructed Advantage*, London: Pinter 1993.
- Freeman C., Technology Policy and Economic Performance: Lessons from Japan. London: Pinter 1987.
- Freeman C., *Japan, a New System of Innovat*ion, [In] G. Dosi, C. Freeman, R. R. Nelson, G. Silverberg and L. Soete (eds.), *Technical Change and Economic Theory*, London: Pinter 1988, pp. 31-54.
- Freeman R., Does Suppression of Labor Contribute to Economic Success? Labor Relations and Markets in East Asia, Cambridge, Mass. and London: Harvard University and London School of Economics 1993.
- Growth, competitiveness and jobs priorities for the European Semester 2013. Presentation of J.M. Barroso, President of the European Commission to the European Council of 14-15 March 2013 (http://ec. europa. eu/news/pdf/sg. 2013-00286-01-04-eu. tra-00.pdf., access: 24.01.2014).
- Hall P. A., Soskice D. W. (eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press. 2001.
- Hayek F., *The use of knowledge in society*, "American Economic Review" 35(1945), pp. 519-530.

- Hayek F., *Individualism and Economic Order*, Chicago: The University of Chicago Press 1948, p. 33-57.
- Hughes T. P., *The Evolution of Large Technological Systems*, [In:] W. Bijker, T. P. Hughes and T. Pinch (eds.), The Social Construction of Technological Systems, Cambridge, MA: MIT Press 1987, pp. 51-82.
- Krauss G., Wolff H. G, Technological Strengths in Mature Sectors an Impediment of an Asset of Regional Economic Restructuring? The Case of Multimedia and Biotechnology in Baden-Württemberg, "Journal of Technology Transfer" 27 (1), 2002, pp. 39-50.
- Krugman P., Development, Geography and Economic Theory, Cambridge: MIT Press 1995.
- Krugman, P., *Where in the world is the "new economic geography"*?, [In] G. Clark, M. Feldman and M. Gertler (eds.), The Oxford Handbook of Economic Geography, Oxford: Oxford University Press 2000.
- Laafia I., Regional Employment in High Technology, Eurostat, 1999 (http://europa.eu.int/comm/eurostat).
- Leydesdorff L., *Epilogue*, [In:] L. Leydesdorff and P. v. d. Besselaar (eds.), Evolutionary Economics and Chaos Theory: New Directions for Technology Studies, London/New York: Pinter 1994, pp. 180-192.
- Leydesdorff L., The Challenge of Scientometrics: The Development, Measurement, and Self-Organization of Scientific Communications, Leiden: DSWO Press/Leiden University 1995.
- Leydesdorff L., A Sociological Theory of Communication: The Self-Organization of the Knowledge-Based Society, Parkland, FL: Universal Publishers 2001.
- Leydesdorff L., Cooke P. and Olazaran M., *Technology Transfer in European Regions: Introduction to the Special Issue*, "Journal of Technology Transfer" 27(1), 2002, pp. 5-13.
- Leydesdorff L., Etzkowitz H., Can "the Public" Be Considered as a Fourth Helix in University-Industry-Government Relations? Report of the Fourth Triple Helix Conference, "Science and Public Policy" 30(1), 2003, pp. 55-61.
- Lucas R., NBER (The National Bureau of Economic Research) Paper, Summer 2002.
- Lundvall B. A., Innovation as an Interactive Process: From User-Producer Interaction to the National System of Innovation, [In] G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete (eds.), Technical Change and Economic Theory, London: Pinter 1988, pp. 349-369.

- Lundvall, B. A. (ed.), National Systems of Innovation, London: Pinter 1992.
- Machlup F., *The Production and Distribution of Knowledge in the United States*, Princeton: Princeton University Press. 1962.
- Macro-economic report to the communication from the Commission Annual Growth Survey 2013, COM 750 final, Brussels, 28.11.2012.
- Marshall A., Principles of Economics, London: Macmillan 1916.
- Nelson R. R. (ed.), Government and Technical Progress: A Cross-Industry Analysis, New York: Pergamon 1982.
- Nelson R. R. (ed.), *National Innovation Systems: A comparative study*, Oxford and New York: Oxford University Press 1993.
- Nelson R. R., Winter S. G., *An Evolutionary Theory of Economic Change*, Cambridge, MA: Belknap Press of Harvard University Press 1982.
- Nonaka I., Takeuchi H., *The Knowledge-Creating Company*, Oxford: Oxford University Press 1995.
- OECD, The Measurement of Scientific and Technical Activities: "Frascati Manual", Paris: OECD 1963, 1976.
- OECD, The Residual Factor and Economic Growth, Paris: OECD 1964.
- OECD, The Knowledge-Based Economy, Paris: OECD 1996.
- OECD, S&T Indicators: Benchmarking the Knowledge-Based Economy, Paris: OECD 1999.
- OECD/Eurostat, Proposed Guidelines for Collecting and Interpreting Innovation Data. "Oslo Manual", Paris: OECD 1997.
- Ohlin B., *Interregional and International Trade*, Cambridge: Harvard Business Press 1993.
- Pavitt K., Sectoral patterns of technical change: towards a taxonomy and a theory, "Research Policy" 13(1984), pp. 343-73.
- Penrose E., *The Theory of the Growth of the Firm*, Oxford: Oxford University Press 1959, 1995.
- Porter M., *The Competitive Advantage of Nations*, New York: The Free Press 1990.
- Porter M., On Competition, Boston: Harvard Business School Press 1998.
- Quéré M., Knowledge dynamics: biotechnology's incursion into the pharmaceuticals industry, "Industry and Innovation" 10 (2003), pp. 255-273.
- Romer P., *Endogenous technical change*, "Journal of Political Economy" 98(1990), pp. 338-354.
- Rosenberg N., *Perspectives on Technology*, Cambridge: Cambridge University Press 1976.

- Sahal D., *Patterns of Technological Innovation*, Reading, MA: Addison Wesley 1981.
- Sahal D., *Technological Guideposts and Innovation Avenues*, "Research Policy" 14(1985), pp. 61-82.
- Schumpeter J. A., *Capitalism, Socialism and Democracy*, London and New York: George Allen & Unwin Ltd 1976.
- Schumpeter J., *The Theory of Economic Development*, Oxford: Oxford University Press 1911.
- SEC(2011) 1428 final Volume 1, Commission Staff Working Paper Executive Summary of the Impact Assessment Accompanying the Communication from the Commission "Horizon 2020 -The Framework Programme for Research and Innovation", Brussels, 30.11.2011.
- Teece D., Pisano G., *The dynamic capabilities of firms: an introduction*, "Industrial and Corporate Change" 3(1996), pp. 537-556.
- Whitley R. D., *The Intellectual and Social Organization of the Sciences*, Oxford: Oxford University Press 1984.
- Whitley R. D., *National Innovation Systems*, [In:] N. J. Smelser and P. B. Baltes (eds.), International Encyclopedia of the Social and Behavioral Sciences, Oxford: Elsevier 2001, pp. 10303-10309.
- Wójnicka E., Interactions in the innovation process as a factor of competitiveness of Companies, 2010
- (source: http://www.4pm.pl/artykul/interakcje\_w\_procesie\_innowacyjnym\_jako\_czynnik\_konkurencyjnosci\_przedsiebiorstw\_czesc\_1-37-54.html).

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# Evolution of the Cohesion Policy Financing Resulting from Multiannual Financial Frames 2014-2020

#### **Abstract**

In general the amounts devoted to financing of the EU activities in the current Multiannual Framework for 2014-2020 have increased as compared with the former Financial Perspective 2007-2013. At the same time the structure of the European General Budget has changed and the priorities, conditions of allocations and the use of money have been altered. The article points at these changes showing what is new and in what way the new elements of financing European public policy are tailored to increase the effectiveness of allocated money. It also shows the new financial instruments, their allocations and frames for further changes.

**Keywords:** Cohesion policy, the EU budget general, the EU public finances, Multiannual Financial Frames, Strategy Europe 2020, Growth and Stability Pact, EMU

### Introduction

The funding available in the European General Budget in consecutive years 2014-2020 is higher than in the previous period of 2007-2013. This is happening regardless of the growing number of member states, where the latest members were relatively poor in comparison with the "Old Members". Moreover, the budget is higher despite the low rate of growth in the European Union (EU) since

2009, which did not cause increase of financial obligations towards the budget. At a first glance this seems to be a specific phenomenon which is difficult to explain using economic reasoning. Let us start with the figures showing the growth of public finances in the EU.

Table 1. Commitments of the MS towards financing the budget in 2014-2020 in million euro (current prices)

2014	2015	2016	2017	2018	2019	2020
134318	135328	136056	137100	137866	139078	140242

Source: Eurostat.

The dynamics is not high but the data is given in absolute terms what is evidenced by the use of current prices. At the same time the rate of inflation is relatively low which in practical terms leads to the conclusion that the amounts of money devoted to allocation grow. This information should be accompanied by additional explanation that economists are discussing the policy adjustments in conditions of deflation<sup>1</sup>, where they show what the sources of it are and how to get used to living in an economy in which prices fall. This information increases the faith that even more money is available as the rate of growth of prices is not only slow but prices decrease. This means that with a similar amount of money one can buy more, which means that in relative terms he/she is richer although his/her pay does not grow. According to theories of rational expectations, inflation was stimulating consumption as consumers believed that in a short time prices will go up and everything will cost more. In such circumstances it was better to buy everything earlier and pay less than after some time paying more. This suggests that economists are scared of disinflation as expecting prices to fall – consumers will postpone their decisions of purchasing goods as they expect that they will cost less in a short

<sup>&</sup>lt;sup>1</sup> Ch. Farell, *Deflation: What happens when prices fall?*, New York: Collins 2004; A. G. Shilling, *The age of deleveraging: investment strategies for a decade of slow growth and deflation.* Updated edition, new York: Willey & Sons Inc., Hoboken 2013, p. 273-310.

time. This approach can be viewed also from another angle. The reaction of consumers will depend on their level of incomes, preferences of their choices and saturation of the market. Different reactions can be seen in different OECD markets (Japan is in recession, the same as the rate of growth is low in Germany, France or a number of other economies. At the same time there is strong demand to adjust salaries to productivity, which stimulates austerity measures and is seen as a politically unpopular move which can change political choices in those states. At the same time other states are not demanding salary reductions but on the opposite – they are offering some salary increases and promotion. In both cases decisions are made carefully and slowly. A perspective is given of cuts in taxes which can leave more money for saving, consumption or investments. All three are considered as stimuli of the economy and the rate of growth.

Table 2. Structure of the Multiannual Financial Frames and their change between 2007-2013 and 2014-2020 (mln current prices)

Years	1a	1b	2	3	4	5	6
	Competitiveness for growth and jobs	social and territorial	Preservation and management of natural resources	Citizenship, freedom and justice	EU as global actor	Admini- stration	Compensation
2014- 2020	91541	355248	420682	12396	56815	56503	901
2007- 2013	125614	325149	373179	15686	58704	61629	27

Source: Eurostat.

The amounts in current prices for period 2014-2020 are higher than for 2007-2013<sup>2</sup>. The growth of allocations can be also seen in case of "Preservation and Management of Natural Resources" and "Compensation". All the mentioned allocations have gained, the

http://ec.europa.eu/budget/biblio/documents/2014/2014\_en.cfm#execution\_use

remaining ones have lost. Nevertheless, the allocations have to be distributed to a growing number of states. Moreover, the number of states during the current Financial Framework can grow further. The current number of Members is 28 and additionally other 6 are officially considered to be candidates for such a status. Those are: Albania, Iceland, Macedonia, Montenegro, Serbia and Turkey. It should be underlined that the growing number of Member States does not always have to result in decreasing transfers for the former Members. This is so despite fixed level of revenues, which are defined in the current Multiannual Financial Framework.

There is a number of factors which result in decreasing transfers but at the same time there are also factors which limit the fall of such transfers. The factors which can result in decreasing the transfers are as follows:

- ☐ The rate of growth of the economy; when it grows, the states are becoming richer and as such are entitled to lower transfers;
- The average income per capita decreases with increase of the number of Member States which represent a lower level of incomes per capita below the average;
- Small states with limited number of citizens and in result limited level of the GDP have relatively low limit of absorption of the possible transfers from the EU General Budget;
- □ Inflation can also result in diminishing the value of transfers;
- □ Increasing difficulty in meeting the requirements of the EU in preparing programs that can be financed with the sources gathered in the European General Budget;
- Meeting the conditions in which money from the European General Budget can be used, which includes also the priorities defined in the European Strategy Europe 2020;
- □ Depreciation of euro in case of states outside the EMU;
- □ Appreciation of the national currency in a state outside the EMU³.

Conditions which can increase the value of transfers from the General Budget of the European Union are as follows:

The depreciation of euro and appreciation of the national currency can happen in parallel. The level of transfer in such a case depends on proportions between the changes of the values of the two currencies.

- □ Disinflation in the economy of a recipient state;
- □ Depreciation of the national currency of a state outside the EMU;
- Appreciation of euro, not followed by increase of prices, or followed by increase of prices but at a slower rate;
- □ Restructuring of the economy of the member state which follows the guidelines given in the Strategy Europe 2020;
- ☐ Engagement of member states in European Neighbourhood Policy or in participation of the regional programs which include a number (two or more) of border states.

The two lists of specific conditions clearly show that a country which desires to get more from the budget is obliged to meet certain conditions which are relatively clearly designed in the documents which were issued in the EU after the crisis of 2008.

## 1. General frames for the European Union financial allocations and the share of Cohesion Policy in it

The total EU allocations of Cohesion Policy for 2014-2020 in mln euro in current prices differ among states. The differences derive from the level of development of individual economies, resulting in differences of incomes per capita, levels of GNP as well as the introduced limits for the transfers. They also take into account regions with high or low density of inhabitants followed by such macro parameters as the unemployment rate, regions where the production goes through a process of restructuring resulting from closing down of certain branches of production, which lose competitiveness or are no longer able to meet the competition challenge (production of household equipment) or environmental policy requirements (coal mines or steel mills).

States which are beneficiaries of Cohesion Policy (CP) can be divided into several groups:

I. Old member states with relatively high CP transfers. This group is not homogenous and can be divided into relatively big and rich economies, which go through a deep structural change (i.e. Italy,

France and Germany) as well as so called former peripheries or "Poor South" (i.e. Greece, Portugal, Spain<sup>4</sup>);

- II. Old member states with relatively small CP transfers. This group can be further divided into small economies (i.e. Cyprus, Malta, Luxembourg), rich economies (i.e.: Sweden, Holland, Belgium, Finland, Denmark, etc.)
- III. New member states can be also divided into different categories taking into account the value of allocations of CP in the years 2014-2020. Big allocations are foreseen in the case of Poland, which is the biggest economy in the group of states which joined the EU in 2004 and afterwards. This country is followed by economies which try to overcame a development gap, resulting in the relatively lowest income per capita in the EU comparing with the average. Those are: Bulgaria and Romania. There is also a group of relatively small states which can be represented by Lithuania and Latvia. There is also a group of medium-small states represented by the Czech Republic, Hungary, Slovenia. There are also small and medium states which gained a relatively high allocation from CP, which embrace such markets as Estonia or Slovakia.

In general when the first divide of money was made in 2013 and accepted by the member states which represent different interests, needs, and used individual arguments in their negotiations – all EU member states seemed to be satisfied with the decisions made by the European Commission<sup>5</sup>. The Table below shows how this was achieved as satisfaction of all states seemed to be a difficult task to meet from the very beginning. The negotiations were dramatic and they were severed at beginning in November 2012, when a proposal of two budgets was put on the table by a group of the EMU members.

<sup>&</sup>lt;sup>4</sup> Ireland is geographically included into this group but does not benefit any longer in the same way as Spain or Greece as the per capita income in this state has increased over the last decade to a level which causes the reduction of such transfers.

http://ec.europa.eu/budget/biblio/documents/fin\_fwk1420/fin\_fwk1420\_en.cfm#draftcouncilregulation1

Table 3. Allocations from the EU general budget in the MFF 2014-2020

State							
Gains in transfers							
Germany	Angela Merkel represents the biggest single net payer to the EU General Budget. She demanded cuts and cuts were made.						
United Kingdom	D. Cameron represents a net payer and society sceptical and critical to the European integration. His strategy was built upon cuts which in result were applied.						
Poland, Slovakia, Romania	The countries in this group achieved within Cohesion Policy more than in the former Financial Perspective 2007-2013. The approved solution creates conditions to overcome the development gap in comparison with the level of development of the Old Member States.						
Lithuania, Slovakia, Bulgaria	The states in this group will obtain support for their nuclear power plants. Ignalin (Lihuania) 400 mln for years 2014-2020 and respectively Bohunice (Slovakia) – 200 mln euro; Kozloduy (Bulgaria) – 260 mln euro.						
Spain	M. Rajoy kept the status of a net beneficiary for his state.						
Greece, Spain, Ireland, Portugal	States which have deeply experienced the financial crisis obtain support for their economies in area of job creation.						
Holland, Denmark, Austria	Leaders of those states obtained limited decrease of their financial obligations towards the EU General Budget. This solution is better in comparison to the one offered earlier in November 2012.						
Austria, Finland, Sweden	Received additional sources within Cohesion Policy, in agreement with the conditions of accession to the EU in 1995.						
	Keeping the previous levels of transfers						
Italy	M. Monti got some additional transfers for Italian agriculture.						
	Lower transfers						
France	F. Hollande obtained more sources within the CAP, which was followed by consecutive reduction of transfers within Cohesion Policy. The "British Rebate" was not eliminated, and such a goal is one of the aims of the French Diplomacy. France has lost the position of the biggest beneficiary of the net recipient from the EU General Budget.						
Czech Republic, Hungary	P. Neczas and V. Orban both received less within the transfers of Cohesion Policy in comparison with their previous demands. Nevertheless, the two leaders obtained special support above the level which was previously decided in the first draft of the allocation proposal.						

Source: Based on Conclusions (Multiannual Financial Framework 7/8 February 2013, ECU 37/13 and "Gazeta Wyborcza" 9-10.02.2013, p. 3.

The presented balance sheet does not cover allocations to all of the EU member states. It illustrates what type of changes were introduced in the case of the new member states, states with which Poland is compared (Hungary and the Czech Republic as well as Slovakia). Also some changes were shown in the case of the main net contributors to the EU budget and the net beneficiaries from the group of the EMU states. The Table does not inform about Greece, a state which gets a strong financial shot from the macrostabilization program controlled by the European Commission and the IMF.

The share of Cohesion Policy dominates the structure of the allocations, which can be seen in Table 2. All member states tried to receive more within the allocations foreseen in this area. The second area which can be used actively in changing the structure of the national economies of the EU member states is competitiveness and creation of jobs<sup>6</sup>. The proportions between 1a (competitiveness) and 1b (cohesion) are given below.

Table 4. Title 1a and 1b in proposal of the Multiannual Financial Frames 2014-2020 approved at the summit held 7/8.02.13

1a. Competitiveness supporting creation of jobs (in mln euro, prices of 2011)								
2014	2015	2016	2017	2018	2019	2020	2014-20	
15605	16321	16726	17693	18490	19700	21079	125614	
1b. Economic, social and territorial cohesion (in mln euro, prices of 2011)								
44678	45404	46045	46545	47038	47514	47925	325149	

Source: Conclusions WRF. EUCO 37/13 CONCL3. Brussels 8.02.2013.

The allocations to individual "envelopes" and states do not mean that all available money will be used by a specific state in order to develop, restructure, create jobs or increase employment. The requirements of the European Commission are very clear but a state, despite preparing a program which can be approved by the Commission, has to meet a number of additional requirements.

<sup>6</sup> http://europa.eu/rapid/press-release\_MEMO-13-1004\_en.htm

# 2. Priorities defined within the policies supporting sustainable growth and the Europe 2020 Strategy

The Europe 2020 Strategy<sup>7</sup> underlines that 2010 has to be a new turning point for Europe, which is marked by the departure from the 2008+ crisis and the replacement of Lisbon strategy by a new one which defines in a more precise manner all the requirements and priorities for the applied economic policies. It also introduces new instruments which help to evaluate if the state follows the guidelines marked in the strategy or only declares a move towards a directions marked by it.

The strategy defines three priorities which are considered as mutually enforcing. Those priorities are as follows:

- Smart growth, which is based on the assumption that development in the current stage of advancement of structural changes in Europe should be built upon knowledge and innovations;
- Sustainable growth which is not limited to environmental issues but, including them, looks at growth from a wider perspective which embraces such areas as efficient use of resources, green economy, enhanced competitiveness;
- Inclusive growth, putting an end to high unemployment rates especially in the group of young generations as well as in the case of the elderly people whose retirement age is being prolonged. This goal is linked with the territorial and social cohesion.

In the launched document the European Commission defines where it wants to see the EU in 10 years after applying the strategy and its goals. This point of destination is characterized by a number of features, which are called as flag or headline targets. Those targets embrace such parameter characteristics:

A strategy for smart, sustainable and inclusive growth -Europe 2020, Communication from the Commission, COM (2010) 2020, Brussels: European Commission, 3.3.2010.

- □ Employment of 75% of citizens aged between 20-64;
- □ R&D investments reaching the 3% threshold of the GDP share;
- ☐ Meeting the climate-energy targets (including 30% reductions of emissions);
- Low ceiling of 10% of those who end their education early, followed by the increase of tertiary education to 40%;
- Decreasing by 20 mln the number of people in Europe who are defined and seen as "poor".

The European Commission follows the approved instruments which were introduced in order to control the macroeconomic situation in the member states. This covers the European Semester, six-pack, two-pack. A few words are necessary to explain what was introduced by the mentioned instruments and how the national budgetary and economic policies are controlled on the EU level.

A team headed by Herman Rompuy, prepared a Report on solutions which can support and strengthen the Growth and Stability Pact (GSP). The European Commission launched six new legal regulations which were labelled as a "six-pack". These regulations were passed through the European Parliament in September 2011. The "six-pack" covers six legal regulations which in practice mean fiscal policy control increase. Their aim is to strengthen the applied procedures which decrease the budgetary deficit and public debt. The "six-pack" consists of five regulations and one directive. The procedures introduced by the "six-pack" mean continuation of integration deepening and they strengthen the macrostabilization policy. These regulations are not the only solutions which were introduced to enforce GSP. The "two-pack" and the European Semester, followed by the banking union, supplement the New conditions introduced by the "six-pack". All new regulations and conditions enable issuing euro-obligations as well as bring about the concept of convergence and competiveness instrument. Strengthening the policy introduced within the EMU simplifies and accelerates the use of sanctions, applied to member states which injure the budgetary discipline. The new solutions lead towards an automatic use of sanctions towards states which violate the discipline.

Experts expect the continuation of the discussion on the facilitation of solutions improving methods applied in supervision over the finances of the member states. Nevertheless, the concentration of effort will be focused mainly on the EMU states<sup>8</sup>. The experts estimate that the approved instruments are important for the financial supervision, while they do not eliminate the threat of destabilization of the financial market, introducing only solutions able to scale down the expected consequences.

The control regulations concerning fiscal policy support instruments which were introduced by the GSP. They are necessary in the case of international relations built upon widened and deepened interdependence of the EU member states, which should lead towards transmission of closer ties among their economies. The new reform labelled as a "two-pack" entered into life on the 30 May 2013. It introduces solutions increasing higher transparency in budgetary decisions and leads towards enhanced coordination of policies in the EMU. This concerns the 2014 budget. The name of "two-pack" results from passing two-consecutive directives with some political impact. Those are: IP/12/1272; MEMO/12/909.

The legislations which are introduced by the "two-pack" are all related to the EMU members. They can be considered a solution which reforms the GSP. They allude to the "six-pack" as well as to the European Semester, which serves as a tool helping to coordinate economic policies of the EU member states. The first of the two regulations refers to all EMU member states and introduces solutions addressed to states being subject to the fiscal policy repair procedure. In other words, the regulations refer to states under the Excessive Budget Deficit Procedure (EBDP). The second regulation defines the rules for strengthening the surveillance in the EMU states, which experience serious difficulties with reducing the budget deficit. This supervision can be applied in states which use financial support in their economic policy by means of tools available for that specific purpose in the EU

A. Gostyńska, P. Tokarski, Reforma zarządzania gospodarczego w Unii Europejskiej - małe kroki wobec dużych problemów?, "Biuletyn PISM" 94(843), 2011.

and IMF. It is also addressed to those EMU states which are in the process of departing from the financial aid programs. In case of the former ones, the introduced solution is applied in order to eliminate the return of problems after the surveillance termination.

The solutions introduced within the "two-pack" enable budgetary coordination and surveillance, which are necessary in the EMU and increase the interdependence of the member states in the economic area. The tools introduced by the regulations can bolster up not only the EMU financial stabilization but are also aimed at budget consolidation and closer coordination of the budgetary policies. The above mentioned expected effects of the "two-pack" application are pointed at reinforcement of the EMU economic component.

The EMU budgetary policy built up is based on a common budgetary agenda and common budgetary rules applied in the EU member states which have introduced euro to circulation on their national markets. This embraces three following stages:

- I. By the end of April each year, (precisely till 30.04), all EMU members are obliged to publish their midterm plans which include also the stabilization perspectives. These plans should also cover priorities concerning employment and the dynamics of growth for the nearest year. The plan of the reforms is seen as an important element of such a document. Reforms should refer to the priorities included in the strategy Europe 2020. The contents of such a document should be coherent with the next step which is the preparation of the information on the state of the economy submitted to the EC within the procedure of the European semester.
- II. By the middle of October every year, (precisely till 15.10), the EMU member states are obliged to publish a project of their budgets for the next year;
- III. By the end of every year, (precisely to 31.12), the EMU member states are obliged to approve their budgets for the next year.

The "two-pack" means that budget projects of the EMU states are reviewed by the European Commission. The reviewing procedure

has to be completed by the end of November every year (precisely till 30.11). In the case of any critical remarks the member state is obliged to change its primary project of the budget. The opinions of the European Commission are publicly accessible, which means in practice that they are available on the website. The discussion on the budget is planned to take place in autumn, which means that it divides the period of two semesters. The integrated supervision is to guarantee consistency of the planned processes and decisions concerning the budget and on wider scale the contents of the economic policy. In case of the EU member states which are subject to the EBDP a system of monitoring is introduced. Such a solution is seen as an enforcement of SGP. The scale and scope of monitoring as well as the applied form of surveillance are coordinated with the state of its financial destabilization.

The "two-pack" falls into the category of legal solutions, which introduces part of the fiscal regulations into the EU legislation. This concerns the requirement of the Economic Partnership Program (EPP) preparation and introduction of ex ant coordination of plans prepared by the EMU member states concerning the emission of debt securities on the capital market.

The solutions introduced by the "two-pack" supplement GSP and the European semester. Using the "two-pack" as a background the Commission will be able to monitor directly, from a short distance, the member state's financial policy. The law introduced here supplies the European Commission with the new competences which are able to bring back stability if properly and consequently applied and met with adequate response.

The European Semester is a process which was introduced in 2011 and brings about coordination strengthening of the economic policies of the EU member states. This solution leads to control of the planned policy, reforms, macroeconomic parameters and planned methods to achieve the designed goals. This also covers the fulfilment of economic policy presented in Europe 2020 strategy. The approval by the European Commission of plans designed for the consecutive year – according to the New legislation and procedures introduced by the new regulations - became a new step in obtaining the financial sources from the

European general budget. The process of policy coordination strengthening covers three parallel activities which are mutually intertwined and as such should be not only coherent but also interrelated. Those activities cover: (1) macroeconomic surveillance (2) thematic coordination (3) fiscal supervision. The first full cycle prepared with the use of the new solutions started in 2011. After that year the procedure was repeated each year in periods from January to June.

The period is too short to evaluate properly the results of application of such procedures and new legal regulations. What can be said is relatively simple but at the same time optimistic. States until now have kept the dates and supplied the Commission with the required documents – all in time. The evaluations made by the Commission experts have been submitted and printed publicly. The member states follow the general guidelines as well as remarks and advice formed in the individual evaluations.

## 3. What should be done in order to make full use of the available moneys

On the side of expenditures, the EU budget covers six elements, which are further divided into smaller, more detailed allocations. Sources allocated to investments stimulating growth and creation of jobs are estimated in the MFF at 313 197 mln euro, which is divided among all the regions according to the level of their development:

- (a) The total amount of 164 279 mln euro is allocated to regions which represent a lower level of development; 31 677 mln euro is allocated to regions which are in the process of structural changes; 49 492 mln euro is devoted to more developed regions; 66362 mln euro is supplied to member states which are eligible to use the sources available in Cohesion Fund.
- (b) Total amount of 1387 mln euro additionally is allocated to regions defined in art. 349 of the Treaty and Northern regions, which meet the requirements of low inhabitancy density, formulated in art. 2 of the 6th Protocol of Accession Treaty for Austria, Finland and Sweden.

The allocation for territorial cooperation in Europe received a total amount of 8948 mln euro, which is divided as follows:

- (a) General amount of 6627 mln euro is devoted to trans-border cooperation;
- (b) 1822 mln euro is allocated for international cooperation;
- (c) 500 mln euro can be used for activities defined as interregional cooperation.

The methods approved for the allocation of sources from the cohesion funds are also not simple. Nevertheless, those methods can be labelled as very transparent. The applied methods are similar to those which are used in the case of calculation and definition of the availability of the sources. The total amount of sources available for each member state is obtained by multiplication of an average intensiveness of financial aid estimated at 48 euro by the number of citizens of that state. Before the level of allocation is defined - each of the member states, eligible to make use of the sources calculates the theoretical allocations, which are defined by number of citizens, their wealth, size of the territory. This calculations have to meet the conditions, which are presented below:

- □ The calculation is made with the use of a mathematic average of the number of inhabitants and the territory counted as a share of the total number of inhabitants and territory of all of the EU member states. In case when the share of inhabitants exceeds its share in territory by 5 or more, which will prove high density of inhabitants, the country with such result can use in its calculations only the density indicator without taking into account the second indicator.
- □ The correction of the obtained shares calculated in percentage points should take into account the indicator of 1/3 of the percentage share by which GNP per capita is higher in this state in the period 2008-2010 or lower in comparison to the average of per capita GNP of all the EU member states eligible to use those allocations (it is assumed that the average is 100%).
- ☐ As it is necessary to meet the needs of transport development and linked to it telecommunication infrastructural development

which is followed by needs to protect the environment of the new member states who joined the EU in 2004 and after - a higher share of those states in the cohesion fund is taken into account. This means an approval of allocation of 1/3 of the total amounts with consideration of the ceilings rule for the structural and cohesion funds, which follow the accepted conditions of such clipping.

- States which were fully eligible to make use of the sources from the Cohesion Fund in the years 2007-2013, but have the nominal level of their GNP per capita higher than 90% of the average for the EU-27 can make use of the support from the cohesion fund in a transition period and on special conditions. This support will be 48 euro per capita in 2014. With the time passing this support will be gradually reduced up to full elimination in 2020.
- The approved conditions cover also a mechanism of cutting the transfers after they reach a certain level. The mechanism, which was used here is called transfers capping.

Special financing conditions and regulations are introduced for territories with low density of inhabitants, territories which are defined as remote and also for islands. In case of regions which are qualified as remote and with low density of citizens, falling into NUTS2, a special allocation is foreseen. In such a case, an amount of 30 euro per person per year is available. Transfers based on such calculations will be done to all eligible regions in proportion to inhabitants. The calculation of the due amounts has to take into account the special status of island territories.

The rules of calculating the ceilings for individual states is an instrument which limits financial transfers for them, assuming that their level of development enables them to finance the solutions planned for application in the national policies on their own or with some limited support of the EU budgetary funding. The solution approved here supports additionally the mechanism of incomes distribution among richer and less developer states of the EU. This concerns internal solutions in each of the member states as well as solutions which shape the international transfers from the EU general

budget. This is achieved thanks to the introduction of a maximum ceiling for each member state at the level of 2,5% of their GNP. This ceiling will be applied in the form of a year to year calculation and is supposed to reduce the transfers with the exception of less developed regions and territorial cooperation. The idea behind this is to increase the effectiveness of allocations of the financial means at the disposal of the EU. For those states which joined the EU before 2013 and whose average GNP in the years 2008-2010 was below -1,0% the limits of transfers are increased by 10% in comparison to the remaining states. In practice such a solution leads to the ceiling of 2,59% of GDP. In addition to the introduced ceilings, it was agreed that allocations should not exceed 110% of the value of transfers for the years 2007-2013.

An interesting additional solution which was applied in the current MFF can be seen in the guarantees introduced as consequences of the 2008+ crisis. In practice such a solution introduces some restrictions in case of ceilings for the regions, whose GNP in 2007-2013 was below 75% of the EU-27 average. The minimal level of transfers in years 2014-2020 for investment supporting growth is defined as 60% of the earlier applied allocation within the stimulation of convergence processes in years 2007-2013.

Also the level of total minimal allocations of cohesion and structural transfers for individual states was decided at 55% of the level in 2007-2013. All remaining conditions formed in regulations have to be met, following the proportional rule applied in the cohesion and structural funds. All the limits are applied in case of all individual states with exception of financing one single goal, which is the territorial cooperation.

It is also taken into account that none of the transforming regions can receive less than it could have obtained being put into the category group of more developed regions. In order to define the minimal level of transfers it is approved that the method of allocations for developed regions is applied for all regions in which GNP per capita is below 75% of the EU-27 average.

Special allocations are foreseen for states, whose economies were most exposed to the EMU crisis which had a significant impact on lowering the standards of living of the inhabitants of such a country. Trying to meet the needs of states in this group additional allocations from the structural funds were foreseen in the following amounts:

- □ For Greece: 1,375 bln euro for more developer regions of the state;
- □ For Portugal: 1,0 bln euro, out of which 450 mln is addressed to more developer regions, while further 150 mln was allocated to Made, 75 mln for regions in transformation and 475 mln for less developed regions;
- ☐ For Ireland: 100 mln euro was allocated with indication of beneficiaries in the border, western and central regions of the state;
- □ For Spain: 1,824 bln euro, from which 500 mln was allocated for Estremadura;
- For Italy: 1,5 bln euro, out of which 500 mln was allocated for non-urban territories.

Also islands states got their own allocations. Malta and Cyprus will obtain – with the application of 48 point of the Final Conclusions of the summit - 200 mln and 150 mln euro respectably. Sources allocated to the two mentioned states come from investment into growth and job creation. Additional sources amounting to 50 mln were directed to Ceuta<sup>9</sup> and Melilla<sup>10</sup>. Remote territory of Mayotte<sup>11</sup> will receive 200 mln euro.

The conclusions from the summit include also some information concerning the necessity of introducing changes and at the same time meeting the need of long term development challenges of a number of regions. The additional allocations listed below are supposed to meet the needs of this type:

Spanish administration unit. City located in Africa on the tip forming the Strait of Gibraltar.

Town. Spanish administrative unit. Location in the north of Africa, eastern coast of Morocco.

French overseas department which consists of two Island Maori and Pamanzi. Geographic location in the northern part of the Mozambique Channel (between Northern Madagascar and Northern Mozambique).

- □ Belgium obtains 133 mln euro, from which 66.5 mln euro is allocated to Limburger, and 66.5 mln for Wallonia;
- ☐ Germany obtains 710 mln euro, from which 510 mln is allocated to former East German regions which went through structural convergence, further 200 mln is allocated to Leipzig;
- Despite the conditions given in point 45 of the summit conclusions, less developer regions of Hungary received allocation of 1.560 bln euro, while the Czech Republic was additionally allocated an amount of 900 mln euro (from which 300 mln was financed from the transfer dedicated to development of the agrarian areas). While less developed areas of Slovenia will be additionally allocated 75 mln euro, within the frames of structural funds.

The conclusions of the summit define also the obligations of the member states resulting from the financing rules of the European Development Fund. The levels of transfer ceilings for specific groups of states are defined here as well as the levels of ceiling of their financial obligations. Similarly as it was done in the previous Multiannual Financial Perspectives, the values of obligations as well as payments are given in the form of a share in cumulated GNP. Additionally, the financial obligations resulted from the approved external activities of the EU are defined in the document. Although such indicators vary in values for different years, it is worth presenting them as a form of specific guidelines for the whole framework of seven years. The total financial obligations amount to 1% of the cumulated GNP of the EU member states, while the total payments are estimated as lower, amounting to 0.95% of the cumulated GNP. This share is additionally valued up by the EU obligations undertaken outside the approved MFF. Here the obligations are estimated at 0,04%. This means that the full burdens linked with financing of the MFF which has to be shouldered by the member states of the EU amount to 1.04% for the whole seven-year period<sup>12</sup>.

<sup>12</sup> Communication from the Commission to the European Parliament, The Council, the European Central Bank, the European Economic and Social Committee, the

## 4. The case of Poland

The total value of allocations for Poland is estimated at 105.8 billion PLN for the years 2014-2020. Within EU Cohesion Policy – Poland will receive 72.9 billion euro in comparison to 69 billion euro in the former 7 year perspective. A decrease of 3.5 billion euro can be seen in the case of the allocations towards the development of the rural areas. These allocations are aimed at financing of the modernization of Polish village areas. This "loss" is to be compensated with an additional "award" in the form of direct payments for farmers. It is difficult to evaluate the mentioned changes only as positive. In longer run the subsidies within the CAP (Common Agriculture Policy) will have to be cut. Their increase today leads towards a perspective worsening of competitiveness of the sector. Subsidies can be seen as a source of artificially stimulated competitive advantage. A better solution would be to keep at the same level or increase the share of allocations for development of agricultural areas, and within it rural infrastructure, which could bring the work conditions of the Polish farmer closer to the conditions prevailing in Denmark or Holland. It can be said that Poland has obtained for its farmers a total amount of euro 28 billion (18 for direct payments and 10 for the development of rural areas), while in the former Multiannual Financial Perspective the allocation amounted to 27 billion (14 from that total amount for financing direct support and 13 billion euro for the development of rural areas). The development of infrastructure at the local level, which includes agricultural areas, can be financed from the sources allocated to the structural and cohesions funds.

Each state applying for the financial sources allocated for that purpose in the EU budget has to meet certain conditions. In the phase of financing of the member state also some new rules were introduced. The most important rules are as follows:

Committee of the regions and the European Investment Bank Annual Growth Survey 2015, COM (2014) 902 final, Brussels: European Commission, 28.11.2014.

- □ Submission and substantiation of the projects. Rules introduced in this area bring more discipline in the phase of preparation of the projects which should be guided by the priorities approved by the European Commission and the goals introduced in the Strategy Europe 2020;
- □ Rules of down payments transfers. The member state will obtain an amount from the general budget which does not exceed 1% of the allocation amount. This makes a difference in comparison with the conditions which were applied previously in the MFP 2007-2013, when the down payments were 7,5-10%<sup>13</sup>;
- The transfers are conditioned by meeting the macroeconomic requirements, known as convergence criteria.<sup>14</sup> The application of such solutions can lead towards limited use of amounts allocated for each member state when the convergence criteria in its economy are not fulfilled.

Defined levels of allocations from the EU general budget can accelerate structural changes of the Polish economy, increasing productivity, creating jobs and expanding the infrastructure. Correct and precise interpretation of the EU priorities seems crucial here. Solutions which are used for allocations of the EU financial sources have a distinct link between the realization of the strategy Europe 2020 and the transfers from the EU budget. Improvement of the use of

According to comments made by the Polish Euro-Deputies the past level of financial transfers from the EU budget allowed to keep the liquidity of the state's budget (Jan Olbrycht, Euro-Deputy Civil Platform, "Rzeczpospolita", 11.02.2013, p. 1.)

<sup>14</sup> Convergence criteria were introduced by the Maastricht Treaty in 1992. They are divided into fiscal and monetary criteria. Fiscal criteria are fixed and a permissible upper ceiling is introduced for the size of the budget deficit and public debt. Both indicators are measured in the form of percentage share in GNP. In the case of the budget deficit, the ceiling of -3,0% should not be surpassed, while in the case of the public debt this indicator is determined at 60% level. The monetary criteria concern the interest and inflation rates and are calculated with the use of the performance in this area of the best performing three states of the EU. The indicator is calculated with use of three economies best performing in this area.

financial sources requires deliberate choices which correspond to the strategic goals of Polish development which should be followed by their consequent realization.

According to the expert estimations, the Polish economy was growing quicker because of the EU transfers. The estimations of the EU allocation impact on the rate of growth of the Polish economy are relatively diversified, nevertheless they fall between 0,7-1,3% of this dynamics. The proper definition of the priorities can influence the further acceleration of the dynamics of economic growth in Poland, it can be seen as a neutral factor for growth, or simply curb the development.

Poland fulfils a number of conditions which decide about the level of transfers. Poland is a state in which GNP per capita is below 75% of the EU average, has a big number of inhabitants and a large territory. Above all, the Polish economy was growing in years of the financial crisis 2008+, which was linked with additional transfers from the EU's general budget. In such circumstances it should not be assumed that when the growth indicators are in the red – the economy can be allocated additional transfers and use them. The application of the new solutions concerning allocation of sources can result in limited possibilities of use of the allocated sources, which are available within different "envelopes" as in professional jargon the financial allocations are labelled. In sum, such a solution will mean that real and planned burdens for the budget within the transfers will be lower than their primarily foreseen levels. This will lead to the liquidity of the budget and the use of allocations in agreement with the national priorities. Nevertheless, they need to take into account the dynamics of changes which take place in the world economy, which requires taking into account the long-term development perspective. including the goals drafted in the Europe 2020 strategy. Points which concern employment, increase of qualifications, prolongation of the age when people retire, financing schooling, education and research development - seem to be crucial in this area.

#### Final remarks

Conclusions of the analysis can be grouped into a few groups of findings, which cover the changing environment of cohesion policy rules, changes in the structure and size of the allocations and finally new conditions in the area of mutual relations between the government and the European Commission in area of economic policies.

Let us start with the first group of the changing environment of cohesion policy rules. The newly introduced legislation brings new rules into application for the available allocations. There is a number of conditions a member state has to include into the project to make its own project matching the conditions which decide about the eligibility of the project to get the financial support from the Commission. In other words, to obtain the allocated money, a state and its government have to go through a process of surveillance of the applied and planned macro policy, scope and scale of the carried out reforms, their results and application of the projects which are built upon the Europe 2020 priority goals. Moreover, the applied solutions, on the one hand, seem to curb the individual activities of states which are considered as undermining the macro-stability of the EU. While, on the other hand, they are supposed to make the results of implemented decisions more coherent one to the other and thus make the economies of member states mutually more interdependent.

As far as the second group is concerned, which means the size of allocations, freedom to spend them, priorities considered in plans of using the money and finally the size of down payments. In general, the amounts of money available are higher than in the past and the structure of the budget is changed. Despite the fact that the crisis 2008+ did not undermine the financing of the EU budget nor from the side of state's obligation nor from the side of EU transfers, the main idea of reshaping the budget was guided by three goals: (1) savings, which diminish the state's obligations to the budget; (2) meeting the requirements of more effective use of the transfer than in the past; (3) looking into the future taking into account job creation, reduction of unemployment, inclusiveness, restructuring of

the economy, macro stabilization, competitiveness and innovations. All the mentioned solutions seem to be approvable and result from the observed practices of the member states. Illustrating this, one can mention that in numerous states the down payments of allocation transfers were used to keep the liquidity of the budget and not for changing the structure of expenditures.

In the third group of conditions one has to turn attention to introduced conditionality in fulfilling the conditions of being eligible to obtain the allocated amounts of money using them according to the priorities listed in the Strategy Europe 2020. The division of powers between the Commission and national governments allocates more powers to the European Commission in controlling the reforms, changes of the budget structure and methods applied to meet the macro economic and financial goals. The new solutions enable the Commission to control directly the policies applied in member states. The procedure is organized in such a way that the Commission can give advice and control how they were fulfilled by a member state in question. The coordination of the economic and financial policies by states creates new conditions in the EU, which enables closer linkages between applied policies and their coordination as well as introduces solutions which make the EU member states economies more interdependent.

In general, states received relatively big allocations. The division of sources has taken into account all diversified interests of member states. The allocations and introduced forms of control help member states to restructure their budgets, reform, stabilize the economy, create new jobs and move towards a smarter and more innovative phase of development.

## **References:**

A strategy for smart, sustainable and inclusive growth -Europe 2020, Communication from the Commission, COM (2010) 2020, Brussels, 3.3.2010.

- Conclusions Multiannual Financial Framework, 7/8 February 2013, ECU 37/13.
- Conclusions WRF, EUCO 37/13 CONCL3, Bruseles 8.02.2013.
- Communication from the Commission to the European Parliament, The Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank Annual Growth Survey 2015, COM (2014) 902 final, Brussels, 28.11.2014.
- Farell Ch., Deflation: What happens when prices fall, New York: Collins 2004;
- "Gazeta Wyborcza" 9-10.02.2013
- http://ec.europa.eu/budget/biblio/documents/2014/2014\_en.cfm#execution use
- http://ec.europa.eu/budget/biblio/documents/fin\_fwk1420/fin\_fwk1420\_en.cfm#draftcouncilregulation1
- http://europa.eu/rapid/press-release MEMO-13-1004 en.htm
- Multiannual Financial Framework, 7/8 February 2013, ECU 37/13
- "Rzeczpospolita", 11.02.2013.
- Shilling A. G., The age of deleveraging: investment strategies for a decade of slow growth and deflation. Updated Edition, New York: Willey & Sons Inc., Hoboken 2013.
- Gostyńska A., Tokarski P., Reforma zarządzania gospodarczego w Unii Europejskiej -małe kroki wobec dużych problemów?, "Biuletyn PISM" 94(843), 2011.
- Żukrowska K., Budżet ogólny Unii Europejskiej, Warszawa: WAiP 2009.
- Żukrowska K. (ed.), Kryzys finansowy 2008 + test dla stosowanej polityki. Metody przeciwdziałania i ich skuteczność, Warszawa: Oficyna Wydawnicza SGH 2013.
- Żukrowska K., *Unia Gospodarcza i Walutowa a zjawiska kryzysowe i ich im-plikacje globalne*, [In:] K. Żukrowska (ed.), Kryzys finansowy 2008 + test dla stosowanej polityki. Metody przeciwdziałania i ich skuteczność, Warszawa: Oficyna Wydawnicza SGH 2013.

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# Territorial Agenda 2020 – the Old/New Paradigm of European Union Territorial Cohesion

#### **Abstract**

The current Territorial Agenda 2020 (TA 2020) is a successor of the Territorial Agenda of 2007 which, in turn, strongly referred to the European Spatial Development Perspective from 1999. Since there is a significant connection of the current agenda with its predecessor, on the basis of the analysis of actions and results, many experts claim that it has become necessary to reorient EU cohesion policy. In practice, this means the necessity to change the paradigm of the development policy from compensatory to polarization and diffusion, and thus the reorientation of the objectives of closing the gap to obtaining benefits from the existence of diversity. It is also necessary to shape spatial planning in such a way which will create opportunities for the occurrence and development of functional relationships. The author of the study attempts to show that the TA2020 specifies a new approach to the EU territorial cohesion policy. It recommends a more strategic approach which requires many institutional adjustments and in the process of coordination and integration of EU policies. The TA2020, which essentially has intergovernmental and informal nature, cannot provide a sufficiently detailed, specialized and strong basis for such an ambitious project of achieving EU territorial cohesion. A major challenge, as the author demonstrates, is to coordinate and integrate territorial cohesion policy with other EU policies, especially those that have a clear spatial dimension.

**Keywords:** European Union, EU territorial cohesion, the concept of territorial cohesion, the Territorial Agenda 2020

## Introduction

Since 1986 cohesion policy has aimed to strengthen economic and social cohesion. Pursuant to the Treaty of Lisbon, territorial cohesion has become the third major component of cohesion policy of the European Union (Art. 174 of the Treaty on the Functioning of the European Union; hereinafter: the TFEU). This formal recognition of territorial cohesion as an area of shared responsibility of the EU and the Member States (Art. 5c TFEU) has serious consequences for the content and nature of decisions and decision-making processes at both these levels. The current Territorial Agenda 2020 specifies a new approach to EU territorial cohesion policy. It recommends a more strategic approach which requires many institutional adjustments and in the process of coordination and integration of EU policies. But the Territorial Agenda 2020, which essentially has intergovernmental and informal nature, cannot provide a sufficiently detailed, specialized and strong basis for such an ambitious project of achieving EU territorial cohesion. A major challenge is to coordinate and integrate territorial cohesion policy with other EU policies, especially those that have a clear spatial dimension, i.e. competitiveness, transport, maritime and fisheries. It should also be noted that the Common Strategic Framework for the programming period 2014-2020, determines actions aiming at the implementation of this new approach, but also those that can make it more difficult.

## 1. The genesis and the concept of territorial cohesion

According to Andreas Faludi territorial issues have grown in importance gradually with the development of the integration process. Under different names, implicit territorial cohesion policy has always been on the agenda of European integration. <sup>1</sup> It has always been in the sheer centre of the EU structural policy. It should also be

A. Faludi, Territorial Cohesion under the Looking Glass. Synthesis paper about the history of the concept and policy background to territorial cohesion, p. 6

noted that since the late eighties, the EC / EU has pursued the Trans-European Networks (TEN) programme whose task is to develop European transport and communication infrastructure, thereby creating the conditions for territorial integration growth in the area of the internal market. Another important course of action strengthening territorial cohesion is the support for inter-regional and inter-state cooperation, which in the EU financial perspective for 2007-2013 was formalized in the form of the third objective of EU cohesion policy, that is European Territorial Cooperation (ETC).

The discussion on territorial cohesion has intensified since the early nineties, and with the expansion of the EU by other states, the need to direct attention to the evolution of the European territory and institutionalization of this dimension of cohesion has become clearer. The current phase of the debate was initiated by broad consultations of the Green Paper on Territorial Cohesion presented by the European Commission on 6 October 2008.<sup>2</sup> The conclusions of these consultations were presented on 25 September 2009 in Brussels during the 1st evaluation seminar of the Green Paper entitled Territorial Cooperation and Territorial Cohesion. And the conference Cohesion Policy and Territorial Development: Make Use of the Territorial Potential! in Kiruna on 10-11 December 2009 initiated a series of meetings Territorial Cohesion and Urban Matters Seminar (TCUM Seminar) on the evaluation of the concept of territorial cohesion. In 2010 two seminars took place: the 2<sup>nd</sup> TCUM Seminar Geographic scales of policy intervention in Brussels in March and the 3rd TCUM Seminar Improving policy coherence on the ground in Brussels in July. The discussion on the role of the territorial dimension in cohesion policy led to the publication in April 2010 of a report on the impact of

 $<sup>(</sup>http://ec.europa.eu/regional\_policy/archive/consultation/terco/pdf/looking-glass.pdf).\\$ 

Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee of 6 October 2008. Green paper on territorial cohesion: Turning territorial diversity into strength, COM(2008) 616 final, Brussels: European Commission, 6.10.2008.

cohesion policy on local development.<sup>3</sup> In 2011, a team of researchers prepared an updated analysis of the EU territorial state and prospects as a base document for a new agenda.<sup>4</sup> It was presented at the informal meeting of ministers responsible for spatial planning and territorial development on 19 May 2011 in Gödöllő in Hungary.<sup>5</sup> During the meeting *Territorial Agenda of the EU 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions* was adopted.<sup>6</sup>

The above mentioned analysis of the EU territorial state and prospects from 2011 presents a comprehensive picture of the territorial structure and development in Europe. It emphasizes the diversity of European territories, confronts their differences and peculiarities; strengths and opportunities; weaknesses and burdens; trends and possibilities; provides a basis for strategic decisions taking into account the territorial aspects. It should be noted, at the same time, that the substantial part of the earlier analysis of 2007 did not lose its validity, but it had to be updated because of the territorial consequences arising from such important factors as the financial and economic crisis since 2008, the EU enlargement, changes in the energy market, growing demographic challenges, increased impact of globalization. Changes introduced by the entry into force of the Lisbon Treaty were obviously very important. But, as Paweł Churski states,

<sup>&</sup>lt;sup>3</sup> European Commission, Directorate General for Regional Policy, Cohesion Policy Support for Local Development. Best Practice and Future Policy Options. Final Report, Brussels, European Commission, April 2010.

The first analysis of this type was adopted as a document accompanying the Territorial Agenda of the EU 2007.

The Territorial State and Perspectives of the European Union 2011 update. Background document for the Territorial Agenda of the European Union 2020 presented at the Informal Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöllő, Hungary.

<sup>&</sup>lt;sup>6</sup> Territorial Agenda of the EU 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions. Adopted at the Informal Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöllő, Hungary (http://www.eu2011.hu/files/bveu/documents/TA2020.pdf).

even conclusions after this series of meetings and documents left considerable freedom in defining the concept of territorial cohesion.<sup>7</sup>

Undoubtedly the formal inclusion of spatial conditions to the definition and interpretation of EU cohesion constitutes a new quality. By this time, the space was treated only as a background for the analysis of the level of economic and social cohesion, or as a reference point for the spatial concentration of intervention actions by the designation of areas characterized by extremely low economic and social cohesion. The introduction of the third dimension of cohesion changed this quite traditional way of thinking. It was adopted as a principle that the territorial dimension of cohesion is to support and complement not very effective, although very expensive, strivings for the improvement of economic and social cohesion.

It should be noted that territorial cohesion is much more difficult to define than economic and social cohesion. Even the European Commission did not define it comprehensively in the Green Paper on Territorial Cohesion of 2008. Numerous expert panels also have not developed a uniform definition. The conclusion of the documents and discussions is that territorial cohesion both complements and reinforces economic and social cohesion. It is both a tool and a result of the achievement of economic and social cohesion. It includes activities aiming at achieving spatial order, that is improving the shortcomings of spatial development of a given area which improves the conditions for socio-economic development. This applies in particular to the development of the settlement system and network transport and telecommunications infrastructure, which should provide the optimum conditions for the functioning of socio-economic systems, but which also facilitate building of local connections increasing the chances of development of peripheral areas through the use of resources of central areas. Territorial cohesion means an increase in the level of territorial integration of an area by its closure and the reduction of the internal level of spatial imbalance.

P. Churski, Wyzwania polityki spójności a Strategia Europa 2020, [In:] K. Marciniak, K. Sikora, D. Sokołowski (eds.), Koncepcje i problemy badawcze geografii, Bydgoszcz: Wyższa Szkoła Gospodarki w Bydgoszczy 2011, p. 501.

Most frequently cohesion refers to the socio-economic phenomena analyzed at the interstate or interregional level. In conducting the analysis at the regional level, which now seems to be particularly important because of the dominant position of regions as economic policy subjects, the concept of cohesion should be interpreted primarily as cohesion of an intraregional system. Territorial cohesion at this level is mainly associated with the formation of networks (network organization of the region) ensuring the development of functional relationships which build social and economic complementarity of the regional system. Thus, the analysis of territorial cohesion refers to the state of development and structure of the settlement network and the communication infrastructure enabling the creation of a functional basis for the regional economy. Actions improving transport and telecommunications infrastructure of the region, and especially the state of urban infrastructure, create conditions for the development of the regional network organization and are treated as support for territorial cohesion.

Building of intraregional cohesion should lead to the complementarity of this system, but it does not always have to involve the levelling of differences in the plane of development occurring within its boundaries. Research shows that the condition for the achievement of this complementarity (cohesion) is such management of space which promotes the development of economic, social and technical relations conditioning, thanks to occurring functional relationships, the possibility of the development of the entire region in spite of the intraregional developmental differences.<sup>8</sup>

On the basis of the analysis of actions and results, many experts claim that it has become necessary to reorient EU cohesion policy. We should agree with P. Churski's statement that this reorientation is "connected with the lack of effectiveness of the existing compensatory

T. Marszał, I. Pielesiak, Spójność obszaru metropolitalnego w świetle powiązań infrastrukturalnych (przykład Łódzkiego Obszaru Metropolitalnego), [In:] T. Marszał (ed.), Rola polskich aglomeracji wobec wyzwań Strategii Lizbońskiej, Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN, vol. 70, 2008, pp. 180–196.

model and an attempt to look at the problem of cohesion through its functional perspective, giving the opportunity to base regional policy on the polarization and diffusion model".<sup>9</sup>

Moreover, as Grzegorz Gorzelak claims, coherence understood only in terms of compensation leads to a contradiction arising from the classic dilemma of regional policy: equality or efficiency. <sup>10</sup> In contrast, the functional perspective of coherence is not in contradiction with striving for competitiveness. Cohesion understood functionally and created in its three dimensions (economic, social and territorial) increases the competitiveness of the area understood as the sum of the competitiveness of enterprises and the competitiveness of their surroundings. This happens because cohesion significantly reduces the transaction costs of enterprises using well-functioning transport and communication links, the developing institutional environment and mobile labour resources characterised by a high level of human and social capital. As noted by Willem Molle, this approach requires the consent to the fact that the existence of cohesion does not necessarily mean the state of closing the gap, but only achieving a level of politically and socially acceptable diversification.<sup>11</sup> In practice, this means the necessity to change the paradigm of the development policy from compensatory to polarization and diffusion, and thus the reorientation of the objectives of closing the gap to obtaining benefits from the existence of diversity. It is also necessary to shape spatial planning in such a way which will create opportunities for the occurrence and development of functional relationships.

As noted by Danuta Hübner, Commissioner for Regional Policy in the years 2004-2009, the dilemma of coherent Europe or competitive Europe was evolutionary overcome mainly as a result of changes in the regional policy environment caused by processes of globalization and the EU enlargement. Durable cohesion can in fact be achieved only by integrating its dimensions. And the improvement

<sup>9</sup> P. Churski, op. cit., p. 501.

G. Gorzelak, *Fakty i mity rozwoju regionalnego*, "Studia Regionalne i Lokalne" 2(36), 2009, pp. 5-27.

W. Molle, European Cohesion Policy, London: Routledge 2007, passim.

of cohesion is conditioned by the improvement of competitiveness and economic growth. Furthermore, "the complexity of development strategies which need to build competitiveness based on the permanent ability to quick adaptation has greatly increased (...). And, in the conditions of the rapidly changing world, this requires good coordination and use of synergies among various policies serving to stimulate growth."<sup>12</sup>

It should be emphasized that such an approach to cohesion was in full compliance with the Lisbon Strategy implemented in 2000-2010, and is present in the Europe 2020 Strategy which has been in force since 2010, and it is even a necessary condition for the achievement of its objectives. Highly developed OECD countries lobby for such a polarization and diffusion approach.

## 2. Territorial Agenda 2020

The Territorial Agenda 2020 (TA2020) is a successor of the Territorial Agenda of 2007 which, in turn, strongly referred to the European Spatial Development Perspective from 1999. Since there is a significant connection of the current agenda with its predecessor, it is worth recalling some facts. The document *Territorial Agenda of the European Union Towards a More Competitive and Sustainable Europe of Diverse Regions* (the TA2007) was agreed on the occasion of the informal ministerial meeting on territorial cohesion and urban development organized on 24-25 May 2007 in Leipzig. The agenda did not have an obligatory character, but formed a strategic framework for European territorial development, including national spatial development policies. The overall objective of the TA2007 was to strengthen global competitiveness and sustainability of all regions of Europe by identifying and mobilizing their territorial potentials. The support of polycentric territorial development of the EU, especially

D. Hűbner, *Spójność i konkurencyjność – czy można je połączyć?* Referat na IV Kongresie Polskiego Forum Strategii Lizbońskiej, Warszawa, 13.10.2006 (europa.eu/rapid/press-release\_SPEECH-06-665\_pl.pdf).

in the new EU Member States, was to serve this purpose. The document also drew attention to the crucial role of territorial governance, understood as "an intensive and continuous dialogue between all stakeholders of territorial development", because it was assumed that territorial development should take place in the dialogue, including the business sector, the scientific community, natural environment, non-governmental organisations, the public sector.

Three main objectives of the European Spatial Development Perspective, which are still in force, were considered the foundation of the TA2007, namely:

- development of a balanced and polycentric urban system and a new urban-rural partnership;
- □ securing parity of access to infrastructure and knowledge;
- sustainable development, prudent management and protection of nature and cultural heritage.

The TA2007 was based on the *Guiding Principles for Sustainable Spatial Development of the European Continent* (CEMAT), approved by the Committee of Ministers of the Council of Europe in 2000. <sup>13</sup> Guided by these principles, the Agenda recommended to intensify the dialogue with neighbouring countries adjoining the EU. In addition, the TA2007 was connected with *Leipzig Charter on Sustainable European Cities* adopted on 24 May 2007 in Leipzig, which lists the integrated urban development as a task with a European dimension. <sup>14</sup> Thus, the TA2007, recognizing the importance of the urban dimension, covered a wider range of EU and national policies. The territorial and urban dimensions have become complementary and together constitute a coherent approach to the spatial aspects of EU and national policies.

Guiding Principles for Sustainable Spatial Development of the European Continent, CEMAT 9(2000).

Leipzig Charter on Sustainable European Cities (http://ec.europa.eu/regional\_policy/archive/themes/urban/leipzig\_charter.pdf).

The TA2020, in relation to the TA2007, did not introduce revolutionary changes, it is rather an adaptation to the current time frame of the most important strategic documents of the EU until 2020 and the latest developmental tendencies, with particular attention to the needs and specificities of the countries which joined the EU in 2004 and later.

The mentioned developmental tendencies were presented in the updated document *The Territorial State and Perspectives of the European Union* (2011, see footnote 108) and in the prepared by the Commission *Fifth report on economic, social and territorial cohesion* (so called The Fifth Cohesion Report, 2010), as well as in the Europe 2020 strategy.

The document TA2020 was divided into four parts: 1) Territorial cohesion as a common goal; 2) Challenges and potentials for territorial development; 3) Territorial priorities for the development of the EU; 4) Making EU territorial cohesion a reality. In the first part the Member States present a common understanding of the purpose and assumptions of the current paradigm of the EU development policy. As written in points 4 and  $\bar{5}$  of the document "The objective of the TA2020 is to provide strategic orientations for territorial development, fostering integration of territorial dimension within different policies at all governance levels and to ensure implementation of the Europe 2020 Strategy according to territorial cohesion principles." It is assumed that the inclusion of the territorial dimension is a prerequisite for the implementation of the Europe 2020 strategy and cohesion policy is "a key framework through which the EU can address territorial development challenges and helps unleash territorial potential at local, regional, national and transnational levels". Thus, the essence of the TA2020 is to strengthen territorial cohesion, and to make it the EU's development policy paradigm. The document points out that, in accordance with Art. 174 and 175 of the TFEU, the Union's policies and activities in all areas should contribute to increasing economic, social and territorial cohesion. From this, it follows that the bodies responsible for the development and implementation of sectoral policies should take into account the principles and objectives of the TA2020. Essential for territorial cohesion is also

convergence of EU level policies with national policies. The assumption is also made that the coordination of sectoral policies, serving the optimization of territorial effects and maximization of cohesion, can significantly increase their efficiency and help avoid the negative consequences of inconsistent policy at all territorial levels. And moreover, thanks to integrated territorial development, it is possible to achieve balance between sustainable development, competitiveness, and social cohesion.

The TA2020 defines territorial cohesion in point 8 as is "a set of principles for harmonious, balanced, efficient, sustainable territorial development. It enables equal opportunities for citizens and enterprises, wherever they are located, to make the most of their territorial potentials. Territorial cohesion reinforces the principle of solidarity to promote convergence between the economies of better-off territories and those whose development is lagging behind." In this perspective "territorial cohesion complements solidarity mechanisms with a qualitative approach and clarifies that development opportunities are best tailored to the specificities of an area".

An important element of this new paradigm is territorially targeted approach to forming the policy and continuous building of networks of cooperation and integration among various regions of the EU at all relevant territorial levels. In principle, such multi-level governance is to serve the principle of subsidiarity based on the horizontal coordination and liberation of territorial potential by means of development strategies based on the local and regional knowledge of needs and the use of specific assets and factors increasing the competitiveness of the regions. The diversity of the territories and their unique identities are treated as the developmental potential and prerequisite for territorial cooperation, serving the sustainable and efficient use of Europe's territory and resources.

The second part of the TA2020 presents main challenges and opportunities for territorial development in the EU, widely discussed in the aforementioned separate document *The Territorial State and Perspectives of the EU*. The following are identified as the most important: 1. increased exposure to globalisation: structural changes after the global economic crisis; 2. challenges of EU integration and the

growing interdependences of regions; 3. territorially diverse demographic and social challenges, segregation of vulnerable groups; 4. geographically diverse impacts of climate change and environmental risks; 5. energy challenges threatening regional competitiveness; 6. loss of biodiversity, vulnerable natural landscape and cultural heritage. An integrated approach is clearly advocated, in order to transform these challenges into opportunities for sustainable and harmonious territorial development.

The TA2020 notices the increasing vulnerability of local and regional communities to shocks caused by external factors, in particular those related to the processes of accelerated globalization, which was revealed strongly during the recent financial and economic crisis. The effects of the crisis influenced developmental opportunities of individual territories in different ways, but all were forced to consider a more efficient use of resources and restructuring activities. In this context, great importance was gained by network connections among metropolises and other urbanized areas, centres of development of international and global levels, which are assets favouring the development of the whole European territory.

The challenges for the deepening and widening of EU integration are also internal factors associated with various administrative divisions and differences among the Member States in terms of budgetary discipline and mutual commitments. The division into the centre and peripheries at the national level still persists. In the context of the dynamic situation in the EU neighbourhood, cohesion at the external borders has become particularly important. Differences between legal, social and political systems, and especially differences in the level of economic development cause serious consequences for the movement of people (migration) and trade.

The growing interdependence of regions creates a need to improve the connections at the global, European and national levels. Barriers still existing in this area are the cause of the insufficient use of resources in border regions and this can perpetuate their peripheral location, with all its consequences.

Equally serious implications for territorial cohesion are caused by demographic diversity. The document notes that significant migration within Europe, especially after the enlargement of the EU and immigration from less developed countries outside the EU create serious challenges, but also opportunities, particularly for urban areas.

Low accessibility, poor economic performance, lack of social opportunities, social infrastructure deficiencies and other specific spatial conditions increase the risk of exclusion, and in some cases, lead to the concentration of groups at risk of exclusion. It is interesting that official statistics do not actually reveal fully the problem if these areas are part of larger administrative units.

In the context of the territorially diverse environmental status and vulnerability to climate change and various possibilities of adaptation to them, the TA2020 draws attention to the creation of new development opportunities in agriculture, the so-called green economy, and renewable energy production.

The TA2020 also noted the problem of spatial diversity in the EU's energy security, especially in the case of islands, remote and sparsely populated areas. They are more susceptible to energy shortages and the increase of its price, while at the same time, uncontrolled suburbanization contributes to high, unbalanced energy consumption.

The document also appreciated the importance of a more rational and coordinated use of ecological and cultural capital. Taking into account the nature of historical and cultural areas as well as of those allocated for development and settlement can help to increase their cohesion and improve the quality of the environment created there.

In the third part the TA2020 identifies six territorial priorities for the EU, which can contribute to the successful implementation of the Europe 2020 strategy:

1. Promotion of polycentric and balanced territorial development of the EU, which is understood as cooperation, in the framework of the network polycentric system, of the most developed cities and regions in Europe, which, as centres, provide added value and contribute to the development of their environment. Such a polycentric territorial development policy at all levels should increase the territorial competitiveness of the whole EU territory, also outside the central "pentagon". At the same time it should avoid

- activities that cause an increase in polarization between capitals, metropolitan areas and medium-sized cities. The agenda proposes actions conductive to reducing the strong territorial polarization of economies and the avoidance of large regional disparities, mainly by eliminating bottlenecks limiting the growth, which is expressly advised by the Europe 2020 strategy.
- 2. Encouraging integrated development in cities, rural regions and areas with specific conditions. In this priority, reference is made to the stipulations contained in the Leipzig Charter on Sustainable European Cities and the Declarations of Marseille (25 November 2008) and of Toledo (22 June 2010) on urban development. Cities should become "motors of smart, sustainable and inclusive development and attractive places to live, work, visit and invest in". To achieve this goal an integrated and multi-level approach to urban development and a regeneration policy is to be applied. Cities themselves should act beyond their administrative borders and focus on functional regions. In the development of different types of rural, remote and sparsely populated areas their specific features have to be taken into account. Mutual interdependences of cities and rural areas also have to be respected by building partnerships based on local strategies. Small and medium-sized cities are to play a key role here, and the authorities of metropolitan regions need to be aware of their responsibility for the development of further located, surrounding areas. This priority also covers areas with specific geographic and demographic conditions (Art. 174 of the TFEU) and the outermost regions (Art. 349 of the TFEU). In their case, the TA2020 recommends cooperation of entities from different countries and regions for joint problem solving and use of potentials.
- 3. Territorial integration in cross-border and transnational functional regions. Territorial integration is considered an important factor supporting global competitiveness, as well as a factor reducing the economic, social and ecological fragmentation, and a factor in building mutual trust and social capital.
- 4. Ensuring global competitiveness of the regions based on strong local economies. For the implementation of this priority it is the

- most important to use social capital and territorial resources and the development of innovation and smart, territorially targeted specialization strategies, and diversification of the local economy.
- 5. Improving territorial connectivity for individuals, communities and enterprises. Here mobility is of crucial importance, as well as fair access to public services in terms of price and space, especially to transport, trans-European energy networks, information (including broadband access) and knowledge. An essential element of this priority is to create an integrated transport system of the EU through the development of trans-European networks (TENT), improved connections between the first and second systems, improving transport links overcoming geographical barriers, as well as improving the accessibility of urban centres in peripheries.
- 6. Managing and connecting ecological, landscape and cultural values of regions. Here, the most important task is to ensure proper functioning, protection and development of ecological systems, cultural and natural heritage, including high value of European urban and rural landscapes. An important factor is the increase of the sense of regional and local identity by strengthening awareness and responsibility of local and regional communities for their unique environmental, landscape, cultural and other values.

Each of the priorities of the TA2020 deserves a wider comment, but the issues of metropolises, as relatively recent in the framework of cohesion policy, have occupied most of attention lately.

The Economic and Social Committee emphasized the importance of this issue in its opinions for a long time<sup>15</sup>, calling for the urgent preparation of an EU Urban Agenda, closely linked to the Europe 2020 strategy. Currently, approximately 359 million people live in cities and suburbs - 72% of the total EU population. The share of urban population continues to grow and by 2050 it is expected to

Opinion of the European Economic and Social Committee on "Metropolitan Areas and City Regions in Europe 2020" (own-initiative opinion), Rapporteur: Joost VAN IERSEL, Brussels, 21 September 2011, ECO/299 – CESE 1380/2011.

rise to more than 80%. Metropolises are functional regions forming major economic areas and labour markets and they generally do not correspond to (longstanding) administrative units such as provinces or districts. Metropolitan areas are the main hubs of the European transport network (TEN-T), while themselves being complex transport networks. It should be noted that September 2014 put an end to the public consultation connected with the Communication on the urban dimension of EU policies which was published by the Commission in July 2014. <sup>16</sup>

Currently it is not clear how to deal with this issue at the EU level, and often also at the national level, due to the problems pertaining to governance, as well as the fragmented approach. Specific tensions spring from disagreement on the appropriate scope of a top-down and bottom-up approach, as well as from the problems occurring between big cities and smaller (suburban) municipalities and rural areas. An important problem is the fact that metropolitan development often does not take place within the administrative borders. The complexity of the problems occurring among the European Union and cities and metropolitan areas results from a number of reasons - from the lack of effective governance to the broad variety of situations and processes.

Part four of the TA2020 characterizes mechanisms for management and implementation of EU territorial cohesion. It should be recalled that the Lisbon Treaty imposes a shared responsibility on the Member States and EU institutions for the support of territorial cohesion and, therefore, they should work together to implement the TA2020. This requires a multi-level governance and the effective vertical and horizontal coordination of different policy areas, stakeholders at different levels (EU institutions, the Member States, regional and local authorities and private actors) and planning mechanisms. It is also necessary to create territorial knowledge and to share it.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. The urban dimension of EU policies -key features of an EU Urban Agenda UE, COM(2014) 490 final., Brussels: European Commission, 18.7.2014,

The TA2020 emphasizes the importance of taking into account the territorial dimension and the coordination of EU and national sectoral policies. In planning of policies the so called territorial approach should be applied to take better advantage of the territorial capital. In turn, the coordination of policies at all levels of management should be accompanied by the territorial impact assessment, coordination of territorially focused planning and monitoring mechanisms.

A clear demand for a more strategic approach to territorial cohesion was formulated, among others, through the development and implementation of integrated local and regional development. Of particular importance in this is cohesion policy and rural development policy, implementation of the territorial dimension of the Europe 2020 Strategy, thanks to the integrated and cross-sectoral nature.

Conditions for strengthening territorial cohesion at the EU level are: taking into account the TA2020 rules in the formulation and implementation of the policy by the EU institutions; consideration of territorial issues in monitoring and evaluation processes, including in the framework of the Structural Funds and the Cohesion Fund and the implementation of the Europe 2020 strategy; assessment of the impact of all relevant EU policies and programmes on territorial cohesion of the EU; evaluation by the European Commission of the implications of each legislative initiative for territorial cohesion before it is adopted; assurance by the Committee of the Regions of local and regional authorities' input in this regard.

Another condition for the proper implementation of the objectives of the TA2020 is to provide a strong methodological support and comprehensive territorial knowledge at the stage of decision-making at the EU level. Taking into account the provisions of the TA2020 in research activities in the ESPON programme is to serve this purpose.<sup>17</sup>

The ESPON research programme (*European Observation Network for Territorial Development and Cohesion*) is a European network of observatories of territorial development and territorial cohesion under Objective 3 "European Territorial"

By adopting the TA2020, the Member States recognized the need for more flexible forms of cooperation to strengthen genuine territorial integration at the cross-border, transnational and interregional levels. They also formulated a recommendation for undertaking initiatives in favour of long-term goals of territorial cohesion, based on the experiences of the former component B of the Community Initiative INTERREG, current transnational programmes, integrated macro regional strategies and European instruments for the exchange of good practices and the development of innovative projects and knowledge transfer between the organizations involved, for instance network and interregional programmes (INTERREG IVC, INTERACT, URBACT).

The agenda highlights activities in maritime areas because the scope of economic activity rapidly increases in the European marine environment. Marine Strategy Framework Directive<sup>18</sup> and the Integrated Maritime Policy of the EU resolve most conflicts related to the use of marine space, but also require coordinated action by the Member States in the field of maritime spatial planning. The TA2020 proposes to include this planning in the present system of territorial planning and to create in this way a sea-land continuum. A legal instrument which can be used for this purpose is the European Grouping for Territorial Cooperation (EGTC).

The TA2020 also draws attention to strengthening of the Member States' contribution to territorial cohesion. The most important task of the authorities at national, regional and local levels is to develop concepts (strategies), objectives and tools which are adequate to the con-

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

Cooperation" of the European Union cohesion policy pertaining to spatial development and territorial cohesion of the EU States, Iceland, Liechtenstein, Norway and Switzerland. Its task is conducting analyzes of changes in the spatial structure in Europe, tracking development trends to determine recommendations for the direction of the European territorial cohesion policy. Its key objective is to strengthen the spatial aspect of all activities carried out with the use of structural funds, by providing knowledge to policy makers.

ditions and possibilities, aim at strengthening of territorial development and are consistent with the principles, objectives and actions at the EU level. The Member States should incorporate the principles of territorial cohesion into national sectoral policies and integrated development policies and spatial planning mechanisms, and, if possible, aim to strengthen territorial cohesion by means of their action plans. What is also needed is proper coordination, evaluation and monitoring of policies at national and regional levels. Regions and cities should collect data, develop and implement integrated strategies and spatial development plans to increase the effectiveness of all actions undertaken on a given territory. Methodological support for these activities is The Reference Framework for European Sustainable Cities prepared as a joint initiative of the Member States, the European Commission and European organizations of local governments<sup>19</sup>.

The TA2020 recommended a number of actions to integrate the Agenda territorial priorities into political debates and the decisionmaking process at the EU level and in the Member States. These include: meetings on the implementation of the TA2020 organized by the rotary successive presidencies and EU institutions; further coordination of the Network of Territorial Cohesion Contact Points (NTCCP); strengthening of cooperation of this network with European institutions and other stakeholders; refinement together with the Commission of the methods of action needed to implement the TA2020; dissemination of knowledge about the Agenda; coordination of the exchange of best practices and development of common methodologies for creating territorial cohesion. The Commission was asked to review the territorial indicators and to prepare recommendations to improve the situation, and additionally the ESPON programme, the Member States and other institutions, in particular the European Environment Agency, were asked to raise the quality of monitoring of regional trends. Latvian (2015) and Luxembourg (2015) presidencies are supposed to evaluate and

The Reference Framework for European Sustainable Cities, RFSC (http://www.rfsc-community.eu/).

consider the need to revise the TA2020 and the Dutch (2016) and Slovak (2016) presidencies are to make such a review if necessary.

#### Final remarks

When assessing the TA2020, we should note a number of positive changes. Certainly, in the normative layer, it strengthens territorial cohesion and makes it the EU's development paradigm. It harmoniously includes the following issues to the discussion of EU spatial development: sensitivity of individual regions to fluctuations in economic activity, shortages of energy, other global phenomena such as climate change, migration and globalization of the economy, and others. Although these challenges (globalization, climate change, demographic changes, increasing energy prices) already constituted an important part of the considerations of the TA2007, now their territorial context is much more strongly marked. A positive change is the emphasis on cross-border relations and cooperation within the wider neighbourhood, the social dimension of cohesion and spatial aspects of sustainable development, as well as more equal than in the TA2007 treatment of the land and sea space. As another strong point of the TA2020 we should regard a more harmonious combination of spatial and socio-economic development through appreciation of metropolitan processes understood as benefits from the existence of agglomerations, or building the foundations of the knowledge-based economy. It is also important that the TA2020 takes into account spatial aspects important for the new Member States.

Unfortunately, the TA2020 does not overcome quite an obvious weakness of its predecessor and the Europe 2020 Strategy, which is the non-binding character of the adopted provisions. We have to remember that the basis of this strategy is still the open method of coordination – (OMC), that is, in fact, a soft method of implementation of EU policies. Although a stronger link between the Agenda and cohesion policy and the introduction of mechanisms forcing the Member States to realise the objectives of the Europe 2020 strategy, i.e. earmarking, increase the chances of achieving territorial

objectives, but it is an insufficient guarantee. The burden of planning and implementation of territorial objectives remains with the Member States and it depends on them how seriously they treat the TA2020 provisions. The EU's role, and in particular the European Commission's function is, in principle, to monitor this process. A greater role of the Commission should be seen in the coordination and integration of territorial cohesion policy with other EU policies, i.e. competitiveness, transport, maritime and fisheries.

An expression of the new approach and the Commission's concern for the realisation of EU cohesion policy objectives is the creation upon its request of a new financial instrument *Connecting Europe Facility* – (CEF). This new fund for 2014-2020 is intended for projects pertaining to the development, construction or upgrading of existing transport, energy and telecommunications infrastructure (currently TEN).

The instrument will be implemented by the Commission, which may be interpreted as an expression of limited trust for the Member States which have proven to be ineffective in eliminating "bottlenecks" in European transport and communication infrastructure. The Fund will finance projects which will complement the missing links in the European energy, transport and digital structure. It will also make the European economy greener by promoting cleaner forms of transport, high-speed broadband and by facilitating the use of energy from renewable sources in accordance with the strategy "Europe 2020".

The principal idea is to improve the connections between different parts of the EU in order to facilitate trade in goods and movement of people for individual countries and regions. Traditionally, the development of transport systems in Europe has had a national dimension. The EU can therefore play a key role in the coordination of the Member States' activities in the field of planning, management and financing of cross-border projects. A well-functioning network is essential for the smooth functioning of the single market and will improve competition. The Commission proposed to create corridors covering major cross-border projects. It is estimated that by 2020 the amount of 500 billion euro will be needed for the implementation of

the truly European network, including 250 billion for the removal of bottlenecks and missing links in the core network. As a result of the final cuts in the budget for 2014-2020 the CEF was reduced to 29.3 billion euro.

#### **References:**

- Churski P., *Wyzwania polityki spójności a Strategia Europa 2020*, [In:] K. Marciniak, K. Sikora, D. Sokołowski (ed.), Koncepcje i problemy badawcze geografii, Bydgoszcz: Wyższa Szkoła Gospodarki w Bydgoszczy 2011.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. The urban dimension of EU policies -key features of an EU Urban Agenda UE, COM(2014) 490 final., Brussels: European Commission, 18.7.2014.
- Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee of 6 October 2008. Green paper on territorial cohesion: Turning territorial diversity into strength, COM(2008) 616 final, Brussels: European Commission, 6.10.2008.
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).
- European Commission, Directorate General for Regional Policy, Cohesion Policy Support for Local Development. Best Practice and Future Policy Options. Final Report, Brussels, European Commission, April 2010.
- Faludi A., Territorial Cohesion under the Looking Glass. Synthesis paper about the history of the concept and policy background to territorial cohesion
- (http://ec.europa.eu/regional\_policy/archive/consultation/terco/pdf/lookingglass.pdf).
- Gorzelak G., *Fakty i mity rozwoju regionalnego*, "Studia Regionalne i Lokalne" 2(36), 2009, pp. 5–27.
- Guiding Principles for Sustainable Spatial Development of the European Continent, CEMAT 9(2000).

- Hűbner D., *Spójność i konkurencyjność -czy można je połączyć?*, Referat na IV Kongresie Polskiego Forum Strategii Lizbońskiej, Warszawa, 13.10.2006 (europa.eu/rapid/press-release SPEECH-06-665 pl.pdf).
- Leipzig Charter on Sustainable European Cities (http://ec.europa.eu/regional\_policy/archive/themes/urban/leipzig\_charter.pdf).
- Marszał T., Pielesiak I., *Spójność obszaru metropolitalnego w świetle powiązań infrastrukturalnych (przykład Łódzkiego Obszaru Metropolitalnego)*, [In:] T. Marszał (ed.), Rola polskich aglomeracji wobec wyzwań Strategii Lizbońskiej, Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN, vol. 70, 2008, pp. 180–196.
- Molle W., European Cohesion Policy, London: Routledge 2007.
- Opinion of the European Economic and Social Committee on "Metropolitan Areas and City Regions in Europe 2020" (own-initiative opinion), Rapporteur: Joost VAN IERSEL, Brussels, 21 September 2011, ECO/299 CESE 1380/2011.
- Territorial Agenda of the EU 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions. Adopted at the Informal Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöllő, Hungary. (http://www.eu2011.hu/files/bveu/documents/TA2020.pdf).
- The Reference Framework for European Sustainable Cities, RFSC (http://www.rfsc-community.eu/).

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# The Cohesion Policy and Development – a Preliminary Assessment<sup>1</sup>

#### **Abstract**

The paper reflects on statistical relationships between the inflow of EU financial resources to Polish territorial units (voivodships, NUTS 3 and poviats) and the pace of their economic growth. Correlation analysis reveals that the less developed units which enjoyed relatively more massive inflows per capita grew more slowly than the better developed ones – the correlation coefficients are negative (for the voivodships) or close to zero (for NUTS 3 and poviats). This suggests that until now, the EU funds have led to a stronger demand effect than the supply effect in the Polish economy. It may therefore be claimed that in the next programming period 2014–2020, more funds received from the EU should be devoted to the support of economic development than to the improvement of living conditions.

Keywords: Cohesion Policy, regional development

The paper draws on two of my earlier studies: G. Gorzelak, Wykorzystanie środków Unii Europejskiej dla rozwoju kraju -wstępne analizy, "Studia Regionalne i Lokalne" 3(57), 2014, pp. 5-25 and G. Gorzelak, B. Jałowiecki, Koniunktura w Polsce Lokalnej 2013, "Studia Regionalne i Lokalne" 4(58), 2014, pp. 5-24.

#### Introduction

Ten years have passed since Poland joined the European Union, an event which in the short term can be compared to Poland's entering the Western sphere of influence with the baptism of Prince Mieszko I in 966 in Catholic, and not Orthodox order. Although it will continue into 2015 and also 2016 to overlap with the next one, the second financial perspective 2007-2013 is now coming to an end. It is a good opportunity therefore to look at some of the achievements and shortcomings in the implementation of strategies following Poland's EU membership, in particular those related to the use of European funds.

There are two good reasons for analysing how the EU funds, mainly those available as part of the Cohesion policy, have been used. First, there are statistics on the financing of specific initiatives under this policy and data can be found on the pace of development in the territorial units where such funds have been expended: voivodships (regions), subregions and counties (although such information is not available for the period post 2011-2012). Second, the objectives of how these monies should be spent were expressly identified in the governmental and regional strategic documents.

Table 1 below shows a summary of the EU funds made available to Poland under the Cohesion Policy and Common Agricultural Policy (CAP) in the 2007-2013 financial perspective.

Programme	Allocation in EUR billion	Share inallocation (%)
Cohesion Policy, total	67.9	70.0
Rural Development		
Programme	13.2	13.6
Sustainable Development		
of the Fisheries Sector and		
Coastal Fishing Areas	0.7	0.7
Direct payments	15.1	15.6
Total	96.9	100.0

Source: own estimation.

The 97 million euro represent a gross amount which also includes Poland's contributions to the EU budget estimated at ca. 25 per cent of the total disbursements. This means that in the period 2007-2013<sup>2</sup> the EU funds net totalled ca. EUR 73 billion. It is also estimated that a large portion of these funds (fifty per cent? less? more?) 'goes back' to the net contributor countries, where the headquarters of the companies carrying out construction work in Poland, selling licences, machinery, etc., are located. It is difficult to interpret this 'returning' portion of the EU funds. On the one hand, these funds are used to finance projects, the results of which will remain in Poland. On the other hand, such companies, when implementing construction contracts such as roads, hire Polish contractors, buy Polish raw materials and other supplies, thereby generating local demand and helping in this way (at least in theory) to enhance the effectiveness of management owing to upgraded infrastructure or technological progress. Given the above, the EUR 70 billion should be reduced by an amount that is hard to specify; to be on the safe side, let us make a conservative assumption of EUR 10 billion, which means an overall net influx of ca. EUR 60 billion in the period 2007-2013 (and in fact up to 2015). Is it a lot or not?

Let us compare these figures against other categories. In 2007-2013, Poland's aggregate GDP totalled ca. EUR 2500 billion, which means that EUR 97 billion represents 3.8 per cent of this amount, although when expressed in net terms, this share falls to 2.4 per cent. Taking this into account, the net contribution of EU funds directly flowing into the Polish economy can be estimated at ca. 2.5 per cent GDP.

As mentioned above, these funds are in fact to be spent in the years 2008-2015/2016. In 2007-2008, funds from the 2004-2006 financial perspective were still being expended, and funds from the 2014-2020 financial perspective will be made available in 2014-2015, although their amount in the first year will be minimal. Therefore, it is difficult to assess the actual impact for the individual years without specific data from the Ministry of Finance, although it can be assumed that using the figures showing the budgeted inflows in the individual financial perspectives will be sufficient for our purposes.

The years 2007-2013 saw the influx of ca. USD 104 billion of foreign direct investment (FDIs). In the years 2007-2012 (no statistics are available for 2013), Poland invested abroad ca. USD 24 billion<sup>3</sup>. A comparison of these amounts indicates that the EU funds represent approximately two thirds of the net value of aggregate inward investment into the Polish economy. It should be noted however, that the inflow of foreign capital is driven by expected economic gains to be obtained as a result of creating new jobs, undertaking production or providing services, and as such indisputably fosters development.

Since the EU funds are assumed to stimulate Poland's development, it would be worthwhile to compare them against the aggregate volume of investment. In 2007-2013, they totalled ca. PLN 1600 billion, i.e. ca. EUR 400 billion. Let us set this figure against the portion of EU funds which can be regarded as those which are really used to cover the costs of investment projects (to see their structure, see Tab. 2).

Tab. 2. EU funds by programme, 2007-2013

Programme	Allocatio (in billion EUR)	Share in allocation (%)	
Infrastructure and Environment	28.3	41.8	
Human Capital	10.0	14.7	
Innovative Economy	8.7	12.7	
Development of Eastern Poland	2.4	3.5	
Technical Assistance	0.5	0.8	
European Territorial Cooperation	0.7	1.1	
16 regional programmes	17.3	25.4	
Total	67.9	100.0	

Source: data of Ministry of Infrastructure and Development

http://nbp.pl/publikacje/pib/pib\_2012\_n.pdf; see also https://www.google.pl/search?q=polskie+inwestyucje+za+granica+2012&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:pl:official&client=firefox-a&channel=sb&gfe\_rd=cr&ei=5jIfU4zRLOy18QeI4oDgBA.

Funds expended under the Infrastructure and Environment and Innovative Economy programmes and, though to a lesser extent, the Development of Eastern Poland programme and Regional Operational Programmes, are most investment-oriented of all. Altogether, they total ca. EUR 57 billion. Unfortunately, there is no information what proportion of CAP funds is spent on investment and what proportion – on consumption. Furthermore, not all of the funds from the Cohesion policy programmes are spent to finance investment goals. Since we are using rough estimates only, with a wide margin of error, we can assume that the value of investment projects financed from the EU funds is not higher than EUR 60 billion (which is probably a seriously overstated figure anyway). This accounts for ca. 15 per cent of all investment expenditure made in the Polish economy, and ca. 35-40 per cent of total outlays in the public sphere.

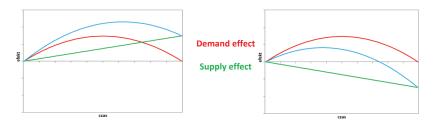
This is without question quite a sizable amount if spent on prodevelopment projects and initiatives - which, as will be shown below, has not quite been the case - and should make a lasting input in the growth of the Polish economy.

# 1. Statistical analysis of the effects of support provided to Polish regions – tentative conclusions

## 1.1. Supply-side effects only or also demand-side effects?

Two factors add to produce the aggregate effect of the inflow of external funds and their absorption: the demand-side effects and the supply-side effects (they are included e.g. in the HERMIN model). Let us illustrate them using the diagrams below (Fig. 1):

Fig. 1. Demand-side and supply-side effects of the absorption of external funds



Source: own elaboration.

The demand-side effect is always positive, although only for a limited period because the supply-side multipliers are higher than zero but lower than 1. On the other hand, the supply-side effect can be either positive, of zero value or even negative, in an utterly unfavourable situation (its potential changes over time are skipped). Therefore, the final effect, which is the outcome of the inflow of external funds and their use locally, is the sum total of the supply-side and the demand-side effects, the ultimate amount of which depends on how these funds were expended.

## 1.2. Data and hypotheses

It would be interesting to see how the potential benefits from the influx of external funds are distributed across the country. Do demand-side effects prevail nationwide and in individual regions? Are supply-side effects also important? Furthermore, if convergence-based cohesion is to be the order of the day, the less-developed regions should receive more funds to accelerate their development. However, as we recall from a short review of the analyses looking at the effectiveness of the Cohesion policy, so far this has not been the usual practice in the European Union. Could such a correlation be observed in Poland post 2004?

The available data on the territorial distribution of the EU funds are rather fragmentary<sup>4</sup>, which is due to a number of reasons, viz.:

- 1. The 2007-2013 financial perspective has not as yet been closed and substantial funds will be disbursed until 2015/2016.
- 2. Information on the funds received under the Common Agricultural Policy is available only for voivodships, with no disaggregation at the NUTS3 level, let alone at the county level.
- 3. The disaggregation of many notable projects (railways, motorways, IT systems servicing institutions operating many field branches, etc.) into smaller territorial systems is difficult if not impossible at times.
- 4. By the same token, territorial disaggregation of many smaller projects related to training, consulting, etc., is not possible as such services are typically provided in many locations.

In consequence, we can only use approximated figures which, on the regional scale, do not capture the large portion of the undisbursed funds and, on the municipal and county scale, do not include the expenditure on 'big' infrastructure of supralocal significance, training and advisory services, agriculture and rural areas.

One additional difficulty stems from the limited possibility to gauge the categories measuring economic growth or, more broadly development. In the case of voivodships (regions) and NUTS3, such categories include GDP and the labour market situation, although the most recent GDP data for the NUTS2 level (voivodships) and NUTS3 are available only for 2011. For counties, we can only know the value of the sum of their own revenues and shares in the national taxes of such counties and their constituent municipalities, which is a category well approximating GDP on the NUTS3 scale, but is

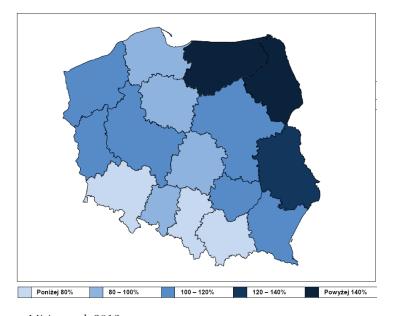
<sup>&</sup>lt;sup>4</sup> Although the report "*Impact of Poland's EU membership and its Cohesion Policy on the country's development*" issued by the Ministry of Infrastructure and Development in April 2014 does offer a territorial breakdown of the 2004-2013 Cohesion policy funds, these figures are misleading due to the much simplified method whereby the linear (national roads, railways) and national expenditures were broken down into voivodships, counties and municipalities (and the term "balanced distribution" is utterly unclear; it should probably be understood as average, i.e. the same for all the analysed territorial units).

probably a less handy tool in the case of counties (for which there is no point in assessing the GDP).

### 1.3. The regional dimension

A full picture of the correlation between the influx of EU funds (from all the sources) is provided in a study prepared by W. Misiąg et al. (2013). Fig. 2 shows the breakdown of EU funds by voivodship for the years 2004-2011, in per capita terms.

Fig. 2. Expenditure financed from the EU budget in 2004–2011 by voivodship (per capita, Poland = 100).



Source: Misiąg et al. 2013

The most underdeveloped voivodships received relatively more funds than the better developed ones. However, an analysis of this correlation indicates that despite such an injection of funds these regions were not able to achieve a higher rate of growth than the better developed regions, which in effect led to a further widening of the gap relative to the country's average GDP in per capita terms, and thereby to increasing the disparities between regions across the country (Tab. 2).

Tab. 3. Correlation between the rate of GDP growth in voivodships and inflow of EU funds, 2004-2012

EU funds per capita	GDP dynamics
Total funds	-0.59
CAP funds	-0.67
Funds for infrastructure from the ERDF and ESF	0.38

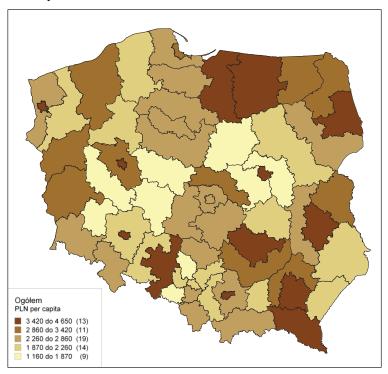
Source: Misiag et al., 2013.

The negative correlation between the volume of the EU funds coming into the voivodships and the growth dynamics of their GDP prove - as could be expected considering the quite universal regularities observable in other countries - that external intervention failed to spur the development of Poland's weakest regions and help them attain a faster level of growth than the national average. These regions are still growing more slowly than the regions with large cities (and, in some years, they even regressed in absolute terms), which is due to the metropolisation of regional development, a process quite comprehensively described in the literature of the subject (cf. e.g. Jałowiecki 1999; Gorzelak, Smętkowski, 2005).

A positive correlation between the rate of growth of the regional GDP and outlays on infrastructure is due to the fact that the better developed regions received a larger part of such funds. This is in line with the hypothesis put forward by Misiag and his team, which held that development processes are influenced by the absolute value of the incoming funds rather than their intensity in relation to the number of the population.

#### 1.4. The NUTS3 dimension<sup>5</sup>

Fig. 3. Per capita distribution of Cohesion Policy funds 2007-2013, by NUTS3



Source: own elaboration.

Figure 3 shows the distribution of a portion of the funds<sup>6</sup> (together with the national contribution, with an aggregate value of

The data for the NUTS 3 and counties were collected and computed by Adam Płoszaj and Maciej Smętkowski.

The calculations are based on the KSI data (October 2013 version). The 2007-2013 financial perspective included the following programmes: HC OP, OP I&E, OP DEP, regional programmes. Only the projects completed

projects in the order of PLN 101 billion, that is 87 per cent of the value of projects completed in the programmes concerned in the years 2007-2012), received from the EU in the years 2007-2013, by NUTS3 units.

Fig. 3 shows that the funds received as part of the Cohesion were mostly concentrated in cities, predominantly large ones. In all the NUTS3 units being a large city and all those where the regional (voivodship) capital was incorporated into the surrounding NUTS unit, the per capita values are significantly higher than in the case of units with a peripheral location in relation to the regional capitals. Such a distribution may be interpreted in two, non-contradictory, ways: first, large cities show a greater potential for absorption than less developed areas with no such cities. Secondly, we cannot rule out the possibility that the authorities, just as in the era of socialism, would have a greater propensity to invest 'close by' than in areas lying at a distance from the place the authorities are located (cf. Gorzelak, 1980).

The distribution of the funds earmarked for enterprise support was similar to the average one, whilst relatively less monies for the development of human capital were spent in the south-western regions, and more – in the eastern regions. Interestingly, two most urbanised Polish regions, Warsaw and the Silesian conurbation, received relatively fewer funds in per capita terms for the development of transport than less urbanised regions. This stands in contradiction with the above-mentioned recommendations formulated on the basis of analyses of the structure of expenditures in the Cohesion policy in Spain and their effectiveness (de la Fuente, 1995).

In 2007-2012, the correlation between the per capita expenditures from the Cohesion policy in the NUTS3 units and the rate of

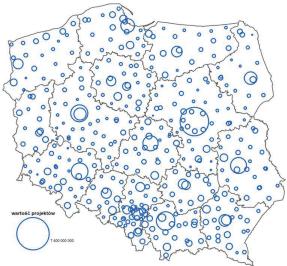
in 2012 were considered. National and supranational projects were excluded: intervention categories: 12, 16, 17, 18, 19, 20, 21, 22, 26, 27, 31, 32, 34, 36, 37, 38, 49, 85, 86 (purchase of rolling stock, TEN-T and TEN-TIC infrastructure, national roads, local and interregional inland waterways, technical assistance); OP HC national projects ascribed to Warsaw were also excluded (IT development in public administration, etc.).

growth in these units was negative but weak (with the correlation coefficient of -0,28; in the years 2008-2012, that is a period of slower growth due to the economic crisis, the correlation was stronger, equal to -0.35). This proves that the EU funds (excluding the Common Agricultural Policy) failed to sufficiently accelerate growth in the least developed regions to drive the rate of growth above the national average, which would help them close the gap with the better developed regions. Naturally, we cannot know what the mutual relations between the paces of growth of these spatial units would be, had they not received any support; it is quite likely that the disparities would be even wider.

## 1.5. The county dimension

Figures 4 and 5 show the volume of Cohesion Policy funds coming into individual counties.

Fig. 4. Value of Cohesion policy projects 2007-2012, by county



Source: own elaboration.

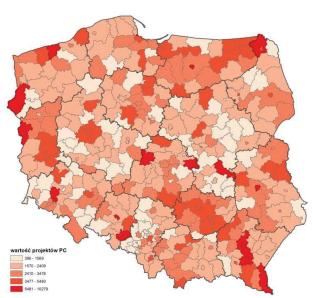


Fig. 5. Per capita value of Cohesion Policy projects 2007-2012, by county

Source: own elaboration.

The per capita expenditures under the programmes financed from the EU are very weakly correlated with the changes in the counties' and municipalities' own revenues. The correlation between the spending of EU funds and changes in the county labour market is even weaker. Therefore, there is no statistical link between the intensity of EU funds absorption (measured by their per capita values) and the pace at which the situation in the local units was improving.

At the same time, Fig. 4 shows that there is a correlation between the absolute volume of these funds and the dynamics of economic growth – on the one hand, regions and local systems which received more European funds were the best developed territorial systems, and on the other – they were regions which were developing at the fastest pace. The authors of the report by Misiag et al. (2013) draw a similar conclusion.

# 2. European Union funds as viewed by the municipal governments

In 2013, EUROREG conducted a survey in the municipalities (urban, urban-rural and rural, with a population up to 50,000) on a number of aspects related to the operation of local governments in Poland. The survey was a follow-up to a similar exercise carried out in the years 1995-1997. Having received answers from over half of the municipalities, we can conclude that the survey findings are reliable and offer a comprehensive picture of the operation of local governments and accurately render their opinions and views.

The survey found that, according to local governments, EU funds helped to enhance the quality of life (a view endorsed most strongly by the local governments in Greater Poland, and the least so - the Congress Kingdom) and, to an even greater degree, led to improving the condition of the natural environment rather than served to reinforce various factors driving economic development (Tables 3 and 4). More than half of the municipalities noted that the EU funds had average or little impact, or none at all, on the economic development of the municipality; enhancing the competitiveness of the local businesses, improving the labour market situation or encouraging the inflow of new investors (the least noticeable in the Congress Kingdom), etc. Quite strikingly, the impact of the EU funds on increasing agricultural output was the least positively evaluated, which points to a prevalently social, rather than pro-productive, role of the Common Agricultural Policy and direct payments. Interestingly, the impact of the CAP on production effects was most positively evaluated in the Congress Kingdom, and the least so - in Galicia (a region with overpopulated agriculture operating mainly through subsistence farms), whilst these differences were strongly significant statistically.

Tab. 4. Effects of the absorption of EU funds in the municipality, n=1251\*)

	Strong and very strong	Average and weak	No effect	Difficult to say
Accelerated economic growth	22.1	51.3	8.4	12.8
New jobs created	11.5	60.1	12.3	9.4
Increased agricultural output	23.8	37.3	19.3	13.1
More competitive businesses	15.7	49.0	11.8	16.6
Inflow of new investors	12.5	48.4	20.9	10.6
Decreased unemployment	7.8	55.5	15.6	13.2
Improved standards of living	44.5	41.0	2.8	7.1
Improved condition of the natural environment	55.9	30.1	4.0	5.0

<sup>\*)</sup> Since not all municipalities listed all the effects, percentage shares do not add up to 100.

Source: Gorzelak, Jałowiecki (2014).

Tab. 5. Effects of the absorption of EU funds in the municipality \*)

	Poland n=1251	Western Territories n=303	Greater Poland n=193	Congress Kingdom n=569	Galicia n=186
Accelerated economic growth	2.90	2.87	2.97	2.87	3.00
New jobs created	2.51	2.52	2.57	2.45	2.65
Increased agricultural output	2.68	2.73	2.59	2.83	2.24
More competitive businesses	2.67	2.69	2.67	2.61	2.80
Inflow of new investors	2.36	2.50	2.45	2.18	2.59
Decreased unemployment	2.32	2.43	2.36	2.23	2.41
Improved standard of living	3.43	3.45	3.58	3.37	3.44
Improved condition of the natural environment	3.61	3.60	3.73	3.50	3.85

<sup>\*)</sup> average values on the 1-5 scale (1: weak, 5: strong) Source: Gorzelak, Jałowiecki (2014).

Prior to the launch of the new financial perspective 2014-2020, local governments had strong and clear views on what they regarded as desirable changes in the way EU funds can be used and spent (Tab. 5). One popular proposal was to increase the volume of funds,

particularly those earmarked for the local infrastructure, and there were no major differences between regions in that regard. At the same time, local governments suggested introducing more lax procedures in the award of funds and loosening the audit and reporting requirements. In a similar vein, respondents were in favour of increasing grants for businesses (an opinion which was most seldom expressed in Greater Poland) and of direct payments for farmers. In the latter case, there were significant differences between regions: such a proposal was made by as many as 70 per cent of municipalities from the Congress Kingdom (and, as we saw from the previous table, the results in agricultural production driven by the CAP intervention were the weakest in this region), and the fewest (only slightly more than half of the municipalities) - in the Western and Northern Territories. According to the popular (and rightful!) opinion, the budget for training should not be increased, which can be viewed as a negative evaluation of this type of projects.

Tab. 6. Changes proposed in the EU programmes, n = 1251

		Poland n=1251	Western Territories n=303	Greater Poland n=193	Congress Kingdom n=569	Galicia n=186
Municipalities proposing changes		87.1	88.8	87.0	86.1	87.6
	Increase the volume of funds	81.7	81.8	81.9	80.7	84.4
	Loosen the criteria for awarding funds	68.7	71.0	66.8	67.1	71.5
Type of change	Reduce reporting and control requirements	71.5	69.7	71.5	71.9	73.1
	Increase non-returnable grants for enterprises	70.8	72.3	68.9	69.2	75.3
	Increase returnable grants for enterprises	63.2	65.3	65.3	59.9	67.7
	Increase funds for local infrastructure	83.8	85.1	84.5	83.9	83.9
	Reduce funds for training	52.3	46.9	59.1	51.3	59.1
	Increase direct payments for farmers	64.5	56.4	61.1	69.9	64.5
	Strengthen the LEADER programme	64.9	64.7	68.4	63.8	65.1

Source: Gorzelak, Jałowiecki (2014).

The opinions expressed by local governments on the effects of the EU policies and desirable changes thanks to which the European funds would more effectively foster local development indicate that these policies are regarded as the source of financing first and foremost of the local infrastructure and projects that improve the quality of life and enhance the condition of the national environment but do not play any significant role in stimulating development. In addition to that, local governments would like these funds to be easily obtainable and subject to as little control as possible.

#### Final remarks

The question on the primacy of one of the two effects, supply-side and demand-side, should be answered in favour of the latter. The fact that those territorial units which saw a greater influx of EU funds (in relation to the population) did not accelerate their development proves that these funds had a smaller than anticipated impact as a development stimulus. A similar conclusion was drawn by the authors of the report prepared by Misiag et al. (2013); they highlighted the relatively greater significance of these funds for improving the living conditions rather than stimulating economic development. This basically agrees with the experiences of other Member States which went through a stage of becoming seriously dependent on the inflow of EU funds for the financing of public investment projects, also in infrastructure. Having their experiences in mind, the concerns about the purposefulness of using external capital in such a way, expressed inter alia in the report by Geodecki et al. (2012), unfortunately seem rather well-founded.

Recently some statements have been made, promising to allocate more EU funds to initiatives that will help improve the degree of innovation of the Polish economy and its technological advancement. Whether this will indeed come to pass remains a question of the future, which we will not be able to evaluate in full until about 2023-24 – just as the effects of the present financing period will not be open to full evaluation until 2017-2018.

This paper set out to outline the directions of such analyses and should be treated only as an initiation of statistical studies on the effects of programmes and projects co-financed thanks to Poland's membership of the European Union.

### **References:**

- Geodecki T., Gorzelak G., Górniak J., Hausner J., Mazur S., Szlachta J., Zaleski J., *Kurs na innowacje. Jak wyprowadzić Polskę z rozwojowego dryfu*, Kraków: Fundacja Gospodarki i Administracji Publicznej 2012.
- Gorzelak G., Jałowiecki B. (eds.), *Koniunktura gospodarcza i mobilizacja społeczna w gminach*, "Studia Regionalne i Lokalne" 25(58), 1998, pp. 81-151.
- Gorzelak G, Jałowiecki B., *Koniunktura w Polsce lokalnej 2013*, "Studia Regionalne i Lokalne" 4(58), 2014, pp. 5-24.
- Gorzelak G., Wykorzystanie środków Unii Europejskiej dla rozwoju kraju -wstępne analizy, "Studia Regionalne i Lokalne" 3(57), 2014, pp. 5-25.
- Gorzelak G., Smętkowski M., Metropolia i jej region w gospodarce informacyjnej, Warszawa: SCHOLAR 2005.
- http://nbp.pl/publikacje/pib/pib\_2012\_n.pdf
- https://www.google.pl/search?q=polskie+inwestyucje+za+granica +2012&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:pl:official&client=firefox-a&channel=sb&gfe\_rd=cr&ei=5jIfU4zRLOy-I8QeI4oDgBA
- Jałowiecki B., *Metropolie*, Białystok: Wyższa Szkoła Finansów i Zarządzania w Białymstoku 1999.
- Misiąg J., Misiąg W., Tomalak M. (eds.), Ocena efektywności wykorzystania pomocy finansowej Unii Europejskiej jako instrumentu polityki spójności społeczno-gospodarczej oraz poprawy warunków życia, Rzeszów: Wyższa Szkoła Informatyki i Zarządzania z siedzibą w Rzeszowie 2013.

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Theoretical Foundation for the European Union Cohesion Policy from the Perspective of Public Goods and Other Market Failures

#### Abstract

According to the subsidiarity principle, policy should be created and implemented at the level as close to the citizen as possible. While a perfect market would theoretically allow people to determine their own life, many market failures exist (e.g., public good provision, informational problems, asymmetric information, positive and negative externalities). This is a traditional argument for state intervention. It will be argued that there is a need for providing different types of capability-enhancing goods at different levels of administrative scale (multilevel governance), in order to support citizens to function effectively in different types of markets as well as to possess, maintain and increase the freedom to determine their own path of development. Within this theoretical context, with a focus on information problems and Amartya Sen's capability approach, the question is addressed what are the theoretical justifications for EU social cohesion policy. The author will identify possible areas of intervention at the EU level.

**Key words:** cohesion policy, market failures, capabilities, multilevel governance

### Introduction

One of the fundaments of the European Union (EU) is the common market. When markets would function perfectly, people would

be able to direct their own life and, under the condition of perfect competition, social cohesion would exist. However, while Adam Smith's¹ idea that people trading with each other in their own self-interest has freed them from feudal oppression, many imperfections exist and will always exist. These imperfections lead to a lack of social cohesion in the form of large income disparities, poverty, unequal opportunities, social exclusion, etc. While this is a traditional argument for state intervention, the existing reality is more complicated than the simple state vs. market discussion. Different levels of administration exist (from local, via national to the EU and global level). Applying the subsidiarity principle and the notion of multilevel governance, market failures should be solved as close to the citizen as possible. The logic is that when the local and national government are not able to do this, there is a task for the EU.

In this article, using Amartya Sen's² capability approach, the question is addressed what are the theoretical justifications for EU social cohesion policy from the point of view of informational problems. After a discussion on the importance of capabilities for social cohesion, government intervention will be discussed in the context of informational problems and the question whether and when consumers can be assumed to be responsible for their own actions. As a conclusion, possible areas of intervention at the EU level will be discussed.

## 1. The market, capabilities and social cohesion

According to the subsidiarity principle,<sup>3</sup> policy should be designed, developed and implemented at the level as close to the citizen as possible. This idea has similarities with the theories of the market, where the market provides each individual with political free-

A. Smith, *An inquiry into the nature and causes of the wealth of nations*, Reprint edited with an introduction by Kathryn Sutherlands, Oxford: Oxford University Press 1998(1776).

<sup>&</sup>lt;sup>2</sup> A. K. Sen, *Development as freedom*, New York: Anchor Books 1999.

M. Ahlt, M. Szpunar, *Prawo europejskie*, Warszawa: Wydawnictwo C. H. Beck 2008.

dom<sup>4</sup> and the opportunity to participate in exchange and realize his/her life plans.<sup>5</sup> Following the logic of Adam Smith in this *Wealth of Nations*,<sup>6</sup> the market liberates people from feudal exploitation and empowers them to direct their own life. Although the market is not perfect, it may be argued that it is the least worst among known systems, reducing peoples' incentives to lie and to cheat. While, paraphrasing Smith, two businessmen do not come together for a nice chat and small talk, but to conspire against consumers in order to increase prices and in turn profits, this is less worse that when power accumulates in the hands of a few state officials. In other words, when power accumulates, this interest group is likely to abuse its power. In a competitive economy, the conspiring businessmen are not strong enough to accumulate too much power, causing that the negative impact of their actions remain limited.

In order for the market and different levels of government administration to function properly, principles of good governance are elementary. Without transparency (i.e., access to information), accountability, participation and policy cohesion<sup>7</sup> the room for opportunistic behaviour (lying and cheating)<sup>8</sup> increases, diverting resources and incentives away from productive activities to redistributive and exploitative activities.<sup>9</sup> This not only disturbs processes of economic growths and social cohesion, but also negatively influences natural resource management.

A properly functioning market would support social cohesion, "the capacity of a society to ensure the well-being of all its members,

<sup>&</sup>lt;sup>4</sup> M. Friedman, *Capitalism and freedom*, Chicago: University of Chicago Press 1962.

<sup>&</sup>lt;sup>5</sup> A. K. Sen, op. cit.

<sup>&</sup>lt;sup>6</sup> A. Smith, op. cit.

Sustainable development indicators to monitor the implementation of the EU sustainable development strategy, Communication from Mr. Almunia to the Members of the Commission, Commission of the European Communities, SEC(2005) 161final, Brussels 2005.

<sup>&</sup>lt;sup>8</sup> I. Molho, *The economics of information - lying and cheating in markets and organizations*, Oxford: Blackwell Publishers 1997.

<sup>&</sup>lt;sup>9</sup> J. Platje, *Institutional change and Poland's economic performance since the 1970s* -incentives and transaction costs, Wrocław: CL Consulting i Logistyka 2004.

minimizing disparities and avoiding manipulation." <sup>10</sup> However, this brings up the question "equality of what?" While equality of property rights on factors of production is a condition for perfect competition and market access<sup>12</sup> and together with equality of outcome (e.g., income, wealth) a determinant of social cohesion, it may be more important what people are able to do with their income and possessions. This concerns the capabilities to direct one's own life. An assumption, which may be a kind of paradigm, is that freedom is the basis for development.<sup>13</sup> This freedom has to be interpreted broadly, while it should be emphasized that freedom is related to responsibility, which can have a cost. 14 However, when we do not have the freedom to direct our own lives, to develop our own local society, and to produce and trade what we want (to choose our own jobs, the schools we go to, etc.), then we rely on someone above us in a hierarchical structure. Just to mention a few problems regarding equality of ownership, equality of outcome, and what people can really do with the goods:

*Personal characteristics* differ,<sup>15</sup> e.g., gender, health, physical outlook, physical strength and intelligence. This in turn influences the individual capabilities, and creates unequal earning opportunities.

People can be *lucky or unlucky*. <sup>16</sup> While as such luck can cause ownership and outcome inequalities, it may strengthen the intergenerational persistence of inequality due to the inheritance of poverty.

Report of the high level task force and social cohesion in the 21st Century. Towards an active, fair and socially cohesive Europe, TFSC (2007) 31E, Strassbourg: Council of Europe 2008.

A. K. Sen, *Equality of what?*, [In:] S. M. McMurrin (ed.), Liberty, equality and law - selected tanner lectures on moral philosophy, Salt Lake City: University of Utah Press 1987, pp. 137-162.

J. E. Roemer, A general theory of exploitation and class, Cambridge MA: Harvard University Press 1982.

<sup>&</sup>lt;sup>13</sup> A. K. Sen, *Development as freedom*, New York: Anchor Books 1999.

<sup>14</sup> See D. Kahneman, Thinking, fast and slow, New York: Farrar/Strauss and Giroux 2011.

<sup>&</sup>lt;sup>15</sup> A.K. Sen, Development as freedom ....

A.K. Sen, op. cit.; J. E. Roemer, Free to lose, London: Routledge 1988; D. Kahneman, Thinking, fast and slow...

Furthermore, as Daniel Kahneman<sup>17</sup> argues, an issue is that people tend to try to find a causal explanation of failure in life or for being poor, underestimating the importance of sheer luck or bad luck. This may lead to blaming external factors or the poor themselves for the situation, creating friction in society and reducing social cohesion.

Capability enhancing goods are required in order to live the life someone chooses. Capability enhancing goods is a broader category than human capital, which rather focuses on the return on investment in education, measured in income. 18 Of importance is not the good as such, but what people can achieve with these goods, i.e. expand their capabilities and in turn their freedom, which Nobel Prize winner Amartya Sen<sup>19</sup> considers to be the main aim of development. This freedom ranges from the freedom from hunger, exploitation and suffering to the freedom to live the life someone appreciates him or herself. For example, health care an education enhance human capital and in turn the income earning capacity of individuals, while also expanding the production possibilities in society. However, this approach rather focuses on growth of GDP and income, which is not necessarily sustainable in the long-run, reducing capabilities of further generations. Health as such increases the possibilities for enjoying life and goods. Well-developed education may empower people to obtain access to information, process information, function socially and economically, defend their own rights, adapt to changes in society and the economy, etc. In fact, it can be argued that education and health care are elementary for capabilities necessary for competing on the market, which provides arguments for general access to a certain level of health care and education.

Capability enhancing goods such as health, education, access to food and shelter, but also capability enhancing human rights, ceteris

D. Kahneman, Thinking, fast and slow ...

J. Mincer, *Investment in human capital and personal income distribution*, "Journal of Political Economy" 66(4), 1958, pp. 281-302; G. S. Becker, *Investment in human capital: a theoretical analysis*, "Journal of Political Economy" 70(5), 1962, pp. 9-49.

<sup>&</sup>lt;sup>19</sup> A. K. Sen, Development as freedom...

paribus, support social cohesion. When the market as such does not provide these goods in the proper amount, there is a role for a higher authority—local administration, state administration and the European Union level. In the context of multilevel governance, following the logic of the subsidiarity principle, the EU should only step in when all lower levels of administration fail to do the job properly. Multilevel governance can be defined as "A system of continuous negotiation among nested governance systems at several territorial tiers—global, regional (e.g., European), national, subnational, local—which are enmeshed in territorial overarching policy networks and are the result of a broad process of institutional creation and decisional reallocation that has pulled some previously centralised functions of the state up to supra-national levels and down to subnational levels (Van den Brande, 2008, 5)."<sup>20</sup>

An issue which complicates the matter is the problem of asymmetric information – at the lowest level (the citizen or the local community), people rather better know what are their needs and what is missing than on the administrative level. On the other hand, they do not have the complete overview of the whole situation in the EU and are not able to influence the development of capability enhancing goods in other administrative units. In this line of reasoning the optimal solution would be that the EU provides capability enhancing public goods, in particular those who support the functioning of the market, and the development of, for example, health care and education the moment local governments or central governments do not have the financial means and / or the administrative capacity. The logic of the argument is - the moment the market fails, that level of administration should intervene that is able to do it most effectively and efficiently. So, when theoretically a nation state would be the level to deal with health care issues, but is either too poor or not effective enough, then the EU can step in.

<sup>&</sup>lt;sup>20</sup> K. Van den Brande, S. Happaerts, H. Bruyninckx, *The role of the subnational level in decision-making for sustainable development –a multilevel governance perspective*, Working Paper 4, Leuven: Katholieke Universiteit Leuven 2008, p. 5.

The capability enhancing goods, which support social cohesion, that the EU should provide according to the subsidiarity principle are in fact a kind of public goods that support the functioning of the market. While transport and transport infrastructure, or transport systems, and a well-functioning financial system are fundamental for the functioning of markets, also market institutions (rules of the game creating stability and transparency) have features of a public good. Transport systems are often discussed in the context of negative environmental externalities, threatening their sustainability.<sup>21</sup> Its fundamental importance for the functioning of the market seems to remain underemphasized in the discourse on sustainable development. As Adam Smith<sup>22</sup> already argued, the extent of the market depends on the development of transport systems and the areas that are included by these systems. In his days, this rather concerned sea transport and horse and carriage as land transport. The functioning of transport systems can be significantly enhanced by logistics, in this way expanding the positive externalities (not-excludable and non-rival benefits). A better functioning market leads to access to a wider range of goods, cheaper imports, increased competition and thus, ceteris paribus, lower prices and higher quality of consumer and producer goods. As such, on the one hand, transport and infrastructure should be supported by the state (or, as discussed later, by different levels of state administration in the context of multilevel governance), while on the other hand reducing negative externalities (Paradowska, 2011).<sup>23</sup> Access to transport systems, in order to enhance capabilities to realize individual life plans, is an important element of supporting social cohesion. When only emphasizing the economic functions of transport systems, while reducing negative environmental externalities, this not only may lead to a concentration

See, e.g., M. Paradowska, Rozwój zrównoważonych systemów transportowych polskich miast i aglomeracji w procesie integracji z Unią Europejską – przykład aglomeracji wrocławskiej, Opole: Wydawnictwo Uniwersytetu Opolskiego 2011.

<sup>&</sup>lt;sup>22</sup> A. Smith, op.cit.

<sup>&</sup>lt;sup>23</sup> M. Paradowska, op. cit.

of economic activity in certain areas (increasing spatial inequalities), as well as excessive emphasis on economic growth, which not only may put unsustainable pressure on energy and other natural resources, but also are often related to increasing demand for transport, which in turn not only may lead to (increased) traffic jams<sup>24</sup> (compare Sterman, 2000) but also an increase in negative externalities as well as energy use. So, in order to enhance social cohesion sustainably, transport policy should take such positive feedback loops into consideration in order to support sustainability.

# 2. Information and government intervention in the market

While there are many other approaches to and multiple reasons for government intervention in the economy, focus will be on informational issues in order to explain the logic of government intervention in the context of multilevel governance. A lack of or asymmetric information may be the most fundamental market failure. When information lacks, this may lead to wrong decisions. Asymmetric information, the case that one market party possesses more information than other market parties, <sup>25</sup> creates room for opportunistic behaviour, which together with other informational problems may strengthen the other market failures, and reduce society's capacity to deal with these problems.

Negative externalities such as pollution may increase when no information on these issues becomes available to the public. The polluter may feel an incentive to externalize more costs when such behaviour is not observed. Freedom of press, freedom of speech and political freedom (e.g., the freedom to replace inefficient leaders) may reduce this problem. This is similar to Amartya Sen's<sup>26</sup> argument that in a democratic country with freedom of press and speech,

<sup>&</sup>lt;sup>24</sup> Compare J. D. Sterman, *Business dynamics: system thinking and modeling for a complex world*, Boston: Irwin / McGraw Hill 2000.

G. A. Akerlof, *The market for "lemons": quality, uncertainty and the market mechanism,* "Quarterly Journal of Economics", 84 (1970), pp. 488-500.

<sup>&</sup>lt;sup>26</sup> A. K. Sen, Development as freedom ...

famines will rather not appear, as otherwise the government probably will not be reelected. When environmental problems become visible, something can be done about them. However, the incentives to do this are likely to be weaker than in case of a famine, as, for example, a dying nature may be less dramatic for people than other people dying. The mentioned freedom of speech, press and political freedom provide people with an instrument to deal with problems negatively influencing their rights, and in turn support social cohesion.<sup>27</sup>

Also problems exist with identifying *positive externalities* and *positive feedback loops*, the situation when, for example, as was discussed earlier the development of infrastructure may lead to increased access (ceteris paribus, supporting social cohesion), which in turn may lead to more congestion in turn reducing accessibility. When such information is not available, this leads to the impossibility to deal with threats to the functioning of a system (transport, finance, etc.). *Imperfect competition*, for example collusion between companies with the aim of increasing prices or share markets, is based on tacit agreements. Also here information problems create the basis for opportunistic behaviour and prevent the finding of solutions.

A fundamental problem with the production of *public goods* is the so-called free-rider problem.<sup>28</sup> As public goods such as water protection or the safety created by policy and the army are non-excludable, the market will have difficulties to produce such goods. Although in some cases (e.g., club goods such as highways)<sup>29</sup> it is possible to obtain payment, this difficult in case of police, water protection, etc., as there is no exclusion mechanism for people refusing to contribute financially.

Of course, this does not mean that democracy, or freedom of speech, are perfect means to support social cohesion. Press can also be used in order to create frictions and hatred among people. However, the moment that there is competition in information provision, there at least the possibility exists an alternative view may be expressed, for which the room is very limited or non-existent in dictatorial systems.

D. Begg, S. Fischer, R. Dornbusch, *Economics*, London: McGraw-Hill 2008.

See Pigou A. C., The economics of welfare, London: Macmillan 1920; F. Knight, Some fallacies in the interpretation of social cost, "Quarterly Journal of Economics", 38(4),1924, pp. 582-606.

While information problems may seem to be less important here. a problem with the production of such goods by the state is the collection of taxes. The willingness to pay these taxes by the citizens are, among other things, determined by the perception of what the government does for them.<sup>30</sup> This perception, related to trust in the government, is important, as many citizens may not possess all information or knowledge on the relevance of public goods, and the positive externalities related to these goods. For example, few people realize the usefulness of a land register, which facilitates the identification of ownership of property. This not only facilitates transactions of such property, but, accompanied by notarial deeds, creates the possibility to get a mortgage for developing a small business.<sup>31</sup> Thus, the moment citizens possess more information, and understand the need of paying taxes for developing infrastructure, health care, education, as well as an effective public administration, there may be less problems and in turn costs, related to tax collection.

While perfect markets are assumed to be featured by perfect information,<sup>32</sup> this information may not be completely available at a certain point in time. This information, following Friedrich Hayek,<sup>33</sup> may become available in the process of search, and trial and error, in the market. The basic idea is that when a consumer does not know which car, dress, or kind of food for tomorrow's dinner to buy, then a civil servant or government planner has even much bigger problems with this. The examples provided below focus on the question whether

J. K. Kampen, J. Billiet, G. Molenbergs, Constituents of trust in government in Flanders (1995-1999): an exploration, Paper prepared for the European Group of Public Administration Conference, 5-8.09.2001.

According to the Peruvian economist Hernando de Soto in his book *The mystery of capital: why capitalism triumphs in the West and fails everywhere else* (New York: Basic Books 2000), this is one of the reasons why capitalism works in the West, and not in many less developed countries.

D. Begg, S. Fischer, R. Dornbusch, *Economics*, London: McGraw-Hill 2008.

F. A. Hayek (ed.), *Collectivist economic planning*, London: Routledge 1935; F. A. Hayek, *Economics and knowledge*, "Economica", 4(13), 1937, pp. 33-54; F. A. Hayek, *The use of knowledge in society*, "American Economic Review", 35(4), 1945, pp. 519-530.

a customer can find out the taste and/or quality of a complex, heterogeneous good, at relatively low costs (financial, time, health, social relations, etc.) and low risk of irreversible mental or physical damage. When this is not the case, the question is whether information problems should be a reason for limiting individual liberties? This would reduce peoples' capabilities, which in turn might negatively influence social cohesion. Improving access to information for all people would reduce the possibility of manipulation, also supporting social cohesion as defined at the beginning of this paper.

As was discussed, according to Amartya Sen individual liberties create the capabilities for directing one's own life. And one can ask him or herself who should have the right to tell others what is good for them. If someone expects, for ideological or religious reasons, to have a higher consciousness than others, and to describe others how to live, should he/she be surprised other may think and/or do the same? Furthermore, besides the question whether consumers possess all information about the effects of an activity, for the regulator a similar question applies – do we have all information on the potential effects of policy? Furthermore, who bears the costs (in other words, are there externalities)? We ourselves? Our neighbours? Other countries / regions? Future generations? Do we take potential side effects into consideration? When information problems in the market exist, the following measures may be considered:

Information provision and education;

Increase price to reduce consumption;

Regulation;

Delegalization.

In the discussion about the harm of a product, one should not forget that basically all products can be harmful, depending on the level of consumption. Even water, a necessity of life, can, when consumed in excessive amounts, lead to death.<sup>34</sup> While most people are unlikely to drink such amounts of water, there always may be indi-

T. D. Noakes, Case proven: exercise associated hyponatraemia is due to overdrinking. So why did it take 20 years before the original evidence was accepted, "British Journal of Sports Medicine", 40(7), 2006, pp. 567–572.

viduals engaging in excessive behaviour. In such a case, an important question is:

- 1. Has the consumer knowledge and is he / she conscious of the potential irreversible effects of his / her consumption behaviour (i.e., is there enough information available to make a conscious decision)?
- 2. If the answer is yes, is a consumer allowed to do him / herself harm, even when this would lead to irreversible health problems, and maybe even death?
- 3. Are there significant negative externalities for third parties connected with the consumption decision?

When following the market logic, from the property rights perspective, private ownership on someone's body and mind should be unlimited. So, theoretically, when doing no-one else harm, the government or a higher authority should not intervene in consumption decisions when they are conscious and voluntary. When drinking or smoking at home, this would not directly affect others. However, heavy drinking in bars till late at night may lead to noise, fights, etc., not to speak of potential problems such as domestic violence. So, even then condition 1 and 2 are fulfilled, there may be reasons for limiting one's rights, for example regulating closure times in the leisure sector by local governments. Furthermore, rights may trade-off. The right to possess a gun may collide with other peoples' right to be safe from other people abusing their guns, an issue heavily discussed in the USA. Thus, while the market logic is often based on the idea of an atomistic society, in reality people interact in a commonly used space, while different market failures exist where issues of social cohesion gain in importance.

Now consider the possibility of trying to find out the taste and quality of chocolate, alcoholic drinks and drugs, and the relation with government intervention at different administrative scales as well as the support of social cohesion. On first sight, it may be thought that when just eating chocolate, we can find out what type of chocolate we like. And when exaggerating with consumption, as many children in richer countries of the world may have done, the stomach sensation and other experiences may teach the lesson that such a consumption

behaviour does not maximize utility, and is not worth repeating. Regarding the relation between excessive chocolate consumption (and other food consumption) and different types of health problems parents and peers, based on their own experience and knowledge, may provide sufficient information. However, the transaction costs of finding out all the effects on health (e.g., different diseases) may be too high. At such a moment, education, dissemination of medical research results, etc., become important. In particular, this is relevant when some parts of the population have more difficulties with access to proper information. Following the market logic, information should be provided by non-governmental organizations, government agencies, media, etc., to let these people make conscious consumption decisions without becoming paternalistic.

Alcoholic beverages, soft drugs and hard drugs are illegal in different countries. The policies are very different. For example, alcoholic beverages are illegal for Muslims in countries like Iran, Pakistan and Saudi Arabia, 35 soft drugs are legal or semi legal in countries like Uruguay, The Czech Republic, The Netherlands and some US states. The question of irreversible damage and the threat of informal structures appearing have to be considered when assessing the cases of legalization, delegalization and regulation.

Does consumption cause long-term irreversible damage? Excessive consumption of alcohol may not only lead to a hangover, but eventually also to death. Furthermore, younger persons may be more likely to get irreversible physical problems.<sup>36</sup> While soft drugs may

<sup>&</sup>lt;sup>35</sup> Islam and alcohol, Tipsy taboo - Alcohol is a reality in Muslim lands, but discussing it remains off limits, "The Economist", 18.08.2012 (available at: http://www.economist.com/node/21560543).

NIH (National Institute on Alcohol Abuse and Alcoholism), Underage drinking -a growing health concern, National Institute on Alcohol Abuse and Alcoholism, United Kingdom 2014 (available at: http://pubs.niaaa.nih.gov/publications/PSA/underagepg2.htm, accessed: 11.10.2014); S. Brown et al., Underage alcohol use -summary of developmental processes and mechanisms: ages 16–20, "A Developmental Perspective on Underage Alcohol Use", 32(1), 2009, pp. 41-52. (available at: http://pubs.niaaa.nih.gov/publications/arh321/41-52.htm, Accessed: 10.10.2012).

cause detrimental effects with long term use, there is no real irreversible damage of one time use,<sup>37</sup> which can be certainly the case with an overdose of hard drugs. This may be an argument for delegalization of hard drugs, and for legalization or regulation of soft drugs.

In case of delegalization, as monitoring and enforcement costs are high, informal structures (illegal trade, parallel economy, mafia structures, etc.) come into being to coordinate the production and distribution of such goods. The quality of the good cannot be controlled by a higher authority, producers cannot be taken to court by dissatisfied consumers without themselves running the risk of penalties, jail or even death punishment in some countries. This provides stronger incentives for opportunistic behaviour. Furthermore, when these informal structures increase in size, they may undermine the state (e.g., the mafia in Russia and Italy). When legalizing the production and trade of such goods, in case of large existing mafia structures, these structures may try to find new business and problems may appear in other sectors (e.g., money laundering, human trafficking). The development of illegal structures is often related to a weakening of the state, unequal access to public services, corruption, etc. While this as such negatively influences social cohesion, formal policy has probably little influence on the people working in these informal sectors. Thus, a developing informal economy not only undermines social cohesion, but also makes policy more difficult than in the case with other market failures due to the lack of information (many problems are not visible) as well as difficulties to get access to the groups functioning in the informal economy.

## Final remarks

In a perfect world, the market would lead to social cohesion. As the world is imperfect, it is important to support people's capabili-

B. Calabria et al., *Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use*, "Drug and Alcohol Review" 29(3), 2010, pp. 318–330.

ties to determine their own life, reducing in this way social tensions, inequality and social exclusion. An important element in policy for social cohesion is information, as informational problems are fundamental in all other types of market failures. Thus, a mechanism to collect, process, manage and disseminate information in a transparent and accountable way (in order to guarantee the reliability of information) may be the cornerstone of any type of policy, including social cohesion policy. This mechanism can be provided at different levels of administration (local, national, transnational, global). While there is an important role for local and national administration in this, there is a task for the EU, as spatial asymmetries in information distribution challenges the functioning of the common market, and threatens social cohesion by creating inequality in capabilities. When focusing in information, capabilities are enhanced by lowering the transaction costs of obtaining and processing information for individuals and groups. Capabilities should enable people to have access to markets (no exclusion), while this participation would not reduce the opportunity of others to participate (non-rivalry). In this sense, the rules and policy governing the market are a kind of public good. 38

However, a challenge in designing, producing, maintaining and using such market institutions is to reduce the mentioned transaction costs as well as the influence of interest groups on the process of creating rules and structures governing the market. Otherwise there exists the danger of markets becoming a kind of club good, where part of society is excluded. This may cause social exclusion, and undermines social cohesion due to a differentiation of capabilities.

A deeper analysis is required regarding trade-offs between effects of policy created at different levels of administration.<sup>39</sup> The crux of

J. Ahrens, H. W. Hoen, R. Ohr, *Deepening Integration in an Enlarged EU: a club-theoretical perspective*, "Journal of European Integration" 27(4), 2005, pp. 417-439.

For example, the construction of a factory in one area in order to reduce unemployment may not only lead to competition with other areas (threatening employment there), but also influence transport flows in case of trans-regional and international trade, causing negative externalities in other areas.

multilevel governance, the creation of policy and provision of different types of public goods in order to, among other things, support social cohesion, may be the minimization of such trade-offs and the creation of decision-making mechanisms based on principles of good governance. This would allow for conscious decision-making regarding the mentioned trade-offs. Furthermore, while the EU has a role in designing and creating enforcement mechanisms for the general rules for the common market, this may reduce the role of the nation state to deal with nation-specific problems regarding capability inequality, social exclusion, etc. An analytical problem is that policy is often based on the assumption that a first-best solution can be found based on, for example, the theory of perfect markets. However, while being a useful analytical framework, a deeper analysis of, for example, the influence of different legal situations, laws, but also culture, levels of trust, and mentality is required in combination with other approaches, as otherwise we may try to construct a world based on a utopian vision, afterwards asking ourselves why so many things went wrong.

### **References:**

- Ahlt M., Szpunar M., *Prawo europejskie*, Warszawa: Wydawnictwo C.H. Beck 2008.
- Ahrens J., Hoen H. W., Ohr R., *Deepening Integration in an enlarged EU: a club-theoretical perspective*, "Journal of European Integration" 27(4), 2005, pp. 417-439.
- Akerlof G. A., The market for "lemons": quality, uncertainty and the market mechanism, "Quarterly Journal of Economics" 84(1970), pp. 488-500.
- Becker G. S., *Investment in human capital: a theoretical analysis*, "Journal of Political Economy" 70(5),1962, pp. 9-49.
- Begg D., Fischer S., Dornbusch R., *Economics*, London: McGraw-Hill 2008.
- Brown S. A., Mc Gue M., Maggs J., Schulenberg J., Hingson R., Swartz-welder S., Martin C., Chung T., Tapert S. F., Sher K., Winters K. C., Lowman C., Murphy S., *Underage alcohol use summary of develop-*

- mental processes and mechanisms: ages 16–20, "A Developmental Perspective on Underage Alcohol Use" 32(1), 2009, pp. 41-52 (available at: http://pubs.niaaa.nih.gov/publications/arh321/41-52.htm).
- Calabria B., Degenhardt L., Hall W., Lynskey M., *Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use*, "Drug and Alcohol Review" 29(3), 2010, pp. 318–330.
- De Soto H., The mystery of capital: why capitalism triumphs in the West and fails everywhere else, New York: Basic Books 2000.
- Friedman M., Capitalism and freedom, Chicago: University of Chicago Press 1962.
- Hayek F. A. (ed.), Collectivist economic planning, London: Routledge 1935.
- Hayek F. A., *Economics and knowledge*, "Economica" 4(13), 1937, pp. 33-54.
- Hayek F. A., *The use of knowledge in society*, "American Economic Review", 35(4), 1945, pp. 519-530.
- Islam and alcohol, Tipsy taboo Alcohol is a reality in Muslim lands, but discussing it remains off limits, "The Economist", 18.08.2012 (available at: http://www.economist.com/node/21560543).
- Kahneman D., *Thinking, fast and slow*, New York: Farrar, Strauss and Giroux 2011.
- Kampen J. K., Billiet J., Molenberghs G., *Constituents of trust in government in Flanders (1995-1999): an exploration*, Paper prepared for the European Group of Public Administration Conference, 5-8.09. 2001.
- Knight F., Some fallacies in the interpretation of social cost, "Quarterly Journal of Economics" 38(4), 1924, pp. 582-606.
- Mincer J., *Investment in human capital and personal income distribution*, "Journal of Political Economy", 66(4),1958, pp. 281-302.
- Molho I., *The economics of information -lying and cheating in markets and organizations*, Oxford: Blackwell Publishers 1997.
- NIH (National Institute on Alcohol Abuse and Alcoholism), *Underage drinking a growing health concern*, National Institute on Alcohol Abuse and Alcoholism, United Kingdom, 2014, (available at: http://pubs.niaaa.nih.gov/publications/PSA/underagepg2.htm, Accessed: 11.10.2014.
- Noakes T. D., Case proven: exercise associated hyponatraemia is due to overdrinking. So why did it take 20 years before the original evidence was

- accepted, "British Journal of Sports Medicine", 40(7), 2006, pp. 567–572.
- Paradowska M., Rozwój zrównoważonych systemów transportowych polskich miast i aglomeracji w procesie integracji z Unią Europejską przykład aglomeracji wrocławskiej, Opole: Wydawnictwo Uniwersytetu Opolskiego 2011.
- Pigou A. C., The economics of welfare, London: Macmillan 1920.
- Platje J., Institutional change and Poland's economic performance since the 1970s -incentives and transaction costs, Wrocław: CL Consulting i Logistyka 2004.
- Report of the High Level Task Force and Social Cohesion in the 21st Century, Towards an active, fair and socially cohesive Europe, TFSC (2007) 31E, Strassbourg: Council of Europe 2008.
- Roemer J. E., *A general theory of exploitation and class*, Cambridge: Harvard University Press 1982.
- Roemer J. E., Free to lose, London: Routledge 1988.
- Sen A. K., *Equality of what?*, [In:] S. M. McMurrin (ed.), Liberty, equality and law-selected tanner lectures on moral philosophy, Salt Lake City: University of Utah Press 1987, pp. 137-162.
- Sen A. K., Development as freedom, New York: Anchor Books 1999.
- Smith A., *An inquiry into the nature and causes of the wealth of nations*, Reprint edited with an introduction by Kathryn Sutherlands, Oxford: Oxford University Press 1998(1776).
- Sterman J. D., *Business dynamics: system thinking and modelling for a complex world*, Boston: Irwin / McGraw Hill 2000.
- Sustainable development indicators to monitor the implementation of the EU sustainable development strategy, Communication from Mr. Almunia to the Members of the Commission, Commission of the European Communities, SEC(2005) 161final, Brussels 2005.
- Van den Brande K., S. Happaerts, H. Bruyninckx, *The Role of the Subnational Level in Decision-Making for Sustainable Development –a multilevel governance perspective*. Working Paper 4., Leuven: Katholieke Universiteit Leuven 2008.

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## Quantitative Effects of the Promotion of Networks on Regional Development. Findings from Two Analyses in Germany

#### **Abstract**

More than two decades ago a paradigm change was introduced in promotion policies for rural regions. This involved focusing more closely on building endogenous strengths by supporting cooperative and actororiented regional networks. There are, however, still few findings on the long-term effectiveness of such approaches to regional development. This paper presents the results of two empirical investigations that attempt to quantitatively analyse the effects of the promotion of regional networks. The first investigation focuses on a micro-scale network analysis for the rural district of Vogelsberg. The second is a macro-scale countrywide analysis of regional statistics which considers a range of funding programmes simultaneously. The results clearly show that the programmes can increase the density of actor networks in the short term, but that there is no evidence of long-term positive effects on the economic development and population trends of the regions.

Key words: regional development, spatial disparities, evaluation

### Introduction

As in the whole of Europe, the policy programme for integrated regional development in Germany has fundamentally changed in the last twenty years with the promotion of regional networks becoming an

explicit objective. This paradigm shift towards "endogenous regional development" is intended to activate the local strengths of the regions in a "bottom-up" approach. Important theoretical reference points for the paradigm change are provided by the concepts of "relational economic geography"<sup>1</sup>, where a stronger focus is put on the institutional context of spaces and interactions between actors than in the classical approaches of regional economics. The concept of the learning region emphasises the role of networks between firms, but also that of supporting institutions and cultural factors, in regional learning processes that can break up negative path-dependent developments<sup>2</sup>. Furthermore, the "soft locational factor" of quality of life is being attributed with increasing significance, also for the economic development of regions. However, both the theoretical stringency of these concepts and the empirical evidence supporting them have been subject to considerable criticism within economic geography<sup>3</sup>. In political sciences the research field of (regional) governance has attracted notable attention in the last ten years. The focus of attention here has been especially on structural characteristics, mechanisms<sup>4</sup>, courses of development<sup>5</sup> and

J. Bathelt, J. Glückler J., Wirtschaftsgeographie. Ökonomische Beziehungen in räumlicher Perspektive, Stuttgart: UTB–Ulmar 2002.

E. W. Schamp, Vernetzte Produktion. Industriegeographie aus institutioneller Perspektive, Darmstadt: Wissenschaftliche Buchgesellschaft 2000; R. Hassink, The Learning Region: A Policy Concept to Unlock Regional Economies from Path Dependency?, Paper prepared for the conference Regionalization of Innovation Policy -Options and Experiences, Berlin, 4-5.06.2004.

L. Schätzl, *Wirtschaftsgeographie 1*, Theorie (9. Aufl.), Paderborn: UTB 2003, p. 243.

<sup>&</sup>lt;sup>4</sup> E.g. A. Benz, S. Lütz, U. Schimank, G. Simonis G. (eds.), *Handbuch Governance. Theoretische Grundlagen und empirische Handlungsfelder*, Wiesbaden: Springer 2007.

E.g. D. Fürst, M. Lahner, K. Pollermann, Entstehung und Funktionsweise von Regional Goverance bei dem Gemeinschaftsgut Natur und Landschaft. Analyse von Place-Making und Governance Prozessen in Biosphärenreservaten in Deutschland und Großbritannien Schriftenreihe der Fachgruppe Landschaft, Beiträge zur räumlichen Planung Band 82, Hannover: Institut für Umweltplanung 2006; S. Löwis von, Governance in Stadtregionen zwischen Stabilität und Wandel. Ent-

learning processes<sup>6</sup>, but not on the effects on the regions. The only larger countrywide investigation dedicated to the empirical investigation of the effects of governance structures on indicators of regional development was conducted by Panebianco<sup>7</sup>, the results of which cast a rather sceptical light on the effectiveness of these approaches in promoting regional networks.

Otherwise the issue of judging the effects of the programmes is delegated to evaluation research. In contrast to, for instance, assessments of firm-related economic promotion<sup>8</sup> however, these evaluations appraise only effects that can be directly attributed to the programme and do not use methods of regional statistics to set these effects in the overall context of the general development of the regions. Thus, e.g., it was determined that the LEADER II programme created a net total of just under 1,600 jobs in Germany as a whole between 1994 and 1999<sup>9</sup>. The competition REGIONEN AKTIV (2002-2007)<sup>10</sup>, as a further example, created or preserved almost

wicklung der räumlichen Steuerungsstrukturen in der Metropolregion Hamburg von 1989 bis 2009, Baden-Baden: Nomos Verlagsgesellschaft 2012.

K. Zimmermann, Regional Governance als kollektiver Lernprozess?, [In:] R. Kleinfeld, H. Plamper, A. Huber (eds.), Regional Governance Band 2. Steuerung, Koordination und Kommunikation in regionalen Netzwerken als neue Formen des Regierens, Göttingen/Osnabrück: V&R, Universitätsverlag Osnabrück 2006, pp. 289-300.

S. Panebianco, Standortfaktor Regional Governance auf dem Prüfstand. Theoretische Überlegungen und empirische Analysen zur Bedeutung regionaler Steuerungssysteme für die Wirtschaftsentwicklung von Regionen, Hamburg: Verlag dr Kovač 2013.

<sup>&</sup>lt;sup>8</sup> F. J. Bade, Die Förderung gewerblicher Investitionen durch die Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur": Wie erfolgreich sind die geförderten Betriebe?, "Raumforschung und Raumordnung", 1(2012), pp. 31-48.

<sup>&</sup>lt;sup>9</sup> M. Geißendörfer, Evaluation von Programmen und Konzepten der ländlichen Strukturentwicklung dargestellt am Beispiel der EU-Gemeinschaftsinitiative LEA-DER, Dissertation an der TU-München, München (2005), p. 170.

<sup>&</sup>quot;REGIONEN AKTIV – Land gestaltet Zukunft" was a Demonstration Project of the Federal Ministry for Food and Agriculture dedicated to testing new approaches to the promotion and development of rural areas.

1,050 jobs in the 18 winning regions. This involved a public investment of 56.30 million Euros in about 1,350 projects, generating a further 28.9 million Euros in public and private co-financing<sup>11</sup>. These evaluations focus on the effects of individual programmes and do not consider overlaps and interactions of programmes within any one region or the medium- to long-term effects of programmes on highly aggregated (macro-economic) indicators<sup>12</sup>. It is, thus, impossible to expect meaningful findings on whether the promotion of regional and mostly innovation-oriented networks of regional development has really led to self-sustaining structures and positive economic developments.

The following presents the results of two independent quantitatively based investigations into the effects of promotional funding. The first investigation considers one region as a case-study and investigates the direct effects of a funding programme with regards to the networking of actors. The second investigation carries out a countrywide examination of regional statistics and analyses the effects of a range of programmes, including those promoting actor networks, over a longer period of time.

# 1. Micro-scale: quantitative analysis of changes in an actor network in a government-funded demonstration region

The following discussion presents an example of a quantitative network analysis that traces the short- to medium-term effects of a funding programme on the regional structure of actors. The programme in question was a Demonstration Project of Spatial Planning (MORO) on Regional Public Services, carried out in 21 project regions in Germany between 2001 and 2013. One of these research

<sup>11 (</sup>BMELV) 2012, Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz: So haben ländliche Räume Zukunft. Ergebnisse und Erfahrungen des Modellvorhabens REGIONEN AKTIV, Bonn 2012; see also S. Elbe, Die Voraussetzungen der erfolgreichen Steuerung..., p. 44.

<sup>&</sup>lt;sup>12</sup> M. Geißendörfer, op. cit., p. 285.

project regions was located in the rural district of Vogelsberg in central Hessen. This upland region is situated in the centre of Germany but is nonetheless more than an hour's drive from the nearest conurbation (Rhine-Main).

Figure 1: Rural district of Vogelsberg: location in Germany (left) and regional structure (right)



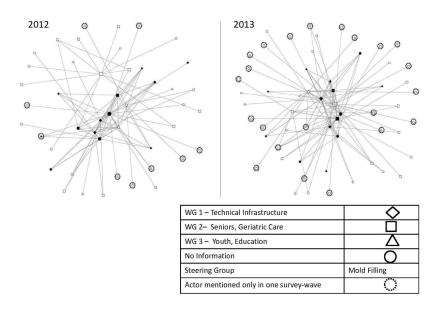
Source: http://www.pundm.hessen.de/uploads/pics/vogelsberg\_l.gif

With the current total of 108,000 inhabitants the rural district of Vogelsberg (Fig. 1) shares the problems of all regions involved in this research project. Significant decreases in population render the future sustainability of social and technical infrastructure questionable in a number of fields, giving rise to a range of innovative possibilities for tackling the issue. More so than in the other regions involved, in Vogelsberg networking was seen as the goal of the demonstration project, as reflected in the title of the funding application: "Strategically using networking and participation resources" (Vogelsbergkreis 2013). The analysis was concerned with assessing the extent to which this goal of furthering actor networks was actually fulfilled in the short term. Surveys of the actors were therefore carried out at two

different points in time: at the end of the opening phase (summer 2012) and at the end of the demonstration project (summer 2013). The core of the survey consisted of a standardised questionnaire in which the actors rated the intensity of contacts to other actors in the demonstration project. In order to avoid actors using the first survey wave as an orientation for the second survey wave and thus being able to answer more strategically, the completed questionnaires from the first wave were not made explicitly available to the actors. Expert interviews were also conducted to allow qualitative aspects of the formation of the networks to be traced.

The greatest problem encountered by the investigation was panel mortality between the two survey waves. It was not possible to assess even the first wave results of actors who were no longer available for the second wave, as it was not always clear whether the actors no longer participated in the network or were just no longer participating in the questionnaire. The investigation is thus unable to present an overall picture of network fluctuations. Nonetheless, the results provide indications about the development of the network, as seen in Figure 2 where the network patterns for 2012 and 2013 are compared. In addition to actors who directly participated in the survey, the figures include those who were named by the participants. The colour of the symbols indicates the specialist team to which the actor belongs. Squares represent members of steering groups; the size of the square shows how often they were named by other actors. Actors who were named but did not belong to a specialist team are shown in black, as are steering group actors who belonged to more than one specialist team.

Figure 2: Changes in the structure of actors in the network of the Spatial Planning Demonstration Project on Regional Public Services in the rural district of Vogelsberg.



Source: own compilation and design

It is immediately obvious that the actors in the centre of the network remained largely unchanged (especially members of the steering group), although the intensity of their relations to one another altered slightly, appearing in most cases to become somewhat closer. Even more striking is that new actors appeared on the edge of the network between the two survey waves. These individuals were not themselves included in the survey but were named by those who participated. In 2012 participants named 48 contact persons, in 2013 a total of 58 were named; the network thus grew by approximately 20%.

The analysis demonstrated that, at least for the one year under consideration, the funding programme was successful in increasing the density of a regional actor network. The inner core of the Demonstration Project (particularly the steering group) proved to be stable, without developing any measurable tendency towards isolation. The importance of the central network actor, the project manager, increased somewhat but not to an extent that suggests one-sided dominance. However, in the extended core of the network it was not possible to activate all members or, more particularly, to maintain their level of activity to the desired extent. This is revealed not so much in assessments of the indicators but rather in the lack of interview responses from the surveyed actors; the Demonstration Project clearly had few associations for them. The high proportion of actors who answered the first survey but not the second was particularly notable. The expert opinions furthermore suggested that, measured according to its own aspirations, the network has remained too much confined to the administration and has failed to reach other groups of actors, in particular the "wider" population, to a sufficient degree.

# 2. Macro-scale: Results of a countrywide correlation analysis of regional statistics

The second investigation presented here was a countrywide analysis assessing a longer time span, i.e. the period from 1995 to 2009<sup>13</sup>. The independent variable in the analysis comprised information as to whether funds for regional development initiatives were used in the rural districts or cities with district status. The funds assessed were drawn from 20 programmes financed either by the federal government or jointly by both federal and state governments. The basis of the analysis is an IAW-Bremen database supplemented by information taken from the funding databases of the individual

Individual programmes such as LEADER I date from the period before 1995, but a certain time-lag in the effects of the programmes can be assumed and it is thus useful to include these in the evaluation. Data on population trends and economic development for Saxony-Anhalt are not available for 1995, it was thus necessary to use data for the year 2000. However, the results of additional control calculations excluding the state of Saxony-Anhalt are identical.

programmes, all freely available on the internet. The programmes assessed may be grouped as follows:

- Rural development policy: LEADER I (1991-1993), LEADER
   II (1994-1999), LEADER+ (2000-2006), LEADER in ELER (2007-2013);
- □ REGIONEN AKTIV (2002-2007);
- □ Land Zukunft (2011-2014);
- ☐ Gemeinschaftsaufgabe GAK Förderschwerpunkt ILE und ReM (2004-201 3);
- Spatial planning policy: Städtenetze (1994-1997), Regionalkonferenzen (1996-2000), Regionen der Zukunft (1997-2000), Anpassungsstrategien für ländliche/periphere Regionen mit starkem Bevölkerungsrückgang in den neuen Ländern (2001-2004), Innovative Projekte der Regionalentwicklung (2003-2006), kommKOOP (2005-2006), Region schafft Zukunft (2007-2011), Masterplan Daseinsvorsorge (2008-2009);
- □ Nature protection: Idee Natur (2008 2014/2020);
- Regional economic and structural policy: Gemeinschaftsaufgabe GRW Förderschwerpunkt Regionalmanagement (since 2001).

Figure 3 shows the economic growth rates and number of regional development projects funded in the German rural districts. Large areas of East Germany are characterised by the great number of programmes deployed and particularly high relative growth rates, as are individual regions in Bavaria and in the north of the country.

Figure 3: Number of regional development funding programmes deployed and development of GDP per capita in the rural districts / cities with district status in Germany 1995 - 2009

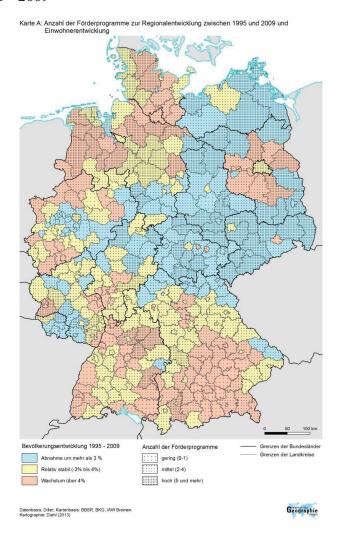


Sources: own evaluation based on data from BBSR Laufende Raumbeobachtung, IAW Bremen

The correlation analysis shows, firstly, that there is a significant negative correlation (R= -0.45) between the utilisation of regional development funding and economic strength (average GDP per capita in the years 1995 and 2009). It can thus be seen that the programmes were deployed more intensively in the structurally weak regions. Secondly, there is a significant association between the rate of increase of GDP per capita between 1995 and 2009 and the number of programmes utilised. This is not particularly pronounced (R=0.21) but it could be an initial indication that supporting regional initiatives do indeed produce results. Those rural districts that intensively deployed the programmes were able to increase their economic strength per capita more than those that made less use of the programmes.

However, a somewhat different picture emerges when changes in the number of inhabitants between 1995 and 2005 are compared with the number of programmes utilised. Indeed, as the programmes are designed not only to benefit economic development, it could be argued that population trends are actually a more meaningful indicator. Figure 4 reveals that, on the one hand, regions that are characterised by particularly positive population trends and that make relatively little use of the funding programmes are concentrated in the agglomerations of the metropolitan regions and in the rural areas of southern Germany. On the other hand, large parts of East Germany, Saarland and the Ruhr area are distinguished not only by particularly pronounced population declines but also by their intensive deployment of the funding programmes. The regions with relatively strong population growth that also take up high levels of funding are striking too; these are primarily found in the northwest of Lower Saxony, in Schleswig-Holstein, around Berlin and in individual areas of southern Germany. The correlation between the deployment of programmes and population trend is significantly negative (R=-0.27). This indicates that the more programmes were utilised in a district between 1995 and 2009, the worse its population trend.

Figure 4: Number of regional development funding programmes deployed and population trends in the rural districts of Germany 1995 - 2009



Source: own evaluation based on data from BBSR Laufende Raumbeobachtung, IAW Bremen

What explanation can be presented for the fact that the deployment of funding programmes in the regions is associated with overproportional economic growth but, on the other hand, also with particularly marked population decline? It seems reasonable to presume that the specific effect of the structural shift in the East German states makes itself felt here. While the East German states have caught up in terms of relative economic strength in the last 20 years and the structural transition, narrowly defined, can be judged as complete, their economic strength continues to compare unfavourably with the average of the states of former West Germany. Growth has not been sufficient to put a halt to the relatively poor population trend. This is similarly true for the peripheral regions of former West Germany<sup>14</sup>.

In order to eliminate the distorting effect of the structural transition in former East German states, a disaggregated assessment according to type of region was conducted. Here a distinction was made between East and West German states and between the individual settlement structures characterising the districts (Figure 5). The results are clear. The indicator demonstrating the need for funding, i.e. average level of GDP between 1995 and 2009, shows that the needy regions were those that received most funding, also when the groups of former West and former East German states were assessed separately. However, no fine-grained differentiations can be distinguished within the distinct types of spatial structure in the East German states. In contrast, the indicators that reveal the effectiveness of programmes, i.e. population and GDP trends, show not a single significant statistical correlation with the number of funded regional initiatives when the comparison is undertaken only between districts of the same structural type.

Wirtschaftlicher Stand und Perspektiven für Ostdeutschland. Studie im Auftrag des Bundesministeriums des Innern, Halle: Institut für Wirtschaftsforschung Halle 2011, p. 52 ff.

district status (without Berlin) 1995 - 2009 according to the consolidated district types of the ployed and the population trend and economic growth in the German rural districts/ cities of Figure 5: Correlation between the number of regional development funding programmes de-Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)

Consolidated   Number of rural districts/   Pearson R - correlation coefficient (significance: *5%; **0.5%)	Numbe	er of rural	districts/	Pearson R	- correlatio	n coefficier	nt (significa	ance: *5%;	**0.5%)
district types BBSR	cities c	cities of district status	tatus	Number of reginitiatives and	Number of regional Number of regional Number of regional initiatives and initiatives and	Number of reginitiatives and	f regional and	Number of reginitiatives and	regional and
				average GDP per capita 1995 and 2009	OP per 5 and	development of GDP per capita 1995 – 2009	ent of apita 09	population trend 1995 – 2009	trend
	Total	Total Former	Former	Former	Former	Former	Former	Former	Former
		Germany	Germany Germany Germany		Germany	Germany	Germany Germany Germany		Germany
Total	401	325	92	-0.38 **	0.37**	0.00	80.0	-0.1	-0.19
1. Urban cores 69	69	58	11	-0.24	0.07	0.1	-0.14	-0.21	-0.18
2. Densely	161	149	12	-0.28**	0.00	-0.05	-0.03	-0.03	-0.2
settled urban fringe									
3. Rural fringe	84	57	27	-0.18	-0.25	0.04	00.00	-0.18	-0.09
4. Rural area 87	87	61	26	-0.35**	-0.04	-0.27*	0.03	-0.08	-0.02

Sources: own evaluation based on data from BBSR Laufende Raumbeobachtung, IAW Bremen

### Final remarks

The two investigations clearly reveal the following. On the microscale the quantitative analysis of changes to the actor network in the rural district of Vogelsberg demonstrates that projects financed from regional development programmes can indeed mobilise actors to improve cooperation in the short to medium term. In the case of the Demonstration Project of Spatial Planning Vogelsberg, an important programme target has thus been at least temporarily achieved.

On the macro-scale, however, the results of the countrywide analysis of regional statistics confirm Panebianco's<sup>15</sup> findings and lead to a rather more sceptical assessment of the long-term effects of programmes promoting actor networks on overall regional development. The analysis shows that the spatial priorities of the funding were correct with programmes being more intensively deployed in the less economically strong regions, whereby funding programmes from various categories were utilised. Several such regions are probably characterised by particularly dynamic actors in both political and administrative spheres, who in the meanwhile practice "programme hopping" between the different programmes so that their regional development initiatives can be stabilised by sequential funding from above<sup>16</sup>. Nonetheless, the analyses provide no measureable indication that regions in which regional initiatives are particularly strongly supported develop better in terms of population figures and economic strength than those in which less funding is deployed. Indeed, when analyses are conducted within structurally similar groups, there is no sign whatsoever that the funded initiatives had any effect on population and GDP trends between 1995 and 2005.

S. Panebianco, op. cit..

G. Nischwitz, R. Molitor, A. Bartelt, S. Rohne, K. Klein-Hitpass, Modell-vorhaben der Raumordnung. Evaluierung "Guter Beispiele" einer nachhaltigen Regionalentwicklung. Good practices II. Unveröffentlichter Abschlussbericht im Auftrag des Bundesamtes für Bauwesen und Raumordnung (BBR), Wuppertal/Bonn 2002.

The results of this evaluation do not mean that the programmes are ineffective. The indicators from regional statistics employed here represent only part of the intended effects of the programmes. Integrated regional development strategies with their discursive bottom-up approach require different principles to be applied than those used for regional economic promotion<sup>17</sup>, and measureable effects are only one aspect of this. Furthermore, in comparison with "hard" programmes, for instance those funding regional economic development and large-scale infrastructure, the amount of funding involved in such projects is relatively low. Thus while the measureable effects may be very small, costs for the taxpayer are not particularly significant. The strategy of promoting endogenous regional development by creating networks is therefore not being fundamentally called into question here, especially as other strategies have not been shown to be any more promising.

Nevertheless, the investigation highlights the efficiency problem of spatially overlapping funding programmes. If regional networking is promoted as the primary aim and thus threatens to mutate into an end in itself without producing measureable regional development effects, then cost-benefit issues arise. This is of relevance not only for the funding authorities but also especially for the regions themselves. Development initiatives draw on regional resources (cofinance, personnel), which are then not available for key municipal tasks. It is, thus, not unusual for a certain fatigue to be noted among key regional actors when faced with requests that they participate in the "network noise" found in some regions as a result of numerous uncoordinated funding initiatives.

The issue of who benefits from the regional development programmes and the question of funding efficiency must thus be

S. Hartke S., *Globalzuschuss und Regionale Teilbudgets: Was geht – was geht nicht*, [In:] S. Elbe, F. Langguth (ed.), Finanzierung regionaler Entwicklung. Oder: Geld ist schon wichtig, Aachen: Shaker Verlag 2011, p. 30.

D. Fürst, Aufwertung der Region als Steuerungsebene?, [In:] D. Fürst, S. Löb, A. Rudolph, K. Zimmermann, Steuerung durch Regionalplanung ("Schriften zur Rechtspolitologie", Band 15), Baden-Baden: Nomos Verlagsgesellschaft 2003, pp. 17-30.

repeatedly addressed both strategically and in each individual region. In the practical debate the approach taken to granting funding has gained particular attention. When municipalities, also in rural regions, are unable to provide basic services does it really make sense to utilise a funding mechanism that entails their participation in complicated procedures to compete for funding, sometimes involving elaborate projects with high communication requirements? It has been suggested that so-called regional global budgets may be a possible way for the European Structural Funds to solve problems of inefficiency in the granting of funding and the lack of co-financing<sup>19</sup>.

## **References:**

- Bade F. J., Die Förderung gewerblicher Investitionen durch die Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur": Wie erfolgreich sind die geförderten Betriebe?, "Raumforschung und Raumordnung", 1(2012), pp. 31-48.
- Bathelt J., Glückler J., Wirtschaftsgeographie. Ökonomische Beziehungen in räumlicher Perspektive, Stuttgart: UTB–Ulmar 2002.
- Benz A., Lütz S., Schimank U., Simonis G. (ed.), *Handbuch Governance*. *Theoretische Grundlagen und empirische Handlungsfelder*, Wiesbaden: Springer 2007.
- Bernat E., Diller Ch., Frank K., Hirschfeld M., Löb S., Mensing K., Nischwitz G., *Regionalisierung und Regionsbildung im Norden*, [In:] Akademie für Raumforschung und Landesplanung, Arbeitsmaterial 347, Hannover: Verl. d. ARL 2009.

S. Elbe, Die Voraussetzungen der erfolgreichen Steuerung integrierter Ansätze durch Förderprogramme. Untersucht am Beispiel des Modellvorhabens Regionen aktiv, Dissertation an der Universität Dortmund, Aachen (2007), p. 95; S.Elbe, Regionalbudgets im Modellvorhaben Regionen Aktiv – und wie geht das in Zukunft?, [In:] S. Elbe, F. Langguth (eds.), Finanzierung regionaler Entwicklung. Oder: Geld ist schon wichtig, Aachen: Shaker Verlag 2011, pp. 69–86; S. Hartke, Globalzuschuss und Regionale Teilbudgets: Was geht – was geht nicht, [In:] S. Elbe, F. Langguth (eds.), Finanzierung regionaler Entwicklung. Oder: Geld ist schon wichtig, Aachen: Shaker Verlag 2011, pp. 29-44.

- (BMELV) 2012, Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz: So haben ländliche Räume Zukunft. Ergebnisse und Erfahrungen des Modellvorhabens REGIONEN AKTIV, Bonn 2012.
- Diller Ch., Konvergenzen zwischen Grundlagen- und Evaluationsforschung in der Raumplanungsforschung, "Zeitschrift für Evaluation", 1(2013), pp. 7-21.
- Diller Ch., *Planung durch Projekte -mehr als ein Tropfen auf dem heißen Stein?*, "Geoscape Alternative Approaches to Middle-European Geography", vol. 4(2009), Supplement, pp. 260-265.
- Elbe S., Regionalbudgets im Modellvorhaben Regionen Aktiv -und wie geht das in Zukunft?, [In:] S. Elbe, F. Langguth (ed.), Finanzierung regionaler Entwicklung. Oder: Geld ist schon wichtig, Aachen: Shaker Verlag 2011, pp. 69-86.
- Elbe S., Die Voraussetzungen der erfolgreichen Steuerung integrierter Ansätze durch Förderprogramme. Untersucht am Beispiel des Modellvorhabens Regionen aktiv, Dissertation an der Universität Dortmund, Aachen (2007).
- Fürst D., Lahner M., Pollermann K., Entstehung und Funktionsweise von Regional Goverance bei dem Gemeinschaftsgut Natur und Landschaft. Analyse von Place-Making und Governance Prozessen in Biosphärenreservaten in Deutschland und Großbritannien Schriftenreihe der Fachgruppe Landschaft, Beiträge zur räumlichen Planung Band 82, Hannover: Institut für Umweltplanung 2006.
- Fürst D., Aufwertung der Region als Steuerungsebene?, [In:] D. Fürst, S. Löb, A. Rudolph, K. Zimmermann, Steuerung durch Regionalplanung ("Schriften zur Rechtspolitologie", Band 15) Baden-Baden: Nomos Verlagsgesellschaft 2003, pp. 17-30.
- Geißendörfer M., Evaluation von Programmen und Konzepten der ländlichen Strukturentwicklung dargestellt am Beispiel der EU-Gemeinschaftsinitiative LEADER, Dissertation an der TU-München, München (2005).
- Gräber H., Holst M, Schackmann-Fallis K. P., Spehl H., *Externe Kontrolle und regionale Wirtschaftspolitik*, Berlin: Edition Sigma 1987, vol. 1.
- Hartke S., *Globalzuschuss und Regionale Teilbudgets: Was geht -was geht nicht*, [In:] S. Elbe, F. Langguth (ed.), Finanzierung regionaler Entwicklung. Oder: Geld ist schon wichtig, Aachen: Shaker Verlag 2011, pp. 29-44.
- Hassink R., The Learning Region: A Policy Concept to Unlock Regional Economies from Path Dependency?, Paper prepared for the Conference Re-

- gionalization of Innovation Policy Options and Experiences, Berlin, 4-5.06.2004.
- Hopfinger H., Für eine gespaltene Regionalpolitik unter veränderten Rahmenbedingungen. Ergebnisse einer Untersuchung über die Auswirkungen der regionalen Wirtschaftsförderung am Beispiel Oberfranken, "Raumforschung und Raumordnung" 42(3), 1983, pp. 90-100.
- Lammers K., Niebuhr A., *Erfolgskontrolle in der deutschen Regionalpolitik:* Überblick und Bewertung, Hamburg: Hamburgisches Welt-Wirtschaft-Archiv 2002 (HWWA –Report 214).
- Löwis S. von, Governance in Stadtregionen zwischen Stabilität und Wandel. Entwicklung der räumlichen Steuerungsstrukturen in der Metropolregion Hamburg von 1989 bis 2009, Baden-Baden: Nomos Verlagsgesellschaft 2012.
- Meincke A., Regionen im Wettbewerb –Leistungswettbewerb als Steuerungsinstrument regionanaler Netzwerke, Baden-Baden: Nomos Verlagsgesellschaft 2012.
- Nischwitz G., Molitor R., Bartelt A., Rohne S., Klein-Hitpass K., Modellvorhaben der Raumordnung. Evaluierung "Guter Beispiele" einer nachhaltigen Regionalentwicklung. Good practices II. Unveröffentlichter Abschlussbericht im Auftrag des Bundesamtes für Bauwesen und Raumordnung (BBR), Wuppertal/Bonn 2002.
- Panebianco S., Standortfaktor Regional Governance auf dem Prüfstand. Theoretische Überlegungen und empirische Analysen zur Bedeutung regionaler Steuerungssysteme für die Wirtschaftsentwicklung von Regionen, Hamburg: Verlag dr Kovač 2013.
- Peters A., Fisher P., *The failures of economic development incentives*, "Journal of the American Planning Association" 70(1), 2004, pp. 27-37.
- Schätzl L., Wirtschaftsgeographie 1, Theorie (9. Aufl.), Paderborn: UTB 2003.
- Schamp E. W., *Vernetzte Produktion. Industriegeographie aus institutioneller Perspektive*, Darmstadt: Wissenschaftliche Buchgesellschaft 2000.
- Sedlacek P., Evaluation in der Stadt- und Regionalentwicklung, Herausforderungen für Wissenschaft und Praxis, [In:] P. Sedlacek (ed.), Evaluation in der Stadt- und Regionalentwicklung. Wiesbaden: VS Verlag (Stadtforschung aktuell, vol. 90) 2004, pp. 11-16.
- Toepel K., Schwab O., Evaluationen in der europäischen Strukturpolitik, "Zeitschrift für Evaluation" 1(2005), pp. 63-74.

- Wirtschaftlicher Stand und Perspektiven für Ostdeutschland. Studie im Auftrag des Bundesministeriums des Innern, Halle: Institut für Wirtschaftsforschung Halle 2011.
- Zimmermann K., Regional Governance als kollektiver Lernprozess?, [In:] R. Kleinfeld, H. Plamper, A. Huber (ed.), Regional Governance Band 2. Steuerung, Koordination und Kommunikation in regionalen Netzwerken als neue Formen des Regierens, Göttingen/Osnabrück: V&R, Universitätsverlag Osnabrück 2006, pp. 289-300.

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## Evolution of the European Union Cohesion Policy Towards Border Regions

#### Abstract

EU cohesion policy is directed primarily at supporting the regions which are peripheral in the socioeconomic sense. Since 1991 – when IN-TERREG programme was established on the basis of the European Regional Development Fund - cohesion policy has also included support for border areas and regional networks, mainly through development of cross-border cooperation. In the current financial perspective of the EU, the cross-border, transnational and interregional cooperation is pursued as part of Objective 3 of cohesion policy, that is the European Territorial Cooperation (ETC). Furthermore, cross-border cooperation with the partner states beyond the external EU border is supported from the funds of the European Neighbourhood and Partnership Instrument. Similar solutions have been adopted for the next programming period 2014-2020 and the European Territorial Cooperation has acquired the status of one of the two objectives of cohesion policy. The aim of this paper is to analyse the evolution of EU cohesion policy towards border regions in the years 1990-2013 and to evaluate it on the basis of the Polish experience. The paper also presents the preparations of Lublin Province (as an example of a border region) for the new perspective of cohesion policy 2014-2020. A special element of these preparations is the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020, which is the first document of this kind in the EU, compiled for the cross-border area located along the external EU border.

Keywords: Cohesion Policy, cross-border cooperation, border regions

## Introduction

Cohesion policy of the European Union (EU) is directed primarily at enhancement of economic, social and territorial cohesion, through reducing disparities in the development levels of European regions, mainly by supporting underprivileged areas. It means that cohesion policy is focused on the regions which are peripheral in the socioeconomic sense, with less emphasis on their actual location. Since 1991 – when INTERREG programme was established on the basis of the European Regional Development Fund – the cohesion policy has also included support for border areas, mainly through development of cross-border cooperation. This creates certain opportunities for counteracting the negative influence of the border on development processes and preventing marginalisation.

The aim of this paper is to analyse the evolution of EU cohesion policy towards border regions in the years 1989-2013 and to evaluate it on the basis of the Polish experience. Moreover, the paper presents the preparations of Lublin Province (as an example of a border region) for the new perspective of cohesion policy 2014-2020. A special element of these preparations is the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020, which is the first document of this kind in the EU, compiled for the cross-border area located along the external EU border.

## 1. Objectives of cohesion policy and the border regions

The years 1989-2020 have been a period of evolution and concentration of EU cohesion policy objectives (Table 1). Implementation of Objective 1 in 1989-1993 took ca. 60% of 57 billion EUR allocated for the EU regional policy. In the following period 1994-1999 it absorbed about 70% of 137 billion EUR (together with Objective 6), and in the subsequent periods respectively: ca. 75% of 183 billion EUR (2000-2006) and ca. 80% of 308 billion EUR (2007-2013). Due to the dominant Objective 1, the EU regional policy is also referred to as cohesion policy.

Table 1. Objectives of cohesion policy in 1989-2020.

	Programı	Programming period:		
1989-1993	1994-1999	2000-2006	2007-2013	2014-2020
Objective 1 (regional): Development and structural	Objective 1 (regional): Development and structural	Objective 1 (regional): Development and	Objective 1 (regional):	Objective 1 (regional):
adjustment of regions whose	adjustment of regions whose	structural adjustment	Convergence	Investment for
development is lagging behind	development is lagging behind	of regions whose development is lagging		growth and jobs
		behind (former Objectives 1 and 6)		
Objective 2 (regional):	Objective 2 (regional):	Objective 2 (regional):	Objective 2	Objective 2
Conversion of declining	Conversion of declining	Economic and social	(regional):	(regional):
industrial regions	industrial regions	conversion of areas	Regional	European
		experiencing structural	competitiveness	territorial
		difficulties (former	and employment	cooperation
		Objectives 2 and 5b)		
Objective 3 (horizontal):	Objective 3 (horizontal):	Objective 3 (horizontal):	Objective 3	
Combating long-term	Combating long-term	Support for adaptation	(regional):	
	unemployment and assisting	and modernisation of the	European	
the occupational integration of	the occupational integration	education, training and	territorial	1
young people	of young people	employment policy	cooperation	
Objective 4 (horizontal):	Objective 4 (horizontal):			
Adaptation of workers to	Adaptation of workers to			
industrial changes and to	industrial changes and			
changes in production systems	to changes in production		1	1
	systems			

Objective 5a (horizontal):	Objective 5a (horizontal):		
Acceleration of structural	Acceleration of structural		
adjustment in agriculture	adjustment in agriculture		
within the Common	within the Common	ı	ı
Agricultural Policy	Agricultural Policy		
Objective 5b (regional):	Objective 5b (regional)		
Support for development and	Support for development and		
structural changes in rural areas structural changes in rural	structural changes in rural	1	1
	areas		
	Objective 6 (regional):		
	Development and structural		
	adjustment in regions with		
ı	low population density	ı	
	(below 8 people per 1 $\rm km^2$		
	- applies to Finland and		
	Sweden)		

Source: Compiled by the authors on the basis of: I. Pietrzyk, Polityka regionalna Unii Europejskiej i regiony w państwach członkowskich, Warszawa: Wydawnictwo Naukowe PAN 2004; The Ministry of Regional Development.

Objective 2 is directed at the regions (which in this case means NUTS 3 territorial units) which were previously well-developed but currently experience difficulties connected with a change in development factors, which in consequence reduced their competitiveness. In 1989-1999 this Objective was supplemented with three horizontal Objectives (3, 4, 5a). From 2000 to 2013 the regional policy Objectives were consolidated by combining Objective 2 with 5a and Objective 3 with 4. Objective 2 (in the years 1989-1999 Objective 2 + Objective 5b) absorbed respectively: ca. 17% of the EU budget for regional policy in 1989-1993 and 1994-1999, about 22% in 2000-2006 and about 16% in 2007-2013. In the years 2007-2013 the new Objective 3 emerged – important from the perspective of the aim of this paper – defined as the European Territorial Cooperation, with a share in the regional policy budget below 3%. Referring to Europe 2020 strategy, only two objectives of the regional policy are planned to be implemented in 2014-2020:

- Objective 1: *Investment for growth and jobs*, financed by the European Regional Development Fund, the European Social Fund and the Cohesion Fund,
- Objective 2: *European Territorial Cooperation* (ETC), financed by the European Regional Development Fund.

This implies further concentration of the EU regional policy objectives. The following areas can benefit from financial support within Objective 1 of EU cohesion policy in 2014-2020:

- □ all European regions, which were divided into three categories depending on their GDP per capita in relation to the EU average, that is less developed regions (GDP < 75% of the EU average), transition regions (75% < GDP < 90%) and more developed regions (GDP > 90%),
- Member States whose GNP is at a level below 90% of the EU average.

Objective 2 of cohesion policy encompasses, as before, border regions and transnational areas. Depending on the category of a region, the rate of project co-financing varies as follows:

- □ less developed regions 85%, 80% or 75%,
- □ transition regions 60%,
- □ more developed regions 50%,
- □ borderland and transnational regions within the ETC 75%.

According to the budget proposals of the European Commission, the Cohesion Fund – which co-finances projects in these Member States whose GNP is lower than 90% of the EU average – will have a sum of 68.7 billion EUR for 2014-2020. Within the Structural Funds, less developed regions will be supported with a sum of 162.6 billion EUR, transition regions – 39.0 billion EUR, more developed regions – 53.1 billion EUR, and border and transnational regions within the ETC – 11.7 billion EUR.

On the basis of the present discussion, it can be claimed that the EU regional policy is directed primarily at supporting the regions which are peripheral in the socioeconomic sense, with less emphasis on their actual location. Nevertheless, proposals for another programming period of this policy (2014-2020) envisage gradual limitation of the redistribution-egalitarian component in favour of the competition-innovation component.

The regional policy of the EU encompasses also – even though on a much smaller financial scale – support for border regions and regional networks. In 1991 INTERREG programme was established for the first time on the basis of the European Regional Development Fund, within the framework of the so-called Community Initiatives. Its first edition in 1991 – 1993 was aimed at:

- □ supporting border regions in overcoming their peripheral status,
- development of cross-border cooperation along the internal EU frontiers,
- stimulating cooperation along the external EU frontiers with partners from third countries.

During this period, 31 projects were financed with the total sum of 1082 million EUR. In 1994-1999, during the second edition of INTERREG programme, 60 projects were implemented for the total sum of 3500 million EUR. The programme was divided into three strands:

- A -supporting the development of cross-border cooperation and overcoming associated problems (43 projects for the sum of 2600 million EUR),
- B -eliminating gaps in trans-European transport and energy networks (3 projects for the sum of 500 million EUR),
- C -creating conditions for the sustainable development of Europe in the area of spatial planning and water management (14 projects for the sum of 400 million EUR).

In 2000-2006 the third edition of the programme (INTERREG III) was implemented. The total amount allocated for its implementation was 4875 million EUR. It consisted of three strands:

- ☐ A -local and regional cross-border cooperation,
- B -international cooperation of regional and national authorities of large European regions (e.g. the Baltic Sea region) aimed at sustainable and coordinated spatial development,
- □ C -interregional cooperation on the European scale, including exchange of information and experience concerning regional development and cohesion policies and techniques.

Within the framework of INTERREG III A the following projects were implemented along Polish borders in 2004-2006:

- three Polish–German programmes: Poland (Lower Silesia Province) Saxony; Poland (Lubuskie Province) Brandenburg; Poland (West Pomerania Province) Mecklenburg Hither Pomerania/Brandenburg,
- □ Poland Czech Republic,
- □ Poland Slovakia,
- □ Poland Lithuania,
- □ Neighbourhood Programme: Poland Belarus Ukraine,
- Neighbourhood Programme: Poland Lithuania Russia (Kaliningrad Oblast).

Within the framework of the Community Initiative INTERREG III, the sum of 177 million EUR was allocated for implementation of the abovementioned programmes in Poland, about 49% of which was

spent on the western border, over 21% on the eastern border, 16% on the southern border, and 14% on the north-eastern border. Implementation of the programmes is evaluated in the next subchapter.

In 2007-2013 the cross-border, transnational and interregional cooperation is implemented within the new Objective 3 of EU cohesion policy, that is the European Territorial Cooperation (ETC) for which 7.75 billion EUR was allocated. On the other hand, cross-border cooperation with partner states beyond the external EU border is supported from the funds of the European Neighbourhood and Partnership Instrument. The European Territorial Cooperation comprises the following three types of programmes:

- 1) cross-border cooperation,
- 2) transnational cooperation,
- 3) interregional cooperation.

For instance, Poland received 0.7 billion EUR under the ETC for the following programmes:

- operational programmes of cross-border cooperation:
  - 1. Poland (West Pomerania Province) Germany (Mecklenburg Hither Pomerania Brandenburg) (132.8 million EUR<sup>1</sup>),
  - 2. Poland (Lubuskie Province) Germany (Brandenburg) (50.1 million EUR),
  - 3. Poland (Lower Silesia Province and Lubuskie Province) Germany (Saxony) (70.1 million EUR),
  - 4. Poland Czech Republic (258.2 million EUR),
  - 5. Poland Slovakia (185.2 million EUR),
  - 6. Poland Lithuania (71.6 million EUR),
  - 7. Southern Baltic (Poland Sweden Denmark Lithuania Germany) (60.7 million EUR)
- programmes under the European Neighbourhood and Partnership Instrument:
  - 1. Poland Lithuania Russian Federation (Kaliningrad Oblast) (132.1 million EUR),
  - 2. Poland Belarus Ukraine (186.2 million EUR).

<sup>&</sup>lt;sup>1</sup> Amounts given include own contribution.

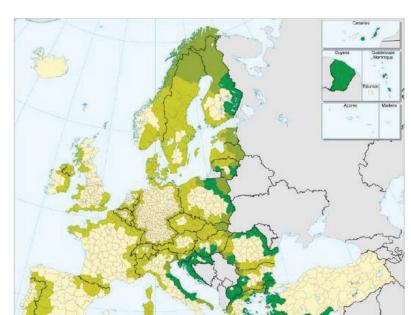


Fig. 1. Regions covered by cross-border cooperation programmes in Europe in 2007-2013

 $Source: http://epp.eurostat.ec.europa.eu/statistics\_explained/index.php/File: Cross-border\_cooperation\_programme\_areas.png$ 

uding adjacent regions ros: DG REGIO; DG ELARG, DG RELEX

internal border programmes (and assimilated) external border programmes

internal and external border programmes

other regions

Projects can be different (investment and non-investment projects) but they always concern initiatives implemented together with another institution or a local government unit from the other side of the border. Project cooperation under the European Neighbourhood

and Partnership Instrument covers at least two partners: one from an EU Member State and one from a partner state. The so-called cross-border effect is important in these projects.

The basic unit used in delimitation of border regions for the purposes of cross-border cooperation programmes, both under the European Territorial Cooperation and the European Neighbourhood and Partnership Instrument, is NUTS 3 territorial unit. These units are divided into border units and adjacent units. In the latter ones, support for projects is up to 20% of the total programme allocation and only non-investment projects can be financed.

Poland is involved in the following two transnational cooperation programmes in 2007-2013:

- Baltic Sea Region apart from Poland, other participants of the programme are: Denmark, Estonia, Finland, Lithuania, Latvia, Germany (selected regions), Sweden and three states from outside the EU: Belarus (selected regions), Norway and Russia (selected regions),
- □ Central Europe apart from Poland, other participants of the programme are: Austria, the Czech Republic, Germany (selected regions), Slovakia, Slovenia, Hungary, Italy (selected regions), Ukraine (selected regions).

Typically, the projects carried out have a non-investment character. They may include: formulation and implementation of a strategy, preparation of necessary documents for investments of supranational significance, working out modern solutions in transport, development of cities, safeguarding of natural and cultural heritage, creating cooperation networks, and experience sharing. The projects must have, as a minimum, three co-financing partners from three states, at least two of which are EU Member States covered by the programmes: Baltic Sea Region or Central Europe.

The last of the discussed programmes is the interregional cooperation programme implemented in 2007-2013 – INTERREG IV whose territorial scope covers 27 EU Member States, Norway and Switzerland. The projects carried out within this programme should have the representatives of at least three countries, including two

partners from EU Member States as a minimum. The subject matter of these projects should concern:

- innovation, research and development of technology, entrepreneurship, information society, employment and qualifications.
- 2) natural environment and prevention of risk, especially issues connected with natural and technological hazards, water management, waste management, biological diversity and safeguarding of natural heritage, power industry, sustainable transport, cultural heritage and landscape.

Therefore, it is evident that EU cohesion policy is not only directed at supporting the regions which are peripheral in the socioeconomic sense, including border regions, but is also aimed at development of interregional cooperation, and one of its forms is cross-border cooperation. Nevertheless, a question arises about effectiveness of actions undertaken within this policy. These issues are discussed in the following subchapter.

# 2. Evaluation of cohesion policy towards border regions (as exemplified by Poland)

Evaluation of cross-border cooperation projects carried out within the framework of the EU regional policy and aimed at counteracting the negative effect of the frontier on development processes in the border regions is based on Poland's experience from 2004-2006<sup>2</sup>. In the analysed period, on the Polish side of the Polish-German border 300 projects were implemented under INTERREG III A programmes. These were typically small projects whose average value was about 267 000 EUR, with half of them not exceeding 103 000 EUR<sup>3</sup>.

The period 2007-2013 has not finished yet so it is difficult to evaluate it properly.

The analysis of cross-border cooperation projects is based on the following publication: S. Dołzbłasz, A. Raczyk, *Współpraca transgraniczna w Polsce po akcesji do Unii Europejskiej*, Warszawa: Wolters Kluwer Polska 2010.

The projects focused mostly on social infrastructure (construction and modernisation of buildings and facilities for recreation, sports and education, as well as culture centres), investments in tourism, repair and construction of local roads, as well as building and modernisation of sewage systems. Only a few projects concerned cultural cooperation or human resources development. This may have been caused by a language barrier or negative stereotypes. The projects were carried out mostly in the biggest cities of the borderland, from Szczecin to Jelenia Góra. In total, over 450 million EUR was spent.

On the other hand, along Poland's southern border, significantly less was spent in comparison to the Polish-German borderland: 18 million EUR in the Polish-Czech borderland and 10.5 million EUR in the Polish-Slovak borderland, with respectively 103 and 47 projects implemented. These were typically small and very small projects (over 60% of them did not exceed 100 000 EUR). Their characteristic feature was predominance of tourism projects, as well as a relatively high share of advanced scientific projects carried out by universities and research institutes, projects concerning renewable energy sources, a high percentage of basic infrastructure projects (roads, sewage systems, health care, social issues), and a small number of human resources projects. The spatial location of projects was determined by proximity of the border. Projects were not concentrated in the biggest cities. The only big town closely involved in cross-border cooperation projects was Opole.

Cross-border cooperation along the eastern and north-eastern border of Poland was influenced by significantly lesser permeability of the EU external border in comparison to the Polish-German, Polish-Czech and Polish-Slovak borderlands whose axes were internal borders. In the eastern borderland, 141 projects were completed worth over 35 million EUR in total. Most of them were small and medium projects (up to 150 000 EUR). They were concerned mostly with: transport, social and environmental infrastructure, cultural cooperation and tourism. In comparison to other borderlands, the share of projects for SMEs, as well as scientific and research projects, was relatively higher. Proximity of the border significantly influenced the location of projects. Big cities, mainly Lublin and Białystok, were

also involved. Along the north-eastern border of Poland, 125 projects were carried out, mostly small and very small (below 100 000 EUR) for the total sum of 24.2 million EUR. The majority of them were non-investment projects in tourism and culture as well as human resources projects. On the other hand, the share of investment projects concerning basic infrastructure was low. Location of projects was influenced by proximity of the border but also associated with bigger urban centres.

Evaluating implementation of cross-border projects within the Community Initiative INTERREG III A (also INTTERREG/TA-CIS on the eastern and north-eastern border) in the first years of Poland's EU membership (2004-2006), we can notice the danger of polarization and asymmetrical development of border regions. Thus, cross-border cooperation programmes should be based more on the intraregional policy of local governments. Furthermore, it is important to give them a more effective multi-entity character and especially to include companies, NGOs and universities. These conclusions have been partly used in the current financial perspective (2007-2013) for development of cross-border programmes within the framework of the European Territorial Cooperation and the European Neighbourhood and Partnership Instrument. Nevertheless, to evaluate their effectiveness we should wait until the end of the current programming period.

To sum up, it can be claimed that the EU regional policy has been focused so far primarily on supporting peripheral regions, including border ones, with low GDP per capita. This policy contributes to gradual convergence within the EU. However, in less developed Member States acceleration of growth leads to (probably temporary) divergence. It means, on the one hand, fast growth of the regions which are relatively well-developed anyway and further marginalization of peripheral regions. Such weaker regions are concentrated especially along the eastern external EU border. Cross-border cooperation programmes, carried out both along external and internal EU frontiers, are not able to totally overcome peripherality of border regions. For mobilization of these regions, it is crucial to have a consistent and coordinated interregional policy of Member States and

an intraregional policy pursued by administrative regions, as well as EU cohesion policy which evolves from making up for infrastructural civilization backwardness towards building of competitive advantage based on innovation.

# 3. Preparations of a border region for the new perspective of cohesion policy 2014-2020 (as exemplified by Lublin Province)

Lublin Province is situated in the eastern part of Poland and its area is over 25 000 km². The Province has 2 156.2 thousand inhabitants, that is ca. 5.6% of Poland's population (as of 31 December 2013). A significant factor of the Province's development is its borderland location. The eastern border of the Province is at the same time the state frontier with Belarus and Ukraine. Its total length is 466 km (that is 38.9% of the whole length of the frontier). The Polish-Belarusian part of the border is 170 km long, while the Polish-Ukrainian section is 296 km.

The analysis of statistical data reveals that Lublin Province is one of the least developed regions both in Poland and in the European Union. Taking into account the purchasing power of the population, GDP per 1 inhabitant of Lublin Province in 2010 accounted for 63% of the national average and only 42% of the EU average. The reasons for backwardness of Lublin Province are complex and multidimensional and have deep historical roots. This is also partly due to the borderland location of the Province. The extremely tight Polish-Soviet border, established in 1945 and existing for almost half a century, led to formation of peripheral area features in its vicinity. Furthermore, low permeability of the Polish-Soviet border resulted in almost complete destruction of functional and spatial relations which used to connect Polish, Belarusian and Ukrainian border regions. The system transformation and socioeconomic changes in Poland and attainment of independence by Belarus and Ukraine initiated a shortterm period when permeability of the border was increasing, which brought about rapid intensification of cross-border movement, trade and cooperation. However, owing to Poland's accession to the EU and primarily to the Schengen Area, the eastern border was again tightened as the external frontier of the European Union<sup>4</sup>. In consequence, as observed by H. Ponikowski, the threat to development of Lublin Province and Eastern Poland in general is connected with reinforcing the image of a peripheral region in a peripheral country<sup>5</sup>.

Even though Lublin Province is one of the least developed regions of the European Union, its development level is relatively good in comparison to the areas on the other side of the border. Taking into account the purchasing power, GDP per capita in Brest Oblast in 2010 was at the level of 31% of the EU average (Belarus – 44%), in Lviv Oblast – 15%, and in Volyn Oblast – 12% (Ukraine – 21%). In the general classification encompassing 348 statistical units of the EU regional level (NUTS2), as well as all oblasts of Ukraine and Belarus, Lublin Province occupied a distant position (302) in terms of the GDP level according to the purchasing power per inhabitant, the Brest Oblast – 315, the Lviv Oblast – 335, and the Volyn Oblast – 343.

On the basis of the above comparison, the following conclusions can be drawn. Firstly, the analysed administrative units are among the least developed regions both in Europe and in the discussed states and are clearly marked by peripherality in the geographical and economic sense. Secondly, the development level of the regions situated on both sides of the analysed segment of the external EU border is largely asymmetric to the disadvantage of the Ukrainian and Belarusian parts of the borderland. In view of the current geopolitical conditions, this only aggravates problems with pursing advanced forms of cross-border cooperation and raising the cohesion of the Polish,

<sup>&</sup>lt;sup>4</sup> T. Komornicki, A. Miszczuk, *Transgraniczne powiązania województw Polski wschodniej*, Warszawa: Ministerstwo Rozwoju Regionalnego 2013 (Opinion prepared at the request of the Ministry of Regional Development for the purpose of updating -The strategy of the socioeconomic development of Eastern Poland until 2020).

H. Ponikowski, Lublin i województwo lubelskie na tle kraju i Unii Europejskiej, [In:] W. Janicki (ed.), Województwo lubelskie. Środowisko – społeczeństwo – gospodarka, Lublin: Norbertinum 2011, pp. 22-23.

Ukrainian and Belarusian border areas. Consequently, the advantages of the borderland location are slight and limited primarily to the cross-border trade. On the other hand, location at the external EU frontier offers new development prospects for the borderland, connected mostly with extension of border infrastructure, management of cross-border movement of people and goods, as well as operation of businesses in the border areas.

Summing up, it can be stated that even though the borderland location of Lublin Province creates certain opportunities for growth, generally it has an adverse effect on the socioeconomic development of Lublin Province, reinforcing its peripherality in two meanings: geographical and economic. Consequently, local authorities should aim at overcoming the negative influence of the frontier on socioeconomic growth and at best possible using of few advantages associated with the borderland location of Lublin Province.

The new perspective of cohesion policy for 2014-2020 offers a real chance for attainment of this goal. Similarly as in the previous programming period, the funding under this policy will be allocated for acceleration of economic growth and for elimination of disparities between richer and poorer regions of Europe. In the new EU financial perspective, Lublin Province will have a chance to benefit from the EU funding within six national programmes worth 45.6 billion EUR in total (including the programme aimed specifically at five provinces of Eastern Poland), as well as the Regional Operational Programme in which a sum of 2.23 billion EUR has been allocated for Lublin Province. Moreover, in 2014-2020 (actually until 2022-2023), the Cross-Border Cooperation Programme Poland-Belarus-Ukraine will be continued within the framework of the European Neighbourhood Instrument<sup>7</sup>. In accordance with the guidelines of the Ministry of

<sup>&</sup>lt;sup>6</sup> Cf. J. Szlachta, Europejski wymiar rozwoju Polski Wschodniej w latach 2014-2020, "Zeszyty Naukowe WSEI -seria: Ekonomia" 6(1), 2013, p. 26.

The exact distribution of funds within the European Neighbourhood Instrument is not known yet. The total budget of the European Neighbourhood Instrument for 2014-2020 has been planned at a level of 18.2 billion EUR and is higher by 40% than the budget of the European Instrument of Neighbourhood and Partnership in 2007-2013.

Regional Development, programmes conducted along the external EU frontiers (including the Cross-Border Cooperation Programme Poland-Belarus-Ukraine) should be directed at creating conditions enhancing competitiveness of border regions, e.g. by supporting infrastructural investment in environmental protection and tourism. Furthermore, they should contribute to safety of the borders but also to increasing their permeability<sup>8</sup>.

With a view of using EU funds in an efficient, orderly and coordinated way, local authorities of Lublin Province compiled a number of strategic and programme documents setting the direction of initiatives undertaken within the new perspective of cohesion policy 2014-2020. Opportunities for socioeconomic development, arising from borderland location of some regions of the Province, were included in the basic strategic document of the region – the Strategy of Development of Lublin Province for 2014-2020 (with the prospects until 2030). Among the identified functional areas (so-called Strategic Intervention Areas) the Functional Border Area was also distinguished, encompassing administrative areas of the districts which are directly adjacent to the state frontier. It is emphasized in the document that the full use of the economic potential resulting from proximity of the border is hindered by restrictions in movement of people, goods, capital and services. In accordance with principles of the Strategy, the intervention should encompass actions aimed at using the potential of the borderland and providing services to the EU through development of social, logistic and border management infrastructure, as well as improvement of safety. Furthermore, the Strategy highlights the need to restore social and economic functions of towns located in the borderland through supporting human resources and entrepreneurship. The Strategy also focuses on launching new border crossings and development of the existing ones (including local ones), especially where former transport connections could be restored, and on opening of seasonal (tourist) border

Programy współpracy terytorialnej z udziałem Polski w perspektywie 2014-2020, Warszawa: Ministerstwo Rozwoju Regionalnego 2012, p. 9.

crossings located on both sides of the frontier, with admissible pedestrian movement<sup>9</sup>.

Nevertheless, the most important element of the preparations of Lublin Province for the new perspective of cohesion policy, taking into account its border location, is the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020<sup>10</sup> which is the first document of this kind, compiled for a cross-border region situated along the external EU border.

The work on the idea of the Strategy was started in mid-2012 on the initiative of the local government of Lublin Province. The general outline of work on the document was presented and approved by the authorities of the four border regions at a sitting of the Council of the Cross-Border Association Euroregion Bug on 26 November 2012 in Brest. A draft Strategy was prepared by the Joint Working Group whose members were representatives of the authorities of Lublin Province and the partner regions from Belarus and Ukraine. Then it was submitted for social consultations in each region from 10 December 2013 until 24 January 2014. The process of preparing the Strategy was completed on 7 May 2014 in Lublin, with official signing of the Declaration on implementing the Strategy by representatives of the authorities of Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast.

The time horizon of the Strategy covers the 7-year programming period, consistent with the next EU financial perspective for 2014-2020. Its spatial range encompasses four neighbouring border regions, that is Lublin Province (Poland), Lviv Oblast and Volyn Oblast (Ukraine) and Brest Oblast (Belarus), with the total area of almost 100 000 km² and 7 142.8 thousand inhabitants. An important

Strategia Rozwoju Województwa Lubelskiego na lata 2014-2020 (z perspektywą do 2030 roku), Lublin: Urząd Marszałkowski Województwa Lubelskiego 2013, p. 80.

Strategia Współpracy Transgranicznej Województwa Lubelskiego, Obwodu Lwowskiewgo, Obwodu Wołyńskiego i Obwodu Brzeskiego na lata 2014-2020 (Projekt), Lublin: Urząd Marszałkowski Województwa Lubelskiego 2014.

argument in favour of such delineation of the cross-border cooperation area is the fact that these regions belong to the Cross-Border Association Euroregion Bug<sup>11</sup>. Even though in the cross-border area covered by the Strategy there are three state frontiers, the Strategy focuses on two of them, that is Polish-Belarusian and Polish-Ukrainian borders which form a part of the EU external frontier.

The document of the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020 is consistent with other strategic documents prepared at the European and national levels for the purposes of the 2014-2020 perspective, and especially with the Europe 2020 Strategy which is the key document defining evolution of the EU policies in this period, and the Strategy for rational and sustainable development facilitating social inclusion, on which the principles of the new European Neighbourhood Policy are based. Among the national documents, the following should be mentioned: the Medium-Term Strategy of the State's Development 2020, the National Strategy of Regional Development 2020 and the National Spatial Development Concept 2030, as well as the Strategy of Development of Lublin Province for 2014-2020 (with the prospects until 2030) prepared on the basis of the aforementioned documents, and the updated Strategy of Development of Eastern Poland 2020. During the work on the Strategy, the strategic documents concerning development of Brest, Lviv and Volyn Oblasts were taken into account, as well as the arrangements made within the framework of the Polish-Belarusian Intergovernmental Coordination Commission for Cross-Border Cooperation and the Polish-Ukrainian Intergovernmental Coordination Council for Interregional Cooperation.

The work on the Strategy focused on identification and agreement on the strategic objectives of cooperation among the border regions, indication of development priorities for the border regions to make them more open to cooperation and mutual benefits, as well as stimulation of growth processes in the borderland, e.g. through

The Cross-Border Association Euroregion Bug includes two border districts of the Lviv Oblast, that is Sokal District and Zhovkva District.

improving promotion of the region and its ability to attract investment from outside. Above all, the Strategy aims at preparing the regions from the borderland for the new perspective of the European Neighbourhood Policy and for efficient obtaining and using of funds from the Cross-Border Cooperation Programme Poland-Belarus-Ukraine 2014-2020.

Nevertheless, it does not mean that sources of financing were limited only to the abovementioned Programme. In accordance with the principles of the Strategy, they should encompass all available and ready financial means, including national public funds; as well as public resources from abroad – mostly funds from the EU budget which, apart from the Cross-Border Cooperation Programme Poland-Belarus-Ukraine 2014-2020, cover also the European structural funds (the European Regional Development Fund and the European Social Fund) and the Cohesion Fund, allocated for implementation of cohesion policy; funds from loans of international financial institutions, as well as other European funds e.g. from the Norwegian Financial Mechanism, EEA Financial Mechanism and the Swiss-Polish Cooperation Programme; non-European funds (e.g. USAID), and private funds co-financing projects under the public-private partnership system.

In accordance with the primary objective of the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020, initiatives undertaken within its framework should be aimed at using the endogenous development potential of the borderland to enhance its socioeconomic competitiveness and to alleviate the limitations resulting from the influence of the frontier. This objective has been further elaborated through indicating the following four spheres of strategic actions:

- 1. economic cooperation in creating favourable conditions for development of entrepreneurship and investment of external capital, intended for improvement of economic competitiveness of the cross-border region;
- 2. strengthening of the natural and cultural potential of the borderland and using it for the development of the tourism sector,

- leading to enhancement of tourist attractiveness of the region while maintaining its biodiversity and cultural heritage values;
- 3. supporting initiatives for improvement of the external and internal transport accessibility of the cross-border region, aimed at significant and permanent shortening of the time needed for crossing the Polish-Belarusian and the Polish-Ukrainian border;
- 4. promoting cooperation between universities and scientific institutions in research and education, with a view to improvement of teaching quality, internationalization of the educational offer and creation of interacademic research teams.

In accordance with principles of the Strategy, four basic sectors of entities involved in its implementation can be distinguished: the public sector (both state administration and local governments), the private sector (so-called economic entities), the social sector (nongovernmental organizations) and the research and development sector (including universities and scientific institutions).

The list of tasks and priorities for Lublin Province and the partner regions located on the other side of the border, included in the Strategy of the Cross-Border Cooperation among Lublin Province, Lviv Oblast, Volyn Oblast and Brest Oblast for 2014-2020, is the basis for creation of new international projects financed from the EU funds in the financial perspective for 2014-2020. The Strategy can be regarded as an interesting example of actions for effective use of cross-border development potential of neighbouring regions and chances offered by European cohesion policy. Furthermore, the fact that the Strategy is the first document of this kind concerning the cross-border area located along the EU external frontier gives it a unique and even model character.

### Final remarks

Over the last decades, on the European scale, there has been a noticeable increase in cooperation among border regions, aimed at alleviation of negative effects of borders, improvement of people's quality of life and making use of opportunities for growth e.g. through

elimination of disparities in the level of economic development caused by the peripheral location of the border areas, upgrading of transport infrastructure, promotion of investment attractiveness and enhancement of competitiveness. Nevertheless, while the increased permeability of borders, resulting from reduction in formal and legal barriers, facilitates the functioning of border regions located at EU internal frontiers, cooperation along the EU external border still remains a problem.

In the years 1989-2013 cohesion policy towards border areas evolved noticeably, both with respect to its objectives and financial means allocated to it. The basic tools of cohesion policy in this sphere are cross-border cooperation programmes. However, it should be remembered that the financial resources assigned to them are only a small part of cohesion policy so their capacities are limited. The total funds allocated for the European Territorial Cooperation (11.7 billion EUR) and the European Neighbourhood Instrument (18.2 billion EUR) for 2014-2020 account to only 3% of the EU budget (997.0 billion EUR). Furthermore, the financial resources assigned to projects co-financed from the European Territorial Cooperation programmes, in which entities located in the Polish borderland can participate, is only 700 million EUR, that is less than 0.85% of the total sum allocated for cohesion policy in Poland (the value of programmes co-financed within the framework of the European Neighbourhood Instrument has not been determined yet) which amounts to 82.5 billion EUR.

It means that in the case of border regions the chances associated with European cohesion policy aimed at bridging the development gap resulting from the peripheral location should be seen primarily in successful implementation of the regional policy at the level of the state and particular provinces, on the basis on national and regional programmes. Actions undertaken within the European Territorial Cooperation and the European Neighbourhood Instrument should only have a complementary character, stimulating development of cross-border cooperation and, especially in the case of regions located along the EU external border, alleviating the negative influence of the frontier on the socioeconomic growth.

#### **References:**

- Dołzbłasz S., Raczyk A., Współpraca transgraniczna w Polsce po akcesji do Unii Europejskiej, Warszawa: Wolters Kluwer Polska 2010.
- Komornicki T., Miszczuk A., *Transgraniczne powiązania województw Polski wschodniej*. Warszawa: Ministerstwo Rozwoju Regionalnego 2013 (Opinion prepared at the request of the Ministry of Regional Development for the purpose of updating -The strategy of the socioeconomic development of Eastern Poland until 2020).
- Miszczuk A., Uwarunkowania peryferyjności regionu przygranicznego, Lublin: Norbertinum 2013.
- Pietrzyk I., Polityka regionalna Unii Europejskiej i regiony w państwach członkowskich, Warszawa: Wydawnictwo Naukowe PAN 2004.
- Ponikowski H., *Lublin i województwo lubelskie na tle kraju i Unii Euro- pejskiej*, [In:] W. Janicki (ed.), Województwo lubelskie. Środowisko-społeczeństwo-gospodarka, Lublin: Norbertinum 2011.
- Programy współpracy terytorialnej z udziałem Polski w perspektywie 2014-2020, Warszawa: Ministerstwo Rozwoju Regionalnego 2012.
- Strategia Rozwoju Województwa Lubelskiego na lata 2014-2020 (z perspektywą do 2030 roku), Lublin: Urząd Marszałkowski Województwa Lubelskiego 2013.
- Strategia Współpracy Transgranicznej Województwa Lubelskiego, Obwodu Lwowskiego, Obwodu Wołyńskiego i Obwodu Brzeskiego na lata 2014-2020 (Projekt), Lublin: Urząd Marszałkowski Województwa Lubelskiego 2014.
- Szlachta J., Europejski wymiar rozwoju Polski Wschodniej w latach 2014-2020, "Zeszyty Naukowe WSEI -seria: Ekonomia" 6(1), 2013, pp. 5-26.

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# Energy Policy and Renewable Energy Sources and the Development of European Regions

#### Abstract

According to cohesion policy for 2014-2020, regions and Member States have to orient investments from the European Union (EU) funds on key areas conducive to economic growth and job creation. Among them there is the support of the transition to the low carbon economy. In the article Energy policy and renewable energy sources and the development of European regions the author, starting from the strategic perspective of the European Union, focuses on the case of Polish regions and puts forward a hypothesis that provinces have a significant, but not much used potential for the development of renewable energy sources (RES) explaining barriers to the use of this potential. The EU financial perspective 2014-2020 gives Polish regions the possibility to use the renewable energy development potential. The decisive factors in the development of renewable energy sources in Poland will not be location, infrastructure or environment constraints, but legal, political and social ones. The author devotes the main part of the study to the issues of social participation and "inclusion of stakeholders" in energy projects, pointing to examples of the consequences of ignoring this issue by the government, local authorities and investors. In addition, she determines the cause of social protests in the energy sector and attributes of the success of social participation in energy projects.<sup>1</sup>

Keywords: European Union, energy policy, renewable energy sources

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#### Introduction

We currently observe an increase in global challenges for energy markets. This situation has resulted from the coupling of factors such as climate change, decreasing fossil fuel exploitation, an increase in global energy demand and changing geopolitics. The European Union (EU) is of the opinion that the only way to deal with these challenges is more Europeanized energy policy<sup>2</sup>.

In the context of international negotiations on climate, the EU has committed itself to the reduction of greenhouse gas emissions by 20% by 2020 compared to the 1990 level. One of the main roles in the implementation of these commitments is to be played by renewable energy sources. It was assumed that if by 2020, Europe manages to achieve the targets for renewable energy sources and energy efficiency, it will be able to exceed the currently set level of emission reduction by 20% and reach in 2020 the level of 25% reduction compared to the 1990 level. These indicators are reflected in the *Europe 2020* Strategy<sup>3</sup>. In the *Energy Roadmap 2050*<sup>4</sup> it is assumed that renewable energy will form the basis of the EU energy system in the future. The European Commission (EC) adopted a framework strategy on resilient energy union<sup>5</sup> and a forward-looking climate change

<sup>2</sup> G. Oettinger, Wyzwania dla europejskiej polityki energetycznej, "Nowa Europa" 1(14), 2013, pp. 19-20.

In terms of climate change and sustainable energy use the following objectives were formulated: reduction of greenhouse gas emissions by 20% compared to the 1990 level (or even 30%, if the conditions are favorable); 20% of energy should come from renewable sources; energy efficiency should increase by 20%. See more in Communication from the Commission -*Europe 2020.* A strategy for smart, sustainable and inclusive growth, COM(2010) 2020, Brussels: European Commission, 3.3.2010, p. 16.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions An action plan for energy by 2050, COM(2011) 885, Brussels: European Commission, 15.12.2011.

The strategy was adopted on 25 February 2015. It assumes the reduction of energy dependence, the promotion of the free flow of energy across borders, increasing energy efficiency and the support of the transition to low carbon economy.

policy. The implementation of the energy union assumptions is directly related to cohesion policy. In the new EU financial perspective 2014-2020, 38 billion euro from cohesion policy funds will be invested in the low-carbon economy. This situation is defined as a development opportunity for European regions.

In this article we put forward a hypothesis that the use of this opportunity will depend on many factors. Among them, next to objective factors relating to the potential of the regions in the field of renewable energy sources, there are legal, political and social determinants. An example of the regions in which these conditions will play a decisive role in realizing the development opportunity will be Polish provinces.

# 1. Energy policy of the European Union

The European Union defined the directions of policy on energy and climate till 2020 and thus began the debate on the future of energy policy<sup>6</sup>. We will find the reflection of this debate in strategic documents.

The *Europe 2020* strategy is a new, long-term programme of socio-economic development of the EU, which replaced the *Lisbon Strategy* which was implemented from 2000 and modified five years later. It emphasized the need for joint action by Member States to overcome the crisis and to implement reforms enabling facing the challenges connected with globalization, aging of societies and the growing need for rational use of resources.

See more in Communications from the Commission: Energy 2020. A strategy for competitive, sustainable and secure energy, COM (2010)639 final, Brussels: European Commission, 10.11.2010; Europe 2020. A strategy for smart, sustainable and inclusive growth, COM (2010)2020, Brussels: European Commission 3.3.2010; Energy Roadmap 2050, COM (2011)885, Brussels: European Commission, 15.12.2011; A policy framework for climate and energy in the period from 2020 to 2030, COM(2014)15, Brussels: European Commission, 12.1.2014; European Energy Security Strategy, COM(2014)330, Brussels: European Commission, 28.5.2014.

The European Commission proposed indicators for monitoring progress in implementing the priorities by means of the primary objectives, among which were: the reduction of greenhouse gas emissions by 20% compared to the 1990 level; increase to 20% of the share of renewable energy in overall energy consumption<sup>7</sup>; striving to increase energy efficiency by 20%. The basic instruments of the implementation of the strategy objectives are the National Reform Programmes drawn up by the EU Member States and the flagship initiatives prepared by the EC, implemented at the level of the EU, Member States, regional and local authorities.

One of the flagship initiatives is *Resource-efficient Europe* assuming support for the transition into the economy which is low carbon and more effectively uses environment resources and striving to eliminate the dependence of economic growth on natural environment degradation. The European Commission's proposals contained in *Green Paper A 2030 framework for climate and energy policies*<sup>8</sup> are based on the assumption of the objective to reduce greenhouse gas emissions in the EU by 80-95% by 2050 compared to 1990. Among the main objectives of this policy the following were highlighted:

- □ the creation of stable conditions for long-term investment,
- □ the support of innovation and competitiveness in accordance with the principles of sustainable development,
- ensuring the EU leading role in efforts to protect the climate,
- achieving the objective of reducing greenhouse gas emissions by 80 95% by 2050 compared to the level of 1990, to fulfil the global objective of limiting the increase in average global temperature on the Earth to 2 deg. C in order to achieve it, greenhouse gas emissions in the EU should be reduced by 40% by 2030,

This objective, depending on the Member State of the EU, is as follows: AT-34%; BE-13%; BG-16%; CY-13%; CZ-13%; DE-18%; DK30-%; EE-25%; EL-18%; ES-20%; FI-38%; FR-23%; HU-14,65%; IE-16%; IT-17%; LT-23%; LU-11%; LV-40%; MT-10%; NL-14%; PL-15,48%; PT-31%; RO-24%; SE-49%; SI-25%; SK-14%; UK-15%.

<sup>&</sup>lt;sup>8</sup> Green Paper. A 2030 framework for climate and energy policies, COM (2013) 169 final, Brussels: European Commission, 27.3.2013.

- the support of the long-term competitiveness, security of energy supply,
- a greater share of renewable energy (30% by 2030, according to the proposal contained in an action plan for energy by 2050), improving energy efficiency and better and more intelligent energy infrastructure,
- increased investment expenditure on the modernization of the energy system.

The framework strategy on resilient energy union, adopted by the European Commission at the beginning of 2015, assumes the reduction of energy dependence, the promotion of the free flow of energy across borders, increasing energy efficiency and the support for the transition to the low carbon economy. Using cohesion policy, Member States, regions and local authorities will have a chance to realize the necessary investments in the sphere of the energy efficiency of buildings, renewable energy sources, smart grids and sustainable urban transport<sup>10</sup>.

EU Cohesion Policy in the financing period 2014-2020 includes the support for investment and actions facilitating the transition to the low carbon economy in the presence of the magnitude of challenges in this area and significant benefits from these investments for regional development, increase in competitiveness, the growth of jobs and the potential in reducing energy poverty. Investments in the framework of cohesion policy are supposed to become an important tool in helping Member States to achieve the objectives of the *Europe 2020* Strategy.

<sup>&</sup>lt;sup>9</sup> Current information on the European Union's energy policy can be found on the official websites: Energy Strategy for Europe (http://ec.europa.eu/energy/index\_en.htm), Energy Roadmap 2050 (http://ec.europa.eu/energy/energy2020/roadmap/index\_en.htm).

http://ec.europa.eu/priorities/energy-union

# 2. Social determinants of renewable energy development in Poland

The potential of Polish provinces in the field of renewable energy sources was presented in the study of the Renewable Energy Institute in 2011 entitled *Estimation of energy potential of Polish regions regarding renewable energy sources – conclusions for Regional Operating Programmes for the programming period 2014-2020*<sup>11</sup>. The report presents the summary of experiences in implementation of renewable energy investment programmes in the years 2007-2013 and specifies the possibilities and the potential of use of renewable energy in the period 2014-2020, with an indication of the highest priority projects, together with the economic and infrastructure conditions and the constraints resulting from the location.

The authors of the report emphasize the fact that the use of renewable energy sources is varied both in provinces, as well as in the whole country. The main factors are various kinds of legal, administrative, as well as economic and environmental restrictions. Therefore, the market potentials are significantly lower than the theoretical ones. So far, on a national scale, only 7% of the heat supplied to direct customers comes from renewable energy sources, including primarily biomass.

The report shows that Polish regions have significant but little used renewable energy potential. In the perspective of 2020, neither locational nor environmental constraints nor limitations in the access to infrastructure, nor - even more - the availability of renewable energy sources are an obstacle to the development of renewable energy sources in Poland and the realisation of small and medium scale investments. However, they require prior inclusion in the planning processes and the creation of favourable framework conditions (legal regulations and a favourable environment for investment and access

Określenie potencjału energetycznego regionów Polski w zakresie odnawialnych źródeł energii – wnioski dla Regionalnych Programów Operacyjnych na okres programowania 2014–2020, Warszawa : Instytut Energetyki Odnawialnej 2011.

to information) in order to reduce the risk, mobilize investors (raise private funds), encourage producers and installers of equipment and prepare residents for wider investment programs<sup>12</sup>. In the literature we find similar positions: (...) what is also needed for the development of the power industry based on renewable energy sources, in the addition to wind, water, sunlight, and the technical and economic resources enabling their use, is well-qualified staff, as well as relevant, multi-range legal solutions. The staff, technical and economic resources and legal solutions have to create a system. Only in this system, the exploitation of renewable energy sources beneficial to the country's energy security will be possible<sup>13</sup>. Another, equally important factor determining the success of the development of renewable energy sources in Poland is the question of the attitude of local communities and individuals to investments in the sphere of renewable energy.

Polish society has for the first time come in contact with the situation in which the implementation of a number of previously unknown energy technologies is considered, including controversial ones, such as nuclear energy, shale gas and renewable energy sources. Despite the fact that energy policy includes a variety of forms of social participation: the investment decision making, planning and programming of plans, programs and policy guidelines and the preparation of laws and normative acts, there is no current and systematic knowledge of how citizens, community groups and NGOs can use these rights. The lack of this knowledge leads to conflicts that manifest themselves among others in the form of protests<sup>14</sup>. Moreover, in this sphere, we deal with numerous myths, stereotypes, conflicting views, distortions and accusations. There is also no unambiguous position on climate

<sup>&</sup>lt;sup>12</sup> Ibidem, p.139.

A. P. Olechowski, *Odnawialne źródła energii i ich znaczenie dla bezpieczeństwa energetycznego państwa*, [In:] P. Kwiatkiewicz (ed.), Bezpieczeństwo energetyczne. Rynki surowców i energii -teraźniejszość i przyszłość, Poznań: Fundacja Czystej Energii 2014, p. 324.

Nuclear energy: http://www.mielno.pl/zakladka/zawartosc/117/protesty-manifestacje/; shale gas, Żurawlow: http://www.eko-unia.org.pl/ekounia/index. php/pl/strona-glowna/lupki; wind energy: http://mapa.stopwiatrakom.eu/

change. For many people the problem of global warming is a political issue and not an economic or ecological one. For example, S.F. Siger draws attention to the fact that governments under pressure change energy policy which harms economies, lowers the standard of living and increases poverty in the world. In turn, the environmental organizations such as Greenpeace and the Environmental Defense Fund collect billions in revenue thanks to huge government subsidies for projects to prevent the greenhouse effect, which, in consequence, contributes to a significant tension in budgets of many countries. In addition, income from trading greenhouse gas emission certificates will soon reach the value of 100 billion USD per year<sup>15</sup>.

Divergent views on climate change and lack of access to experts at the local level entail the situation in which it is difficult for local communities and individual residents to form their views based on facts. In such situations, emotions often play a decisive role in building attitudes towards energy investment<sup>16</sup>.

The report *Wind Energy in Poland* indicates that the social resistance phenomenon may actually delay or suspend the preparation and implementation of investments. The report says that a growing problem in the development of the wind energy market in Poland is a dispute between two environments: the supporters of wind power represented mainly by developers and investors and opponents not united or united in various types of organizations. Between these groups there are local authorities, with their interests, and central authorities involved in the dispute<sup>17</sup>.

Opinion surveys of representatives of municipalities in which wind farms are located and neighbouring municipalities identified the benefits and concerns associated with wind energy. Among the benefits the respondents mentioned: economic ones (additional revenue of municipalities and their citizens, and the presence of a long-term investor in the area of the municipality; the employment of local

<sup>&</sup>lt;sup>15</sup> F. Krawiec, *Energy*, Warszawa: Difin 2012, pp. 44-45.

See more in S. Mrozowska, B. Kijewska, T. Besta (eds.), *Społeczny wymiar procesu wdrażania energetyki jądrowej w Polsce*, "Ekoatom" 13(2014), pp. 12-22.

<sup>&</sup>lt;sup>17</sup> Raport - Energetyka wiatrowa w Polsce, Warszawa: TPA Horwath 2013, p. 59.

workers, the involvement of local entrepreneurs, the investor's provision for the local community), branding (the possibility of building the image of a modern and eco-municipality; interest of tourists) and investment (growth of interest in the possibility of investing in the area of renewable energy by other investors, development of energy infrastructure and the construction of new road sections). The other group includes economic concerns (loss of value of the land located near wind farms), branding (interference with the landscape and wildlife; decrease in the number of tourists), health (harmfulness to the health of humans and animals)<sup>18</sup>. In turn, the authors of the study entitled Does Local Energy Mean Renewable?, in which representatives of 262 Polish municipalities participated, point to great potential for the development of renewable energy which could be released if there were appropriate law, administrative procedures, and additional state support. In the conclusions the authors of the study emphasize the fact that the social acceptance for RES installations is big, but its limitation (especially visible in the case of wind power and biogas) is a small level of knowledge and inefficient mechanisms for resolving conflicts and not very transparent decision-making mechanisms. If residents of municipalities could join the discussions about the new RES installations, public acceptance could be higher<sup>19</sup>.

Z. Łucki and Z. Misiak in the publication *Energy and Society* say that the attitude of Poles to renewable energy is very positive. In contrast, the attitude of local communities and individuals to specific investments in renewable energy is quite different. Thus, one cannot associate public perception resulting from public opinion surveys with the acceptance of renewable energy by consumers, or its acceptance at the local level. The authors add that in many publications a statement can be found that nontechnical forces shaping

Wpływ energetyki wiatrowej na wzrost gospodarczy w Polsce, Raport przygotowany przez Ernst&Young we współpracy z Polski stowarzyszeniem Energetyki Wiatrowej oraz European Wind Energy Association, 03. 2012, p. 55.

Ancygier A., Szulecki K., *Energia lokalna – czyli odnawialna? Raport z badania akceptacji dla odnawialnych źródeł energii i perspektywy dla ich rozwoju w polskich gminach*, Raport Nr 1, 12.2013, Wrocław: Environmental Studies and Policy Research Institute 2013, p. 25.

the development of new sources of energy, especially at the local and regional level, have not been recognized yet<sup>20</sup> and indicate the reason for this state of affairs: (...) it results partially from the immaturity of the technology and renewable energy market, but also from certain contradictions inherent in this sector: it has a slogan of sustainable development on the banners and at the same time it has many ecological disadvantages<sup>21</sup>.

# 3. Societal acceptance of energy technologies

The problem of acceptance and inclusion of stakeholders in energy projects is the subject of numerous research. The results of research conducted within the project Create Acceptance<sup>22</sup>, pertaining to 27 case studies on the implementation of energy investments, indicate that an essential element in determining the acceptance conditions is taking into account national and local political context, cultural (environmental and energy awareness, the level of research funding), institutional, social, economic, physical and geographical one (natural resources, the area of forests). The authors of the final report of the project identified a set of contextual functions which should be considered before starting energy investments.

Among the political and cultural functions, the following were distinguished: government policy; types of government policy in the field of new energy techniques and related topics; stability of national policy; political culture (consensus, negotiations, confrontations); centralization of power of the national government; trust in institutions; "top-down" and "bottom-up" tradition of undertaking initiatives;

Z. Łucki, W. Misiak, Energetyka a społeczeństwo. Aspekty socjologiczne, Warszawa: Wydawnictwo Naukowe PWN 2012, p. 192.

<sup>&</sup>lt;sup>21</sup> Ibidem, p. 204.

Factors influencing the societal acceptance of new energy technologies: Meta-analysis of recent European projects. Deliverable 3.1, 3.2 and 4, Petten: Energy Research Centre of Netherlands, p.114 (http://www.ecn.nl/docs/lie of the netherlands 2007 (http://www.ecn.nl/docs/library/report/2007/e07058.pdf).

environmental awareness; the experience of the past; attitude to a new technique<sup>23</sup>. In turn, the following were qualified as distinguishing features of good communication and participation: the recognition of different interests and perceptions of the local community; understanding of local communities; communication addressed to specific key groups from the point of view of acceptance; transmission of information by means of tools and channels compatible with the needs of the residents; continuous dialogue with local groups, especially those which are in opposition. According to the authors of the report, the factors identified above should be considered at both the national and local levels, as the differences in national and local contexts create different conditions for the emergence of social acceptance<sup>24</sup>.

Energy projects are of growing interest for various entities, hence, it is necessary for an investor to be aware of the need to identify all stakeholders and treat them as equivalent regardless of the size and pressure<sup>25</sup>. Attributes of success for social participation in the power industry are presented in Table 1.

Table 1 Attributes of success for social participation in the power industry

The decision making process	The assurance of full and active representation of stakeholders Bringing comprehensive and deliberate contribution by society The acceptance of the decision-making process as legitimate by stakeholders
The impact of social participation on the knowledge and attitudes of stakeholders	Understanding by society of managerial and environmental problems of the decision maker and its activities Understanding by society of connections between the costs of the decision maker's activity and ecological benefits Understanding by the decision maker of society's concerns Society's confidence in the decision-maker

Z. Łucki, W. Misiak, Energetyka a społeczeństwo. Aspekty socjologiczne, Warszawa: Wydawnictwo PWN, p. 131.

Factors influencing the societal acceptance..., p. 115.

<sup>&</sup>lt;sup>25</sup> Y. Feenstra, *Societal acceptance: today's challenge of the energy sector*, "EDI Quarterly" 5(1), 03.2013 (http://www.energydelta.org/uploads/bestanden /12507163-aa61-4f7b-bd23-a7ac91b47edd).

The impact of	The impact of society on basic decisions
social participation	Improvement of basic decisions
on decisions in	Acceptance of basic decisions as justified
the sphere of	
environment	
management	
The impact	Minimization of the cost of environmental management
of decisions in	Minimization of negative ecological effects
the sphere of	Righteous distribution of negative effects on society
environment	
management on	
the state of the	
investment location	
The impact	The attainment of internal and external stakeholders' goals
of decisions in	associated with each action of social participation
the sphere of	The execution of the investor's mission connected with the
environment	location
management on	The attainment of all goals of external stakeholders
stakeholders' goals	

Source: Z. Łucki, W. Misiak, Energy and Society. Sociological Aspects, Warszawa 2012, p. 131. Study based on S.A. Carnes, M. Schweitzer, E.B. Peelle, A. K. Wolfe, J. F. Munro, *Measuring the success of public participation on environmental restoration and waste management activities in the U.S. Department of Energy,* "Technology in Society", vol. 20, pp. 385-406.

Many institutions, including the Social Council of the National Programme for Reduction of Emissions operating at the Ministry of Economy<sup>26</sup> indicate the need for *public dialogue and consultation by creating permanent platforms of communication of central administration, local governments with society*<sup>27</sup>. At the level of the European

On May 18, 2012 pursuant to Regulation by W. Pawlak, Deputy Prime Minister, Minister of Economy, the Social Council of the National Programme for Reduction of Emissions was dismissed. In its place, the Social Council for the Development of Low-Carbon Economy was established.

Zielona Księga Narodowego Programu Redukcji Emisji Gazów Cieplarnianych -Green Paper of National Programme for the Reduction of Greenhouse Gas Emissions, Warszawa: Społeczna Rada Narodowego Programu Redukcji Emisji, 09.2010 (www.rada-npre.pl/index.php?option=com\_docman&task=doc\_download&gid=38&Itemid=).

Union this function is fulfilled, among others, by the initiative of the European Economic and Social Committee, which initiated the creation of the European Energy Dialogue. The dialogue is to serve consumers in obtaining explanations concerning compromises and expressing their preferences and to provide negotiation space to allow discussion on political choices in the context of their social impact and social acceptance for them and a strategy for investments and resources. In addition, it is intended to constitute a new structure taking into account social and civic engagement. As a consequence, it is supposed to cause the deepening of public debate on energy and to influence the formation of policy pertaining to all types of energy and to play a role in the stimulation of convergence at the level of the European Union in close liaison with the framework of energy policy and climate protection policy for the period after 2020. The premise of the Economic and Social Committee is the establishment and orientation of a permanent European dialogue on energy, conducted at national, regional, metropolitan and local level with the support of the European Commission<sup>28</sup>.

Despite the appointment at the European and national level of institutions which in their scope have the stimulation of the factual and substantive debate on energy issues, we cannot talk about the success of these initiatives in Polish provinces. The problem of localization conflicts is indicated by local authorities as important for the development of RES. Local governments make attempts to solve this problem. An example is the formation of the Association of Municipalities Friendly for Renewable Energy by Polish municipalities of several Polish provinces. The Association focuses on: providing opinions and promoting economic and legal initiatives related to the acquisition and production of energy based on the use of wind force, hydropower, sunlight, biomass and natural gas in order to implement the National Strategy for the development of renewable energy associated with the directives and regulations of the European Union; representing common interests of cities and municipalities in the protection and shaping of the environment, including the ones

<sup>&</sup>lt;sup>28</sup> Ibidem.

pertaining to environmental fees, taxes, reliefs and exemptions from such fees; undertaking joint projects in the field of the protection of water, earth, air and landscape - the natural values of natural resources; presenting opinions, proposals, projects of programmes subject to the association's activities to state authorities, parliamentarians, central and local government<sup>29</sup>.

The association adopted the Appeal of NGOs on ambitious, binding objectives of energy and climate policy of the European Union till 2030<sup>30</sup> and actively participated in lobbying for specific solutions in Polish law on renewable energy sources. Explaining the success of the development of renewable energy sources in their municipalities, members of the association point to the large value of conducting meetings, organising seminars, debates and discussions with residents about the concerns connected with RES. A step forward in the development of renewable energy sources in Polish provinces is the Act on renewable energy sources. It concerns the adaptation of legal solutions adopted in Poland to legislative standards on the RES market in other European countries.

Its objectives include increased energy security and environmental protection, rational use of renewable energy sources, the development of mechanisms and instruments assisting the production of electricity, heat or cold, agricultural biogas in installations of renewable energy sources, development of optimal and sustainable energy supply to end users<sup>31</sup>.

gy sources in http://www.sejm.gov.pl/sejm7.nsf/PrzebiegProc.xsp?nr=2604

<sup>&</sup>lt;sup>29</sup> Statut Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej, Załącznik nr 1 do Uchwały nr 1/I/2008 Walnego Zgromadzenia Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej z dnia 6 czerwca 2008r. w sprawie przyjęcia jednolitego tekstu Statutu Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej [ *The Statute of the Association of Municipalities Friendly for Renewable Energy*, Annex 1 to Resolution No. 1/I / 2008 of the General Assembly of the Association of Municipalities Friendly for Renewable Energy on 6 June 2008 on the adoption of a uniform text of the Statute of the Association of Municipalities Friendly for Renewable Energy], p. 2.

http://sgpeo.pl/Wspolny\_apel\_organizacji\_pozarzadowych,866,15.html
See the course of works on the government's draft of the Act on renewable ener-

The Act was signed by the President of the Republic of Poland on 11 March 2015. It includes the so-called "prosumer amendment", which introduced the guaranteed tariff for people producing energy for their own use. Prosumers will be able to sell excess energy from the installations up to 10 kW to the grid at the price guaranteed for 15 years. The Act also introduced the institution of the obliged seller, specified the mechanisms of counteracting the oversupply of certificates of origin, defined the rules for monitoring and determination of the weighted average price at which property rights resulting from certificates of origin are sold, introduced an auction system of the sale of energy and the procedure of formal assessment of producers of electricity from renewable energy sources intending to participate in the auction, introduced RES fees and established Renewable Energy Settlement Operator joint stock company, eliminated the possibility of over-compensation of the support offered to producers of energy from RES with other public and de minimis aid and regulated the rules of using support mechanisms<sup>32</sup>.

## Final remarks

The overview of the main issues related to the development opportunities of Polish regions in connection with European policy promoting the development of renewable energy sources leads to a few generalizations.

Firstly, the existing development potential of Polish regions in terms of renewable energy is not sufficiently understood by decision makers. Polish energy policy in the field of renewable energy sources does not take into account the potential and importance of regions in their implementation, as well as the role that they can play due to the significant financial resources that may be at their disposal in the years 2014-2020. What is noticeable, however, is the fact of following

The text of the Act finally passed after consideration of the Senate amendments (http://orka.sejm.gov.pl/opinie7.nsf/nazwa/2604\_u/\$file/2604\_u.pdf).

the European Union expectations and implementation of Community legislation.

Secondly, the issue of social conditions of the development of renewable energy sources in Poland is underestimated despite the diagnosis of the problem in studies conducted, among others, by representatives of local government units. The high level of lack of social acceptance recurring in the survey results, especially for wind and biogas power, may result from various reasons. Among them are: the imposition of the unwanted investment by force, the lack of knowledge about the technology by the public, the omission of social concerns and not taking them into account in decision-making, lack of benefits for the local community. Insufficient knowledge in Polish society causes fear and raise doubts. Simultaneously, we observe insufficient access to tailored to the individual recipient information on renewable energy sources. Formal education institutions are not prepared to carry out such activities, because of the lack of both trained personnel and teaching aid facilities dedicated to this field. In turn, state institutions and NGOs carry out campaigns which are often one-off, limited to a given territory and for a given period of time, which is connected with the sources of funding for such campaigns. Very often these are grant funds, projects obtained from various international or European institutions.

Research shows that the most important attributes of successful public participation in energy projects are: stakeholders' acceptance of the decision-making process as legitimate, understanding of social concerns, the assurance of full and adequate representation of stakeholders and adaptation of communication tools to a given social group. The essence of all these approaches is the pursuit of wider voluntary acceptance of investments by society through better information, more extensive consultation, assurance of the participation in the design process of investments and possible involvement of communities in partnership with the investor. All of these conditions require the creation of a standard, a procedure in the field of the information and communication campaign linking the national level with regional and local ones, educational activities or models engaging

stakeholders, as it happens in countries which have extensive experience in the development of renewable energy sources.

Another problem faced by poorer local governments is a matter of the lack of financial resources to employ specialists in obtaining external funding for projects related to the development of renewable energy in local governments. The experience of the previous European Union funding period 2007-2013 showed that specialists with such competences, employed in local government units, were an important factor for success in obtaining funds for projects related to the development of renewable energy sources.

As a result, the large development potential of Polish regions in the field of renewable energy can, but does not have to be recognized and utilized in the funding period 2014-2020. Many factors will affect the final index of renewable energy development. Next to social and political factors there are extremely important economic and legal factors. The Act on renewable energy sources gives hope to the supporters of RES for the positive development of the situation, however, experts point to many possible problems including convincing investors to invest in areas where organizations opposed to the development of RES are active.

### **References:**

Ancygier A., Szulecki K., Energia lokalna –czyli odnawialna? Raport z badania akceptacji dla odnawialnych źródeł energii i perspektywy dla ich rozwoju w polskich gminach, Raport Nr 1, 12.2013, Wrocław: Environmental Studies and Policy Research Institute 2013.

A policy framework for climate and energy in the period from 2020 to 2030, COM(2014)15 final, Brussels 12.1.2014.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions An action plan for energy by 2050, COM(2011) 885, Brussels: European Commission, 15.12.2011.

Energy 2020. A strategy for competitive, sustainable and secure energy, COM (2010)639 final, Brussels: European Commission, 10.11.2010.

- Energy Roadmap 2050, COM(2011) 885, Brussels: European Commission, 15.12.2011
- (acces: http://ec.europa.eu/energy/energy2020/roadmap/index\_en.htm. Energy Strategy for Europe: http://ec.europa.eu/energy/index\_en.htm.).
- Europe 2020. A strategy for smart, sustainable and inclusive growth, COM (2010)2020, Brussels: European Commission, 3.3.2010.
- European Energy Security Strategy, COM(2014)330 final., Brussels: European Commission, 28.5.2014.
- Factors influencing the societal acceptance of new energy technologies: Metaanalysis of recent European projects. Deliverable 3.1, 3.2 and 4, Petten: Energy Research Centre of Netherlands, p.114 (http://www.ecn.nl/docs/library/report/2007/e07058.pdf).
- Feenstra Y., *Societal acceptance: todays challenge of the energy sector*, "EDI Quarterly", 5(1), March 2013 (http://www.energydelta.org/uploads/bestanden/12507163-aa61-4f7b-bd23-a7ac91b47edd.).
- Green Paper. A 2030 framework for climate and energy policies, COM(2013) 169 final, Brussels: European Commission, 27.3.2013.
- http://sgpeo.pl/Wspolny\_apel\_organizacji\_pozarzadowych,866,15. html
- http://www.sejm.gov.pl/sejm7.nsf/PrzebiegProc.xsp?nr=2604
- Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów *Ramy polityczne na okres 2020-2030 dotyczące klimatu i energii*, Brussels: European Commission, COM(2014)15 final.
- Krawiec F., Energia, Warszawa: Difin 2012.
- Łucki Z., Misiak W., Energetyka a społeczeństwo. Aspekty socjologiczne, Warszawa: Wydawnictwo Naukowe PWN 2012.
- Mrozowska S., Kijewska B, Besta T. (eds.), *Społeczny wymiar procesu wdrażania energetyki jądrowej w Polsce*, "Ekoatom", 13(2014).
- Oettinger G., Wyzwania dla europejskiej polityki energetycznej, "Nowa Europa" 1(14),2013.
- Określenie potencjału energetycznego regionów Polski w zakresie odnawialnych źródeł energii wnioski dla Regionalnych Programów Operacyjnych na okres programowania 2014–2020, Warszawa: Instytut Energetyki Odnawialnej 2011.
- Olechowski A. P., Odnawialne źródła energii i ich znaczenie dla bezpieczeństwa energetycznego państwa [In:] P. Kwiatkiewicz (ed.), Bez-

- pieczeństwo energetyczne. Rynki surowców i energii teraźniejszość i przyszłość, Poznań: Fundacja Czystej Energii 2014, pp. 324-345.
- Paska J., Surma T., *Polityka energetyczna Polski na tle polityki energetycznej Unii Europejskiej*, "Polityka Energetyczna", 16(4), 2013.
- Raport Energetyka wiatrowa w Polsce, Warszawa: TPA Horwath 2013.
- Statut Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej, Załącznik nr 1 do Uchwały nr 1/I/2008 Walnego Zgromadzenia Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej z dnia 6 czerwca 2008 roku w sprawie przyjęcia jednolitego tekstu Statutu Stowarzyszenia Gmin Przyjaznych Energii Odnawialnej.
- Wpływ energetyki wiatrowej na wzrost gospodarczy Polsce, Raport przygotowany przez Ernst&Young we współpracy z Polskim Stowarzyszeniem Energetyki Wiatrowej oraz European Wind Energy Association, 03. 2012.
- Zielona Księga Narodowego Programu Redukcji Emisji Gazów Cieplarnianych -Green Paper of National Programme for the Reduction of Greenhouse Gas Emissions, Warszawa: Społeczna Rada Narodowego Programu Redukcji Emisji, 09.2010
- (www.rada-npre.pl/index.php?option=com\_docman&task=doc\_download&gid=38&Itemid=).

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