

Cohesion Policy in Greater-Poland



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Prefix

All my in Central and Eastern European counties have interested me. I always enjoyed travelling to these countries for their architecture, history and nature. Ever since I travelled there for the first time I have believed in the potential of this area, which I will discuss in later on in this thesis. Most of my Dutch friends still have a negative image of the former communistic countries in Europe, but Central Europe is not as gloomy as many Western Europeans do believe. However, the living standard is still much higher in Western-Europe than in Central and Eastern-Europe. The European Union tries to bridge this socio-economic gap by utilizing the untapped potential of Central and Eastern European regions. When this European policy on utilizing of the untapped potential in Europe was discussed during a course about EU Regional Policy, I knew that this would be the topic of my master thesis. I could not have written my thesis on my own. Therefore, I would like to thank in the first place my thesis supervisor Leo Paul, my parents and my sister for their support, my co-workers at RDH who helped me a lot in finding the right documents and helping me with Polish-English translations, and all the amazing people that I met during my stay in Poznan.

Summary

The region of Greater-Poland is located in Western-Poland and was classified as a lagging region by the European Commission in 2007. This classification resulted in a large share of European development funds within the regional development budget. The regional policy on the allocation of the regional development budget was formulated in the Wielkopolska Regional Operational Programme (WROP). The main question of this research was to what extent the regional policy in Greater-Poland between 2007 and 2013 was effective. So far, the results of impact assessments of the effectiveness of regional policy have been rather unsatisfactory.

The research made use of qualitative research methods. The impact of the regional policy was analysed by 13 interviews and analysis of 5 policy documents. The interviews can be split into three groups: interviews with experts on regional policy in Greater-Poland, interviews with direct beneficiaries of the WROP and interviews with indirect beneficiaries. The policy documents are evaluation documents on the effectiveness of the WROP for the period 2007-2013.

The economy of Greater-Poland grew greatly between 2007 and 2013, and the socio-economic development of the region was sensational. The interviews with (indirect) beneficiaries suggested that the impact of the regional policy on the socio-economic development of the region was large. The experts on regional policy all had a favourable opinion on the impact of the regional policy on the socio-economic development of the region. However, they estimated that this positive impact was lower than suggested by the (indirect) beneficiaries.

Several critical remarks about the regional policy were made during the interviews. It was not able to improve the low innovativeness in the region, and it was not able to reduce the polarization trend in Greater-Poland. These two negative outcomes might be the result of a poor place-based regional development strategy, with many interventions not adjusted to the regional context. Moreover, the evaluation process of the regional policy was insufficient, and it is therefore doubtful whether regional policy makers in Greater-Poland have learned much from the evaluation process.

1. Introduction

The Cohesion Policy is a policy designed by the European Commission in order to reduce regional development inequalities within the European Community as a bloc. However, the solidarity between EU member states is at risk. On June 23rd 2016 Great-Britain decided to leave the European Union, and other member states are also discussing leaving the European community. Less EU solidarity can have extensive consequences for the Cohesion Policy. If the European community is going to split into groups the goal of the European Commission will no longer be creating cohesion among member states (Stratfor, 2015). It is expected that the spending on cohesion objectives will be reduced after 2020 (CAP Reform, 2016). Critics believe the Cohesion Policy is too complex, that it is lacking clear goals. Another point of critique is the fact that it is pursuing economic liberalization among 28 member states, but at the same time trying to create solidarity and economic cohesion. According to the critics, the European Union struggles to find a balance between designing plans at the supranational level, while allowing member states to implement the policy at the national, regional and local level. Every seven years the member states discuss a new budget for the Cohesion Policy, and every time, large economies push for a smaller budget (Stratfor, 2015). With the large debate going on about EU solidarity, the chances that the budget for the Cohesion Policy will be cut are high. This is worrying for peripheral EU-countries which receive large amounts of funding from the Cohesion Policy. The Bulgarian Prime-Minister Borissov stated that the Bulgarian administration will try to prevent any losses on the Cohesion Policy: "We must not allow Europe at two or more speeds or a loss of Cohesion Policy" (BTA, 2017).

Because the Cohesion Policy is under discussion, this thesis analysis its effectiveness and relevance in Greater-Poland (in Polish: Wielkopolska), one of the main beneficiary regions of the Cohesion Policy between 2007 and 2013. This region is located in the west of Poland and has a population of 3,5 million inhabitants and a surface of 30,000 km² (Invest in Wielkopolska, 2012). The capital of the region is Poznan and the region had a GDP of 54% of the European average in 2006 (see figure 1.1). The region was classified as a lagging region within the European community in 2007 and therefore received a relatively high share of financial support between 2007 and 2013 (EC, 2009). The regional policy for Greater-Poland between 2007 and 2013 has been formulated in the Wielkopolska Regional Operational Programme (WROP). This document was used as the fundament for this thesis, so the main question of this thesis was:

"To what extent was the regional operational programme of Greater-Poland for 2007-2013 effective?"

It is not the first time that the Cohesion is being criticized. During the 2008 economic crisis the relevance and effectiveness of the policy was heavily discussed. As a response to this discussion the European Commission reformed the Cohesion Policy in 2009 in order to make the policy more effective. The Cohesion Policy became place-based, and from 2014-2020 budgetary period the place-based concept of smart specialization was an ex-ante conditionality for regional policy (Barca et al., 2012). Place-based policies are policies that are designed with an explicit consideration of the spatial effects of regional policy (Barca et al., 2012, p. 139). The newest concept in place-based policies is smart specialization; which helps regions in concentrating their resources on high value sectors that have the best chance in making the region more innovative and competitive (EC, 2010). In order to answer the main question and to find out whether the 2009 reform of the EC made the Cohesion Policy more effective; the following three sub-questions have been formulated:

Is the Cohesion Policy able to adjust itself to the regional needs and therefore place-based?

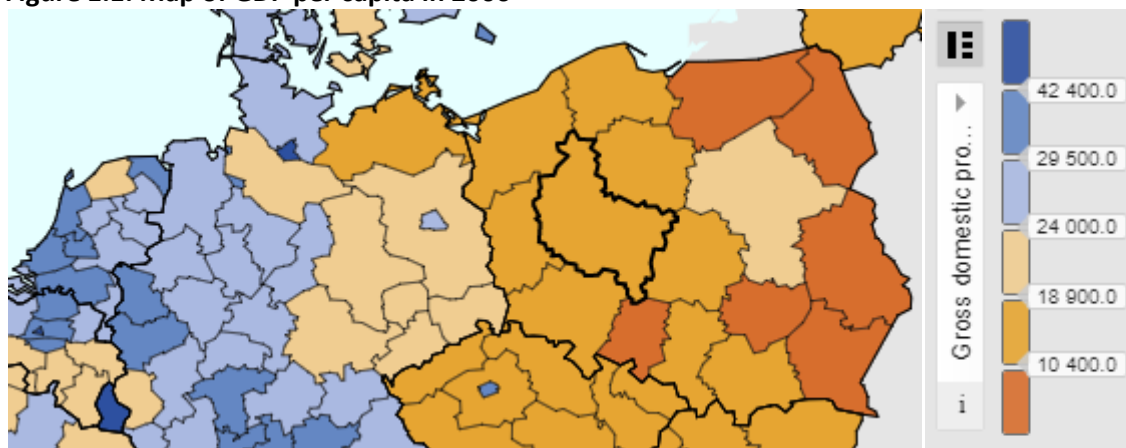
Can the smart specialization strategy be an effective tool in enhancing the effectiveness of the Cohesion Policy?

Are the goals of the Cohesion Policy of creating equity among member states and creating overall economic growth compatible?

In order to answer these questions the regional development theories have been examined. These theories give insight in the mechanisms behind regional development and the emerged of regional disparities. The EU regional policy (from 2007 named as the Cohesion Policy) will be discussed in chapter 3, as well as the evolution of the policy, and the rationale behind the current Cohesion Policy. Chapter 4 describes the regional economy and the regional policy of the Greater-Poland. The general economic trends, economic characteristics of the region and the regional operational programme for Greater-Poland (WROP) will be examined. In the fifth chapter the methods of the research are outlined. A description on how the effectiveness of the WROP has been measured is given in this chapter. The results of the research are discussed in chapter 6, which gives insight in the impact of the regional operational programme on the regional economy. Chapter 7 discusses the conclusions and recommendations improving the regional policy in Greater-Poland.

This thesis is scientific relevant because it contributes to the search for a proper impact assessment method. So far, the outcomes of previous impact assessments of regional policies were unsatisfactory and the methods used were heavily discussed (Bradley & Untiedt, 2012). This thesis used a more qualitative approach and contributes to the discussion this approach is more tailored to assessing the impact of regional policy. The social relevance of the thesis is its contribution to the public debate on the impact and relevance of the Cohesion Policy. It adds to the discussion whether the Cohesion Policy is creating convergence, or whether it is better to develop a European community at two or more speeds.

Figure 1.1: Map of GDP per capita in 2006



Source: Eurostat, 2017

2. Regional economic development

2.1 Different growth theories

The geographical pattern of economic development have been under debate since the 1950s. This debate was a result of the political concerns about the international inequalities, which showed a clear North-South divide in economic development (Williamson, 1965, p.3). The neo-classical economists and politicians were deeply concerned about the effects of economic progress in western countries on the distribution of income and on the prevalence of poverty. Various neo-classical economists proposed models in order to try and understand the present international inequalities (Dorfman, 1991). Rostow (1963) answered this with his theory about different stages of economic growth. Each nation is in a different stage of economic development and each developing country will reach the same level of developed countries sooner or later. Neoclassical models explained the dispersion of economic activity according to the principle of comparative advantage, and expected economic convergence through the redistribution of economic activity to the locations with the highest comparative advantage. After a while the location will develop and would become too expensive followed by relocation of economic activities to places with a higher comparative advantage, which will economically develop next. The empirical support for the neoclassical theories was weak, and already in the 50s and 60s some development economists who claimed that economic activity had 'circular and cumulative' patterns (Farole et al., 2009, p.1091). Until the 1980s development scientists tended to ignore the possibility that economic development would cluster in certain places and generate long-term income divergence. Neo-classical economists did not pay attention to the role of regional inequalities in economic development (Williamson, 1965, p.3). Only since the 1980s researchers found patterns of economic divergence within countries. Kanbur and Venables (2005) claimed that economic integration is unleashing forces where core regions within countries benefit, often at the expenses of the periphery. For example, European integration has promoted international convergence, but regional inequalities have increased. These regional inequalities can be explained by:

1. The technological paradigm driving growth, and especially innovation and its geography;
2. Geographical integration of markets, combined with greater organizational and geographical fragmentation of production;
3. The persistence of institutional differences between places despite integration.

Tendencies towards geographical agglomeration of certain activities are likely to continue in the foreseeable future. The same concerns of politicians in the 50s about international inequalities are now applicable to persistent regional inequalities. As a reaction to these regional inequalities policy makers have launched policies aimed at achieving convergence between regions (like the EU Cohesion Policy), but they may not be strong enough to counteract the forces behind divergence. Three different academic approaches trying to explain the regional inequalities have been developed since the 1980s (Farole et al., 2009, p.1092):

1. New Economic Geography
2. Endogenous growth theories
3. Institutional growth theories

New Economic Geography

The New Economic Geography models are based on the work of Krugman (1991). These models emphasize that market integration, scale economies, transport costs and home market effects favour the concentration of economic activities in core regions. The advantages of large, flexible, highly

specialized labour markets and localized technological spillovers in core regions reinforce the tendency to agglomerate economic activity in core regions (Fujita et al., 1999).

Innovation based growth models & knowledge networks

Endogenous growth theories (also known as Schumpeterian growth theories) focus on innovation, and regions as product spaces on the 'quality ladders'. These models stress the value of change and adaptive efficiency in economic development, rather than the adjustment towards an optimal, equilibrium allocation of factors between places. The economy is seen as a restless search for new products and processes with higher rates of return. However, the potential for development of these new products and processes is unevenly distributed across places. Innovation economists claim that human capital transmission operates through knowledge networks. This has important spatial implications since the transaction costs of transmitting knowledge remain high, often requiring face-to-face contact (Farole et al., 2009, p.1093).

An important question for innovation economists is how this transfer of knowledge between people occurs. In the literature about knowledge networks two types of knowledge are distinguished: technical know-how, which is sticky and difficult to imitate and to transfer to others; and business knowledge, which has been regarded as a public good shared during informal contacts between people (Kogut & Zander, 1995). The transfer of business knowledge between companies is less complicated than the transfer of technical know-how. Technical know-how is very firm and context-specific (Winter, 1987). Although technical know-how is usually associated with tacit knowledge, Lissoni (2001) acknowledges that technical knowledge can be codifiable and therefore be transmitted to other companies. In simpler words, entrepreneurs can give each other technical advice in order to solve technical problems that might require context specific skills and competences.

A possible tool for stimulating the transfer of technical know-how between entrepreneurs is by establishing industrial clusters. Geographic nearness, as in industrial clusters, has been often regarded a key factor enhancing local knowledge transmission (Maskell, 2001). It is important to note that local knowledge spillovers do not freely circulate in space and that informal social networks are crucial in this knowledge transmission (Balland et al., 2016, p.38). In industrial clusters technical know-how is not hanging in the air, but circulates via (localized) networks among specific actors and communities (Almeida & Kogut, 1999). These (informal) local networks are a result of social relations between entrepreneurs in the industrial cluster (Grabher, 1993). For example, two engineers of two different companies who both go to the same church on Sunday can advice each other on solving work-related technical problems. Informal contacts rapidly and effectively channel information and knowledge across firms that otherwise was limited to formal inter-organizational ties (Balland et al., 2016, p.39). Social cohesion, the feeling of membership and the social embeddedness of entrepreneurs in the cluster creates trust, which is crucial for the transmission of technical knowledge and ultimately stimulates innovation (Balland et al., 2016, p.41).

Institutional growth theories

A third group of researchers argues that institutions determine whether regions are prosperous because institutions shape the ability of an economy to use and develop its resources. These institutions also contribute to the spatial distribution of economic activity. High-value economic activity favors to agglomerate in metropolitan areas, and institutions reinforce this progress because these are mainly present in metropolitan areas. Institutions facilitate the creation of 'systems of innovation', which cluster innovative activities in metropolitan areas (Lundvall, 1992). Successful institutions are hard to replicate, which increases regional disparities even more. Innovation-orientated activities tend to concentrate on these location where favorable institutions can be found (Farole et al., 2009, p.1093). On the other hand, weak institutions can hold back development and produce a hostile environment for sustainable innovation and growth (Acemoglu, 2006).

Degrowth/social innovation

A relatively new approach to regional economic development explores the benefits of a more 'clean-tech' economic development. The adverse environmental impacts of economic development is becoming of increasing concern under scholars and policy makers (Rockström et al., 2009). In the eyes of these scholars, economic development should be low-carbon based and no longer focus solely on increasing consumption within a region. This approach is one of ecological modernisation, believing that technology, innovation, and progress solve environmental problems (Mol, 2002). While climate change may have been the initial driver behind low carbon policies and targets, policy-makers start to recognize that the shift to a greener economy also offers the prospect of a more resilient and sustainable economy in the future (Gibbs & O'Neill, 2016, p.2). For some scholars the green economy approach is not radical enough; according to them economic growth and environmental protection cannot go hand in hand, so they proposed an alternative pathway based on de-growth and post-growth (Research and Degrowth Association, 2012). Degrowth approach advocates a "different vision of prosperity, one based on dramatically less material overgrowth and consumption" (Kallis et al., 2012, p.174).

Another approach that challenges the neoliberal agenda of continued economic growth is the idea of social innovation. Social innovation is a bottom-up development process which builds on and strengthens the community in order to respond to future challenges (Nordregio News, 2017, p.4). Social innovation occurs in the absence of suitable commercial innovation. Commercial innovation is generally motivated by profit maximisation, while social innovation is non-profit based. According to social innovation scholars, mainstream public policies rely on commercial innovation in order to overcome future challenges (Mulgan, 2006). However, these mainstream policies created extra social injustice and did not stimulate sustainable growth (Gibbs & O'Neill, 2016, p.4). Social innovation is social in its means and outcomes, and it contributes to a more stable world (Nordregio News, 2017, p.4).

2.2 Regional embeddedness

Different growth theories stressed the importance of the context for regional development (Farole et al., 2009). The theories about social capital also argue that context matters for economic development. The problem with mainstream economic theories was that they ignored the important role of social relations in generating economic development. Economic mechanisms tend to be more socially sophisticated than economists tend to believe (Rutten & Boekema, 2007, p.1835). Regional social capital affects whether a region benefits from the technological development efforts of its companies (Rutten & Boekema, 2007, p. 1834). A commonly used definition for social capital is: "social capital refers to those features of social organization such as networks, norms and trust, which facilitate coordination and cooperation for mutual benefit". Because of the substantial differences in prosperity and social capital between regions, Rutten and Boekema (2007, p. 1836) stated that regions rather than nations are the most appropriate geographical level to address the contribution of social capital to economic development.

There is a debate in the social capital literature between the "rational choice" and "embeddedness". Rational choice relates to the availability of capital in a place, while embeddedness relates to the social relations. The rational choice theory argues that the firm's location decision depends on the availability of capital. The rational choice theory is criticized by Granovetter (1992) who claims that the rational choice theory is under socialized, because capital is embedded within concrete, ongoing system of social relations. Social capital is also capital that can be exchanged, this exchange is not rational but it is embedded in a social web of social relations or social context. This social context is intangible; networks, cultural norms, trust, and social proximity are unique assets of a region. The development of technology is more and more spread than ever before (Gibbons et al., 1994), but due

to the uniqueness of the social networks the new technologies are not for every firm available. This can be explained by the idea that collaboration for mutual benefit is likely to function much more smoothly when relations are characterized by a high level of trust, shared norms and values and that benefit from cultural or social proximity (Rutten & Boekema, 2007, p. 1838).

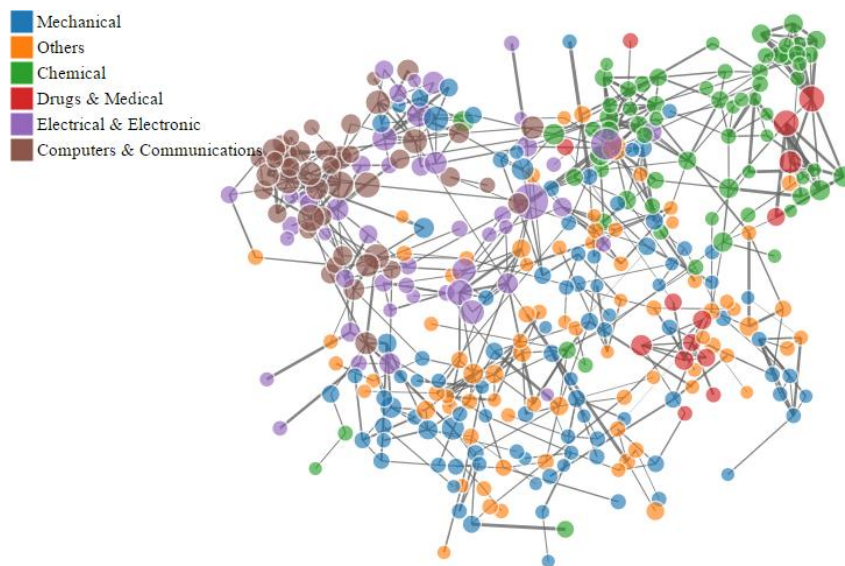
Intangible (social) assets of a region have a significant effect on the embeddedness of firms. This embeddedness is caused by the following mechanism: the longer a company is located in a region, the more suppliers it has within the region. Moreover, the companies that are long established in the community are more likely to develop generous social responsibilities that embed them into the region. High value investments are usually more embedded because capital-intensive activities bring enhanced skills and expertise together with long-term stability of jobs into a region. The termination of low-capital investments is more likely than the termination of high-capital investment. Small branches of multi-plant enterprises may be in greater danger of closure in the case of rationalization (Domanski, 2004, p.114).

2.3 Related Variety

From a regional approach to economic development in the previous paragraphs, the upcoming paragraph has a more sectoral approach. The main debate in the urban economics and the economic geography literature is the specialization-diversification debate (Van Oort et al., 2015). Should regions and cities specialize in certain technologies and industries and create clusters, or should regions diversify over various technologies and industries, and create a portfolio effect with inter-sector spillovers and being more resilient against external economic shocks? Beaudry & Schiffauerova (2009) concluded that the specialization-diversification debate is not an “either-or” question. The results of the studies about this topic were inconclusive, with outcomes being dependent on measurement in many respects. New theoretical development in the evolutionary economics has come up with the question whether concepts of specialization and diversification fully captured the role of variety within the economy. This new way of thinking resulted in the concepts of related and unrelated variety (Frenken et al., 2007).

Variety and diversification consist of related variety and unrelated variety, the presence of different technological or industrial sectors will not simply result in positive results, but that present sectors require complementarities and shared competences in order to generate inter-sector spillovers. This need resulted in a distinction between related variety and unrelated variety because knowledge spillovers will not transfer to all different industries evenly, due to the varying cognitive distances between each pair of industries. It was argued that industries are more related when they are closer to each other within the Standard Industrial Classification (SIC) system (see figure 2.1 for visual explanation). In Dutch urban regions, the positive results of knowledge spillovers were higher in regions with related variety and regions characterized by unrelated variety were better hedged for economic shocks (Frenken et al., 2007, p.688). Another conclusion of Frenken and others (2007) was that urbanisation externalities play an important role in creating new (related) varieties. The study of Van Oort and others (2015) founded that related variety significantly correlates with employment growth, especially in medium-sized city regions, and that specialization was significantly related to productivity growth.

Figure 2.1: Scatter plot of economic sectors and relatedness between sectors



Source: Petralia, 2015

2.4 Resilience

The specialization-diversification debate relates to resilience and the potential lock-in of a region. The portfolio effect would make regions more resilient to economic shocks (Frenken et al., 2007, p.688). But what is the concept of resilience? According to Martin & Sunley (2014) the concept is ill defined, and more fundamental research needs to be done to understand how the economic resilience of a region works. Concepts of path dependency and lock-in can also be used in explaining the growth-path of a region, so the question is what the extra value of the concept of resilience is over these two other concepts (Davies, 2011, p.370). Davies (2011) claimed that there are three dimensions of resilience:

- the ability of a regional economy to withstand external pressures
- its capacity to respond positively to external change
- its longer term adaptability or learning capacities.

In evolutionary economics resilience is seen as the capacity of a region to sustain long-term development and the capacity of a region to respond positively to short-term shocks. The evolutionary approach focuses more on the long-term economic evolution of regions and their ability to adapt and reconfigure their industrial, technological and institutional structures (Boschma, 2015, p. 734). "Resilience is considered as an ongoing process rather than a recovery to a (pre-existing or new) stable equilibrium state" (Simmie & Martin, 2010, p.31). According to Saviotti (1996) the need for economic renewal was always present in a region and in time of crises the need for renewal is felt even more pressing. Resilience then depends on the ability of regions to cope with structural change and to create new growth plans in order to offset the inevitable processes of stagnation and decline in their regional economy (Saviotti, 1996).

Evolutionary economists also have special attention for the concepts of adaptation and adaptability. Both concepts have special attention for the way regions reconfigure their economy in the ever changing world economy. The concept of adaption concerns the changes within the existing growth path, while adaptability is about developing new pathways. Evolutionary economists claimed that there is a trade-off between the two concepts. Adaption leads to increasing specialization and a preference for innovations that fit within the existing structures. When the economic system

optimizes its 'fit' within the world economy, it loses its adaptability. On the other hand, an increase in the adaptability of a regional economy leads to lower specialization rates (Boschma, 2015, p. 734).

2.5 Smart Specialization

The latest concept in the literature about regional economic development is the concept of smart specialization. The concept of smart specialization builds upon the ideas of related variety and resilience. Researchers advocating smart specialization see relatedness within the regional economy as a main initiator for economic growth and cross-sector knowledge spillovers. Within the concept of smart specialization different countries and regions have to specialize themselves in related knowledge-based sectors depending on the regional capabilities, and then proceed from this starting point to a development policy based on these capabilities. For utilizing the regional potential and the stimulation of innovation in a region, policy-makers have to bear in mind the evolutionary pathways of a regional economy and the dependency on the inherited structures. Policy-makers have to create mechanisms whereby the untapped potential of a region is most likely to be realized (McCann & Argiles, 2015, p.1296).

In order to make the 'smart specialization' concept applicable for the regional context, David et al. (2009) propose two different development strategies that can be implemented by local governments. On the one hand, pursuing 'one-size-fits-all' skills-training policies, or on the other hand, stimulate human capital formation towards the new 'knowledge needs' of the region's traditional industries which are starting to adapt and apply new technologies. In the process of developing a smart specialization policy, McCann & Argiles (2015, p. 1293) stressed the importance of knowledge diffusion between sectors, activities and occupations, and to avoid automatically prioritizing high-technology sectors as the smart specializations of the region. Local skills should be promoted in order to facilitate incremental improvement within traditional industries, and creating a more specialized application of the present technologies within a region (McCann & Argiles, 2015, p.1293).

Regions do not only vary in their historical competences and technologies, but also in their untapped potential. Prosperous and diversified regions should use the smart specialization strategy in order to specialize their economy more, and create a denser sector pattern. Less prosperous regions, the focus group of the EU regional policy, need a smart specialization that stimulates related diversification within their over-specialized economy. In those regions new skills should be applied in the process of reconfiguring the regional economy. This fostering of incremental change in a region's economic ecosystem is harder in less prosperous regions due to the embeddedness of a small range of sectors (Van Oort et al., 2015, p.1296). The strategy of smart specialization and economic reconfiguration builds upon the concept of related variety which claims that growth can be promoted by diversifying into technologies which are closely related to the existing dominant technologies (Frenken et al., 2007, p. 688).

Another element in developing a smart specialization growth strategy is the role of connectivity. Regional policy-makers in the periphery should invest in their most connected industries. Connections with industries outside of the region result in an inflow of knowledge and new ideas. If the knowledge inflows into industries that are related to the region's existing technological fields, then this fosters growth (Boschma & Iammarino, 2009). In this way, peripheral regions are able to learn from the more advanced regions. Important, however, is that the networking effect must not lead to what is called an adverse Krugman shadow effect (Fujita et al., 1999) whereby the network causes an outflow of knowledge and skills. A successful smart specialization strategy must focus on maximizing the knowledge spillovers and learning linkages within the regions, as well as between regions (McCann & Argiles, 2015, p.1298).

The main question in the smart specialization debate is how to turn the concept into effective regional policy. The concept of smart specialization was an ex-ante conditionality for regional policy for the first time in 2014-2020. Before, the concept was already introduced in some regional policies for the period of 2007-2013 (Barca, 2009; EC, 2010). Smart specialization is a bottom-up process where small and medium sized enterprises (SMEs) discover 'smart' niches and where they can utilize their potential (Rodink, 2004) and build upon the regional potential (Tödtling & Trippl, 2005). These 'smart' niches must be related to traditional industries in order to develop in a smart specialization. The smart specialization should not be a top-down process in where regional governments decides in which industry the region is going to specialize, but a bottom-up process in where entrepreneurs and citizens together with the regional government decide what the smart specializations of the region will be (OECD, 2012). Although, there is an important role for public policy, since public procurement is needed in the risky process of investing in young industries. Public procurement can stimulate the investment in these smart niches and can create a public-private learning agenda. Important is that this public-private agenda uses clear outcome indicators, ongoing monitoring and evaluation in order to analyse whether the public budget was spent wisely (David et al., 2009).

3. EU Cohesion Policy

3.1 Battling regional disparities

The main question of chapter 3 is how the EU regional policy makers can design a regional policy that can overcome the regional disparities in levels of income, economic output, employment, and generally in levels of economic inequality. The EU Regional Policy (also known as the Cohesion Policy) makers mainly focused its interventions on active redistributing of welfare between European regions. The aims of the EU regional policy were formulated by the European Commission (EC) in the following objectives (Senior Nello, 2009, p. 348):

- Promoting a harmonious, balanced and sustainable development of economic activity
- Convergence of economic performance
- Economic and social cohesion and solidarity between member states

In order to achieve these goals, the EU regional policy main goal is to improve the performance of lagging regions (Gripaios et al., 2008, p.499). This improved economic performance should lead to a situation in where the growth in the EU is robust. In order to establish harmonious growth within the community the economic growth rates of the lagging regions must be at an acceptable level (Farole et al., 2009, p. 1090). The socio-economic convergence of European regions would lead to a degree of regional disparities that is socially and politically acceptable (Molle, 2006, p. 287). In the beginning of the European community, regional policy was only implemented by national governments and not by the EU itself. National governments financially supported lagging regions within their state and these policies were neither coordinated by the EU nor financially supported by the EU. The establishing of the EU regional policy was an outcome of the discussion about whether European integration would lead to socio-economic convergence or divergence. On one hand there was the view that integration leads to less income disparity. This view is generally based on the faith in markets; the integration would create opportunities for fully exploiting the comparative advantages of a region. The free flow of capital and labour would, according to some, lead to convergence. On the other hand were the opinions that integration would lead to greater disparities between regions. According to researchers who support this idea, the free flow of capital and labour would cause the concentration of this capital and labour in the fast-growing regions (e.g. New-Economic Geography approach of Krugman). Because of the monetary union it is not possible anymore for countries to use their exchange rate and monetary policies in order to become more attractive for investment (Senior Nello, 2009, p. 349-351).

With not being certain as to what the spatial effects of the European economic integration would be, the EU established a regional policy in where lagging regions received financial support that could ease the adjustment to the common European market (Gripaios, 2008, p. 501). This financial support helped the lagging regions in being able to be competitive while accessing the common market and the support facilitated the utilizing of their untapped potential (Gripaios, 2008, p. 501). The regional policies are formulated in regional operational programmes and a national operational programme outlines how the available budget for regional development will be spent. The regional operational programmes are co-financed by the national government, so that there will be coherence between national and European investments. Every European region is responsible for developing a regional operational programme (Barca, 2009, p.68). The budget available for regional development in the EU between 2007 and 2013 has been more than doubled in real terms since the late 1980s. For the period 2007-2013 € 347 billion was allocated by the EU for regional policy objectives (Farole et al., 2009, p. 1090). There are three financial instruments available under the EU Cohesion Policy (see figure 3.1 for their objectives) (Senior Nello, 2009, p. 352-353):

- The European Regional Development Fund (ERDF); with having the goal of reducing disparities between various regions in the community.

- The European Structural Fund (ESF); having the aim to increase employment opportunities and to contribute to the improvement of living standards.
- The Cohesion Fund (CF); that provides assistance to those member states that fear that they will not be able to meet the additional competitive pressure resulting from the economic and monetary union.

Figure 3.1: Objectives of the three European funds 2007-2013

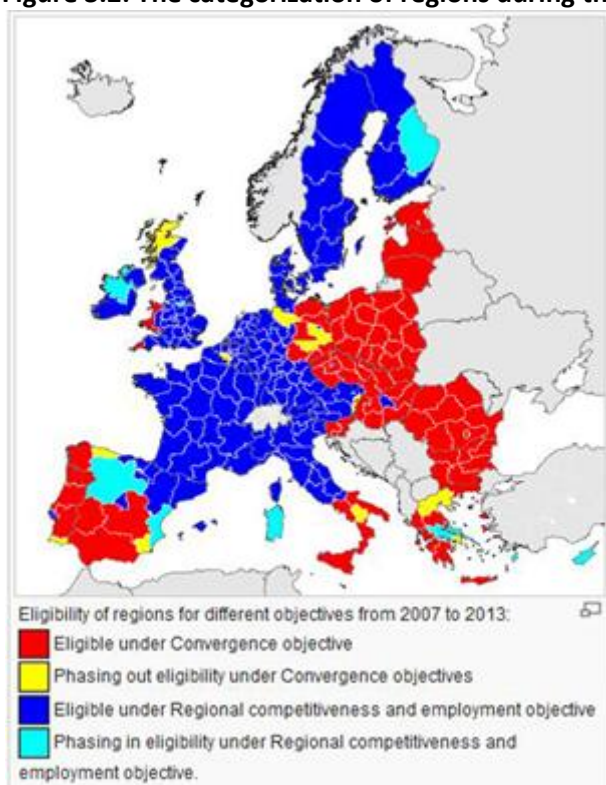
Objectives	Structural Funds and instruments		
Convergence	ERDF	ESF	Cohesion Fund
Regional Competitiveness and Employment	ERDF	ESF	
European Territorial Cooperation	ERDF		

Source: EC, 2011

3.2 The historical evolution of EU regional policy

In the beginning of the European integration, regional policy mainly was a national affair. National governments themselves were implementing regional policy in order to reduce regional disparities. The EU implemented on a small scale measures that assisted Southern Italy in solving her socio-economic problems. The second phase of the regional policy covers the 1975-88 period and was characterized by the introduction of new measures, the wider use of existing instruments and a gradual increase in the funds available for redistributive measures (Tsoukalis, 1997). In 1988, the regional policy of the EU radically changed; for the first time the regional policy became a top priority for the EU, resulting in large budgets available for reducing regional disparities. From 1988 the regional policy had to counter the negative effects of the in 1985 established internal European market. The less favoured lagging regions and countries were afraid that they would not be able to meet the additional competitive pressure in the single market. With the accession of the new countries Greece, Spain and Portugal the regional disparities increased. The accession of new lagging regions together with the disappointing results of the regional policy before 1988 (caused by the limited efforts of the EU) resulted in the recognition that the effectiveness of the policy needed to be enhanced (Senior Nello, 2009, p. 358). The existing funds were strengthened with extra budget and new funds like the cohesion fund were introduced (Senior Nello, 2009, p. 356). For the 2007-2013 period of the EU regional policy various changes were introduced. The policy was closer related to the Lisbon Strategy (see 3.4 for more information), including the earmarking of resources that were explicitly reserved for projects supporting the Lisbon Strategy. As a result of implementing the Lisbon Strategy in the 2007-2013 Cohesion Policy there was, next to the convergence objective, also attention for strengthening the competitiveness and attractiveness of regions who did not qualify under the objective of convergence. This was done by supporting innovation, entrepreneurship and protection of the environment in non-lagging regions. Between 2007 and 2013 regions with a GDP per capita lower than 75% of the European average were receiving funds under the objective of convergence (receiving 61.6% of the available funds) and the other regions were receiving support under the objective of strengthening competitiveness and employment (see figure 3.2). In the 2007-2013 period the EU regional policy was renamed into the EU Cohesion Policy. Also three additional funds were introduced: JASPER for investment programs and technical assistance, JESSICA for encouraging sustainable development in urban areas and JEREMIE a loan programme that provided financial assistance to micro-to-medium funds (Senior Nello, 2009, p. 359).

Figure 3.2: The categorization of regions during the 2007-2013 period



Source: Council for European Studies, 2014

Given the substantial resources involved and the political emphasis put on the EU regional policy, the effectiveness of the funding is an issue of major concern (Gripaios, 2008, p. 500). Especially since the financial crisis and the fiscal pressure that this crisis put on the contribution of the donor states of the regional policy (Bradley & Untiedt, 2012, p.3). Judt (2005, p. 715) saw the Cohesion Policy more as a financial reward for peripheral countries for accepting the common market and currency. The GDPs of member states have converged in the last twenty years, but it is the question whether this was the result of the interventions of the EU regional policy (Senior Nello, 2009, p. 362). Part of the unclarity of the effect of the regional policy on economic convergence can be explained by the difficulties of an impact assessment, since it is very difficult to isolate the effects of the regional policy from other effects resulting from other policies or global economic trends (Gripaios, 2008, p. 519). Another point of the critique was on the framework of the Cohesion Policy, Bradley & Untiedt (2012, p. 4-5) claimed that the Cohesion Policy showed weaknesses at all of her stages consisting of design, implementation, monitoring and evaluation. According to Bradley & Untiedt (2012, p. 1) the Cohesion Policy has tended to evolve and develop with unclear objectives and in a somewhat ad-hoc fashion. One of the discussions around the 2007-2013 Cohesion Policy was how the objective of convergence (equity) could be compatible with the objective of enhancing competitiveness and employment (effectiveness). Since economic activity tends to concentrate in economic cores (Fuijta et al., 1999; World Bank, 2009), excessive equality interventions may be harmful for economic growth if it enhances limiting the agglomeration effects. A decrease of regional inequality could also result in a decrease in the overall growth and competitiveness of the community (Farole et al., 2009, p.1095). Also the corrupt policy design and the bureaucracy that comes along with the implementation of the Cohesion Policy is a common heard critique (Senior Nello, 2009, p. 369).

The European Commission has a central role in developing and clarifying the Cohesion Policy. This has resulted in a situation in which economic rational was lacking, national and regional recommendations were often uncritically added to the EU Cohesion Policy while problems and

failures were swept under the carpet (Bradley & Untiedt, 2012, p. 3). It is clear that there was a need to justify the spending under the regional policy, especially since the donor states became under severe fiscal pressure by the global economic crises (Bradley & Untiedt, 2012, p.3).

3.3 The 2009 EU Cohesion Policy reform

As a result of the global financial crisis there was a large demand for developing a clear academic rationale behind the EU Cohesion Policy that would create a basis for a more effective regional policy. In 2009 the World Bank reacted to the demand and published the report *"Reshaping Economic Geography"* in which the World Bank advocated a place-neutral regional policy. According to the World Bank (2009) development and growth will always be unbalanced and attempts to spread economic activity will not reduce poverty; they will only undermine growth and prosperity. Place-neutral interventions should target fundamental infrastructural problems and stimulate economic integration. The result of the World Bank report was a development model based on 'spatially blind' strategies. The model included "policies that are designed without explicit consideration of space" as the most effective way of generating regional development, guaranteeing equal opportunities and improving the lives of individuals wherever they live or work (Barca et al., 2012, p. 138). Fabrizio Barca, a former special advisor to the European commissioner responsible for regional policy, did also react to the demand for an academic justification of the Cohesion Policy and published in 2009 his report "an agenda for a reformed Cohesion Policy". In this report Barca formulated a place-based approach for development policies. Barca (2009) stated that "place-based" policy is a long term strategy aimed at tackling persistent underutilization of potential and reducing persistent social exclusion in specific places through external interventions and multilevel governance resulting in bottom-up initiatives. The approach promotes context-specific economic division (place the economic activity in the most suitable context) and it triggers institutional reforms (Barca et al., 2012, p.139). The place-based approach advocates that space matters and that space shapes the potential for development, not only for the territories but also for the individuals who live there. The place-based development strategies are context based; context is understood in terms of social, cultural and institutional characteristics of a region. The place-based approach stresses the importance of the role of knowledge in policy intervention. According to place-based scientists underdevelopment is the result of a failure of local elites to intervene and the underdevelopment can only be tackled by new knowledge and ideas. The purpose of the intervention is to interact local groups with external elites in order to tackle the corrupt local economy (Barca et al., 2012, p.139).

An important distinction between place-based and place-neutral approach is that place-based policies are about places and place-neutral policies are about people. The people-based approach is interested in the how the life of people can be improved best and strives for equal access to opportunities for every individual. Place-based scientists argue however that increasing mobility will lead to a brain-drain in lagging and less agglomerated regions causing even more spatial unevenness. Another distinction is that the place-neutral approach pleads for the development of mega-cities, while the place-based approach doubts the advantages of mega-cities and agglomerations and pleads for more de-agglomerated patterns of economic activity. The place-based scientists believe that a more spread economic activity will lead to higher levels of productivity since it prevents negative agglomeration effects (Barca et al, 2012, p.140).

The European Commission opted for implementing a place-based development strategy. The EC agrees with place-based scientists that context matters and that an 'one-size-fits-all strategy' does not fit within the highly heterogeneous EU. The local context is getting more and more important in the globalizing world. The EC argues that space-neutral policies will always have explicit spatial effects, many of which will undermine the aims of the policy itself unless its spatial effects are explicitly taken into consideration. The EC acknowledges that the local context must be taken into consideration while conducting regional policy (Barca et al., 2012, p.140). The place-based approach

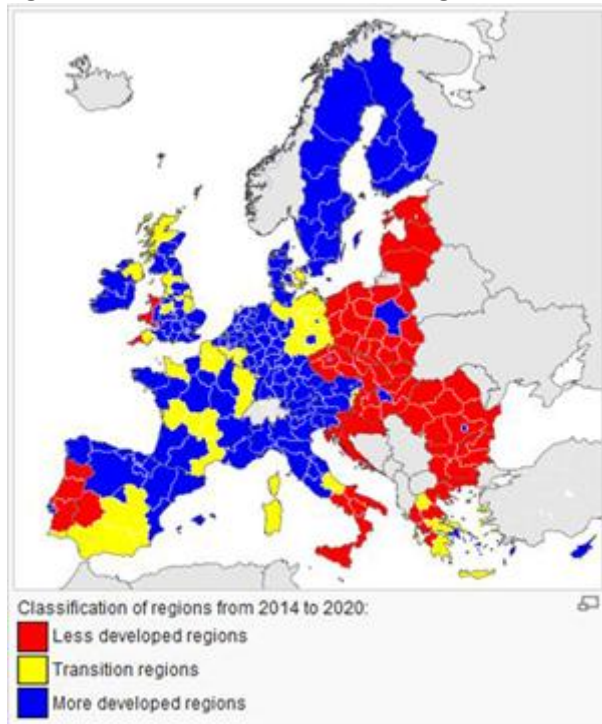
is taken into consideration for the first time in the Cohesion Policy for 2007-2013, but only fully implemented in the period 2014-2020 (Barca, 2009, p. 9). Since the report came out in 2009, the focus was already on the design of the 2014-2020 period, and only little changes were able to be made for the 2007-2013 period (Bradley & Untiedt, 2012, p. 3). The 2009 reform was also needed according to the EC since many lagging regions were unable to follow the pace of growth of the leading regions. Lagging regions were not able to fully utilize their own potential. The lack of spatial context in the Cohesion Policy before 2009 resulted in an unavoidable trade-off between efficiency and equity within the community. By designing a place-based regional policy the EU thought it would be able to make better use of local resources and create more harmonious growth across Europe and tackle persistent underdevelopment (Farole et al., 2009, p.1097). The idea of creating the place-based development strategies by European regions was that they can better exploit their untapped potential, and prevent a zero-sum game where leading regions develop at the expense of lagging regions or vice versa (Barca, 2009, p.54). The EC should only give guidelines for the development of these place-based strategies and let the member states be responsible for the implementation of the place-based approach (Barca, 2009, p.69). The overall goal of the reform is to fully utilize the untapped potential and making the lagging regions more competitive as well as making the community as a whole more competitive. Convergence is no longer a goal of the Cohesion Policy itself but an expected logic result of the cohesion efforts (Barca, 2009).

3.4 Innovative Cohesion Policy 2014-2020

In order to bridge the competitiveness and productivity gap with the US, the EU has to improve its innovative performance. In 2000 the Lisbon European council decided to launch a 'new strategic goal' which was to transform the EU into the "most dynamic competitive knowledge-based economy in the world by 2010" (Senior Nello, 2009, p. 167). In 2010 this strategic goal was updated and the ambition of the EU is now to become an 'Innovative Union' in 2020. According to the EC (2010, p.2), regional policy makers should devote more of the resources available to stimulate 'smart growth'. The challenge is how this innovation policy should be designed (McCann & Argiles, 2015, p.1292). The aim of the 'Innovation Union' is to foster EU-wide economies of scale in high-tech knowledge-intensive sectors, while the aim of the Cohesion Policy is to promote the development in many of Europe's weaker regions. The funding available for implementing the 'Innovative Union' (also known as Horizon 2020 strategy) is coming from budgets of the regional policy dedicated to the promotion of regional development especially in lagging regions. This contradicts with the fact that the economies of scale in high-tech knowledge-intensive sectors can be utilized best in leading regions (McCann & Argiles, 2015, p.1292). The EC has tried to find a way to accomplish both aims of enhancing cohesion and enhancing competitiveness, although the freedom of the EC in doing so is limited. Innovative projects cannot always rely on funding due to their uncertain outcomes and returns on investments, so governmental support for these projects is crucial. However, regional governments in lagging regions prefer to invest in more basic objectives like the improvement of physical infrastructure. Regional governments have to realize that the funding of smart projects can help to make the region more innovative and create more endogenous growth (EC, 2010, p.3). Despite the large disparities in innovative potential between European regions the EC argues that every region should support smart growth within their territory. In order to adjust the innovative Cohesion Policy better to the needs of European regions a third middle region has been introduced. The following three types of regions are classified within the 2014-2020 framework (see figure 3.3) (EC, 2012, p. 6):

- 'Less developed' regions, whose GDP per capita is lower than 75% of the EU average, who will continue to be top priority for the policy.
- 'Transition' regions, whose GDP per capita is between 75% and 90% of the EU average. This are regions who struggle to stay competitive but who previously would not qualify for targeted investments.
- 'More developed' regions, whose GDP is above 90% of the average.

Figure 3.3 Three different kind of regions in Cohesion Policy 2014-2020



Source: Council for European Studies, 2014

In order to stimulate smart growth within a region strategic intelligence is needed to identify the high-value activities that offer the best chance making the region more innovative and competitive. National and regional governments should develop a smart specialization strategy to maximise the impact of regional policy. The strategy can help regions to concentrate resources on few key priorities rather than spreading investment thinly across all business sectors. The smart specialization strategy can also be a key element in developing multi-level governance for integrated innovation policies. The strategy helps in the understanding of the relative strengths of the region, the strengths on which the region should build upon. The smart specialization strategy is a bottom-up process where businesses, universities and policy makers cooperate in designing a development strategy with the aim of enhancing innovation within the region (EC, 2010).

The smart specialization approach assumes that context matters for the potential technological evolution of innovation systems, making it a suitable tool for place-based interventions (McCann & Argiles, 2015, p.1292). Because of the heterogeneity of the European regions it is a challenge to turn the sector concept of smart specialization into regional policy. There is no one-size-fits-all smart specialization strategy. The strategy highly depends on the region's technological profile, its industrial structure and geography. In the case of the EU, over time its regions were becoming more and more interconnected with global value chains, making the sector composition of a region more and more specialized (McCann & Argiles, 2015, p. 1296). McCann & Argiles (2015) suggested that if a region wants to successfully implement smart specialization into its regional policy, it is necessary to develop regional policies that promote the creation of new related innovative niche markets amongst the large-scale embedded industries. A clear smart specialization strategy is based on the embedded structure in a region that will prevent opportunism, however the smart specialization logic also implies newness, variation and differentiation. This newness undermines the existing embedded structure. The policy design should be therefore open and inclusive to prevent the local elites from restricting and limiting the operations of the smart specialization strategy (McCann & Argiles, 2015, p. 1298). For large core regions that are limitedly targeted by regional policy the smart

specialization strategy seems not to have relevance, although the strategy will be most effective in well-developed highly strong diversified regions. Because of their growth potential in combination with their specialization possibilities, the strategy suits transition regions the best,. For lagging regions, however, the smart specialization strategy offers only limited possibilities. The lack of economic scale in lagging regions is likely to reduce the effectiveness of the policy (McCann & Argiles, 2015, p. 1298). The European Union with her highly heterogeneous regions seems to be an appropriate territory for developing smart specialization strategies. The concept of smart specialization already got some attention in the Cohesion Policy 2007-2013 and in the 2014-2020 period it became an ex-ante conditionality for receiving European regional development funds (EC, 2010).

3.5 Evaluation of the Cohesion Policy

Since a large part of the EU budget is spent on the implementation of the Cohesion Policy there is also great interest in the effectiveness of the policy. National governments (especially the donor states) are greatly interested in the results and the spatial effects of the policy (Bradley & Untiedt, 2012, p. 3). Every member state has a Management Authority who is responsible for answering the questions about the effects and effectiveness of the Cohesion Policy (Barca, 2009, p. 74). However, Barca warned in his 2009 report (p. 49) the difficulty of finding true-based evidence for the economic performance of the Cohesion Policy. The Management Authority is responsible for finding this evidence and monitoring the economic performance of the regional policy within a member state (Barca, 2009, p. 74). National governments are responsible for the evaluation of the regional policy; in doing so the national governments have to follow the evaluation framework outlined by the EC. This evaluation framework consists of three stages (Gripaios et al., 2008, p. 502). An *Ex-ante evaluation* that tries to answer the question whether the regional policy was a 'good programme', by examining the linkages and consistency between global initiatives, specific objectives and outcome indicators. A *Mid-term evaluation* that examines whether the programme remains relevant to the local needs, the degree of effectiveness achieved as reflected by the monitoring indicators, the quality and relevance of the indicators, and the quality of the programme management. Finally, the *ex-post evaluation* uses final monitoring data to compare the expected outcomes with the actually achieved, as well as attempting to assess the long-run impact of the programme (Gripaios et al., 2008, p. 502).

This evaluation framework is widely criticized since the results of various evaluations have given limited understanding in the spatial effects of the Cohesion Policy. For the evaluations macro-economic models were used that only paid attention to the non-spatial effects of the policy. This made it very hard to link the spatial policy instruments with the non-spatial outcomes (Bradley & Untiedt, 2012, p. 7-8). Other issues in making the direct link of policy interventions with the policy outcomes were the overlap of effects from other policies and external effects like a global economic crisis (Gripaios et al., 2008, p. 502-505). Although the theoretical advances in the understanding of 'spatial' effects of regional policy, there have been no convincing case studies conducted that could address the spatial effects of the Cohesion Policy (Bradley & Untiedt, 2012, p. 8). Another point that Bradley & Untiedt (2012) made is that when examining the effectiveness of the Cohesion Policy all the four stages of the development of the policy need to be evaluated. The four stages of the development of the policy are the design, the implementation, the monitoring and the evaluation of the policy. According to Bradley & Untiedt (2012) the design stage is evaluated probably the weakest, since the examination of the design of regional policy in lagging states has been at best superficial and at worst non-existent. Implementation of the Cohesion Policy has been difficult for the new EU member states that were undergoing massive structural and institutional changes. Monitoring of the Cohesion Policy has been strong; maybe even too strong, however misuses of the funds have been relatively infrequent. Evaluation of the regional policies has been weak, unconvincing and often

misdirected, a conclusion that was closely related to the mentioned failures at the initial design stage of the policy (Bradley & Untiedt, p.4, 2012).

In the evaluation reports there has been little attention for the mistakes that were already made in the design stage of the policy. Starting with the regional boundaries that have been used for the spatial boundaries of the different regional operational programmes. Especially in new member states, the regions are highly heterogeneous and the sub-regions do not have coherent economic characteristics. The regional operational programme needs to be spatially differentiated towards the sub-regions, bearing in mind the sub-regional differences that often have been ignored. The regional authorities in especially lagging regions had little policy instruments at their disposal and their power was always overshadowed by the much greater power and scope of policy instruments implemented on the national level (Bradley & Untiedt, 2012, p. 12). The “Lisbonisations” of the Cohesion Policy made the implementation of the policy only more complex. The objectives of the Lisbon strategy are hard to implement in lagging countries since their different needs than the needs of leading countries. Lisbon objectives focus on more advanced knowledge-intensive interventions, while lagging regions need more basic investments, like the upgrade of physical infrastructure and human capital. In this way “Lisbon” is deflecting away the attention of what is really needed in lagging regions (Bradley & Untiedt, 2012, p. 12). Bradley & Untiedt also criticized the focus of the regional operational plans on the demand-side of the economy; the plans were mainly about spending rather than about producing (Bradley & Untiedt, 2012, p. 12).

There was also critique on the evaluation process itself; part of the unclear effects of the policy has to do with parameterization of the outcomes. The indicators that were used often did not reflect the socio-economic development in the region. The best example of this is the most used indicator for measuring the success of the policy; the GDP per capita. The GDP parameter should indicate the level of well-being of a territory, but this is something for which the parameter never was designed. The parameter reflects the economic growth of a region, but economic growth does not equal welfare growth. So it is questionable whether the GDP per capita parameter is a good representation of socio-economic development within a region (Constanza et al., 2009). Also the impact evaluations of the Cohesion Policy do not distinguish “implementation” impacts and “post-implementation” impacts from each other. When the funding coming from the programme ends, only supply-side impacts remain and it becomes visible whether the economy will continue to benefit from the interventions. Evaluation reports regularly confuse these two kinds of different impacts and risk to make misleading conclusions (Bradley & Untiedt, 2012, p. 18). Another issue in the evaluation of the Cohesion Policy was that the Cohesion Policy is not a single project, but a multi-annual financial support tool for multiple national and regional development programmes. The key of success of the policy lies in the match between the individual selected programmes on the micro-scale and the policy outlines on a macro-scale. The selection of projects that will be funded is one of the most relevant processes to ensure the effective and right implementation of the Cohesion Policy (Idczak & Musiałkowska, 2014).

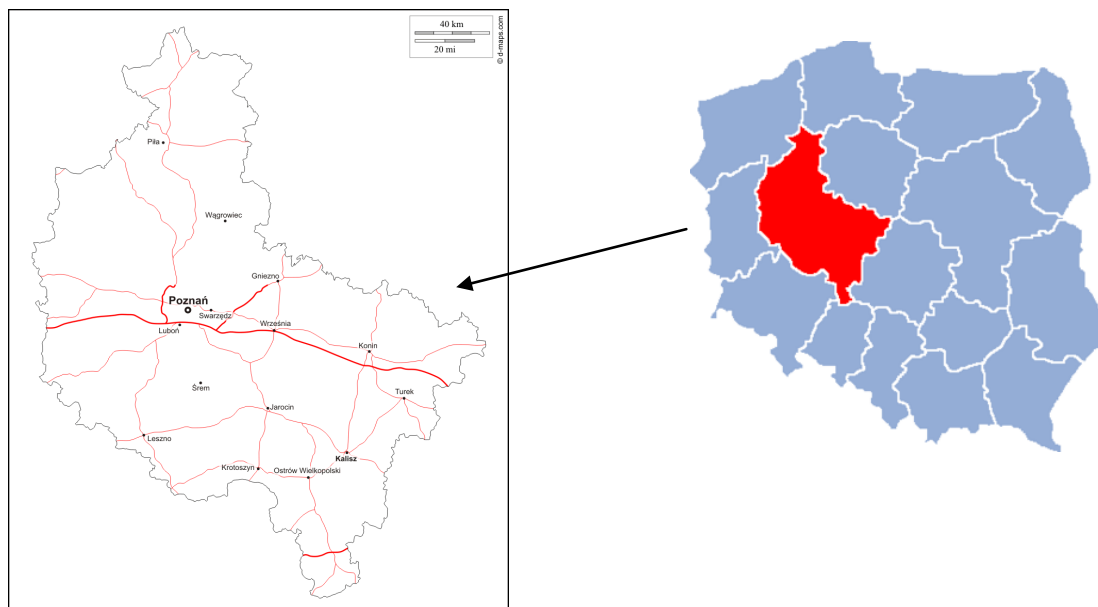
Within the evaluations conducted on national and regional scales governments have made little attempts in evaluating whether interventions ‘work or not’. Also, the conclusions of the reports about the effectiveness of the Cohesion Policy, which are often positive, tend to be strongly influenced by the assumptions built into the models (Barca, 2009, p.86). The understanding of whether Cohesion Policy makes a difference in utilizing untapped potential or to reduce social exclusion can be best derived through direct micro-analysis of the specific interventions (Barca, 2009, p.87). If there continues to be an unwillingness for improving the Cohesion Policy design and the impact evaluation, the credibility of the EC’s actions and efforts are likely to be weakened and the donor states may come to believe that their resources could be better directed elsewhere (Bradley & Untiedt, 2012, p. 22).

4 Greater-Poland's economy and its regional policy

4.1 A brief economic history (1989-2007)

Greater-Poland is located in the Western part of Poland, which always has been the more prosperous part of the country. The region is characterised by a strong regional identity as well as entrepreneurial spirit and traditions of civic involvement. Greater-Poland has traditionally strong economic ties with Germany, resulting in a large German share of foreign investment (FDI). Berlin is closer to Poznan than Warsaw (OECD, 2012, p.3). The region also has strong transportation links with Germany, being one of Poland's main transportation hubs located on the motorway running from Berlin to Warsaw (see figure 4.1). The region is also well educated with the capital Poznan being one of Polish biggest centres of sciences and higher education. Poznan features 22 universities or other higher-education institutions with 125,000 students in total. This comes down to 214 students per 1000 inhabitants in Poznan, having the highest student density in Poland (Parysek & Mierzejewska, 2006, p. 298).

Figure 4.1: A map of Greater-Poland & Greater-Poland location within Poland



Source: D-Maps.com, 2017

The contemporary economic history of Greater-Poland starts in 1989, when Poland transformed its communistic-planned economy into a capitalist free-market economy. The change in Poland's socio-political system and the opening to the world market has brought some significant changes to the economy of Greater-Poland (Gaczek, 2014, p.7). Although Greater-Poland even had a well-developed economy with a diversified structure before 1989, the levels of modernity and innovativeness were very low in comparison with Western-European regions. However, Greater-Poland quickly made use of its advantages (geographical location, diversified economic structure, skilled labour and work mentality) and was able to modernize her economy quickly (Parysek, 2005). This resulted in the rapid development of small businesses, the revival of family businesses, a large influx of FDI and an increased level of entrepreneurship (Gaczek, 2014, p.7). In the period of 1995-2007, Greater-Poland was one of the fastest growing regions of the OECD, with a productivity growth that was twice as high as the Polish average (OECD, 2012, p. 3). Greater-Poland was exposed to a second external shock in 2004 with the accession of Poland to the European Union. This accession meant also the

access of Greater-Poland to the European common market and the necessity for a competitive struggle for companies on more challenging external markets. Still the companies in Greater-Poland managed to perform well in the more competitive macro-economic markets. The high levels of entrepreneurship, high level of academic development and an inflow of foreign investments including EU funds were positively contributing to the reaction of Greater-Poland to this external shock (Gaczek, 2014, p.8). Poznan was in 2006 one of the largest Polish industrial centres in terms of productivity and employment (Parysek & Mierzejewska, 2006, p. 299). The economy of Greater-Poland is diversified; however the region has three sectors that are developed the strongest. The automotive sector (with the presence of Volkswagen and the Poznan-based bus & couch producer Solaris), Shared Service Centres (SSC) and the logistic sector as a result of the geographical location of the region. At the same time Greater-Poland is an agricultural region, which implies a strong food sector (Polish ministry of economy, 2015). The regional economy of Greater-Poland is export-oriented and has proven to be resilient against external shocks (Parysek & Mierzejewska, 2006, p. 299).

Greater-Poland had a GDP per capita being 54% of the EU average and an average yearly income of € 9,700 per inhabitant in 2006, significantly lower than the EU average of € 17,100 (Eurostat, 2017). The region is economically lagging behind the rest of Europe, but has at the same time high economic potential. However, this potential is concentrated in the core of the region with peripheral sub-regions struggling to compete (WROP, 2011, p.21). The unemployment rate in Greater-Poland was in 2005 14.6% (national average 17.6%), this employment rate was closely related to education as lower educated people tended to be more unemployed. The unemployment rates were therefore higher in rural areas where people are generally lower educated (WROP, 2011, p.29).

The FDI was spatially differentiated with large sub-regional differences. When analysing the sector composition it turned out that Greater-Poland had a diversified economic structure and it was making use of home-based resources. However, only a small part of these sectors was high tech, and Greater-Poland was characterized by a low level of investment in high-tech sectors (WROP, 2011, p.39). Another issue in making the economy more knowledge-intensive was the problems for SMEs to implement innovation within their company (WROP, 2011, p.41). Researchers in Greater-Poland made little use of their R&D potential. There was a low rate of investments by companies in their R&D-departments and there was insufficient cooperation between R&D-sectors and the rest of the economy. Part of this problem could be explained by the absence of specific institutions that provide support for the transmitting of knowledge between R&D-sectors and the rest of the economy. This all in the end resulted in a low-innovative performance of the Greater-Poland region (WROP, 2011, p.44).

Greater-Poland reflects a poor innovative performance compared to the EU-average. In the short-run the economy of Greater-Poland is performing well and it is resilient against external shocks, but on the long-run it may have troubles in maintaining her competitiveness (Czyz, 2010). The economy of Greater-Poland is based on low-tech production and relies on its cheap labour force. Greater-Poland has problems with transforming into a knowledge-intensive economy since the socio-political transformation. The industrial production may relocate to other countries in the future as the wages in Poland are rising due to of the rapid economic development. The low innovative performance could result in a problematic situation where no (knowledge-intensive) economic activity is able to replace the relocated industrial production (Gaczek, 2014, p.8). The future challenge for the region will include fostering innovative activity tailored to the specific needs of the sub-regional economies, such as adjusting the educational system to the needs of the present knowledge-intensive sectors. While the regional authorities make a clear commitment to creating a sound regional innovation system through an integrated place-based approach, the results of this policy will only be visible once concrete measures are implemented (OECD, 2012, p.4).

The low-innovative performance of Greater-Poland has a negative influence on the competitiveness of the Greater-Poland region (Czyz, 2010). When comparing the economic performance between seven highly populated Polish regions, Greater-Poland ranks third after Mazovia (Warsaw) and lower Silesia (Wroclaw). When comparing the competitiveness Greater-Poland is ranked last. The regions were compared on a wide range of indicators ranging from GDP per capita to the annual R&D-investment. The question was why Greater-Poland has such a low-competitiveness score compared to its economic performance (Czyz, 2010, p.76). Greater-Poland scores modest on indicators for knowledge potential (R&D facilities, higher-education rate), but the region is underutilizing its potential (Czyz, 2010, p.79). A low share of people working in high-tech sectors and low investment in R&D translate itself in the economic composition of Greater-Poland. As such, Greater-Poland has a low share of large knowledge-intensive enterprises (Czyz, 2010, p.81).

4.2 Regional policy between 2007 and 2013

As mentioned before, Greater-Poland has problems in increasing its innovativeness. This resulted in the design of a regional development strategy based on increasing innovation, raising R&D expenditure and education reforms (Musiałkowska, 2008). The development strategy of Greater-Poland is based upon the community strategic guidelines (CSG) that were part of the renewed Lisbon strategy and the EU's Cohesion Policy for 2007-2013. In this CSG the EC proposed to concentrate the interventions on the objectives of the renewed Lisbon strategy, namely the stimulation of 'smart growth' (Musiałkowska, 2008, p. 10). When analyzing the different regional operational programs in Poland the following trends were visible (Musiałkowska, 2008, p.13):

- Stimulating the networking between science and the economy (i.e. technology parks, incubators, centres of advanced technology)
- Increased focus on the technological development in the sectors of ICT, Biotechnology and Nanotechnology
- The need for research and innovation policy instruments like grant systems, implementation of research effects, clustering, use of joint-ventures and the availability of seed capital for start-ups
- The growing awareness of the importance of raising private capital for financing research; the national government of Poland wants 2/3 of the R&D expenditure to be private

The Regional Operation Programme for Greater-Poland (WROP) 2007-2013 was funded dominantly by the European Regional Development Fund (ERDF) and has an overall budget of € 1.76 billion, which included both EU funds and the national contributions for regional development. The ERDF resources allocated to the programme amount to € 1.33 billion, which corresponds to approximately 1.8% of the total EU money to be spent in Poland under the Cohesion Policy 2007-2013. The majority of the funds of the WROP have been allocated to Priorities 1 and 2 (innovation and transportation), illustrating the region's commitment to investment in innovation and transport infrastructure (OECD, 2012, p.7). In order for the regional government to receive subsidies from the European Union implied not only accepting European standards, but also standards imposed by the national government. This high dependence on conditions imposed by a higher scale can have a negative impact on the effectiveness of the policy.

The Greater-Poland regional authority considered investment in the innovation capacity of local SMEs critical for the region's development. The Marshal office was fully aware that in order to remain competitive, the region needed to stop relying on its relatively cheap labour as a comparative advantage and a factor for attracting FDI. The emphasis in the regional policy was put on "smart specialisation" to exploit the local assets in the sub-regions, establishing a regional innovation system based on close co-operation between enterprises, knowledge providers and the territorial administration to facilitate innovation. The main investment tool used for this purpose was Priority 1 of the WROP 2007-2013, funding that was made available for projects focusing on strengthening

SMEs' potential for innovation, creating links between businesses and research institutions to support the commercialisation of new technologies and enhancement of the business environment institutions (e.g. start-up incubators) (OECD, 2012, p.8). The regional authority in Greater-Poland was also dedicated to enhancing collaboration with the private sector actors as partners in public investment schemes and their beneficiaries. However, in the vast majority of cases, private companies acquired funds for projects they had implemented themselves. Projects implemented in public-private partnerships (PPPs) remained rare. In fact, PPPs were a challenge due to a low level of trust between the public and private sectors (OECD, 2012, p.15).

4.3 WROP

Main objectives and priorities

The general objective of the operational program for 2007-2013 was "strengthening the development potential of Greater-Poland to increase competitiveness and employment". One of the objectives of the regional strategy for 2020 is the improvement of the quality of life and economic growth. According to the Marshal office (MO) the number of jobs is a good indicator for the success of the strategy since the number of jobs is on the long-term the main determinants for the quality of life. The focus on employment linked the objective of the WROP 2007-2013 with the objective of the regional strategy for 2020. The main parameter determining whether the accomplishment of the general objective of the WROP was the GDP per capita. Although this is the most common used indicator for the success of regional policy, its use is criticized since it is questionable whether the parameter reflects the overall socio-economic development (Constanza et al., 2009). However, the GDP parameter provided input for the assessment of the competitive position of Greater-Poland within the European community, and at the same time it provided input for the assessment of the regional policy in Greater-Poland (WROP, 2011, p. 100).

According to the MO (WROP, 2011, p. 101) the general objective of the 2007-2013 budgetary programme required the implementation of an improved business environment with improved conditions for investment, more economic activity of its inhabitants and an increased share of knowledge and innovation in the economy of the region. This enhanced business environment could be accomplished by achieving the following specific goals:

- Increasing economic potential of enterprises
- Strengthening regional innovation system
- Strengthening the links between science and economy
- Development of institutional, financial and service business support instruments
- Preparation of investment areas
- Promotion of environmentally friendly economy.

In order to monitor the effects of the regional policy in Greater-Poland the MO designed main target indicators. The indicators were the number of created jobs, the change of the trade-balance of the region, the employment level and the percentage of households with a computer. The overall goal of the region was to have a GDP that was 64.7% of the EU average by 2013; the GDP was 54% of the EU average at the start of the programme (WROP, 2011, p.112). As previously mentioned by Barca (2009, p. 74) and others it is hard to isolate the direct effects of regional policy, but these indicators have been used for examining whether the regional policy for Greater-Poland was a success (WROP, 2011, p.102). The objectives in the WROP resulted in seven priorities in the programme. All the funded projects were divided under one of the seven priorities. The seven priorities of the program were (WROP, 2011, p. 115):

- Competitiveness of enterprises (main focus point in this thesis)
- Communication infrastructure
- The environment (harmonious growth)
- Revitalisation of problem areas

- Infrastructure for human capital
- Tourism and cultural environment
- Technical assistance

The total financial amount of the interventions funded by the ERDF in the economy of Greater-Poland between 2007 and 2013 was € 1,332,573,532 (the yearly budget of the ministry of finance in the Netherlands or 1/30 of the yearly turnover of the largest Polish company PKN Orlen). This budget accounted for 7.07% of the total budget available for regional development by the EU for Poland. The projects funded by the WROP were divided over the seven priorities as showed in table 4.2. The first two priorities received the largest amount of support. It is remarkable that Greater-Poland still spent 40% of the budget for regional policy between 2007 and 2013 on communication infrastructure. Although the emphasis of regional policy is more on place-based interventions and focused on innovation; most of the regional investments were spent on place-neutral interventions.

Table 4.2: Distribution of regional development funds over the seven priorities

WROP Priorities for the years 2007-2013	ROP funds	
	€	%
1. Competitiveness of enterprises	343,367,888	25,77
2. Communication infrastructure	537,661,547	40,35
3. The environment	173,821,000	13,04
4. Revitalisation of problem areas	54,060,000	4,06
5. Infrastructure for human capital	121,284,097	9,10
6. Tourism and cultural environment	61,470,000	4,61
7. Technical assistance	40,909,000	3,07
Total	1,332,573,532	100,00

Source: WROP, 2011, p.176

This thesis focuses mainly on the interventions under priority 1 (Competitiveness of enterprises). Greater-Poland has a well performing diversified regional economy with a large share of small and medium-sized companies. However, the innovativeness in Greater-Poland was lagging behind compared to other European regions. Being aware of this, the main objective of the priority one was implemented in the region through interventions aimed at strengthening the potential of enterprises, their innovativeness, cooperative relations and the cooperation with science (WROP, 2011, p. 115). The interventions tried to activate the high potential of science in the region by stimulating the unsatisfactory cooperation between business and science sector. An important role in this process was fulfilled by intermediaries, whose aim it was on one hand to identify the potential of the research and development sector, and on the other to determine precisely the needs of regional companies (WROP, 2011, p. 116). If the aims under priority one would be implemented successfully, it would lead to a significant improvement of the regional level of innovation in companies, while entrepreneurs with a high level of innovativeness would be able to show even higher level of innovativeness (WROP, 2011, p. 116).

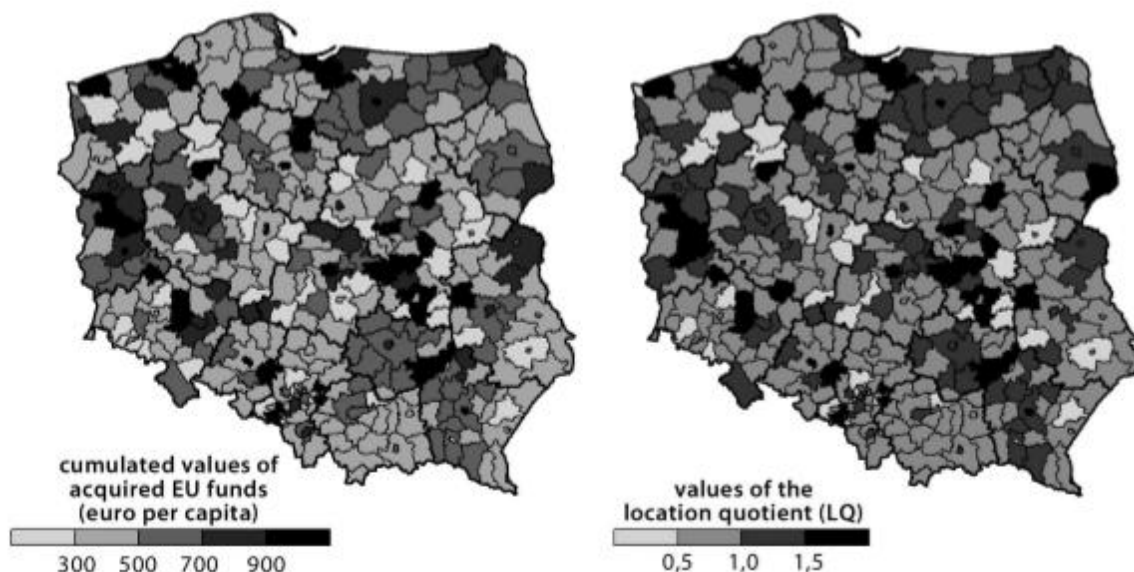
The last priority, technical assistance, was dedicated to the process of implementing, monitoring and evaluating the WROP. The guidelines designed by the European Commission demanded European member states to monitor their expenditure within the regional operational programmes in order to ensure the rational, effective and efficient use of regional development funds (WROP, 2011, p.189). Besides monitoring in where the Management Authority in Poland controlled on how the budget was spent, the Management Authority was also responsible for the evaluation of the WROP. The evaluation was aimed at improving the effectiveness of the operational programme. Another objective was to evaluate their impact on the specific structural problems affecting the region. The evaluation tried to analyse the progress of the programme towards the priorities formulated in the

WROP (WROP, 2011, p.197). The Managing Authority has appointed steering groups in Greater-Poland acting as task forces for thematic evaluation. Evaluations were carried out by independent third bodies, and evaluation results were made publicly available (WROP, 2011, p. 198).

4.4 Effectiveness of the regional policy between 2007 and 2013

The main question of this thesis is whether the regional operational plan for Greater-Poland in the period of 2007-2013 was effective. Was the plan able to tackle the challenges in the region and did it stimulate socio-economic development? Different reports have been written about how the Cohesion Policy funds were spent and what the impact was of the funding on the economy of Greater-Poland (Churski, 2014; Churski & Perdal, 2016). It appeared that the spending of the regional development budget followed a geographical pattern; a pattern of geographical concentration. The interventions were concentrated in urban areas, the investments by the WROP per capita were higher in urban areas than in rural areas (Churski & Perdal, 2016, p.12). This pattern of investment was the same before 2007, when the non-public and public investments were also concentrated in urban agglomerations (WROP, 2011, p.39). The interventions of the Cohesion Policy could have the unintended effect of deeper socio-economic polarization in the Greater-Poland region. The Cohesion Policy is based around the idea of equity within the European Union, but although the efforts of the regional policy, the socio-economic development in the Greater-Poland region polarized even more. Maybe the Cohesion Policy creates cohesion on the international level, but on the regional level it creates polarization (Churski & Perdal, 2016). The sub-regions in Greater-Poland that suffered from structural underdevelopment were not the sub-regions that received the largest amount of money for structural socio-economic development. This pattern was also visible in other Polish regions, where the more developed urban sub-regions were the main beneficiaries of the EU investments (see figure 4.2). The values of acquired funds EU funds per capita were higher than expected in large urban areas. A location quotient higher than 1 means an over-representation of acquired EU funds, a location quotient lower than 1 stands for an under-representation of EU funds per capita (Churski & Perdal, 2016, p.12). Although the WROP for the period 2007-2013 had the aim to find a balance between supporting the growth-poles and minimizing sub-regional polarization it seemed that the fund allocation enhanced the regional polarization.

Figure 4.2: The geographical allocation of EU funds in Poland



Source: Churski & Perdal, 2016, p.12

The explanation of the difference in the received funding between urban and rural areas was found by Churski (2014, p. 17) in the difference of the competitiveness of the two different types of areas.

Urban areas were better in applying for regional policy funding. Rural areas suffered from low-efficiency (low population density), excessive own contributions for new investments whose level exceeded the local available budget, and inadequate human resources of the local administrations responsible for attracting regional development funds. As a result, development peripheries received far lower allocations of EU investments. A large number of projects implemented in development peripheries did not show a major development impact such as the creation of new jobs. The above described trend showed the inability of Poland to implement the idea of equity in her regional development policies.

The effectiveness of the Cohesion Policy depends, among other things, on a proper use of specific endogenous resources of each area (Churski, 2014, p.17). Ten years of Polish membership in the European Union can be summarized by a positive balance of economic development. Poland has become the largest nominal beneficiary of the EU Cohesion Policy. The evaluation of cohesion interventions should indicate whether the positive effects were the result of an effective Cohesion Policy. If there was a lack of coherence between assumptions in the regional policy and outcomes to be found then this should lead in changing the interventions (Churski, 2014, p.18).

The impact evaluation of the regional policy was the responsibility of the Management Authority that created a National Evaluation Unit (NEU). For evaluating the effectiveness of Greater-Poland regional policy it was assisted by the Evaluation unit of the Marshal office. One of the evaluations the NEU has conducted was the 'Innovation Barometer' for Greater-Poland. In this barometer the innovation-based projects were monitored. The first results of this on-going counterfactual barometer were a growth in the revenues of the projects, a consistent growth of employment, increased innovation and an enhanced innovative potential of the projects (NEU, 2014, p.11). An improvement that was identified by the Innovation Barometer was the lack of thematic concentration of the interventions, resulting in a random distribution of funding for innovative projects. The barometer recommended having a more specialized sector approach towards funding innovative projects. This recommendation is in line with the new smart specialization strategy as promoted by the EC (NEU, 2014, p.42). Another recommendation was that the use of parameters in the selection process should be abandoned. The barometer showed that the selection process did not lead to the selection of the most innovative projects. In the 2014-2020 programming period the selection process makes use of an expert assessment in order to select the best projects (NEU, 2014, p.43).

5 Methods

5.1 Mode of analysis

Different macroeconomic models were used for the evaluations of the WROP 2007-2013. The Wroclaw regional development agency tried to present the impact of the WROP on the macro-economic performance of the Greater-Poland region. This analysis was a quantitative-ex-ante evaluation (HERMIN-model) directly after the design of the WROP was finalized (WROP, 2011, p. 205). The Gdansk institute for market economics also conducted a quantitative impact evaluation of the WROP on the region's GDP (MaMoR2-model), which represented the deviation of the GDP growth compared to the growth in case of an absence of EU funds (WROP, 2011, p. 208). The Management Authority has clearly opted for a quantitative approach in evaluating the impact of the WROP. The authors of the ex-ante evaluations stressed the difficulty of isolating the effects of the WROP from other economic policies. Therefore, it is difficult to argue the correctness of the outcomes of the macro-economic analyses. In the models there was only the assumption which part of the effects was the result of the WROP (WROP, 2011, p. 205). The quantitative impact evaluations of the WROP on the regional economy were unsatisfactory. This observation is in line with the critique of Bradley & Untiedt (2012) regarding the poor quality of evaluation conducted by public institutions within the European community. Therefore, this thesis used a qualitative approach on the impact assessment of the WROP on the regional economy of Greater-Poland.

The research methods consisted of a content analysis of conducted interviews and of ex-post evaluation documents. It was presumed that the results of the content analysis would give insight in whether the expectations of the WROP matched with the outcomes of the WROP. In order to have empirical evidence of the effects of the regional policy, the available evaluation documents have been collected and interviews with (indirect) beneficiaries of the WROP have been held. Moreover, experts on the topic of regional policy in Greater-Poland were interviewed about their view on the effectiveness of the regional policy. These interviews were semi-structured, the interviews had some degree of a determined order but also allowed flexibility (Hay, 2010, p. 102). The interviews with direct beneficiaries of the WROP were semi-structured as well. The interviews with indirect beneficiaries were structured and therefore followed a predetermined and standardized list of questions (Hay, 2010, p. 102). The interviews with indirect beneficiaries were easier to compare due to their standardization. The other interviews were more flexible as the respondents had more freedom to tell about their experiences with the regional development programmes, which smaller indirect beneficiaries as a result of their scale have to a lesser extent.

Macro-economic analysis had troubles in defining the real impact of the WROP on the economy of Greater-Poland. Interviews were chosen as method of research because interviews can bridge the information gap that other methods cannot bridge. According to Hay (2010, p. 102) interviews are an appropriate method of filling this gap, since interviews give a more qualitative assessment of the research problem. Another issue that researchers faced when assessing the impact of regional policy was the high complexity, as multiple factors influence the performance of the regional economy. As a result, it is hard to distinguish which part of the performance was the result of the regional policy. Qualitative research would provides better insight in which effects were really the effect of the regional policy (Hay, 2010, p. 103). The second advantage of conducting interviews was that the conducted interviews included confidential questions about investments and how the financial investment was implemented. When using interviews and having face-to-face contact there was a higher chance of getting confidential information rather than using for example a questionnaire (Hay, 2010, p. 103). The interviews with the (indirect) beneficiaries started with general safe questions about the company and evolved into deeper questions about the external support the beneficiaries received. The topic lists that were used for the interviews can be found in the appendix.

To analyse the interviews and the evaluation documents the technique of content analysis was used. Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding. Content analysis is commonly used to analyse interviews, but it is not used so often for the analysis of documents. However, content analysis is useful for examining trends and patterns in policy documents. Content analysis enables to compare the changes in public documents throughout time. The content analysis visualizes changes in the opinion of policy makers (Stemler, 2001, p. 1). In this case, it visualized whether the policy makers of Greater-Poland were still satisfied with the regional operational programme, and how the expectations of the outcomes of the WROP changed.

In order to conduct a content analysis the data needed to be coded. Content analysis and coding is more than counting words, it is also about the connotations of the words (Stemler, 2001, p. 2). Once all the interviews were coded, it was possible to retrieve themes from the data. These themes were topics that were discussed in multiple interviews. These themes allowed to make a comparison between the varying opinions on a certain issue and start to unravel the general feeling about a theme (Hay, 2010, p. 125). The coding process was an inductive process where the codes were determined during the analysis of the data. Coding is a useful process that reduces the amount of data in order to make the data more ordered (Hay, 2010, p. 283). The final codes can be found in the codebook that is included in the appendix. The coding has been done manually, there was no computer software used. Since there was no overall ex-post evaluation available, the following ex-post evaluation documents have been used for the content analysis:

- The influences of the WROP 2007-2013 intervention on the employment in the Greater-Poland region
- The WROP 2007-2013 and the needs of the regions as a source of recommendations for the programming period 2014-2020 in the matter of smart growth and innovations in enterprises
- Ex-post analysis of the capabilities of implementation the financial instruments in the 2007-2013 period
- The environmental effects of the WROP 2007-2013 intervention
- The social inclusion as a premiss for regional government policy for the realization of aims of the Europe 2020 strategy

The ex-post evaluation documents are written in Polish and only consisted of an English executive summary. The MO has translated the documents in order to make them applicable for content analysis.

5.2 Description of the units of research

The selected research units were projects that received financial support under priority 1 of the WROP. In order to stay competitive as a region it was important that the interventions under priority 1 were successful. The projects were selected from a dataset that included all the projects funded by the WROP between 2007 and 2013. The first selection was made by selecting only the projects that were from Poznan, since it was more practical to interview beneficiaries that were from Poznan because of the travel-times. The second selection was made by selecting projects from Poznan that fell under priority 1. The selection resulted in a list with more than 1100 innovative projects from Poznan. The projects were sorted descending by the amount of support they have received. The decision was made to reach out to projects who have received more than € 1 million of subsidies from the WROP. Three projects agreed to be interviewed: Poznan Science and Technology park (PPNT), SpeedUp group and YouNick. These projects did not only benefit themselves from the funds, YouNick and SpeedUp redistributed their granted budget through seed money to high-potential start-up and PPNT invested the money in creating an innovative ecosystem and also distributed part of their grants as seed money for high-potential start-ups present at the park. Therefore, the decision was made to also interview start-ups who indirectly benefited from regional development

interventions and to examine what the impact of the interventions was in the end of implementation process. SpeedUp-group unfortunately withdrew from having an interview, but they shared their portfolio of the companies they have invested in. The projects and experts that have been interviewed are listed below:

YouNick:

YouNick is part of the Nickel group, Nickel is the largest construction conglomerate in Poznan. Ten years ago the company decided to start a private technology park. In order to stay competitive and to foster development of innovative technologies Nickel created a technology park named YouNick. Five years ago YouNick decided also to start invest themselves in innovative companies by providing them seed money. This investment programme is a joint initiatives between National Centre for R&D and YouNick, the investment programme is named BridgeAlfa. Part of the investments of BridgeAlfa was financed by regional development funds and the other part of the investments was financed by YouNick themselves.

Poznan Science and Technology park (PPNT):

PPNT is Poznan's first science and technology park. It is a project of the Adam Mickiewicz university fund. This is a fund that raises money for the commercialization of scientific initiatives at Adam Mickiewicz university in Poznan. The park is now one of the role models of creating innovation in Poznan and the Greater-Poland region. PPNT was one of the main beneficiaries of the regional development programme in the years 2007-2013. The budget from the plan was invested in infrastructure (buildings/labs), seed money for start-ups and projects aimed at the knowledge dispersion within the park.

6 smaller indirect beneficiaries:

TrafficTrends: Online marketing bureau, received seed money from SpeedUp

Bench: Online platform for business meetings, received seed money from SpeedUp

IC Solutions: computer technology company, received seed money from SpeedUp and located at PPNT

IITX: IT-company located at PPNT, but did not receive seed money

LinguaSmart: Provides language courses for companies located at PPNT, but did not receive seed money

BBH Biotech Polska: Biotech-company located at PPNT, did also receive seed money from PPNT

5 interviews with experts on regional policy in Greater-Poland:

Paweł Churski:

The director of the institute of Socio-economic Geography and Spatial Management, and the head of the department of Regional Analysis at Adam Mickiewicz University in Poznan. The research specialities of Paweł Churski are socio-economic geography, spatial management, regional policy and regional growth. Mr. Churski had in his research special attention for the role of financial aid from the structural funds on the socio-economic processes in Poland. Mr. Churski has written multiple articles about the effect of the Cohesion Policy on the economy of Poland, and the socio-economic development of Greater-Poland in general.

Ida Musiałkowska:

Head of the department European Studies at the faculty of economics at the University of Poznan. The research specialities of Mrs. Musiałkowska are integration processes in the EU and the rest of the world, regional policy and regional development and EU structural funds. Mrs. Musiałkowska has written articles about the EU Cohesion Policy implementation, evaluation and the impact of the Cohesion Policy on the socio-economic development of Greater-Poland.

Monika Matusiak:

Mrs. Matusiak was involved in the design of the regional policy for Greater-Poland as a representative of the European Commission. In this position Mrs. Matusiak was responsible for assisting in the design of regional policy for lagging European regions. Mrs. Matusiak was also the author of smart specialization strategy for Greater-Poland. Mrs. Matusiak is an expert in the designing the regional policy in Greater-Poland and in the implementation of Cohesion Policy in European 'lagging regions', including Greater-Poland.

Tadeusz Strykiewicz:

Director of the institute of socio-economic geography and spatial management at Adam Mickiewicz university in Poznan. Mr. Strykiewicz is also the head of the department for regional policy and European integration at the Geography faculty of Adam Mickiewicz university. Furthermore Tadeusz Strykiewicz is the chairman of the steering group for evaluation of the WROP 2007-2013 at the marshal's office. Moreover, Tadeusz Strykiewicz is the head of the team of experts advising Greater-Poland marshal office in updating Horizon 2020 goals. Dr. Strykiewicz has a good understanding on the impact of the WROP 2007-2013 and how this regional development program was evaluated. He is also member of the council for the stimulation of interaction between science and business, one of the main obstacles in the regional economy of Greater-Poland. The research interests of Mr. Strykiewicz are the spatial organization of economic activity, the process of globalization and the impact on regional and local development, regional policy and the challenges of stimulating a knowledge-based economy, and Dr. Strykiewicz is an expert on development strategies of Poznan and Greater-Poland.

Agata Ociecek:

Mrs. Ociecek is an employee of the municipality of Poznan, involved in the co-working space Plus-Jeden (English: Plus-One). In this position Mrs. Ociecek is responsible for bringing start-ups in connection with external financing possibilities which could help the start-ups to speed up their development. Mrs. Ociecek has with her experience a good view on the process that leads towards raising funding for young innovative firms. Also she has a view on what the obstacles were for getting investment and what the feedback was of the start-ups on the investment cycle. The research in this thesis was biased towards successful companies who received financial support. Mrs. Ociecek could give in her position a more complete overview of investments assessment since she also had an eye on the projects who did not manage to receive financial support.

6. Impact Evaluation

6.1 General overview of the regional economy

Sectors

The first topic of concern in the interviews with the experts on regional policy was the assets of the regional economy of Greater-Poland. As mentioned in chapter 4 Greater-Poland has a diversified economy, the experts underlined this observation and stated that Greater-Poland has a highly heterogeneous regional economy. However, in Greater-Poland some sectors are more developed than others; in a investment brochure the region claimed that its strong sectors within her diversified economy are the automotive sector, shared-service centres sector and the logistic sector (Polish ministry of economy, 2015). The interviewed experts highlighted the same strong sectors as the brochure. Next to these sectors the experts also saw the pharmaceutical sector, the furniture sector and the food/agriculture sector as well developed sectors within the region. An important notice in the description of the regional economy is that there is no general answer on what the strong sectors are in the regional economy. The experts stressed in the interviews that the sub-regions have different sub-regional economies. Especially the economic structure of the Poznan sub-region is different from the other sub-regions. Getting asked about the strong sectors in Greater-Poland Mrs. Matusiak, representative of the European Commission, made the following statement:

“The economies of the sub-regions differ strongly, so it is not possible to give a general answer on what the strong sectors are. Greater-Poland has the same size as other European countries, and it is too differentiated to give a general overview”

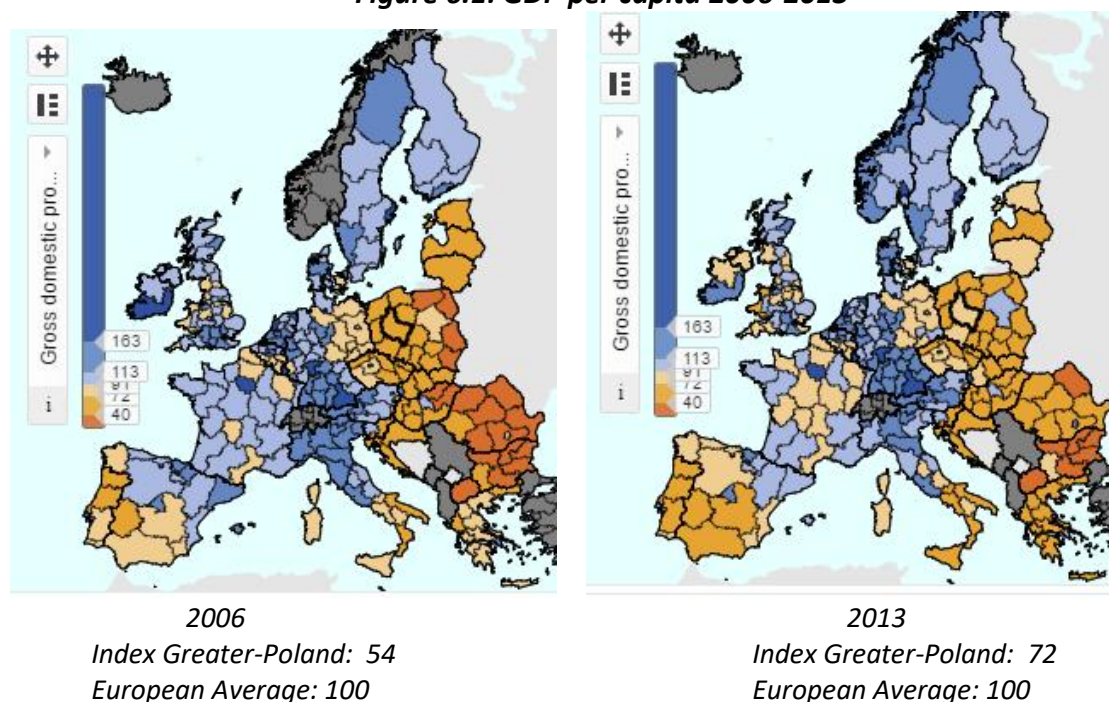
These sub-regional economical differences have to be taken into consideration while designing regional policy; the different sub-regions need different economic interventions. Greater-Poland has an incoherent economic structure, something that is not uncommon for large regions in new member states. A commonly heard critique on regional policy in the EU was that the regional policy designs in large European regions have ignored the different needs of the various sub-regions (Bradley & Untiedt, 2012, p. 12). The sub-region of Poznan accommodates knowledge-intensive sectors like the pharmaceutical and the IT-sector, while the other sub-regions accommodate more traditional industries according to the experts on regional policy.

Trends 2007-2013

The main indicator of success of the WROP was according to the Marshal office (MO) the development of the GDP per capita compared to the EU average. At the beginning Greater-Poland's GDP per capita in 2006 was relatively low compared to the EU average (54% of the EU average), and matched the GDP per capita of the regions direct next to Greater-Poland, such as West-Pomerania and Lubuskie. One of the aims of the regional policy of Greater-Poland in the years 2007-2013 was to bridge the GDP gap to the EU average. The aim of the regional policy was to achieve a GDP of 64.7% of the European average in 2013. Greater-Poland achieved the goal with having a GDP that was 72% of the European average in 2013. In those six years the GDP of Greater-Poland grew absolutely and relatively compared to the EU average, and Greater-Poland was outperforming most of its directly neighbouring regions (see figure 6.1). Greater-Poland performed economically better than West-Pomerania and Lubuskie; the only Western-Polish region with a similar economic growth was Lower Silesia. West-Pomerania and Lubuskie were not able to profit at the same degree as Greater-Poland and Lower Silesia from the nearness of Germany. The GDP of Greater-Poland was comparable to the GDP of Coastal Croatia and the region around the Bulgarian capital Sofia in 2006. The GDP of Greater-Poland was comparable to the GDP of the Algarve, Sardinia and lagging regions in the UK in 2013. Greater-Poland was able to catch up with Western European regions who did not suffer from structural underdevelopment under communistic rule. All four experts on regional policy

agreed on that the economy of Greater-Poland has developed itself really well between 2007 and 2013. The improvement in GDP between 2007 and 2013 was a great success for Greater-Poland, and might be explained by the use of an effective regional policy.

Figure 6.1: GDP per capita 2006-2013



Source: Eurostat, 2017

Although the improved figures on the GDP, Greater-Poland is still lagging behind the EU average and most West-European regions. Another concern was the trend of polarization between the sub-region of Poznan and the other sub-regions. This trend was also visible in the regional economic data for the period 2007-2013 (see table 6.1). Paweł Churski (director of the institute of Socio-economic Geography and Spatial Management at Adam Mickiewicz University) and Ida Musiałkowska (head of the department European Studies at the University of Poznan) recognized that the economic growth between 2007 and 2013 was unevenly spread over the region; this trend deepened the socio-economic polarization in the region even more. Something that is almost inevitable when a region is economically developing according to Mr. Churski:

“The main characteristic of socio-economic development between 2007 and 2013 was polarization, it is a standard. The new policies try to counterattack the polarization, but it is the question whether it is possible to counterattack polarization if you want to economically develop as a region”

Table 6.1: GDP per capita per sub-region 2006-2014

Sub-region	2006	2014
Pilski	2,291	3,308
Koninski	3,638	5,340
Miasto Poznan (city of Poznan)	8,027	11,625
Kaliszki	3,887	6,216
Leszczynski	3,381	5,283
Poznanski	4,646	8,007

Source: Eurostat, 2017

The overall levels of employment improved, but in the peripheral parts the employment levels did not improve according to the experts on regional policy. Therefore it was questioned by the experts whether the strong economic development in Greater-Poland was sustainable. In order to have a sustainable development the economic growth needs to be robust, the experts questioned whether the economic growth in Greater-Poland between 2007 and 2013 was robust. Another concern about the sustainability of the regional economy is the innovativeness of the region. All the experts and even two beneficiaries of the regional operational programme pointed at the fact that Greater-Poland has a low innovative performance. The question of the experts on regional policy was whether Greater-Poland will be able to economically develop in the future. This highly depends on how endogenous the growth between 2007 and 2013 was.

Embeddedness/Resilience

Greater-Poland successfully attracts FDI (Gaczek, 2014, p. 7), but it is unclear to what extent the FDI is embedded. According to dr. Musiałkowska and dr. Stryjakiewicz (foreign) companies make well use of local based resources and are part of well embedded production networks. Foreign companies therefore regularly made re-investments once they have come to Greater-Poland. Ida Musiałkowska claimed that foreign companies located more and more advanced branches in Greater-Poland, simultaneously these foreign companies became more and more socially responsible in the region. Also Polish companies are well-embedded in the region and they make well use of local resources. TrafficTrends really appreciated to be located in Greater-Poland because of the region's good universities providing them the workforce needed. IITX and IC Solutions did not consider leaving Greater-Poland since both companies have a large amount of social capital present in the region. The investments in Greater-Poland seemed to be long-term and it was not expected that the economic growth between 2007 and 2013 was just conjectural.

As a result of the presence of foreign companies in Greater-Poland's economy, the regional economy is very well connected with the world economy, especially with Germany. This openness could also be a risk; in times of a global economic shock Greater-Poland's economy could be heavily affected. Greater-Poland has proven to be resilient against external shocks before 2007 (Gaczek, 2014, p. 8). The question is whether the financial crisis of 2008 had a severe impact on the economic performance of Greater-Poland, also in comparison with other Polish regions. When analysing the yearly economic growth rate of Polish regions between 2007 and 2013, it was clear that Polish regions were the fastest growing in the EU (Eurostat, 2017). Part of this could be explained by the relatively low GDP per capita in 2006, which made the GDP growth relatively higher than other regions with a similar absolute GDP growth. When looking at the growth percentages of Greater-Poland in comparison with other Polish regions, the growth of Greater-Poland was stable but had not as high peaks as visible in the national average (see table 6.2). The high peaks in especially Eastern Poland can be explained by the relatively low initial GDP in 2006 (Eurostat, 2017). Compared to Western-Poland, Greater-Poland also had more stable growth numbers than the other regions. Between 2006 and 2013 only the economies of Mazovia and Lower Silesia grew faster than the economy of Greater-Poland. It can be concluded that the 2008 economic crisis had little effect on the economic performance of Greater-Poland. The Greater-Poland region and also all the other Polish regions did not experience a recession in a time where the rest of the European community was experiencing a severe recession. Part of the explanation of the stable economic performance was that the EU funds functioned as a budget stabilizer for socio-economic development (OECD, 2012, p.4). Another reason for the absence of a recession in Greater-Poland was given by Monika Matusiak. According to her companies in Greater-Poland may be not so innovative, but they are very well adapted to the macro-economic situation. Greater-Poland's companies have high levels of adaption, despite their low level of adaptability.

Economic growth (%) 2006-2013

Table 6.2: Yearly real economic growth percentages for Polish regions

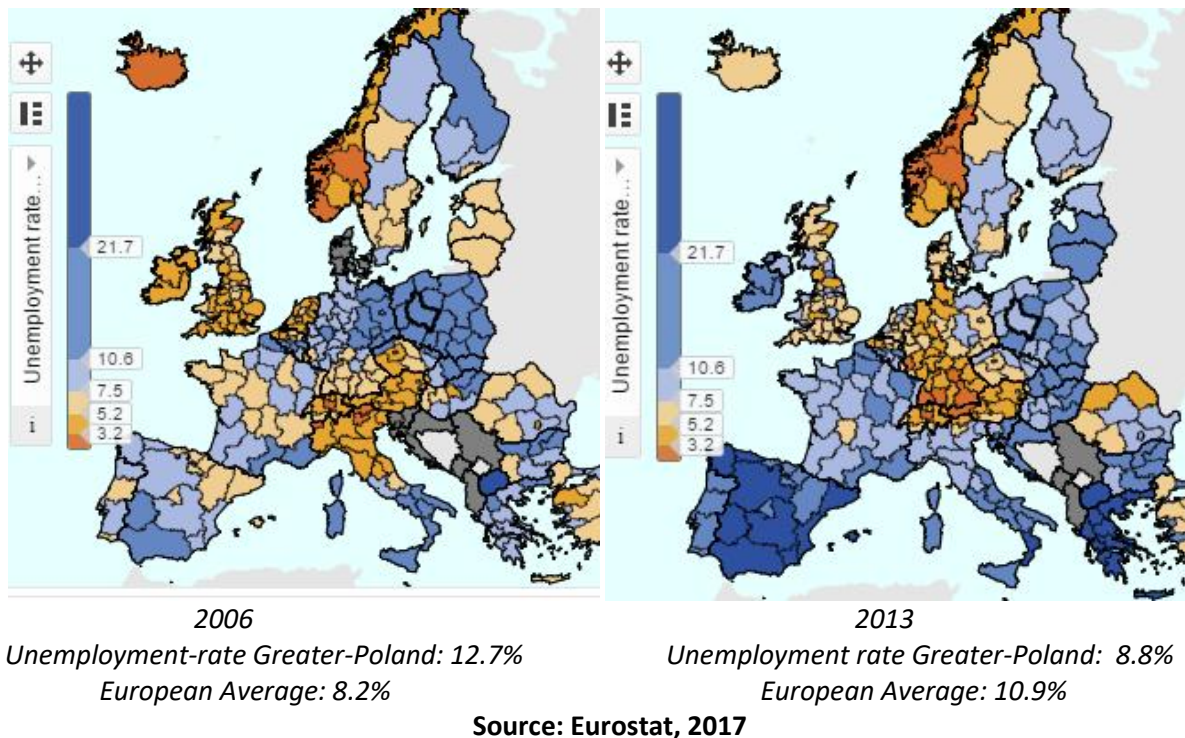
Name of the Voivodeship	Capital city	Real Economic growth in %								
		2006	2007	2008	2009	2010	2011	2012	2013	2006-2013
Lower-Silesia	Wrocław	2.6	9.4	3.9	2.1	5.2	5.9	2.0	0.2	49.7
Kuyavian-Pomerania	Toruń	6.9	7.3	3.2	-0.9	3.3	3.7	0.6	1.4	36.6
Lublin	Lublin	4.7	6.4	4.7	1.1	3.8	5.4	1.8	1.6	44.8
Lubusz	Zielona Góra	5.3	5.8	4.3	0.1	3.0	3.8	2.3	0.4	33.3
Łódź	Łódź	6.3	6.6	5.0	1.8	4.2	4.9	2.1	0.8	40.9
Lesser-Poland	Kraków	4.5	5.1	5.3	3.3	2.4	6.1	1.5	1.3	43.9
Masovia	Warsaw	7.8	8.9	3.6	6.0	5.0	4.7	1.9	2.9	52.0
Opole	Opole	4.5	7.9	-0.5	-0.9	2.6	4.7	0.4	0.5	35.1
Podkarpackie	Rzeszów	5.6	5.1	5.2	1.5	3.7	5.8	0.7	2.4	43.7
Podlaskie	Białystok	3.1	6.1	1.5	4.0	2.7	4.0	0.5	2.3	42.5
Pomerania	Gdańsk	5.1	7.6	1.9	5.5	3.2	5.6	2.8	0.8	44.7
Silesia	Katowice	10.0	9.1	5.6	1.0	4.2	5.3	1.0	0.4	37.5
Świętokrzyskie	Kielce	7.8	7.4	5.2	-0.6	2.6	3.2	0.0	-1.2	31.8
Warmian-Masuria	Olsztyn	4.1	4.2	3.7	2.9	3.2	4.1	0.1	0.5	38.3
Greater-Poland	Poznań	4.2	5.5	2.5	3.7	2.2	5.4	2.7	1.8	47.2
West-Pomerania	Szczecin	5.7	3.4	1.3	3.2	3.1	3.5	0.9	0.3	33.7
Poland	Warsaw	6.2	7.3	3.8	2.9	3.8	5.0	1.7	1.5	43.7

Source: Eurostat, 2017

The Marshall office claimed in its report on the effect of the WROP on the employment in the region that the regional policy interventions made the regional economy more resilient since the regional development funds functioned as a budget stabilizer in the region. The evaluation report about the effect of the WROP on the employment levels in the region concluded that Firms who were financially supported by the WROP were less likely to economize their activities. The regional policy interventions prevented job shedding at the beneficiary firms, something that happened more often at the control group of firms that were not supported by regional development funds.

The unemployment indicator for Greater-Poland indeed improved between 2007 and 2013. The unemployment rate in Poland was higher than in most other European countries in 2006. This situation was improved in most parts of Poland in 2013, with the unemployment rate in Greater-Poland being under the EU average (8.8 on 10.9). Also the situation in Greater-Poland improved compared to other Polish regions; Greater-Poland has lower unemployment rates than West Pomerania, Lubuskie and Lower Silesia. One of the goals of the WROP was to increase the employment level and the number of jobs in Greater-Poland. The statistics showed that the WROP achieved in this goal, since the employment levels have gone up, especially when compared to the EU average. This might be explained by the efforts of the regional policy between 2007-2013 that prevented job shedding at firms and created new jobs at beneficiary firms. The MO report on the effects of the WROP on the employment levels in Greater-Poland claimed that the WROP created 14,500 direct jobs and that the WROP maintained 8,000 jobs that otherwise would be economized.

Figure 6.2: Unemployment rate (%) 2006-2013



6.2 Regional policy between 2007 and 2013

Design policy

Before a regional development policy can be designed, an analysis must be made on what the (structural) obstacles are in the regional economy. Every interviewed expert mentioned that before 2007 the low innovative performance was the main obstacle in the regional economy; there was a lack of newness in the region. As a result of this low innovative performance, Greater-Poland struggles to stay competitive. Companies in Greater-Poland were not performing well in commercialising their innovative ideas. Despite having the knowledge, new ideas could not be applied into business concepts. Part of this problem was caused by the mentality of the people in Greater-Poland. This mentality was according to Paweł Churski and Monika Matusiak not orientated towards change and the mentality gave a high value towards traditions. Inhabitants of the Greater-Poland region are not risk takers; this is not only the issue in rural areas but also the larger cities as well as in Poznań where people are not in favour of taking risk. The issue around the innovative performance was according to Paweł Churski more a sociological problem than an economic problem:

“People who live in Greater-Poland don’t like risk, but for innovation you need to take risks. Greater-Poland has also a lot of family owned businesses who give high value to traditions and do not like change. This is dangerous, it can cause a negative lock-in”

This non-innovative mentality was strongly present in the peripheral sub-regions in Greater-Poland stressed Mrs. Matusiak. In these peripheral regions, there is a strong presence of large traditional family-owned companies who do not encourage change within the company or an entrepreneurial spirit of their employees. This mentality is very hard to change according to the regional policy experts. Another issue of the low innovative performance was the weak link between the science and the business sector; according to the experts on regional policy the statistics showed a low activity of R&D within enterprises and a low cooperation rate between universities and companies. The innovation potential was there, but people in Greater-Poland have difficulties in applying the knowledge into commercial ideas. Paweł Churski and Tadeusz Strykiewicz (chairman of the steering

group for the evaluation of the WROP 2007-2013) claimed that the programmes based on stimulating the commercialization of innovation before 2007 were not so successful. Ida Musiałkowska said the following about this topic:

“The low-innovative performance of Greater-Poland is a matter of commercialising innovative ideas. There is a gap between the number of new innovative ideas in Greater-Poland and the number of patents.”

The regional policy for 2007-2013 was designed by analysing the 3000 project proposals that were submitted before 2007; this gave an insight in the structure of the beneficiaries' needs, the needs that could be split under seven priorities as mentioned in chapter 4. Since these proposals were from all over the region, it also gave insight in how the regional policy could be adjusted to the sub-regional needs. By first analyzing the beneficiaries' needs before designing the regional policy, the Marshall office claimed that this approach has made the regional policy more bottom-up and place-based (Ex-ante evaluation WROP 2014-2020). The regional policy focused due to the low-innovative performance of the region on the creation and exchange of new knowledge (WROP, 2011, p. 115). The main focus of the regional policy plan was on the commercialization of innovative ideas. For example, Ida Musiałkowska stressed that in the regional policy for 2007-2013 more emphasis was put on lowering the costs of patents and for helping innovative companies to access the market. On a micro scale, PPNT also supported commercialising innovative ideas. For a lot of innovative companies in the life science sector it is really expensive to buy their own lab material and equipment, PPNT is providing these materials and equipment for these life science companies. The regional policy also had some attention for countering the socio-economic polarization. The regional policy for 2007-2013 paid attention to social entrepreneurship that improved the socio-economic inclusion of peripheral regions; something that has been ignored in the previous regional policies.

Implementation policy

The four experts on regional policy agreed on the poor implementation of regional policy in Greater-Poland. The innovation policies do not fit within the regional context and are too focused on EU guidelines. This was explained according Paweł Churski and Monika Matusiak by the high dependency on EU budgets causing one-on-one implementation of the directions given by the EC. This high dependency made the design of the regional policy in Greater-Poland more a top-down process according to Monika Matusiak:

“The directions given by the EU are one-on-one implemented, and although that the EU encourage bottom-up initiatives, the initiatives are very top-down. The guidelines that come with EU budget are too strict, regional policy makers do not have the freedom to design a development strategy that suits to the needs of the regional economy”

The Marshall office acknowledged in the Ex-ante evaluation of the WROP 2014-2020 that they could not fully adjust the specific goals of the WROP for 2007-2013 to the needs of the regional economy since that would breach with the guidelines from the EC. Monika Matusiak claimed that regional policy makers in Greater-Poland did not have the freedom to tailor the design of the regional development strategy towards the needs of the regional economy; this is a contradiction with the place-based approach implemented by the EC.

Monika Matusiak: “The conditionalities of the EU funding prevent regional development plans to be context-based”

Another reason of the poor implementation of regional policy was that the allocation of funds depended on the decisions of national and international governments. Regional governments in Poland are highly depending on national subsidies in order to implement their regional development

strategies (OECD, 2012, p.3). Dr. Churski, Dr. Strykiewicz and Dr. Matusiak pointed at the large interest conflicts between the national and the regional government. The regional development strategies were highly influenced by political ideology from all governmental levels, making the strategies more short-term than long-term. This short-term thinking made the regional policy less effective. Therefore Tadeusz Strykiewicz was satisfied with the EU guidelines as a stable external influence on the regional policy, although these guidelines made the regional policy less place-based. Election outcomes between 2007 and 2013 changed the development strategies every time drastically, resulting in lower levels of trust between the business sector and the public sector. Monika Matusiak claimed that the new elected national government has reversed the improvement made by the design of the smart specialization strategy for the region.

It was still the question whether regional policy makers in Greater-Poland have already got the new place-based guidelines of the EC said Ida Musiałkowska. The place-based approach is relatively new and only fully implemented for the first time in 2014-2020, so the results of the place-based approach implementation are not fully clear yet. A point of critique on the place-based guidelines was that the guidelines made use of fuzzy concepts, something that made the implementation not easier. Ida Musiałkowska said the following about these fuzzy concepts:

“You have the concepts on paper, but it is unclear how these concepts will work in reality. The result of the actual implementing is also a process of cooperation and how different stakeholders translate the concept into reality”

Ida Musiałkowska also stressed that the regional policy in Greater-Poland was based on knowledge intensive sectors, but many of these sectors were not developed enough for implementing capital intensive investments. This issue was not unique for Greater-Poland; it was an issue across all new member states. Bradley & Untiedt (2012, p. 12) claimed that in the new member states the interventions could be more effective when budgets would be allocated to basic improvements rather than to advanced knowledge-intensive interventions. According to Dr. Musiałkowska knowledge-intensive industries would benefit more from small-scale investments in basic improvements. The marshal office also strongly criticized in her-own recommendation report the implementation of innovation policies; the innovation interventions were based on achieving short-term effects on innovation indicators rather than investing in long-term innovation. The focus was on outcomes which were easy to quantify which in turn would make the policy look more effective, however making the results of the policy on the long-term less effective. This focus on short-term results led to a mismatch between the regional innovation strategy and the innovation-based interventions.

Another issue in the implementation regarding the regional policy was that the policy picked winners. The idea behind the Cohesion Policy is an equal distribution of welfare, so also an equal allocation of funding. However, a clear pattern of investment concentration was visible. YouNick acknowledged that they preferred to invest in companies which already have received external financial support; investment in those companies is more efficient since companies which already received support have higher returns on investments. This tendency also showed the need for public procurement. Investing in companies which had not received any investment yet is risky and investors prefer safe investments; this was also acknowledged by Agata Ociecek (Municipality of Poznan and responsible for bringing start-ups in connection with external financing possibilities). Public authorities should invest in these new industries first, so that private investors will follow the example of the government. Agata Ociecek stated that for many start-ups in Poznan which apply for EU funds an administrative barrier exists, whereas companies which have already received financial support are better able to handle this administrative burden. The unintended effect of picking winners is that it will lead in the end to more economic inequality, while the Cohesion Policy is designed around the idea of equity.

This pattern of concentration was not only visible on the individual level, but also on the geographical level. In the regional policy for 2007-2013 the MO has tried to spread the economic development and the allocation of funds more equally over the region. However, companies in the core sub-region of Poznan were better in attracting funds than companies in the periphery of the region (Churski & Perdal, 2016, p.12). One of the ways the MO tried to be involved in spreading the socio-economic development more equally was by supporting social entrepreneurship. Policy makers in peripheral sub-regions saw social innovation as a possible way of developing their territory. However, these local governments experienced a bureaucratic burden while applying for these funds said Tadeusz Strykiewicz. Local governments in peripheral regions did not have the human resources to take care of the administrative obligations as part of receiving funding for social innovations. Tadeusz Strykiewicz blamed this administrative burden for strengthening the regional polarization. However, the MO underlined the need for interventions in the rural areas stronger in the budgetary programme 2007-2013 than ever before. PPNT has also recently started to pay attention to the social potential of start-ups next to their commercial potential. In the 2007-2013 budgetary period the interventions in social innovations were limited, but this seems to improve. Tadeusz Strykiewicz stated the crucial role of the regional government in the process of stimulating social innovation:

“Attempts of social innovation would not exist without the support from the regional government. It is really hard to develop social entrepreneurship without strong relations with local authorities”

Allocation of the financial instruments

Greater-Poland was one of the first regions in Poland to experiment with the implementation of the financial instruments under the JESSICA and JEREMIE initiatives. In her-own ex-ante evaluation for the period 2014-2020 the MO had a favourable opinion on the use of these financial instruments. The aim of the JEREMIE initiative was to eliminate the financial gap of micro to medium sized companies. This aim was achieved since one out of five firms that received repayable grants under the JEREMIE initiatives would not be able to bridge the financial gap without the financial support and 40% would have to make the investments in a later stage; according to a survey conducted by the MO. However, all the financial instruments in the 2007-2013 regional policy got the critique from the interviewed indirect beneficiaries that they were causing deadweight effects. The minimum amount of money that was granted by the regional policy was too high for many of the SMEs which would like to receive funding in the 2007-2013 period. Therefore in the ex-ante evaluation of the 2014-2020 budgetary period, the MO stated that the loans available under the JEREMIE initiative in the period 2014-2020 range from € 25,000 to € 125,000 (in the 2007-2013 period grants started from € 100,000). The MO stressed that the loans should be customized to the needs of the SMEs, instead of being off-the-shelf loans. TrafficTrends advised to implement a more micro-credit grant system:

“The best start-up money is € 25,000 from a private investor without any special requirements or constraints like the requirements of the EU”

In table 6.3 and 6.4 is displayed how the direct and indirect beneficiaries from the regional policy in Greater-Poland used the external support. All the direct beneficiaries used the grants for investing in high-potential start-ups. PPNT also used regional development funds for investing in the physical infrastructure in the park. The indirect beneficiaries used the external support mainly for commercialising their business ideas.

Table 6.3: The implementation of regional development grants by the interviewed companies

Name of the company	Number of start-ups financially supported	On what were the regional development grants spent?
SpeedUp-group	52	Financial support for start-ups and advice on how to run a business
YouNick	17	Seed capital for knowledge-intensive start-ups
PPNT	13	Physical infrastructure at the park, business services for the start-ups and seed capital

Source: Own work

Table 6.4: The implementation of external support by the indirect beneficiaries

Name of the company	Reason to reach out for external support	How did the external support look like?	How was the external support used?
TrafficTrends	Commercialising of their business idea	€ 12,000 of direct financial support	Used as a buffer to survive the first uncertain months
Bench	Developing proto-type into an industrial product	Direct financial support and the SpeedUp-group helped Bench in finding employees and sub-contractors	To hire employees who could develop the proto-type into reality
IC Solutions	Commercialising the IC-pen	Direct financial support	New employees were hired necessary for developing the IC-pen
IITX	Making use of the good facilities at PPNT	Advice on how to run a business	During important business decisions PPNT was consulted
LinguaSmart	Commercialising of their business idea and profiting from the nearness of other high-potential firms	Advice on how to run a business	During important business decisions PPNT was consulted
BioTech	Speed up the market entry and to lower the costs of the R&D projects	Seed capital and the ability of making use of high-standard lab equipment facilitated by PPNT	Able to buy expensive materials that were needed for innovative projects

Source: Own work

6.3 Evaluating regional policy in Greater-Poland

Greater-Poland was obliged to evaluate her spending under the regional operational programme. The idea behind this evaluation was that regions can learn from evaluations and improve their regional policies for the future (Stern, 2009). The question is whether Greater-Poland evaluated their regional policy in an effective way. In other words, was the evaluation of the 2007-2013 budgetary programme a learning process or not. Every department at the MO had the responsibility of evaluating and monitoring the effects of the WROP on their own specialization. This gave according to Mrs. Matusiak problems in the understanding of the effects of the regional policy; departments had little idea what the effects of their interventions were on the specializations of other departments. The Management Authority in Poland had the responsibility for the evaluation as a

whole, not the regional government. So in the end there were little inter-department knowledge spillovers about the effects of the regional policy. Another issue was that the evaluations as a whole were outsourced to consultancy companies. This led no room for public discussion and made the conclusion of the reports according to Monika Matusiak automatically positive since the consultancy companies have a financial dependency on the assignments given by the public authorities. The evaluation reports were usually more than 100 pages long, making it unattractive for the public to read them. However, the MO countered this critique by stating that it used public consultations in her evaluation reports. A platform has been erected by the regional government where inhabitants could post their improvements via an evaluation form. Another point of critique was that the evaluation was too much focused on fulfilling indicators that have been set at the beginning of the budgetary programme. These indicators should be more flexible and be adapted to the changing economic situation according to Dr. Stryjakiewicz. The indicators should be more qualitative and there had to be more attention to post-implementation outcomes; this critique was also mentioned by Bradley & Untiedt (2012, p. 18). Indicators need a better periodization, because some effects need a longer time before they appear, especially regarding innovative projects. A long-term evaluation can only be conducted after all effects have appeared said Stryjakiewicz and an ex-post evaluation does not cover all these long-term effects. In the opinion of the Marshall office, formulated in the recommendation report, the indicators were a good basis for conducting evaluation reports. However, the Marshall office shared the critique that the indicators should be more qualitative in order to determine the success of the WROP. Tadeusz Stryjakiewicz stated that the outcomes of the policy should also be compared to other regions, not only with the expected outcomes at the beginning of the policy, in order to analyse the effectiveness of the policy.

Tadeusz Stryjakiewicz: "Evaluation processes are too focused on indicators. Sometimes we can observe many misappropriations. The main purpose is to fulfil the main indicator set in the beginning. But the world is changing and the indicators should be more flexible. It is difficult to predict some indicators at the beginning of the budgetary programme"

All four experts on regional policy acknowledged that an impact assessment is really hard to conduct, something that was also mentioned in scientific articles (e.g. Gripaios et al., 2008, p. 159). The effects will only occur 5-7 years after the interventions were implemented and it is really hard to isolate the effects of the regional policy. During the interviews with the indirect beneficiaries, effects of the external support appeared. All the interviewed beneficiaries were able to expand as a result of the support received between 2007 and 2013. Table 6.5 shows how many employees the start-ups now have and where their employees and business relations are from. This last two questions were asked in order to analyse whether the regional economy profited from the interventions or whether the effects of the support leaked away to other regions. In most cases the start-ups have their network based in Poznan. The first employees and business relations were usually from the networks of Speedup, YouNick and PPNT, something that was underlined by Mrs. Ociecek. After the start-ups expand their activities they start looking for new employees and business relations in the rest of Poland and even abroad. In table 6.5 is visible what the effects of the support were; however this still does not say anything about the direct impact of the external support, this real impact will be discussed in the next paragraph.

Table 6.5: Outcomes of the external support on the start-ups

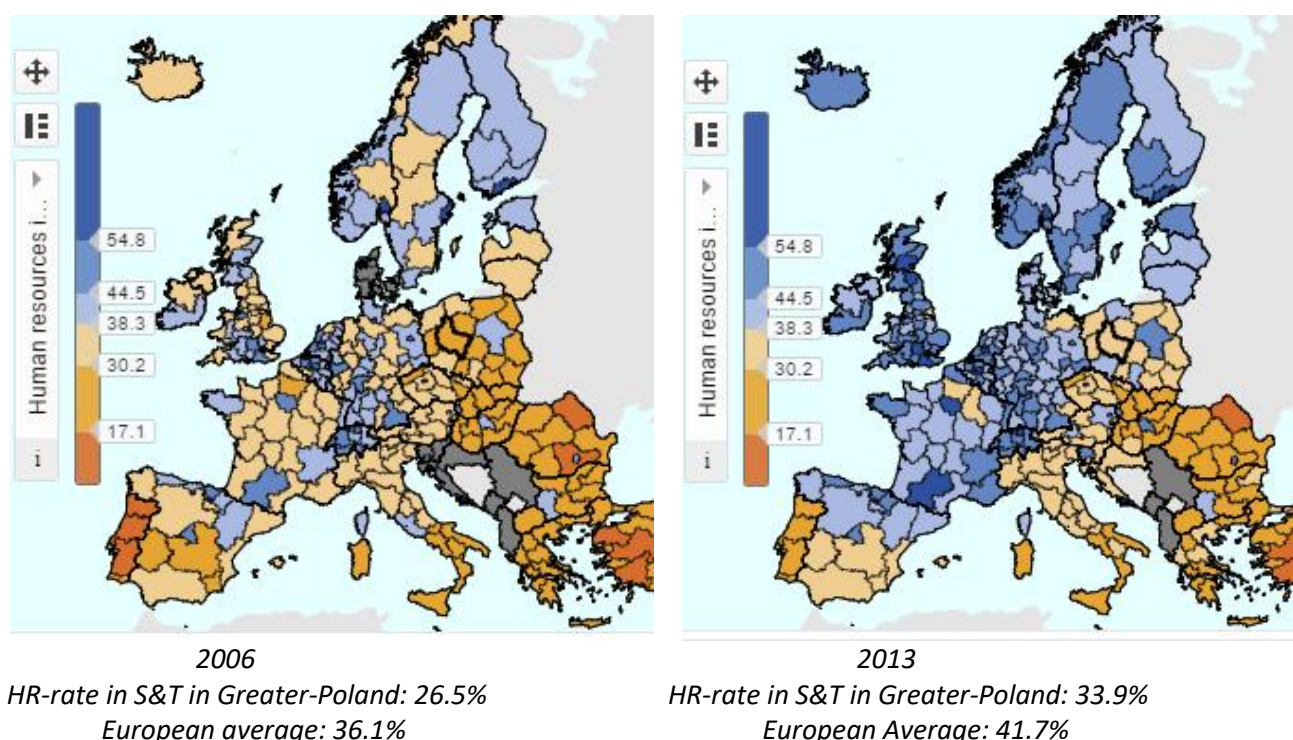
Name of the company	Location business relations	Employees	
		Number of employees	Origin of employees
TrafficTrends	Polish companies, from all over the country	30 employees	Poznan
Bench	Poznan based, because of the Speedup group network	At the top 8 employees, now 5	All over the world
ITTX	Mainly UK and Ireland, because of working history of the founded in UK and Ireland, but recently also from Poland	4 employees	Poznan
LinguaSmart	Mostly from Poznan, also from Warsaw and Gdansk, two from PPNT	3 full-time employees and 30 part-time language teachers	Three full timers from Poznan, the language teachers are from Poznan, Warsaw and Gdansk
BioTech	Mostly from Poland, but also from other EU countries	4 employees	Poznan
IC Solutions	Poland, but plan to expand to abroad	15 employees	Poznan

Source: Own work

6.4 Impact of the 2007-2013 regional policy

The main question of this chapter is what the impact of the regional policy between 2007 and 2013 was on the socio-economic development of Greater-Poland. All four experts acknowledged that part of the socio-economic development between 2007 and 2013 was partly the effect of regional policy. The share that regional policy had in the economic success of the region was interpreted differently. The MO was positive and claimed that the socio-economic improvement was the result of effective regional policy. On the other hand, Monika Matusiak argued that the effect of the public economic support was limited. In her eyes the regional economy, in absence of the interventions, would have developed in a similar way. Other experts on regional policy argued that the regional policy had a significant impact on the socio-economic development. Enhancing the innovativeness of the region was a top priority in the regional policy between 2007 and 2013, but experts on regional policy said that the outcomes of these interventions were disappointing. The outcomes of the main innovation indicators are visualized in figure 6.3 till figure 6.8.

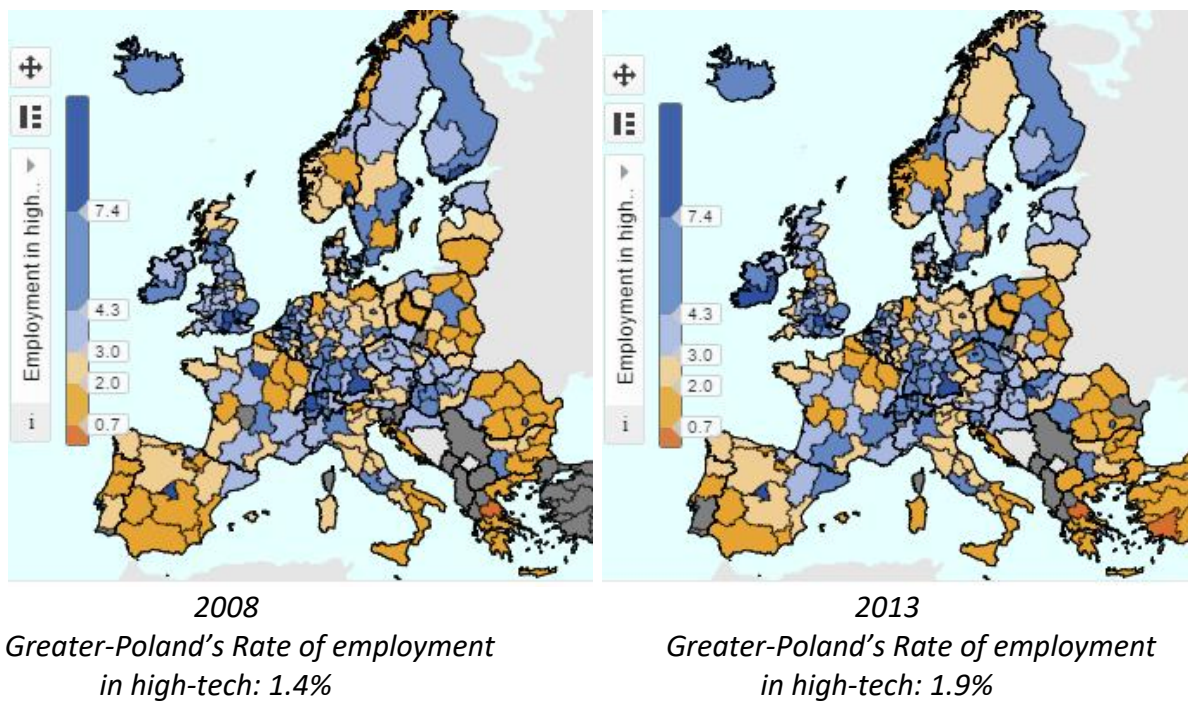
Figure 6.3: HR in Science and Technology 2006-2013



Source: Eurostat, 2017

Greater-Poland not making optimal use of her innovation potential was the main obstacles in the regional economy before 2007 (WROP, 2011, p. 115). Greater-Poland fell behind in the transformation towards a knowledge-based economy (Czyz, 2010). Human resources in science and technology are the share of the population who successfully completed at the third level education within the active population of a region. This share of highly educated employees in Greater-Poland was lower than in other Polish regions and lower than the EU average in 2006. The hope was that regional policy could improve this situation. The share of higher educated people within the labour market increased in the period of 2006-2013, but compared with other Polish regions, Greater-Poland was still behind other highly populated regions in Poland like Mazovia, Pomerania, Lower-Silesia and Silesia. Greater-Poland managed to improve her innovative potential, but compared to other Polish regions and the EU average, Greater-Poland still has low levels of innovativeness.

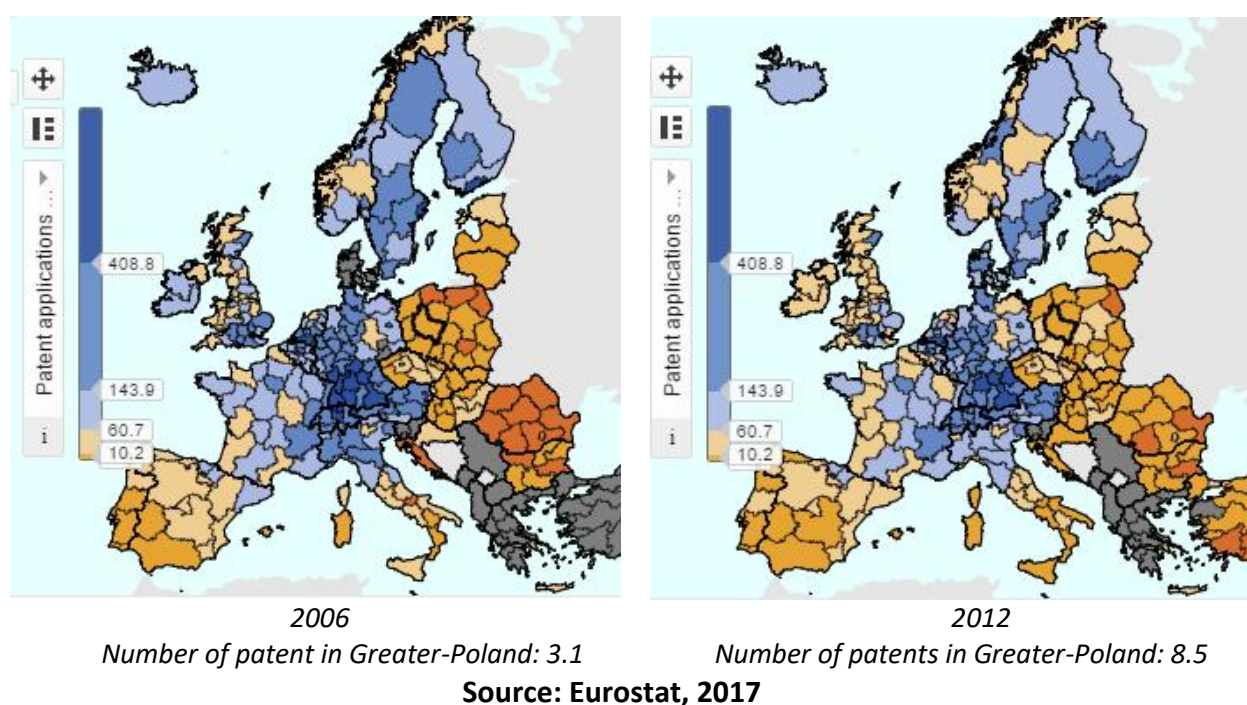
Figure 6.4: Employment in High-Tech sectors 2008-2013



Source: Eurostat, 2017

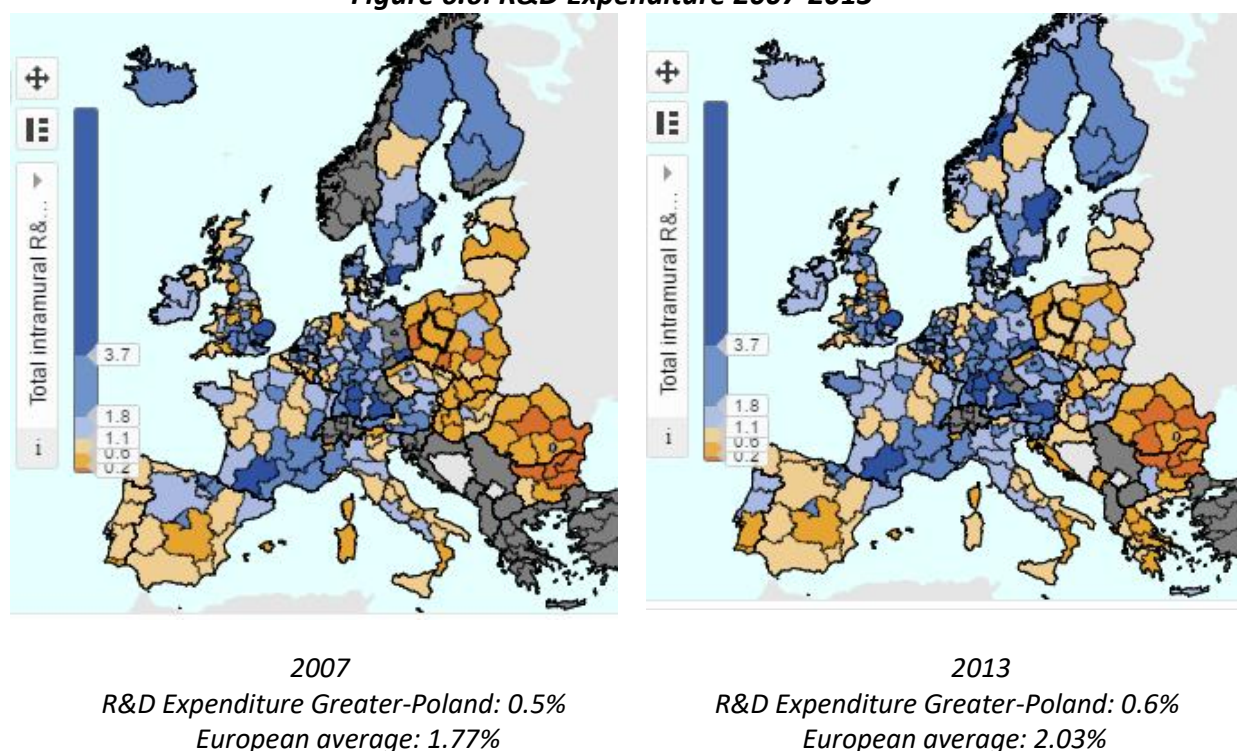
As mentioned before, Greater-Poland has difficulties with utilizing her innovative potential. There were enough high standard research facilities present in Greater-Poland and the population was highly educated, but only a relatively small share of people was working in knowledge-intensive sectors. Experts on regional policy stressed the issue of a limited amount of knowledge-intensive sectors in the regional economy. The lack of knowledge-intensive companies caused a relatively small share of people was working in knowledge-intensive sectors. 1.4% of the working population of Greater-Poland was working in high-tech sectors in 2008. In this ranking Greater-Poland scored low compared to other Polish and the European average. The score significantly improved in 2013, but it was still behind all other regions in Western-Poland. Greater-Poland's share of population working in high-tech sectors was comparable to Eastern-Poland regions such as Lubelskie and Podlaskie in 2013.

Figure 6.5: Patent Applications 2006-2012



The number of patent applications is a common used proxy for innovative activity in regions. The number of patents per 1000 inhabitants in Greater-Poland was low in 2006. Only 3.1 applications for patents at the European Patent Office (EPO) per 1000 inhabitants were submitted. This number increased to 8.5 applications per 1000 inhabitants in 2012. However, this number was still below European average and below the number of applications in Mazovia, Lower Silesia and Lesser-Poland. The commercialisation of innovative ideas has improved, but it was still significantly lower than in other European regions in 2013. Ida Musiałkowska stressed that one of the measures implemented by the MO was to ease the patent application process, leading to a smoother process of commercialising an innovative business idea. Experts on regional policy claimed that a lot of structural investments have been made by SMEs, but that those investments did not lead to innovation. There was insufficient investment in newness; most of the investments were investments in non-innovative upgrades. In order to increase the level of patent applications the region should invest more in innovative upgrades; not in basic upgrades.

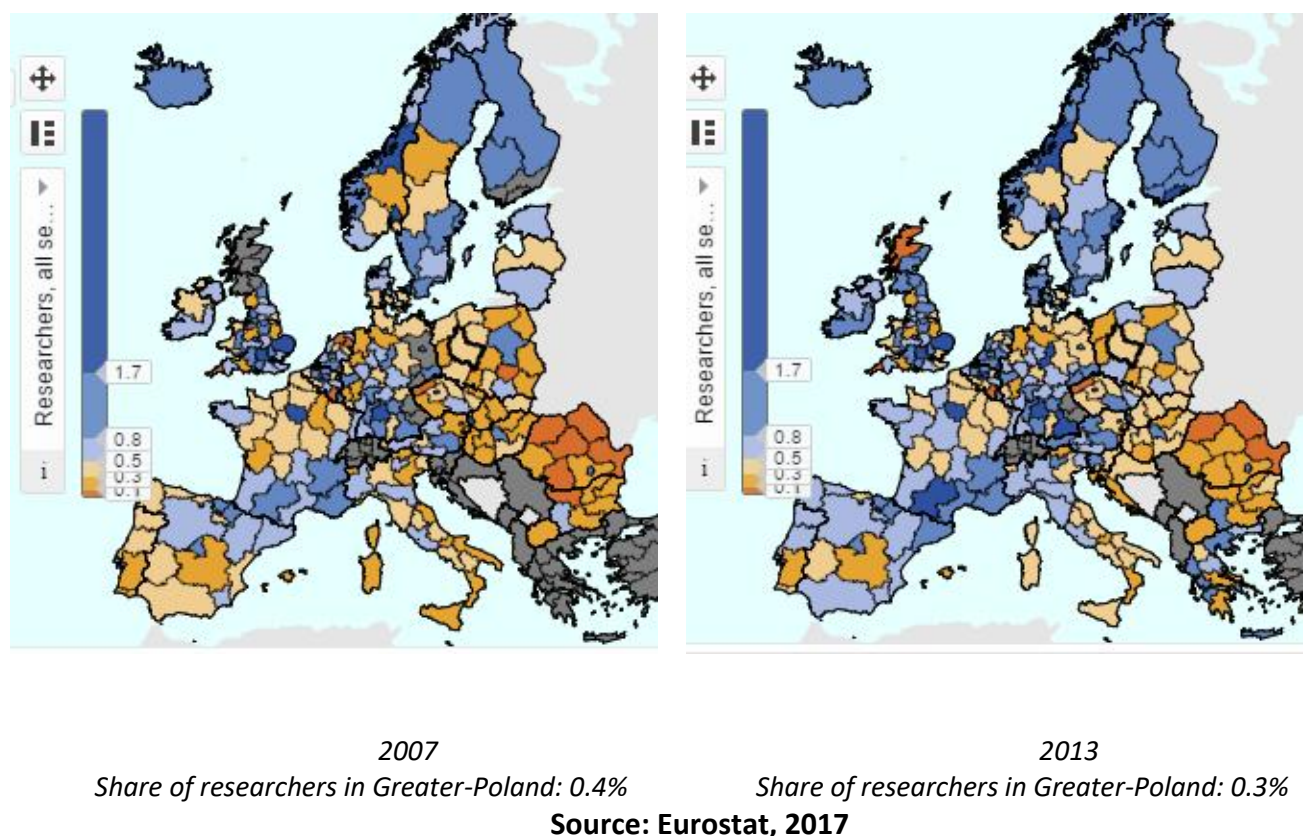
Figure 6.6: R&D Expenditure 2007-2013



Source: Eurostat, 2017

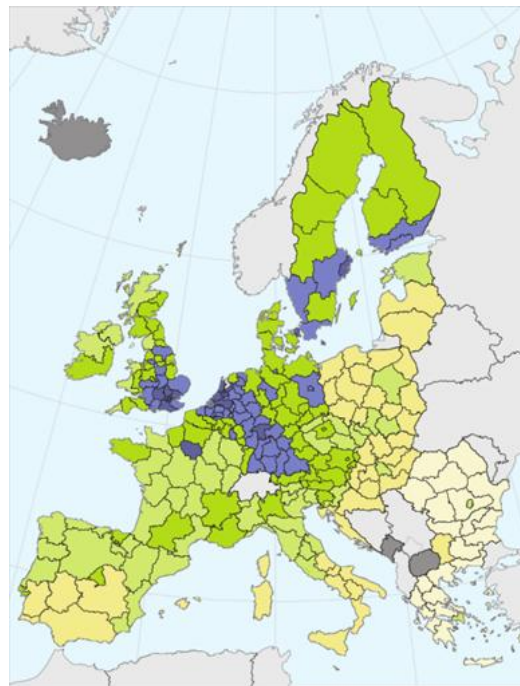
The increase the R&D expenditure in the Greater-Poland region was one of the interventions aimed at enhancing innovative activity in the region. Part of this increase could be established by the regional government, but the increase mainly depends on the expenditure of private companies in their R&D expenditure (Czyz, 2010, p. 79). the GDP of Greater-Poland spent on R&D expenditure was 0.5 percent in 2007. This percentage was below EU average and comparable to other non-capital Central European regions. The percentage of GDP spent of R&D in Greater-Poland was raised with 0.1 percent point to 0,6 percent in 2013, making it still below EU average and below the percentages of Mazovia and Lesser-Poland. Between 2007 and 2013 the European average on R&D-expenditure grew faster than in Greater-Poland. On the other hand, Greater-Poland scored higher on this indicator in 2013 than directly neighbouring regions such as Lubuskie, West Pomerania and Pomerania. In the evaluation of the regional policy (recommendations from the WROP 2007-2013) the MO acknowledged that the transfer of knowledge from the R&D sector to enterprises was still insufficient in 2013. One of the improvements suggested by the MO in the recommendation report 2007-2013 was that instruments on targeting the transfer of knowledge should also target the R&D development of firms which are not SMEs. The low R&D-expenditure was also the result of the low levels of cooperation between business and sciences as mentioned by all experts on regional policy.

Figure 6.7: Researchers 2007-2013



Researchers (people active in the field of creating new knowledge, products, processes, methods and systems) made up 0.4% of the working population in Greater-Poland in 2007. This score was comparable to the score in regions in the north of France and the west of Poland, only the Polish regions of Mazovia and Lesser-Poland scored higher on this indicator. The share of researchers in the working population in Greater-Poland decreased to 0.3% in 2013, making Greater-Poland one of the lowest scoring regions on this indicator. In Western-Poland Lower Silesia was able to improve the share of researchers in her economy; unlike Greater-Poland that stayed at the same level as Lubuskie and West-Pomerania. This indicator followed the trend that also occurred in other indicators. Greater-Poland was able to increase her economic performance very rapidly in the years between 2007 and 2013, but on the other hand, it was not able to improve her innovative performance compared to other European regions. The inability of improving the innovativeness in the region might have the consequence that Greater-Poland will lose its competitiveness and will have serious difficulty in maintaining its level of socio-economic development (Czyz, 2010).

Figure 6.8: The level of competitiveness in 2013



Source: Joint Research Centre, 2013

The question is how the competitiveness has developed during the period 2007-2013. It was hard to make a comparison in time since competitiveness in Europe was measured on NUTS-1 level in 2006. West-Poland (the NUTS-1 region where Greater-Poland is located in) ranked 103th on the competitive index of the 118 European NUTS-1 regions in 2006. It was assumed that Greater-Poland had a relatively low competitive performance in 2006. Enhance this competitiveness was the main objective of regional policy between 2007 and 2013. The competitiveness in Greater-Poland was still rather low compared to other European regions in 2013 (see figure 4.10); Greater-Poland ranked 209th of the 262 NUTS-2 regions. The WROP succeeded only limited to relatively increase the competitiveness of the region. The competitiveness of Greater-Poland improved relatively even more between 2013 and 2016. Greater-Poland ranked 190th of the 263 European regions in 2016; still not high, but comparing this rank with the 195th position on the GDP ranking of European regions it could be considered acceptable (EC, 2016). Innovation is needed to replace the comparative advantages Greater-Poland has because of its cheap labour costs; Ida Musiałkowska saw already successful innovative companies leaving Poznan for other large Polish agglomerations. YouNick is also moving her focus away from investing in companies from Greater-Poland into investing in companies from other Polish regions. Where in the past YouNick was mainly investing in Poznan-based companies, now YouNick is investing more in companies from other large Polish agglomerations. According to YouNick Greater-Poland is running out of high-potential start-ups to invest in, so YouNick scouts for high-potential firms outside of Greater-Poland. This low innovativeness resulting in low competitiveness is affecting the embeddedness of innovation potential in the region; a problem that according to Dr. Strykiewicz was not recognised well enough by regional policy makers.

As mentioned before, an effective impact evaluation can only be conducted by also looking at the effects on a micro scale (Idzak & Musiałkowska, 2014). During an interview with PPNT, the employees of the Technology Park stressed that uncountable projects between 2007 and 2013 were conducted which would not have been possible without the support from the regional policy. The whole community of 500 people working at the Poznan science and technology park (PPNT) would not have been there without the public support. In absence of the public support for PPNT start-ups

would not been able to locate at the park. The nearness created in the park is the result of the investments of the EU and the regional government. The investments were crucial and brought a lot of opportunities that would otherwise be unaffordable for PPNT. All the infrastructure build with the support of funds is still being used and in the eyes of PPNT the investments were spent wisely:

“The public support made it possible to develop the infrastructure at PPNT, and the infrastructure was followed by companies and people coming to PPNT. The buildings that have been built with public support are now full of live and business development. This community of 500 people working at PPNT would not all be here without the support from regional development funds”

The external support had also a fundamental impact on two interviewed start-ups: Bench and TrafficTrends (see table 6.6). The effect of the support was significant on BioTech and IC Solutions and the effect was low on IITX and LinguaSmart; however these two companies only received non-monetary support which could be an explanation for the limited effect of the external support. Receiving external financial support had another indirect effect, it gave the companies recognition of being a high potential firm; this created extra trust of other companies in the start-up.

IC Solutions: “Being recognized by a investor as a high-potential start-up gives some sort of a PR benefit”

Table 6.6: Indirect impact of regional development grants

Name of the company	Impact of the external support
TrafficTrends	Fundamental; The founders would have not started the company without the financial support. The grant gave some extra security for TrafficTrends; this security enabled the company to grow
Bench	Fundamental; The founders would have not started the company without the financial support. It would not be able to develop their proto-type and survive as a company without the financial support.
IC Solutions	Significant; The development of the company would have taken more time without the help of the SpeedUp-group. The founders needed to hire people on the short-term for commercialising their innovative idea, the founders could not have hired the necessary employees without the external financial support.
IITX	Rather low; The company profited from the nearness of other firms and the low rental prices, but the support of PPNT contributed only a little to the development of the firm
LinguaSmart	Limited impact on the development of the firm; The advices of PPNT had a positive contribution on the development of the firm and the nearness at PPNT resulted in two clients who are also located at PPNT
BioTech	Significant; Biotech was able to run the business in the first three years without any financial problems. The investments of PPNT speeded up the development of the firm and increased potential revenues in the future

Source: Own work

6.5 Future/Smart specialization

Tadeusz Strykiewicz argued that regional policy in Greater-Poland between 2007-2013 needed a stronger sectoral concentration, something what was also acknowledged by the national evaluation unit (NEU, 2014, p. 42). This recommendation is in line with the implementation of the smart specialization strategy that includes interventions focused on a limited amount of sectors. The smart specialization strategy for Greater-Poland was designed in 2010 and firstly implemented into regional policy in the 2014-2020 period. The regional policy for 2014-2020 was also more place-based and more focused on innovation than in the 2007-2013 period. The question is whether the limited implementation of the smart specialization strategy was an improvement for the 2007-2013 regional policy.

Smart specialization was according to experts on regional policy an opportunity to enhance the effectiveness of the regional policy in Greater-Poland, but the definition is ill defined since all experts had their own interpretation of the concept. The ill definition of the concept led to poor quality strategies according to experts. A lot of European smart specialization strategies were similar to each other and copied from examples given by the EC. The strategies were not based on the local assets and traditions most of the time; a lot of lagging (Polish) regions have smart specializations such as ICT and Biotech in their strategy although they do not have an advanced ICT or Biotech sector within their region.

Ida Musiałkowska: "You see a lot of copying in the making of smart specialization strategies instead of looking at the regional endogenous competences"

However, Greater-Poland had a good process towards developing a smart specialization strategy according to experts on regional policy in Greater-Poland. Monika Matusiak stated that there is now a much better understanding of the sector composition by the regional policy makers and higher levels of trust between the business and the public sector. This also led to more public interest in the economy and more interventions in the economy suggested by politicians. Experts on regional policy stated that the food sector and the furniture sector were chosen as a smart specialization in Greater-Poland. These two sectors were also named in interviews with experts as well-developed sectors in the Greater-Poland region. How to win the hearts and minds of the people of Greater-Poland for implementing the smart-specialization strategy is going to be the main challenge in making the strategy a success according to regional policy experts. The mentality of people in Greater-Poland is not oriented towards change, while the concept of smart specialization stresses the importance of newness. It is important to have local support, otherwise the sectors which are not a smart specialization will obstruct the implementation process. Regional policy makers have to explain the usefulness of the concept, otherwise pressure groups will determine the implementation of the strategy and make it ineffective according to Tadeusz Strykiewicz.

7. Conclusions, recommendations and discussion

The results of the thesis have given an insight in how the Cohesion Policy is brought into practice. The central question is what to what extend the implementation of the Cohesion Policy was effective. Did the available regional development funds made a difference to the socio-economic development of the region? It can be concluded that the regional policy had a positive impact on the socio-economic development of the region. All interviewed (indirect) beneficiaries have benefited from the interventions in the regional economy. All experts on regional policy also had a favourable opinion towards the impact of the regional policy on the regional economy. The regional policy lifted the socio-economic position of the Greater-Poland region to a higher level. The important question here was to what extend the regional policy positively influenced the socio-economic development in the region.

The general conclusion from the interviews was that the interventions had a significant impact and that the interventions positively contributed to the development of the firms. The question is whether these results can be generalized to the regional level. Experts on regional policy argued that the results of the interventions, especially in innovative projects, were disappointing. The main question remained hard to answer, due to the difficulty of conducting a proper impact assessment. The impact of the regional policy focused on innovativeness seemed low when looking at macro-economic data. The innovative performance of the region remained rather weak. In this thesis it appeared that this low innovative performance was more a result of the difficulties in commercialising innovation in the region. The mentality of the people in Greater-Poland is not orientated towards change, which makes it difficult to implement successful policy focused on enhancing innovation. The people of Greater-Poland are not interested enough in utilizing their innovation potential, although they have capabilities to do so. The innovative performance of the region may be not as low as in the figures, but as long as innovative ideas will not be introduced to the market the innovation indicators will give low outcomes.

The research not only resulted in a conclusion on the impact of regional policy, but it also gave insight in possible improvements of regional policy. The question about the impact of regional policy was hard to answer, but the question on what could be improved on regional policy of Greater-Poland for the period 2007-2013 was less abstract and easier to answer. An important question is whether the regional policy for 2007-2013 was place-based; designed the Marshall office a regional policy adjusted to the regional context? The regional policy design was rather top-down; the guidelines of the EC were strict and regional policy makers in Greater-Poland did not have full freedom to design a context-based regional policy. Although the EC claimed in her 2009 reform that the design of regional policy would be more bottom-up, the process in Greater-Poland was still mostly top-down. Another point of critique on the regional policy of Greater-Poland was that the policy created deadweight effects and that it implemented off-the-shelf interventions. The interventions were too ambitious and not adjusted towards the needs of the beneficiary firms. The innovation policies also implemented too ambitious measures; interventions that knowledge-intensive sectors in Greater-Poland could not absorb. Interventions designed for knowledge-intensive (Western-European) economies were implemented without consideration of the regional context of Greater-Poland. The implementation of regional policy in Greater-Poland would be more effective if it would focus more on the needs of beneficiary firms by making grants more flexible instead of off-the-shelf interventions. The concept of smart specialization can contribute to making regional policy in Greater-Poland more place-based. Greater-Poland had a good process towards designing a smart specialization strategy. The strategy builds upon the assets of the region, the chosen smart specialization are well-developed sectors in the region. The smart specialization concept can make the policy interventions more adjusted to the needs of the regional economy

when implementing the smart specialization strategy correctly and make the regional economy as a whole more innovative by effectively utilizing the untapped potential in the region

Another conclusion in this thesis is that the regional policy design needs to put more attention to the polarization trend in the Greater-Poland region. The aim of the Cohesion Policy is to create harmonious growth within the European community. The economic growth in Greater-Poland was great, however not harmonious. The trend of polarization is hard to counter when a region economically develops, but the sub-region of Poznan has grown on a much larger scale than other sub-regions, and peripheral parts of the region hardly benefited from the socio-economic development of the region. The Marshall office has to make a decision about whether it wants to stimulate overall growth within her territory or whether it wants to reduce sub-regional inequalities. The EC is moving her focus away from reducing regional disparities to an approach in where competitiveness of the community as a whole is strengthened. The regional authorities in Greater-Poland have not made a decision on this topic yet; however the regional policy mainly focused on overall economic growth and as a result it enforced regional polarization. The idea of social innovation is considered in this thesis a possible way of stimulating the economic development in peripheral parts of the Greater-Poland region. Before social innovation can be successfully implemented there should be more attention in the regional operational programme devoted to social innovation as an alternative for commercial innovation. Also the administrative burden of regional development grants needs be lowered. For peripheral communities and small scale firms located in the periphery of the region this administrative burden was too large.

The evaluation process of the WROP for 2007-2013 was criticized during the interviews. The evaluation process is too focused on fulfilling the indicators, which also has implications for the design of the policy. The policy design focused on creating short-term successes that would occur in indicators. That the evaluation process of regional policy by the Marshall office was stratified was another point of critique on the evaluation process. Every department at the Marshall office was responsible for evaluating effects of policy interventions on their own specialization. Since the evaluation as a whole was conducted by the Management Authority in Warsaw; there were little knowledge spillovers about effects of regional policy interventions on other specializations. The evaluation process needs to be improved so that regional policy makers have a better comprehension on spatial effects of the regional policy for Greater-Poland; a crucial understanding in designing effective place-based regional development strategies.

A critical reflection

The research has been conducted on a limited number of eight (indirect) beneficiaries. The research was conducted on a small scale and this made it hard to generalize conclusions to the regional level. However, research results gave an interesting insight in the impact of regional policy on socio-economic development in Greater-Poland. An important side note was that the research was biased towards successful projects; all respondents had a positive experience with regional policy interventions. It would have been interesting to interview beneficiary projects that were not successful, for example dissolved firms who however did receive a regional development grant. Interviewed projects were all located in the sub-region of Poznan; a sub-region which experienced way different effects from regional policy than other sub-regions. It would have been interesting to also interview beneficiary firms from peripheral parts of the region. A further research on a larger scale with more respondents is needed in order to make more general conclusions. Also a longitudinal research would be interesting since not all effects of the 2007-2013 regional policy have occurred. The qualitative approach of this research had a positive impact on the research since it gave more insight in confidential information about the impact of regional policy interventions. This thesis helped in a better understanding of the impact and effectiveness of regional policy in Greater-Poland, but more research need to be done in order to formulate a more general conclusion on the effectiveness of the 2007-2013 regional policy in Greater-Poland.

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Appendix

A Topic list interviews

Topic lists expert interviews

- General characteristics economy Greater-Poland
- Regional development
- Strong sectors
- Underdeveloped parts of economy, obstacles
- Innovativeness, long-term competitiveness
- Regional policy (focus points)
- Implementation of the cohesion policy
- (Impact) evaluation/effectiveness of the policy
- Smart specialization strategy

Topic list Agata Ocieczek

- Plus-Jeden
- Development of young innovative firms in recent years
- City government support
- Start-ups successful in obtaining external support
- Geographical location business relations
- Geographical location first employees
- Experiences with application procedures public funds
- Share private investments compared to public investment in start-ups
- Impact of external support on start-ups
- Impact of external support on innovativeness in Greater-Poland

Topic list large projects

- General information about the company/institution
- Origin of the employees
- Kind of start-ups they support
- How many people working at the project/turnover project
- History/development of the project
- Selection procedure start-ups
- Geographical location of supported start-ups
- Cooperation public institutions
- Application public funding/Reason for application
- Success/impact of the support

Topic list indirect beneficiaries

- Description of the company
- Size of the company; employees, turnover
- History/development of the firm
- Geographical location employees
- Geographical location business relations
- Location of the firm
- Reason to reach out for external support
- Contribution external support to development firm
- Impact of external support

B Code Book

General economic trends

GDP growth
Productivity growth
Polarization

Strong sectors

Sectoral composition
Service sector
Pharmaceutical sector
Logistic sector
Food sector
Agriculture/food sector
Automotive sector
Furniture making sector

Embeddedness

Local-based resources
FDI
High-educated labour force

Resilience

Openness/connectedness
2008-2012 Economic crisis

Obstacles in regional economy

Mentality not orientated towards innovation
Presence of traditional companies
Commercialising innovative ideas
Competitiveness
Brain drain
Unemployment in peripheral parts of the region

(Implementation of) Regional policy

Creating new knowledge networks
Investing in R&D and innovative entrepreneurship
Too focused on EU requirements/Top-down
Too many changes in the regional policy
Implementation place-based approach
Deadweight effects
Picking winners
Counter fight polarization
Social inclusion/Social innovation
Bureaucracy barrier
Little coordination between departments at MO
Financial instruments

Evaluation

Little coordination between departments at MO
Outsourcing overall evaluation

No public discussion
No Benchmarking
Indicators

Impact of the regional policy

Outcomes regional policy
Impact assessment
Isolating effects
Effect interventions
Impact of external investors on indirect beneficiaries
Disappointing outcomes of innovation strategies
Institutional capacity
Disappointing results in general
Peripheral communities
Environmental impact
Creation of knowledge networks

Smart specialization

Sectoral concentration
Copying of smart specialization strategies
Concept ill defined
Greater-Poland's smart specialization strategy
Endogenous growth
Bottom-up

Innovative Ecosystems

Cooperation within the region
Leasing well-equipped labs
Research centres/clusters
Knowledge spillovers
Benefits from nearness other (innovative) companies

Triple Helix

Co-investing in innovative entrepreneurship
Advising governments on innovation policy
Linking business with science

Business relations beneficiaries

Benefit from network PPNT, SpeedUp or YouNick

Employees

Benefit from network PPNT, SpeedUp or YouNick
Effects regional policy on regional employment

External investors beneficiaries

Benefit from network PPNT, SpeedUp or YouNick
Investors are not risk takers when investing in start-ups
PR Benefits