

Czech University of Life Sciences Prague

Faculty of Economics and Management

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Bachelor Thesis

**Approaches to Implementation of the EU-Cohesion
Policy in the Czech Republic and Germany**

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BACHELOR THESIS ASSIGNMENT

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Economics and Management
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Thesis title

Approaches to Implementation of the EU-Cohesion Policy in the Czech Republic and Germany

Objectives of thesis

The objective of the thesis is to evaluate approaches to Implementation of the EU-Cohesion Policy in the Czech Republic and Germany. In particular, the thesis is focused on the evaluation of the policy in two comparable border regions.

Methodology

The bachelor thesis is divided into two parts. The theoretical part describes the main facts and trends about the EU-Cohesion Policy, its historical impact, and its future perspectives. The practical part evaluates its implementation in the Czech Republic and Germany with the focus on two comparable border regions. Based on the analysis of the data related to these regions the outcomes are evaluated and a conclusion is made with the aim to make suggestion for future utilization of the policy in these two regions.

The proposed extent of the thesis

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Keywords

Cohesion Policy, European Union, border regions, subsidies

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CAPELLO, R. *Regional Economics*. Abingdon: Routledge, 2016. ISBN 978-1-138-85588-5

TEASDALE, A. – BAINBRIDGE, T. *The Penguin Companion to European Union*. London: Penguin Books, 2012. ISBN 978-0-141-02118-8

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Declaration

I declare that I have worked on my bachelor thesis titled ‘Approaches to Implementation of the EU-Cohesion Policy in the Czech Republic and Germany’ by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 23 March 2020

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Approaches to Implementation of the EU-Cohesion Policy in the Czech Republic and Germany

Abstract

The bachelor thesis processes the topic concerning approaches to implementation of the EU-Cohesion Policy in the Czech Republic and Germany with a focus on neighbouring regions on the Czech-Saxony border, specifically NUTS 2 regions Severozápad and Chemnitz. The goal of the thesis is to evaluate the importance of the cohesion policy realised in neighbouring regions of two EU member states and its impact on mutual convergence. The bachelor thesis contains a theoretical definition of basic terms related to cohesion policy and an overview of its historical development. The analytical part focuses on comparing and evaluating the financial support realized through the cohesion policy on a broader level of NUTS 1 level and simultaneously in the observed regions of NUTS 2 level. Subsequent analysis follows the development in economic and social sphere of the regions in order to find out, if the application of the policy reports real outcomes. Based on a synthesis of the findings, conclusions are drawn. The conclusions point to the importance of the role of individual states in the implementation of cohesion policy as well as the importance of specific cohesion policy measures bringing the neighbouring regions of two countries closer together.

Keywords: Cohesion Policy, European Union, border regions, subsidies

Přístupy k implementaci politiky soudržnosti v České republice a v Německu

Abstrakt

Bakalářská práce zpracovává téma zabývající se přístupy k implementaci politiky soudržnosti v České republice a v Německu se zaměřením na sousední regiony na Česko-Saské hranici, konkrétně regiony NUTS 2 Severozápad a Chemnitz. Cílem práce je zhodnotit význam politiky soudržnosti realizované v sousedních regionech dvou členských států EU a její dopad na vzájemné sblížení. Bakalářská práce obsahuje teoretické vymezení základních pojmů souvisejících s politikou soudržnosti a přehled jejího historického vývoje. V analytické části se práce zaměřuje na porovnání a zhodnocení finanční podpory realizované v rámci politiky soudržnosti v širším měřítku úrovně NUTS 1 a zároveň ve sledovaných regionech úrovně NUTS 2. Následná analýza sleduje vývoj v ekonomické a sociální oblasti daných regionů za účelem zjištění, zda se aplikace politiky soudržnosti reálně projevuje v těchto regionech. Na základě syntézy zjištěných poznatků jsou vyvozeny závěry, které poukazují na význam role jednotlivých států při uplatňování politiky soudržnosti jakož i na význam konkrétních opatření politiky soudržnosti sblížující sousední regiony dvou zemí.

Klíčová slova: politika soudržnosti, Evropská Unie, hraniční regiony, dotace

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1 Introduction

The events of the World War II resulted in a radical change of the whole society climate in the post-war period. There was evident that European states following individual policies to protect only own national interests regardless of development in other countries were not able to stop an expansion of non-democratic regimes and the war. The ideas to keep peace in Europe and to encourage economic development has led to an unprecedented cooperation between European nations. Establishment of the European Coal and Steel Community by six West-European countries followed by the European Economic Community and later the European Union contributed to Europe's return to the world's most important economies.

The post war development, which was characterized by rapid economic growth, scientific revolution, and capital concentration leading to formation of trans-national companies, pointed out that relatively small and isolated European national economies without cooperation would not be competitive in the world economy. Economic cooperation and abolishment of trade barriers accelerated economic development in Western European countries during first post-war decades.

Over the years, other European states have joined the idea of closer cooperation to take advantages of participation in a common market. However, the enlargement of European Communities brought also difficulties due to different level of economic development in later joined countries. To enable a smooth functioning of the common economic space, a regional approach was introduced to eliminate existing economic barriers. Regional approach based on solidarity of more developed regions with less developed regions created a unique European Cohesion Policy.

The current Cohesion Policy brings advantages to all less developed regions in the territory of the European Union. Such regions are often regions located at national borders that were in the past peripheral, relatively isolated from neighbouring foreign regions and often also outside the main interest of their home states. The bachelor thesis is focused on a comparison of application of the EU-Cohesion Policy in border regions of the Czech Republic and Germany, regions that have historically had a lot of common but where cooperation and traditions have been discontinued.

2 Objectives and Methodology

2.1 Objective

The objective of the thesis is to evaluate approaches to implementation of the EU-Cohesion Policy in the Czech Republic and Germany. In particular, the thesis deals with economic and social development in border regions (Severozápad and Chemnitz) where cohesion policy under the same objectives was applied.

Considering the recommended extend of the thesis, the aim is not to carry out a deep and detail analysis comparable with those developed by relevant monitoring authorities, but to provide a different perspective on the application of the cohesion policy in neighbouring regions under different rules of two national states. The thesis aims to answer following questions: How important is an application of cohesion policy tools on development in neighbouring regions located in two countries and which measures of the cohesion policy have the best predisposition to bring such regions closer together?

2.2 Methodology

The bachelor thesis consists of two main parts – theoretical and practical. The theoretical part is based on literary research with the aim to provide a necessary theoretical background concerning the topic of the bachelor thesis. The literary research draws on relevant sources such as literature, journal articles, information sources of European and national institutions (European Commission, European Statistical Office, Ministry for Regional Development of the Czech Republic, institutions of the region Severozápad and Federal State of Saxony) and others.

The practical part deals with an analysis of the European cohesion policy and its impacts with focus on two neighbouring border regions at NUTS 2 level – Severozápad (Czech Republic) and Chemnitz (Germany). The selection of these two regions was done due to the fact, that both regions have historically much in common. Both were part of the Soviet Block during the Cold War period and both underwent hard development since 1990.

European cohesion policy, its application and financial support is analysed for both regions for the programming period 2007-2013. Data for this period are perceived as relevant from following reasons:

- it is the first comparable period because the Czech Republic joined the EU in 2004 and for this reason the period 2007-2013 is the first one in which the Czech Republic participated throughout,
- it is also the latest comparable period as the programming period 2014-2020 is not finished yet and the data for this whole period are not available.

Due an application of the rule N+2/N+3, the funds are spent it some delay and the impact of cohesion policy measures is also not immediately apparent. Therefore, there is assumed that the latest statistical data are affected mainly by measures from that period. For this reason, also the most recent available data (specifically data until 2017) are taken into account.

Subsequent analysis is focused on economic and social development in both regions. to illustrate how the cohesion policy support affects local development. A synthesis of analysed data leads to drawing conclusions. The analysis consists mostly on basic statistical methods and method of comparison.

3 Theoretical Part

3.1 Basic Terms

3.1.1 Regional Policy

The definition of the regional policy could be essentially described as a set of policies designed to eliminate disparities between regions and improve conditions in disadvantages areas. Resources and economic activities are distributed unevenly in space. Economic actors (mainly firms) choose their locations according to the availability of these resources and appropriateness of the area for their economic activities. (1, p. 1)

Considering the imbalances mentioned above, disadvantages regions are more sensitive to regional problems. According to Seniro Nello, regional problems and their potential solution could be described in the following way: ‘Regional problems are the disparities in levels of income, in rates of growth of output and employment, and generally in levels of economic inequality between different regions. Public intervention may be considered necessary to reduce these disparities through redistribution.’ (2, p. 338)

During its existence, the EU developed active regional policy, which is based on the fact, that not only national states are involved in the integration process. The EU takes also the regional approach which allows the redistribution between different countries, regions or sections of the population. (2, p. 338) According to the European Commission, the Regional Policy of the EU could be described in following three main points:

- ‘EU regional policy is an investment policy. It supports job creation, competitiveness, economic growth, improved quality of life and sustainable development.’ (3)
- ‘Regional policy is also the expression of the EU’s solidarity with less developed countries and regions, concentrating funds on the areas and sectors where they can make the most difference.’ (3)
- ‘Regional policy aims to reduce the significant economic, social and territorial disparities that still exist between Europe’s regions. Leaving these disparities in place would undermine some of the cornerstones of the EU, including its large single market and its currency, the euro.’ (3)

3.1.2 EU Cohesion Policy

Cohesion Policy is the EU's main investment policy. It was introduced in the Single European Act (SAE) as a support for those member states which could fear that the single market would be beneficial only for more prosperous states. The main goal of the cohesion policy is to reduce of disparities of regions and support job creation, competitiveness, economic growth and sustainable development. (4, pp. 92, 93) (5)

Cohesion policy is realized through three main funds: The European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund. In the current programming period, it is possible that the three main funds are combined also with other instruments, especially by two other structural funds - the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF) (see chapter 3.9). (5) (6)

3.1.3 The European Regional Development Fund

The European Regional Development Fund is the largest of the EU structural funds. It was established in 1975 as a reaction to the entry of the UK (with difficulties in some rural areas) and Ireland to the European Communities. Its resources are determined to help job creation, development of transport and other infrastructures. The ERDF supports local development, research and innovation and also environmental protection. (2, p. 342) (5)

3.1.4 The European Social Fund

The European Social Fund is the oldest EU structural fund. It was established in 1960 according to the Treaty of Rome. Its aim is to increase opportunities for employment and improve living standards. It is also focused on providing support of education and to people who are at risk of poverty or social exclusion. (5) According to the Europe 2020 Strategy the goals of the ESF are following:

1. 'Increasing adaptability of workers and enterprises.
2. Enhancing access to employment and participation in the labour market.
3. Reinforcing social inclusion by combating discrimination and facilitating access to the labour market for disadvantaged people.
4. Promoting partnership for reform in the fields of employment and inclusion.' (2, pp. 341, 342)

3.1.5 The Cohesion Fund

The Cohesion Fund is additional financial instrument designed for member states with low GDP per capita. The condition for eligibility is GDP below 90 % of the EU average. The Cohesion Fund was introduced according to the Maastricht Treaty. Its main goal is to help with improving the transport infrastructure and environmental protection in eligible states (mainly the new member states and the countries of the south). (2, pp. 342, 343) (5)

3.1.6 The European Investment Bank

The European Investment Bank was established according to the Treaty of Rome. In the very beginning of the EU regional policy it was the main tool for helping to the disadvantaged regions. Nowadays, it helps to finance projects aimed to job creation, economic growth, supports investments in education or health care and provides loans earmarked to finance these projects. It also supports initiatives like the Lisbon Strategy or Europe 2020 strategy. (2, p. 343)

3.2 Historical Development

The Second World War was an important milestone for the future of European integration. Almost everyone in Europe experienced a brutal rule by fascist dictators or occupation by a foreign army. Millions of people were dead after the most harmful conflict in the history. Hundreds of towns were destroyed, and the economy laid in ruins. Moreover, it was not an isolated conflict but the next one which arose as a consequence of the tension between historical rivals – France and Germany. (7, p. 4)

Considering this horrific experience and the danger arising from splitting the world into the East and the West, establishing a cooperation between France and Germany became a necessity. The desire of preventing another war by partnership of these two countries was heard through the Treaty of Paris in 1951 which established the European Coal and Steel Community. The idea of grouping six European countries (including France and Germany) into the community focused on collaboration in the field of coal and steel was the first step towards European integration. (8)

One of the greatest issues after the Second World War was to build up missing rural infrastructure, such as roads, rails and electricity network. The rural areas were poor in contrast with booming economy in cities. However, there was no need to create common

regional policy inside the European Communities and the task of helping to problematic regions had not been solved at the supranational level, but by national governments. Apart from a few regions with a real poverty (e.g. Mezzogiorno Italy), the Economy was considerably homogeneous. (7, pp. 270, 289)

The first mention about regional policy comes from the Treaty establishing the European Economic Community (also known as the Treaty of Rome). In the preamble the member states commit 'to strengthen the unity of their economies and to ensure their harmonious development by reducing the differences existing between the various regions and by mitigating the backwardness of the less favoured'. (9)

Article 129 of the Treaty establishing the European Economic Community dealt with the establishment of the European Investment Bank. Article 130 specified Its role. The EIB became the strongest instrument for the fundamentals of regional and cohesion policy. (10, p. 418). The role of the EIB is defined in the Treaty as following:

'The task of the European Investment Bank shall be to contribute, by calling on the capital markets and its own resources, to the balanced and smooth development of the Common Market in the interest of the Community. For this purpose, the Bank shall by granting loans and guarantees on a non-profit-making basis facilitate the financing of the following projects in all sectors of the economy:

- a. projects for developing less developed regions;
- b. projects for modernising or converting enterprises or for creating new activities which are called for by the progressive establishment of the Common Market where such projects by their size or nature cannot be entirely financed by the various means available in each of the Member States; and
- c. projects of common interest to several Member States which by their size or nature cannot be entirely financed by the various means available in each of the Member States.' (9)

During the drafting of the Treaty of Rome by the Spaak Committee it was discussed the possibility to focus more on the regional policy, even the potential establishment of a regional fund was discussed. However, this idea was not realized, and the committee opted for the founding of the European Investment Bank. (10, p. 418)

Another important contribution of the Treaty of Rome was the European Social Fund. As mentioned above the fund was created in order to support employment. In Article 123 of the Treaty there is specifically said that the fund 'shall have the task of promoting within the Community employment facilities and the geographical and occupational mobility of workers.' (9)

The Common Agricultural Policy also became an important tool for solving regional problems and disparities. In 1962, the European Agricultural Guidance and Guarantee Fund (EAGGF) was introduced. It became a basis of one of the fundamental principles of Common Agricultural Policy – financial solidarity. The fund was divided into two sections - the Guidance the Guarantee section. The Guidance section was responsible for covering expenditures on structural measures. The Guarantee section financed market interventions and export refunds. (2, p. 283)

Nevertheless, in the period 1958-1975 no regional measures were really implemented as a Community policy. It was hoped that the only persistent regional problem with the Southern Italy will be solved by instruments of the common market and by support of labour movement within the Community. After the introduction of the Common Agricultural Policy in 1962, it was considered that the redistribution role will be fulfilled also by it. (2, p. 344)

The situation changed at the beginning of the 1970s. The impending enlargement of the United Kingdom, Ireland and Denmark rose doubts how to deal with regional disparities especially in the case of Ireland. In reaction to this, Paris Summit in 1972 took the decision to create the European Regional Development Fund. The task of the fund was a redistribution of money to the poorest regions. The fund, finally established in 1975, however disposed of minor budget, which disappointed some member states. Nevertheless, the establishment of the fund was perceived as an important milestone. (7, p. 290) (11, pp. 48, 49)

The creation of the ERDF in 1975, however, did not lead directly to integration of it and other instruments into a cohesion policy. National governments did not adopt a supranational approach and gave a preference to a distribution of funds according to their own criteria. This caused, that the funding was dispersed rather than concentrated in regions with a greatest need. (11, p. 49)

3.3 The Origin of the Cohesion Policy

The 1980s with oncoming enlargement of Greece, Spain and Portugal entailed a change in EU spending priorities as these states were considerably poorer. Their agriculture also did not produce commodities which the Common Agriculture Policy supported most intensively. In order to confront the regional inequalities, the spending priorities had to change. (7, p. 290)

The Single European Act signed in 1986 connoted a first treaty for cohesion policy. The concept of economic and social cohesion with the aim to reduce regional disparities was described in articles 130a to 130e. (2, p. 344)

For better illustration of the concepts defined in the Single European Act following articles are quoted:

Article 130a:

‘In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion.

In particular the Community shall aim at reducing disparities between the various regions and the backwardness of the least-favoured regions.’ (12)

Article 130b:

‘Member States shall conduct their economic policies, and shall coordinate them, in such a way as, in addition, to attain the objectives set out in Article 130a. The implementation of the common policies and of the internal market shall take into account the objectives set out in Article 130a and in Article 130c and shall contribute to their achievement. The Community shall support the achievement of these objectives by the action it takes through the structural Funds (European Agricultural Guidance and Guarantee Fund, Guidance Section, European Social Fund, European Regional Development Fund), the European Investment Bank and the other existing financial instruments.’ (12)

Article 130c particularised the role of European Regional Development Fund:

‘The European Regional Development Fund is intended to help redress the principal regional imbalances in the Community through participating in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions.’ (12)

Following reform of structural funds in 1988 integrated ERDF with the European Social Fund and the Guidance Section of the European Agricultural Guarantee and Guidance Fund in order to improve the coordination between them. Since 1988 it is possible to speak about cohesion policy which had its budget of ECU 64 billion. Since 1989 the principle of programming was implemented. The first programming period was planned for years 1989-1993. (11, pp. 49, 50) (13)

In order to reduce regional disparities, the reform also determined following objectives for period 1989-1993:

1. ‘promoting the development and structural adjustment of the regions whose development is lagging behind;
2. converting the regions, frontier regions or parts of regions (including employment areas and urban communities) seriously affected by industrial decline;
3. combating long-term unemployment;
4. facilitating the occupational integration of young people;
5. with a view to reform of the common agricultural policy:
 - a. speeding up the adjustment of agricultural structures, and
 - b. promoting the development of rural areas’ (14)

In order to make the cohesion policy more efficient, the adaptation of a system for classifying territorial units was needed. The goal was to unify the categorization of the regions and allow better comparison on the regional level. This was done by adapting so-called NUTS system (Nomenclature of Units for Territorial Statistics) based on existing institutional divisions within the countries. The NUTS units were divided hierarchically into 5 levels: NUTS 1 (areas grouping basic regions), NUTS 2 (basic regions) subdivided into NUTS 3, continuing through NUTS 4 to the smallest category NUTS 5. The NUTS 2 level was adapted as the main one for purposes of the cohesion policy. NUTS 4 and NUTS 5 were later replaced by LAU (Local Administrative Units). (11, p. 50)

3.4 Programming Period 1994-1999

The Period was mainly affected by the Treaty on European Union (Maastricht Treaty). The budget rose to ECU 168 billion. The Treaty introduced three novelties:

- the Cohesion Fund
- the Committee of the Regions
- the principle of subsidiarity (13)

The Cohesion Fund was agreed according to the Maastricht Treaty. Article 129c says, that the community ‘may support the financial efforts made by the Member States for projects of common interest financed by Member States, which are identified in the framework of the guidelines referred to in the first indent, particularly through feasibility studies, loan guarantees or interest rate subsidies; the Community may also contribute, through the Cohesion Fund to be set up no later than 31 December 1993 pursuant to Article 130d, to the financing of specific projects in Member States in the area of transport infrastructure.’ (15)

Another important benefit of the Maastricht Treaty was the establishment of the Committee of the Regions. It was a response to the increasing consciousness of regional problematics. The Committee consists of local and regional representatives and acts as an advisory body. (4, pp. 104, 105)

The other novelty - the principle of subsidiarity - was described in the Article 3b of the Maastricht Treaty:

‘The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein.

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.

Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty.’ (15)

The period 1994-1999 also brought the change in the objectives. The existing objectives were kept and Objective 6 (related to the regional policy of northern areas of Finland and Sweden according to their entry to the EU in 1995) was formulated. Another acquisition was the introduction of the Financial Instrument for Fisheries Guidance (FIFG). (2, p. 345)

3.5 Programming Period 2000-2006

The period 2000-2006 was mainly influenced by the greatest enlargement of the EU in 2004. The enlargement connoted a big challenge for regional policy as the new member states reported significantly higher regional problems. The budget for this period was set up to € 213 billion for the 15 existing members, € 22 billion was earmarked for new member countries (2004-2006). (13)

At the end of 1990s the European Union confronted new challenges, e.g. intensive globalisation processes. In March 2000 (during the European Council in Lisbon) so-called Lisbon Strategy was introduced. The aim of the strategy was to transform the EU by 2010 into the world's most competitive and most dynamic economy. (16)

Regarding changes caused by impending enlargement in 2004, the period 2000-2006 also brought changes in the objectives of the structural funds. Former six objectives were reduced to three (see Table 1). The objective 1 dealt with those regions whose GDP per capita was less than 75 % of the EU average. These regions were supported by 69.7 % of all spending of the structural funds. 12.3 % of the spending was earmarked for the objective 2. The objective 2 included rural areas and regions dependent on fishing which experienced a decline or natural difficulties. The regions which did not belong to objectives 1 and 2 were incorporated into objective 3. This objective supported improvements in the field of education and professional training or equality between men and women. (2, p. 347)

Table 1: Structural funds objectives 2000-2006

Objectives	Definitions
Objective 1	The less well developed areas of the EU, which are defined as those whose GDP per capita is less than 75% of the EU average.
Objective 2	The economic and social conversion of regions that were facing natural difficulties including declining rural areas and those dependent of fishing.
Objective 3	Improvement of human capital by promoting employment, education and professional training.

Source: own elaboration based on (2, p. 346)

Together with the change of the objectives, the policy was also reformed in the context of so-called Community Initiatives. The initiatives had the role to increase the motivation for cooperation between member states which had the possibility to cooperate on the basis of common interest. There were many Community Initiatives before 2000, however, for period 2000-2006 they were reduced to four:

- ‘LEADER+ (rural development)
- INTERREG II (cross-border, transnational and interregional co-operation)
- URBAN (economic and social regeneration of cities and urban neighbourhood)
- EQUAL (transnational co-operation to combat all kinds of discrimination and inequalities in the labour market)’ (2, p. 345)

As mentioned above the key challenge was to implement instruments which support economic, social and administrative reforms in incoming states. These so-called pre-accession instruments were used before the enlargement in 2004 and they are following:

- Phare - focused on helping to the incoming states with fulfilling of the conditions set up for accession to the EU. It was also used for financing of the projects of social and economic cohesion aimed to increase life standards in poorest regions. After the accession into the EU it was replaced by ERDF and ESF.
- SAPARD - aimed on a support of project in the field of the environmental and transport infrastructure. After the accession into the EU it was replaced by CF.
- ISPA - provided investment in the field of agriculture and rural development. The goal was to focus incoming states on priorities of the Common Agriculture Policy. After the accession into the EU it was replaced by EAGGF. (17)

3.6 Programming Period 2007-2013

The period 2007-2013 was the first one in which 10 new member states participated throughout. In 2007 Bulgaria and Romania joined the EU, followed by Croatia at the end of the period. The budget for cohesion policy was increased to € 347 billion. The main characteristics of the period was a focus on transparency and communication. (13)

The three objectives were again modified into three new priorities: Convergence, Regional competitiveness and employment and European territorial co-operation (see table 2).

Table 2: Structural funds objectives 2007-2013

Objectives	Financial instruments
Convergence	ERDF, ESF, Cohesion Fund
Regional competitiveness and employment	ERDF, ESF
European territorial co-operation	ERDF

Source: own elaboration based on (2, p. 349)

The Convergence objective was created as a synthesis of the previous objective 1 and the Cohesion Fund. It was related to the least developed areas. It covered regions which were eligible according to the regional criteria (GDP less than 75 % EU average) and Member States which fulfilled the criteria for support from the Cohesion Fund (GNI less than 90 % EU average). The main goal of the objectives was to economic growth of those regions. (18)

Regions which were not covered by convergence objective fell into the regional competitiveness and employment objective. It aimed to support regional competitiveness and attractiveness, as the definition says, ‘by anticipating economic and social changes.’ Moreover, it supported innovations, entrepreneurship, protection of the environment or the development of the labour market. (18)

The third objective - the European territorial co-operation - aimed to provide a framework for cooperation between national, regional and local actors at three levels: cross-border, transnational and interregional. It was designed as a complement to previous two objectives financed by the ERDF. Its goal was to support economic and social development with the idea of overcoming of the barriers. (18)

Apart from the changes in objectives the period 2007-2013 brought also new funds for financing the Common Agriculture Policy, namely the European Agricultural Guarantee Fund, and the European Agricultural Fund for Rural Development. They replaced the European Agricultural Guidance and Guarantee Fund since 1 January 2007. (19)

3.6.1 Europe 2020 Strategy

Introduced in 2010 the Europe 2020 Strategy was designed for the period until 2020 in order to support competitiveness and productivity. The strategy followed the aims of former Lisbon Strategy. The main headlines which the EU has adapted were defined as following summary shows:

- ‘Employment:
 - 75% of the population aged 20 to 64 years to be employed;
- Research & Development:
 - 3% of GDP to be invested in the R&D sector;
- Climate change & energy:
 - Greenhouse gas emissions to be reduced by 20% compared to 1990;
 - Share of renewable energy sources in final energy consumption to be increased to 20%;
 - Energy efficiency to be improved by 20%;
- Education:
 - Share of early school leavers to be reduced under 10%;
 - At least 40% of 30 to 34 years old to have completed tertiary or equivalent education;
- Poverty and social exclusion:
 - At least 20 million people fewer at risk of poverty or social exclusion.’ (20)

3.7 Programming Period 2014-2020

The most important affair which affected the whole period was the Europe 2020 Strategy in which goals for smart, sustainable and inclusive growth in the EU met. The budget of € 351 billion did not change too recognizably compared to the previous period. For the funds it was important their coordination. (13)

For the period 2014-2020 two main goals were defined in the context of structural funds:

1. Investment for growth and jobs
2. European territorial cooperation

The first goal concerned with all three categories of regions: less-developed, transition and more-developed. The support for this goal was provided by all main ESI Funds for the cohesion policy (ERDF, ESF and Cohesion Fund). The second objective was kept in the same way as in the previous period and was supported by ERDF. (6)

As mentioned above, one of the goals for programming period 2014-20 was the cooperation and coordination between the structural funds. The aim of the period was to define a clear

set of rules in order to generate smart and sustainable growth with the link to Europe 2020 strategy. Newly introduced legislative framework enabled collaboration between five structural funds called European Structural and Investment Funds (ESIF):

- the European Regional Development Fund
- the European Social Fund
- the Cohesion Fund
- the European Agricultural Fund for Rural Development
- the European Maritime and Fisheries Fund (6)

3.8 The Cohesion Policy in the Future

At present a new programming period 2021-2027 is at the stage of planning. For many member states it is necessary to prepare for facing to new challenges, like the consequences of the withdrawal of the United Kingdom from the European Union, pressure to deepen the integration in the field of Eurozone and dealing with migration and security issues. (21)

For this reason, five main objectives were defined for the period 2021-2027:

- Smarter Europe
- a Greener, carbon free Europe
- a more Connected Europe
- a more Social Europe
- a Europe closer to citizens (22)

4 Practical Part

4.1 Characteristics of the Regions Severozápad and Chemnitz

The border area between north-western part of Bohemia and Saxony underwent very complicated development during the 20th century. The region characterized by continuous mountain ridge in length of 130 kilometres was settled mostly by German inhabitants and traditional economic activities have been developing for centuries and respected specific harsh natural conditions. Economic development in the mountain areas culminated already in the 16th century in the context of silver and other metals mining, first at the side of Saxony, later at Bohemian side. But after this wave, specific and limited conditions led to development of traditional crafts - like lace making, gloves making and other leather processing, glass making and also wood processing, mainly wooden toys and Christmas ornaments manufacturing. However, the Bohemian foothills offered good conditions for agriculture and foundation of many important towns as local economic centres, e.g. Karlovy Vary, Chomutov, Most, Teplice and others. Saxony developed textile industry, Chemnitz and its surroundings became later a centre of machinery including automotive industry. Automotive industry in Saxony remained an important economic pillar also in German Democratic Republic in the post-war period. (23) (24)

The World War II radically changed the situation and interrupted the long-term continuity. Saxony, as a part of defeated Germany experienced serious economic troubles, the Bohemian part was affected by a displacement of Czech inhabitants in 1939 and later German inhabitants in 1945 which led to total break of traditional way of life. Both Czechoslovakia and Saxony became a part of the Soviet Bloc and started to develop centrally planned economies. This shaped the economic development for next more than 40 years. The socialist centrally planned economy put an accent to heavy industry. The area was suitable for heavy industry concentration mainly due to brown coal deposits. Coal mining, coal power plants and other facilities like refinery shaped the local economic development as well as the face of the landscape. Socialist economic progress in these regions was no more oriented on production with a higher value added. Total population exchange also brought new settlers needed for mining and heavy industry, also low-skilled workforce. Such settlement was not able to continue in local traditions, the social problems deteriorated, and cultural devastation occurred. (23)

Strong accent on industrialization has caused also serious environmental problems at both sides of the border. The area became unattractive and was perceived just as an area useful for exploiting natural resources. Outflow of educated and skilled workforce socially isolated some areas. (23)

New challenge appeared with the collapse of centrally planned economies. The need to revitalise inefficient and environment damaging technologies and the whole industrial structure was evident at both sides of the border. Economic decline affected all transition economies. The reunification of Germany brought a significant help to former East German federal states in form of financial support, which was the case of Saxony as well. Economic transformation in the Czech Republic had to do without any comparable support. (25)

Despite above described structural changes during the centrally planned economy and turn to production with low value added, some specific high value-added manufacturing survived, e.g. glass industry. Both sides of the border became famous worldwide for the production of musical instruments. Unfortunately, troubles in this highly appreciated manufacturing in the Czech Republic appeared in recent years. (26) (27)

Considering the European cohesion policy, Saxony became a part of European Communities already in 1990, that means the federal state could participate in cohesion policy almost from the begin since the essential reforms in 1988. The Czech Republic joined the EU in 2004, also one and half decade later, and could fully participate in the whole programming period since 2007.

Moreover, after the reunification of Germany, the regions of the former German Democratic Republic were strongly funded by the federal budget of Germany. The costs for the reunification are estimated at 2 trillion euros. This fact had a significant impact on the position of the eastern German regions, because many important investments (e.g. transport infrastructure) were realized independently on the EU cohesion policy. (25)

4.2 Regions for Implementation of the Cohesion Policy

For the purposes of the cohesion policy implementation, which is based on a regional approach, there was necessary to create regional units which are similar and comparable. For statistical monitoring, a system of a common nomenclature of territorial units for statistics (so called NUTS) was developed. The hierarchical system where certain NUTS level is

created by several lower NUTS levels was established in 1988, also in the time of an important structural reform. There was evident that to create quite new territorial units with new borders would cause enormous complication with respect to existing systems of data collection. Therefore, NUTS regions follow borders of existing administrative units in each state respecting given criteria. If there are no appropriate administrative units, the NUTS unit is created by aggregation of two or more lower administrative units. The recommendations for NUTS population size are as follows:

Table 3: NUTS levels - recommended population size of the regions

Level	Characteristics	Minimum	Maximum
NUTS 1	major socio-economic regions	3,000,000	7,000,000
NUTS 2	basic regions for the application of regional policies	800,000	3,000,000
NUTS 3	small regions for specific diagnoses	150,000	800,000

Source: own elaboration based on (28) (29)

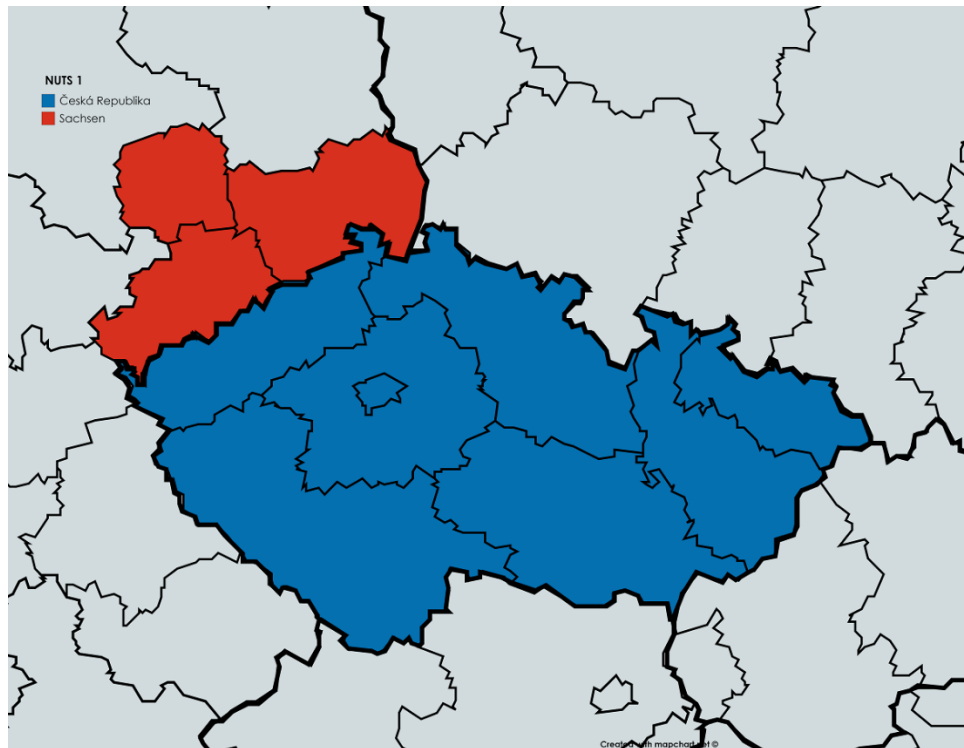
The analytical part of the thesis will therefore include comparisons at comparable NUTS levels, which (in the case of the Czech – Saxony border area) involves the level NUTS 1. Although NUTS levels should be more or less comparable, it is not exactly the case of the Czech Republic and Germany. In the Czech Republic, the NUTS 1 level involves the whole country covering the area of nearly 79 thousand square kilometres with more than 10 million inhabitants. In Germany, the NUTS 1 Saxony covers just less than 19 thousand square kilometres counting about 4 million inhabitants (see Table 4):

Table 4: Basic facts about selected NUTS 1 regions

Name of the NUTS 1 Region	Area (km ²)	Total Population	Population Density (person per km ²)
Česká republika	78,868	10,553,843	136.6
Sachsen	18,420	4,084,851	221.0

Source: own elaboration based on (30)

Image 1: Map of selected NUTS 1 regions



Source: (31)

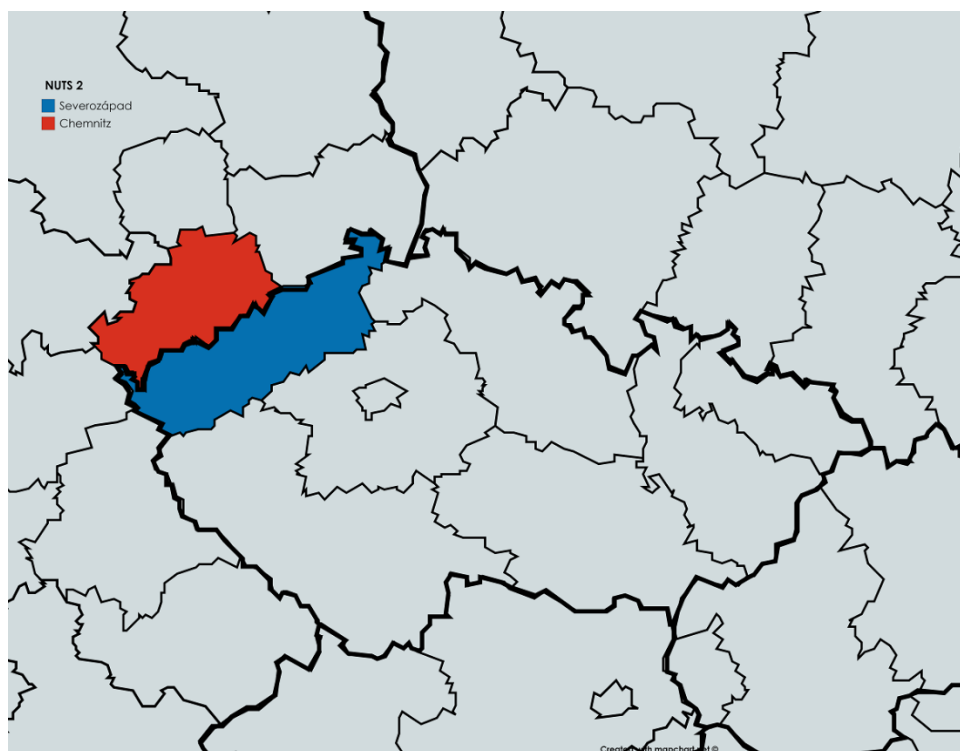
The NUTS 1 in the Czech Republic consist of 8 NUTS 2 units, in Saxony are that only 3 NUTS 2 units. The level NUTS 2 makes regions in both states better comparable, however differences in size remain. In the Czech Republic, an average NUTS 2 size reaches nearly 10 thousand square kilometres, the average area of this unit in Saxony exceeds slightly 6 thousand square kilometres (see Table 5). To obtain more specific picture about the border region, the analysis will also take into account data from selected areas irrespective of comparable NUTS levels which aims to highlight specific problems of the region.

Table 5: Basic facts about selected NUTS 2 regions

Name of the NUTS 2 Region	Area (km ²)	Total Population	Population Density (person per km ²)
Severozápad	8,649	1,120,654	132.4
Chemnitz	6,524	1,465,612	224.5

Source: own elaboration based on (30)

Image 2: Map of selected NUTS 2 regions



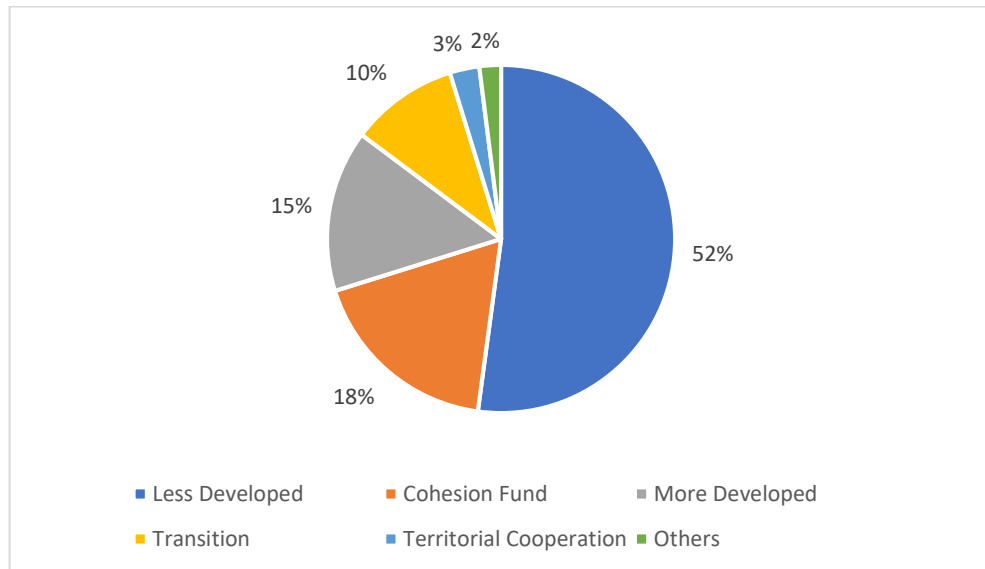
Source: (31)

The European cohesion policy, which is based on solidarity, has an aim to differentiate support to European regions depending on their development needs measured by their economic development. The funding is provided by structural funds, nowadays called European Structural and Investment Funds, which are realised through operational programmes. (18)

4.3 Cohesion Policy Funding

European cohesion policy aims to support an overall harmonious development in EU – regions. This is based on financial re-allocation which puts an accent on less developed regions. That means, that less developed regions can obtain a higher share of EU-funding to support development projects and to eliminate existing economic, social or environmental shortages. In the current programming period (2014-2020), the EU cohesion policy shall allocate approximately € 352 bn., from which 52 % is earmarked for less developed regions, 10 % for transitions regions, 15 % for more developed regions but the largest territory. The Cohesion Fund represents about 18 % of the total financial allocation. The remaining percentages are spent for European Territorial Cooperation and Technical Assistance. Less developed regions are mostly regions of Eastern and Southern Europe (see Figure 1).

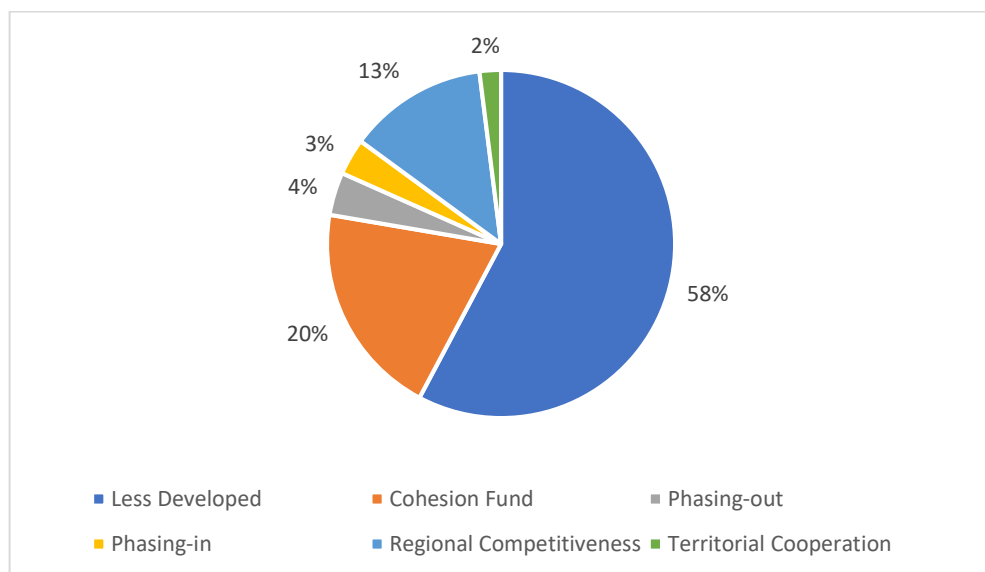
Figure 1: Cohesion policy funding 2014-2020



Source: own elaboration based on (5)

Similar situation can be observed also in the previous financial period 2007-2013 which is analysed more in detail. The Convergence regions (correspond with less-developed regions in current period) amounted more than 82% of the total cohesion expenditure (including Cohesion Fund which proportion counted 20 %). Regional Competitiveness and Employment amounted 16 % and European Territorial Cooperation remaining approximately 2.5 % (see Figure 2). Expenditures from this period focused on two neighbouring regions in the Czech Republic and Germany are analysed below in detail.

Figure 2: Cohesion policy funding 2007-2013



Source: own elaboration based on (18)

Due to different size of the Czech and German NUTS regions, the total amounts allocated are not directly comparable, however decomposing their structure can reveal an important information. The Czech Republic as NUTS 1 region was supported within the programming period 2007-2013 by € 24,246 million. The neighbouring NUTS 1 region Saxony obtained during the same period € 4,562 million, however its area and population is much smaller, as mentioned above. At the NUTS 2 level, all regions in the Czech Republic (with an exception of the capital Prague) were categorized as less developed (Convergence), also their average GDP per capita did not reach 75 % of the EU-average. In Saxony, it was the case of two NUTS 2 regions – Chemnitz and Dresden, the third one (Leipzig) was that time already classified as phasing-out region¹. (33)

According to Council Regulation 1083/2006, the ceilings applicable to co-financing rates were set for member states and relevant funds. For the Czech Republic, the co-financing rate for ERDF, ESF as well as Cohesion Fund was 85% of eligible expenditure in Convergence regions; in Germany the co-financing rate (applicable for ERDF and ESF) was 75% of eligible expenditures. To utilize a maximum possible share of EU-funds was confirmed by relevant official documents (OP Saxony, Thematical OP, ROP Severozápad) both in the Czech Republic and Saxony. (33) (34)

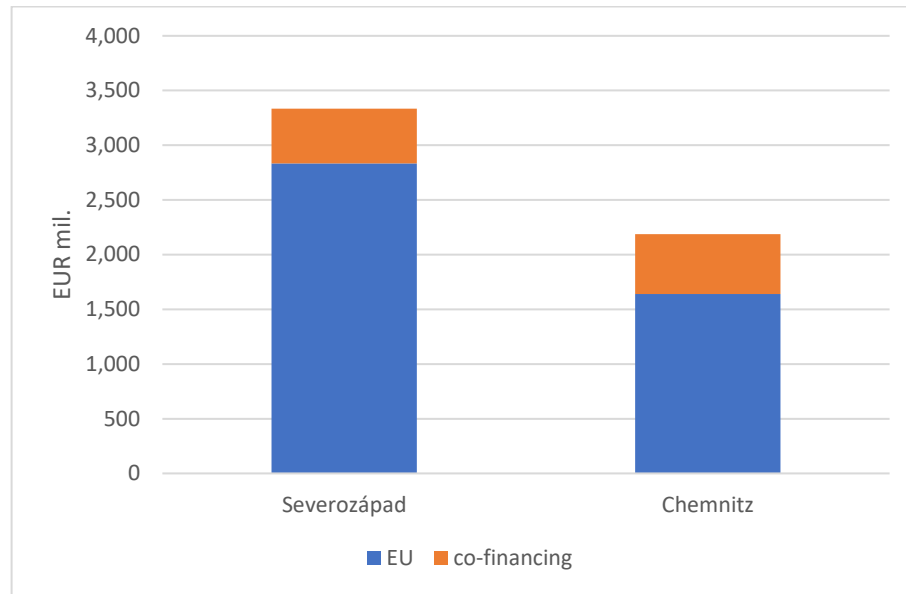
4.4 Cohesion Policy Allocations by Structural Funds

Support within the EU cohesion policy involved all eligible financial resources (funds) in analysed regions. That means, ERDF and ESF in both regions, in region Severozápad also Cohesion Fund which was eligible in the Czech Republic but not in Germany. Total allocated amounts can be better compared at this level, because both regions are not so extremely different in terms of number of inhabitants (1.1 million in Severozápad and 1.5 Chemnitz). (33)

The Figure 3 models proportions of EU-funding and national co-financing in NUTS 2 regions Severozápad and Chemnitz:

¹ Phasing-out system was applied to regions which would have been eligible for funding under the Convergence objective if the threshold of 75 % of GDP had been calculated for the EU at 15 and not at 25. (32)

Figure 3: Cohesion policy funding and national co-financing 2007-2013



Source: own elaboration based on (33)

A subsequent analysis will take into account only the contribution of the EU-funds because the data are mutually comparable. Total payments of € 2,834 million to Severozápad is much higher than € 1,640 million to region Chemnitz. A decomposition of financial resources can help to understand such difference in regions of the same classification. Another information useful for an analysis can bring a conversion into per capita basis payments. Differences are evident. An average expenditure per capita in region Severozápad amounted € 2,529, in region Chemnitz it was € 1,119. The role of individual funds is described below. (33)

4.4.1 European Regional Development Fund

ERDF was the most important financial instrument in both regions during the observed period. This may be expected generally in most regions with respect to total ERDF expenditures (which are the highest in the context of the whole EU cohesion policy) and subject of support (infrastructural investments etc.). Even though the proportion of the ERDF on total allocation² was different (64 % in Severozápad and 74 % in Chemnitz), the amount was nearly the same (€ 1,293 mil. in Severozápad and € 1,212 mil. in Chemnitz). (33)

² The total allocation does not include the Cohesion Fund as it is applicable only in the Czech Republic.

4.4.2 European Social Fund

Another situation has been experienced in the case of the ESF. In the above-mentioned comparison, ESF contributed 36 % on the total amount in Severozápad, but only 26 % in Chemnitz (the total amount contributed € 719 mil. in Severozápad and € 428 mil. in Chemnitz). Stronger orientation on social problems in the region Severozápad can be explained by stronger accent of regional management on the issues like relatively high level of unemployment in conditions of the Czech Republic (as explained in detail in chapter 4.9) and unfavourable educational structure. (33) (35)

4.4.3 Cohesion Fund

In addition, the Cohesion Fund allocation must be taken into account in the region Severozápad. This adds another € 821 million to the total amount of allocated funds in the region Severozápad in the programming period 2007-2013. These additional funds contributed mostly to the development of transport infrastructure and environmental investments. (33)

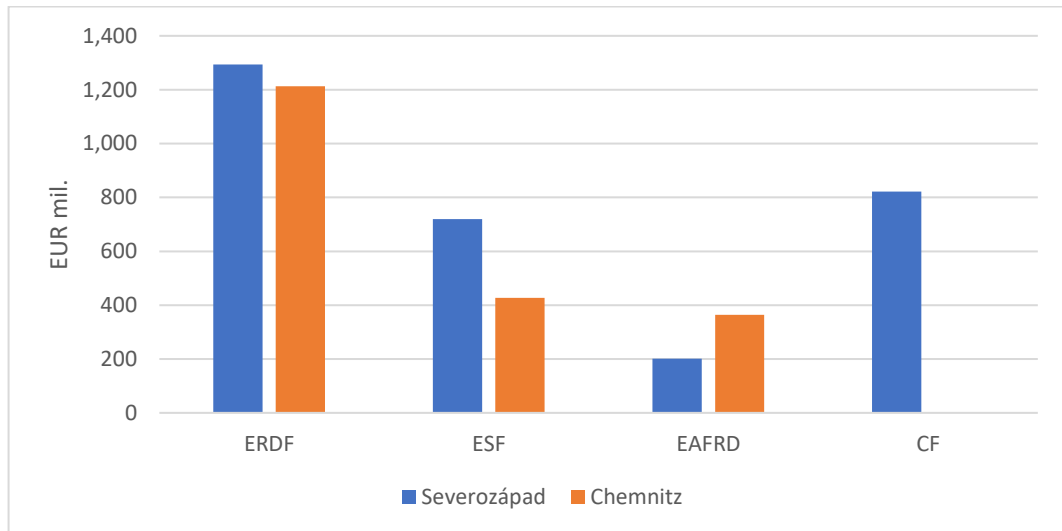
4.4.4 European Agricultural Fund for Rural Development

Regional development in both regions was also affected by support of the EAFRD in the programming period 2007-2013. Moreover, this fund is since the beginning of the new programming period 2014-2020 part of ESIF of the EU cohesion policy and, therefore, it is necessary to take its contribution into account. This fund supported development mainly in rural areas. (6)

On the contrary of the other funds, the EAFRD allocation was more significant in Chemnitz region, where the fund contributed 18 % to the total³, but 9 % in region Severozápad. This can be explained partly by industrial character of the region Severozápad. (33)

³ For the purpose of comparison of EAFRD proportion the total allocation consists of EAFRD + ERDF + ESF. Cohesion fund is not included.

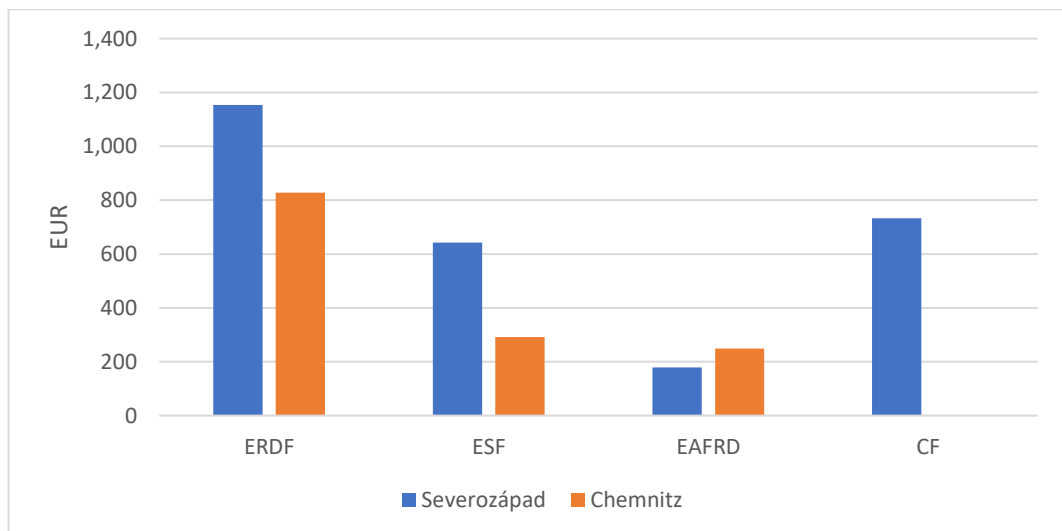
Figure 4: Funds' allocation in regions Severozápad and Chemnitz 2007-2013



Source: own elaboration based on (33)

Expressed on per capita basis, there are not significant differences in the proportions. However, there is evident that the differences are higher in the case of ERDF and ESF in the region Severozápad, while in the case of EAFRD the difference is lower. This is caused by lower number of inhabitants in region Severozápad.

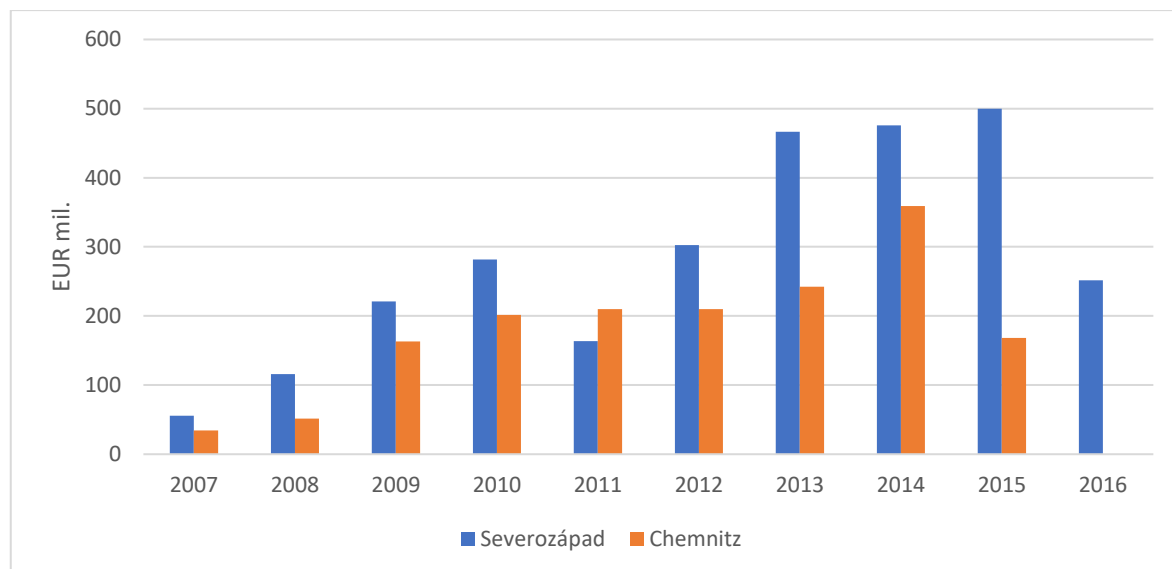
Figure 5: Funds' allocation per capita in regions Severozápad and Chemnitz 2007-2013



Source: own elaboration based on (33)

As mentioned above, the real impact of the cohesion policy is evident with some delay. It is due to the fact, that the rule N+2/N+3 of the cohesion policy enables to receive subsidies after the end of the programming period. Figure 6 shows, that the post-period funding represented very important share on the total allocation.

Figure 6: Cohesion policy annual funding of the programming period 2007-2013, including post-period funding



Source: own elaboration based on (33)

4.5 Cohesion Policy allocation by Operational Programmes

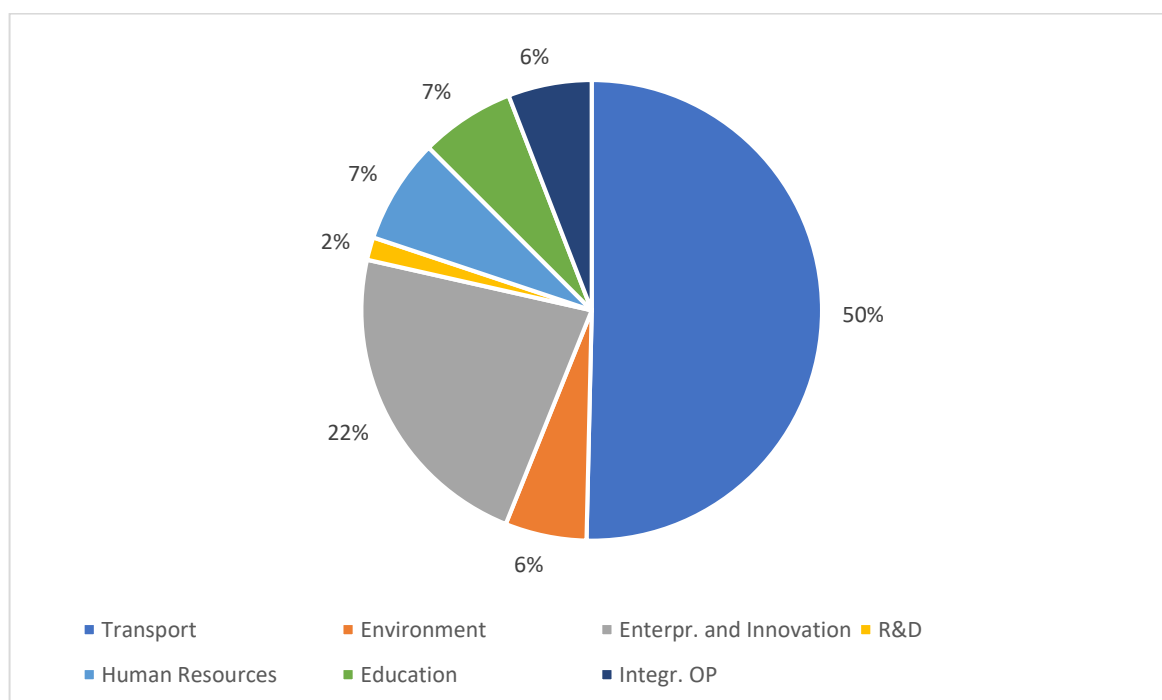
Convergence regions in the Czech Republic were funded in the programming period 2007-2013 by several operational programmes. There were 8 thematic operational programmes: Transport, Environment, Enterprises and Innovation, Research and Development for Innovations, Human Resources and Employment, Education, Integrated Operational Programme and Technical Assistance covering the Czech Convergence regions territory (also the whole Czech Republic except Prague) and seven regional programmes (for seven NUTS 2 Convergence regions) including the Regional Operational Programme Severozápad (ROP Severozápad). The idea to establish regional operational programmes aimed to create specific development strategies meeting all regional needs and respecting special regional characteristics. In the German NUTS 1 level (Saxony), the operational programmes for convergence regions were designed with respect to source of funding – Operational Programme Sachsen ERDF, Operational Programme Sachsen ESF and Sachsen Rural Development Plan (funded by EAFRD). Identical approach was used also in other German NUTS 1 Regions (Federal States). (36)

4.6 Funding in the Czech Republic

4.6.1 Thematic Operational Programmes in Severozápad

Total funding through the cohesion policy in the region Severoápad was € 2,834 mil. Approximately 73 % were realized through thematic operational programmes. All of them were applied also in other Czech NUTS 2 regions, however, their proportion was partly different. The most important thematic operational programme in the region Severoápad was the programme Transport which covered the greatest amount of support (nearly 50 % of all thematic operational programmes). The second most important was the programme Enterprises and Innovation focusing on economic development. Very low proportion was noted in the case of Research and Development (only 1.6 % in comparison with almost 10 % of the Czech Republic average). (33) (36) (38)

Figure 7: Thematic OP in the region Severozápad 2007-2013



Source: own elaboration based on (38)

Note: Technical assistance is not involved, because the support was spent mostly in Prague (administration at relevant ministries)

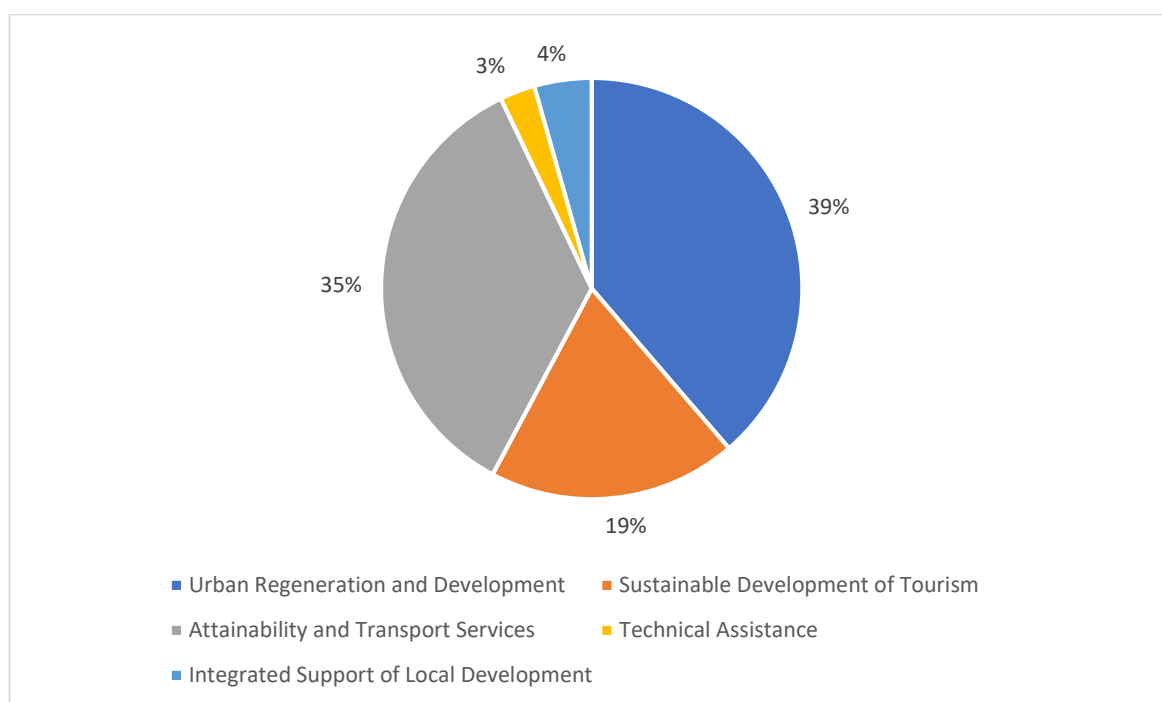
Note: The source provides only interim data, therefore the final results could slightly differ.

4.6.2 Regional Operational Programme Severozápad

The Regional Operational Programme Severozápad is the only operational programme designated for the appropriate NUTS 2 region. Its expenditures amounted approximately € 561 million, which is about 20 % of the total cohesion policy support in the region. Therefore, it can be concluded that the programme respecting regional needs and specifics did not play a crucial role in development of the region Severozápad. (36)

Main goals of the Regional Operational Programme Severozápad were divided into five so-called priority axes: Urban Regeneration and Development, Sustainable Development of Tourism, Attainability and Transport Services, Technical Assistance and Integrated Support of Local Development. Figure 8 shows the proportion of the priority axes:

Figure 8: Priority axes of the ROP Severozápad 2007-2013



Source: own elaboration based on (37)

There is worth to mention that comparing real payments with approved resources (planned funding), the Regional Operational Programme Severozápad reached the lowest ratio (73.5 %) among all other regional operational programmes. (regions Jihovýchod, Severovýchod, Střední Čechy, Střední Morava and Moravskoslezsko were able to use almost all approved funds). That means, the financial allocation for the region Severozápad could be by about € 200 million higher in case of full exploitation. (36)

4.6.3 Cross-border Cooperation

Another programme designed to support overall development on Czech-Saxony border was launched within another cohesion policy objective – European Territorial Cooperation, known also as Interreg. Common projects of both regions were implemented within this objective. Although the financial allocation was marginal (€ 197 mil.), the programme is important in solving common challenges in the border regions and contributes to economic and social convergence in areas that often face common specific problems of border peripheries. (39)

During the programming period 2007-2013 programme INTERREG III A - Free State of Saxony - Czech Republic was applied. The cross-border cooperation supported environmental projects, projects focused on maintaining cultural heritage, transport links, security, educational, training and language centres, tourism and many others, mostly soft projects. Despite lower share within the EU cohesion policy support, implemented projects became mostly really visible for the public. There is also worth to note that the beneficiaries were able to spend all available funds intended for this purpose. (36) (39)

As mentioned above, the border area between the Czech Republic and Saxony experienced difficult times in the past. Cross-border cooperation aims not only to support economic and social development, but it helps to eliminate a negative legacy of the past. The programmes have also the objective to eliminate prejudices insecurities and to build up personal contacts between people from both sides of the border. (39)

4.7 Funding in Saxony

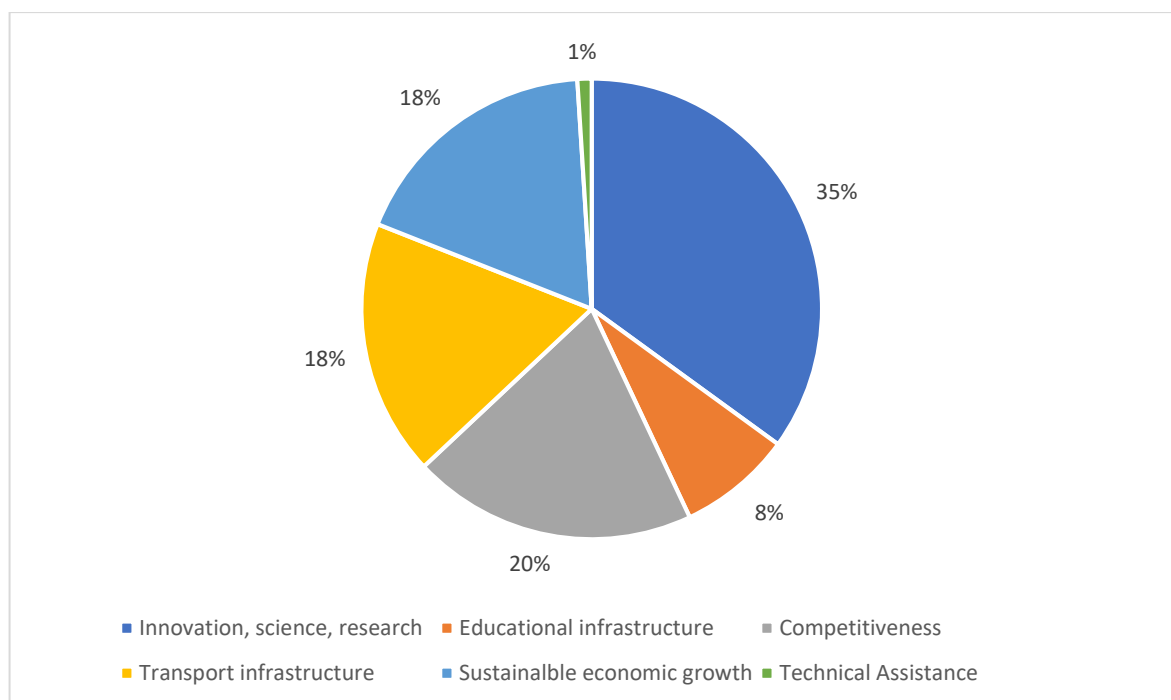
The system of operational programmes in Saxony was simpler in comparison with the Czech one. Support of individual measures in the Saxon NUTS 2 regions was regulated by two operational programs: OP Sachsen ERDF and OP Sachsen ESF. It is necessary to mention, that both operational programmes in Saxony reached the ration between real payments and approved resources approximately 97 %. (36)

4.7.1 OP Sachsen ERDF

The operational programme Sachsen ERDF consisted of 5 main axes: Strengthening Innovation, Science, Research; Improving Educational Infrastructure; Increasing the Competitiveness of the Commercial Economy; Improvement of Transport Infrastructure and

Expansion and Improvement of the Infrastructure for Sustainable Economic Growth. (see Figure 9). A small share was used for technical assistance as typical for all operational programmes. The highest proportion is evident in the case of the axis ‘Strengthening Innovation, Science, Research’. It can be assumed that higher shares have been spent in cities like Dresden, however the region Chemnitz did not stand aside. Just the ERDF contribution under this axis of almost € 37 million for the Technical University Chemnitz indicates, that the importance of science, research and innovations was higher than in the region Severozápad. Comparing to the region Severozápad, lower proportion was used for transport infrastructure development; as mentioned above, such investments have been mostly done after the German reunification. There is also evident a stronger accent on sustainable economic growth (specific axis ‘Expansion and Improvement of the Infrastructure for Sustainable Economic Growth’). (40)

Figure 9: OP Sachsen ERDF 2007-2013



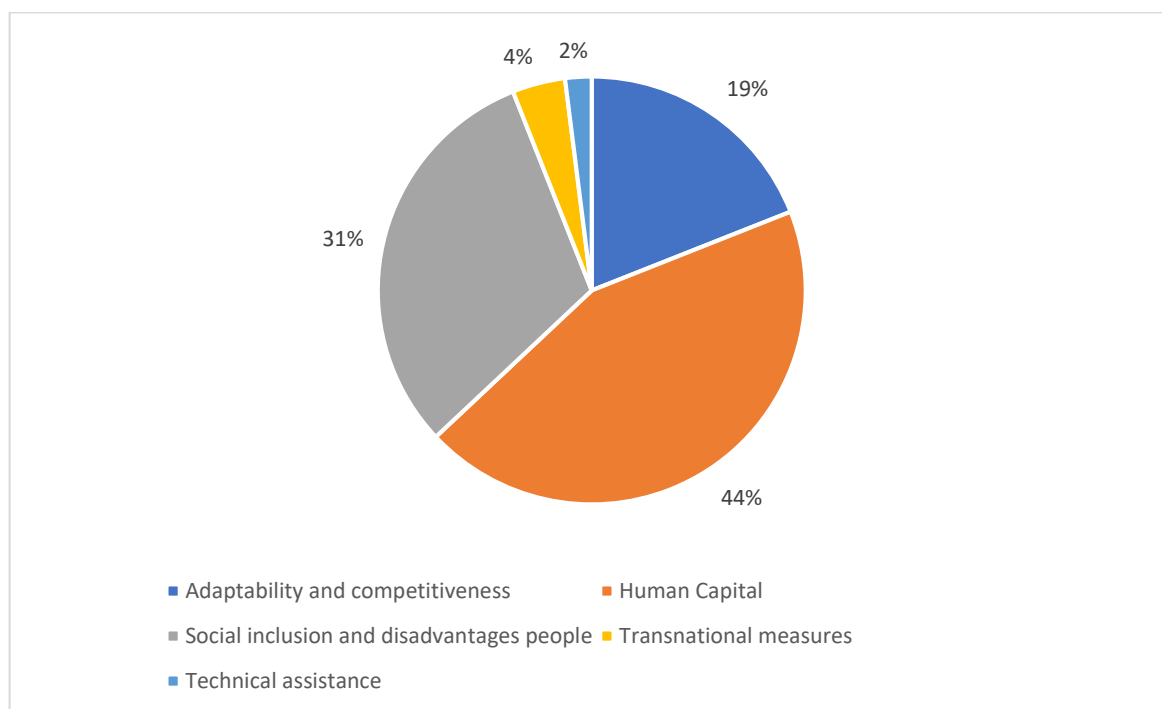
Source: own elaboration based on (40)

4.7.2 OP Sachsen ESF

The operational programme Sachsen ESF consisted of 3 main axes: Increasing the Adaptability and Competitiveness of Employees and Companies; Improvement of Human Capital and Improving Access to Employment and Social Inclusion of Disadvantaged People. Lower amounts were intended to transnational measures and technical assistance.

As evident from the Figure 10, the highest share represented the axis Improvement of Human Capital. There is also worth to note that the axis Improving Access to Employment and Social Inclusion of Disadvantaged People was an important item within the total ESF support.

Figure 10: OP Sachsen ESF 2007-2013



Source: own elaboration based on (41)

4.7.3 EAFRD

In addition, regional development was supported also by the EAFRD under rules of the Rural Development Programmes. As evident from previous analysis, the proportion of this fund on total EU-funding was higher in the region Chemnitz than in Severozápad.

4.8 Economic Development in Regions Severozápad and Chemnitz

The aim of the EU cohesion policy is to reduce disparities between European regions and to contribute to their convergence. Following analytical part aims to find out if the EU cohesion policy applied in regions Severozápad and Chemnitz in the programming period 2007-2013 has brought some visible and measurable effects on economic and social development in monitored regions. The economic development in regions at relevant NUTS levels is

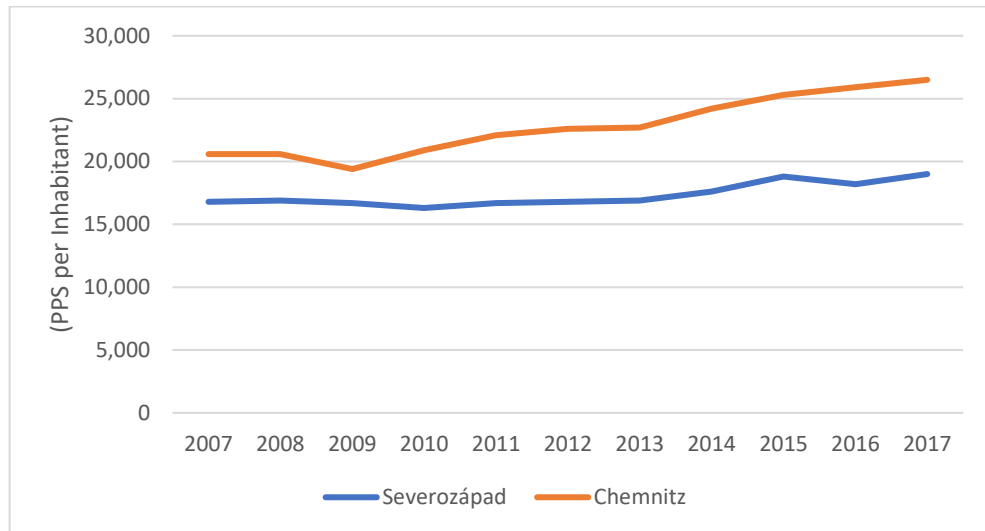
expressed as the proportion of GDP per capita in PPS⁴ of a specific region in relation to the average of the whole European Union⁵. It enables to state which regions reach over-average or below-average economic development. Support of relevant development projects shall also result in reducing disparities among regions, thus, to reach an economic convergence.

To analyse specific situation in the Czech-Saxony border region, NUTS 2 levels Severozápad (Czech Republic) and Chemnitz (Germany) may be used. Both belonged to below-average regions. The reference period includes years from 2007 (beginning of the programming period 2007-2013) to 2017 (last available data). Figure 11 shows, that economic development measured by GDP per capita PPS reached 16,800 in region Severozápad in 2007 which was the second lowest level among all 8 Czech NUTS 2 regions. Also, region Chemnitz was with 20,600 per capita PPS less developed compared to the others (Dresden and Leipzig). All NUTS 2 regions (8 in the Czech Republic and 3 in Saxony) experienced an increase in average GDP per capita by 2017. However, region Severozápad experienced the slowest growth – by 13.1 % from 2007 to 2017 – among other Czech regions. The region Chemnitz which GDP per capita was still the lowest in Saxony in 2017 experienced a fast growth – by 28.6 %. That means, that Chemnitz reported the third largest growth from all regions from the Czech Republic and Saxony (after regions Střední Morava with 32.5 % and Leipzig with 28.7). (43)

⁴ 'Purchasing power parities (PPPs) are indicators of price level differences across countries. They indicate how many currency units a particular quantity of goods and services costs in different countries. PPPs can be used as currency conversion rates to convert expenditures expressed in national currencies into an artificial common currency (the Purchasing Power Standard, PPS), thus eliminating the effect of price level differences across countries.' (42)

⁵ After the withdrawal of the United Kingdom from the European Union the source of the data (Eurostat) has recalculated the data about average GDP per capita taking EU27 (without the United Kingdom) as the base. Therefore, it is possible that older data do not correspond with the category in which specific region was placed. The objective of this comparison is not to classify the regions into particular category. The goal is to compare GDP per capita development in selected regions.

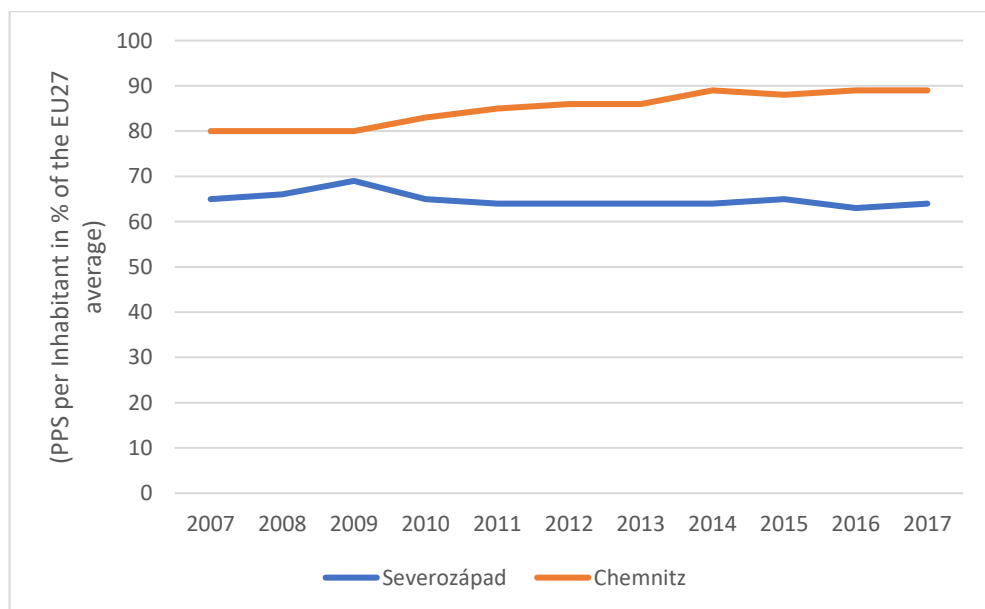
Figure 11: Regional GDP in regions Severozápad and Chemnitz



Source: own elaboration based on (43)

A similar conclusion can be drawn if comparing GDP per capita PPS as percentage of the EU-average. The region Severozápad did not experienced any shift towards the EU-average. The GDP per capita reached only 64% of the EU-average in 2007, the same as in 2017. The region Chemnitz moved from 80% of the EU-average in 2006 to 89% in 2017. (43)

Figure 12: Regional GDP in regions Severozápad and Chemnitz



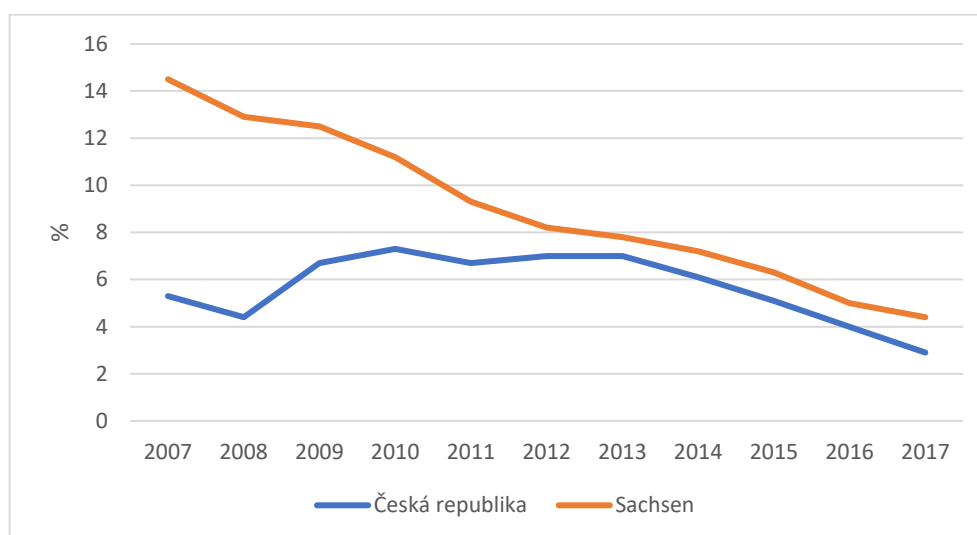
Source: own elaboration based on (43)

To learn more about reasons for such development, other specific data must be analysed.

4.9 Unemployment in Regions Severozápad and Chemnitz

Considering unemployment rate at the beginning of the programming period 2007-2013, the situation was significantly better in the Czech Republic than in Saxony. Whereas in the Czech Republic the unemployment rate was 5.3 %, Saxony reported 14.5 %. The Czech Republic experienced decrease in unemployment until 2008. After economic crisis in 2008, unemployment rate went up in the Czech Republic, while Saxony experienced only a slowdown in decreasing. After 2013, the unemployment is decreasing again in both observed NUTS 1 areas. Despite of the worse tendency after 2008, the unemployment rate in the Czech Republic is still lower than in Saxony. (44)

Figure 13: Unemployment in NUTS 1 regions Česká Republika and Sachsen



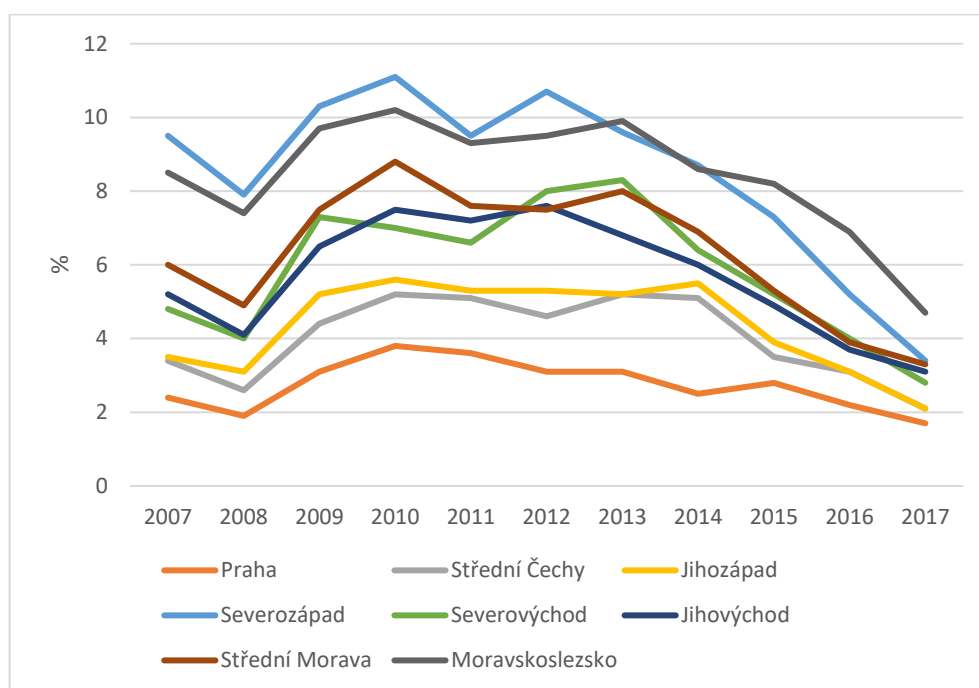
Source: own elaboration based on (44)

It is also necessary to mention, that the Czech Republic and Germany report the lowest unemployment rate in the EU in the long time horizon, specifically the Czech Republic the lowest (2.9 % in 2017) and Germany the second lowest (3.8 % in 2017). In the observed period from 2007 to 2017, the unemployment rate decreased by 2.4 % in the Czech Republic and by 10.1 % in Saxony. As the initial position of the Czech Republic was better in 2007, it is an obvious reason for lower marginal decrease of unemployment. (45)

When comparing specific regions at the NUTS 2 level (see Figure 14 and Figure 15), it is possible to observe that all regions report similar trends which are corresponding to the trends of the NUTS 1 regions described above. Despite considerable differences between Czech regions, all of them were affected by the crisis in 2008 and all of them also

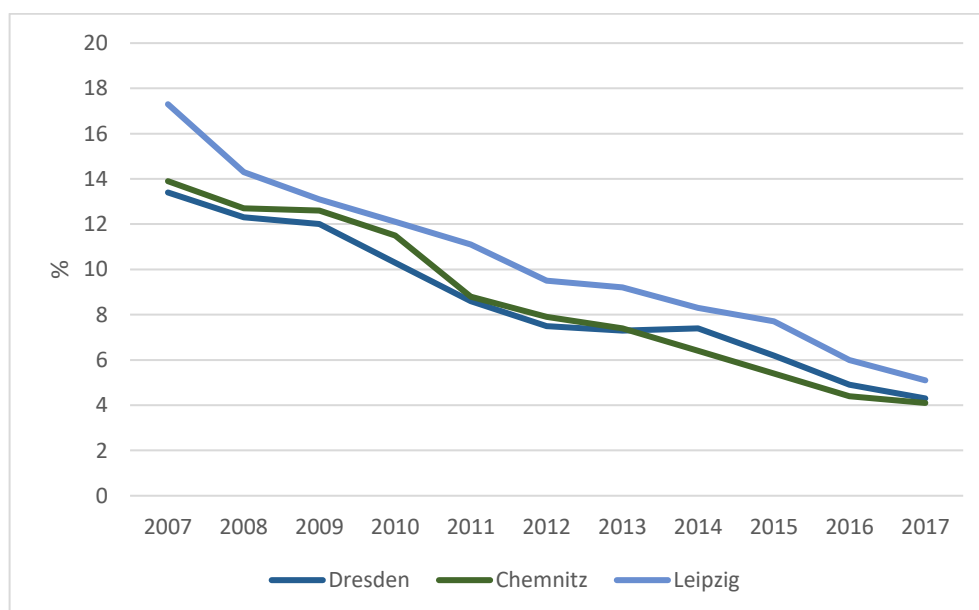
experienced increase of unemployment followed by moderate decrease. The tendency analogous to the situation in the entire NUTS 1 region could be observed in regions of Saxony as well, however, the regional differences are significantly smaller compared to the Czech regions. (44)

Figure 14: Unemployment in NUTS 2 regions of the Czech Republic



Source: own elaboration based on (44)

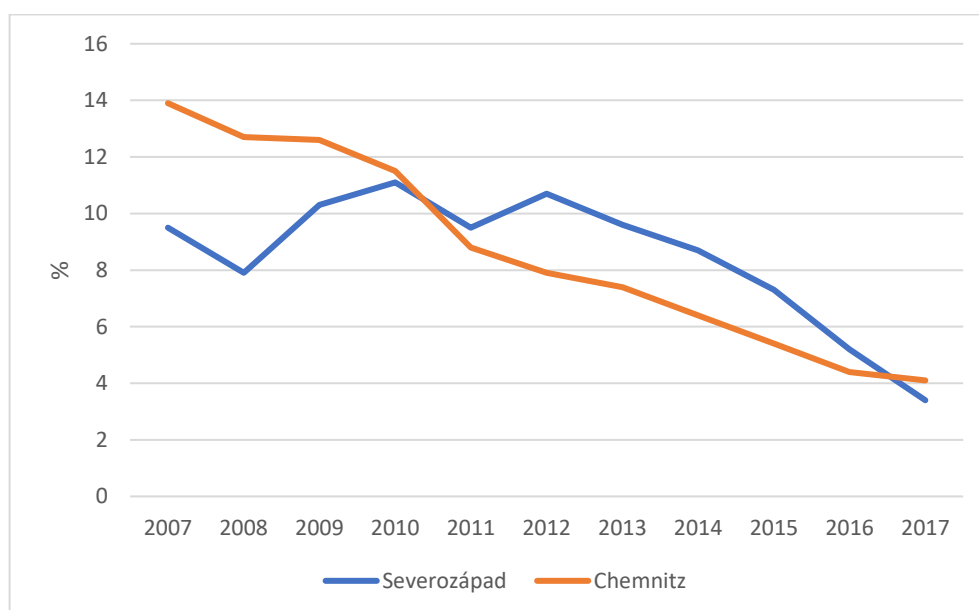
Figure 15: Unemployment in NUTS 2 regions of Saxony



Source: own elaboration based on (44)

In 2017, regions Severozápad and Chemnitz had relatively high unemployment rate (in case of Severozápad it was the highest unemployment rate in all of the Czech regions). However, they both experienced high marginal decrease in unemployment from 2007 to 2017. In case of region Severozápad it was even the highest marginal decrease all over the regions of the Czech Republic. Moreover, in 2017, the region Severozápad was overleaped by region Moravskoslezsko, which reported the highest unemployment rate in the Czech Republic. (44)

Figure 16: Unemployment in NUTS 2 regions Severozápad and Chemnitz



Source: own elaboration based on (44)

4.10 Tertiary Education in Regions Severozápad and Chemnitz

In addition, the analysis is accompanied by tertiary education in both regions. The reason for this analysis is that the level of education has an impact both on social and economic situation and both regions are facing specific problems in attracting people with tertiary education.

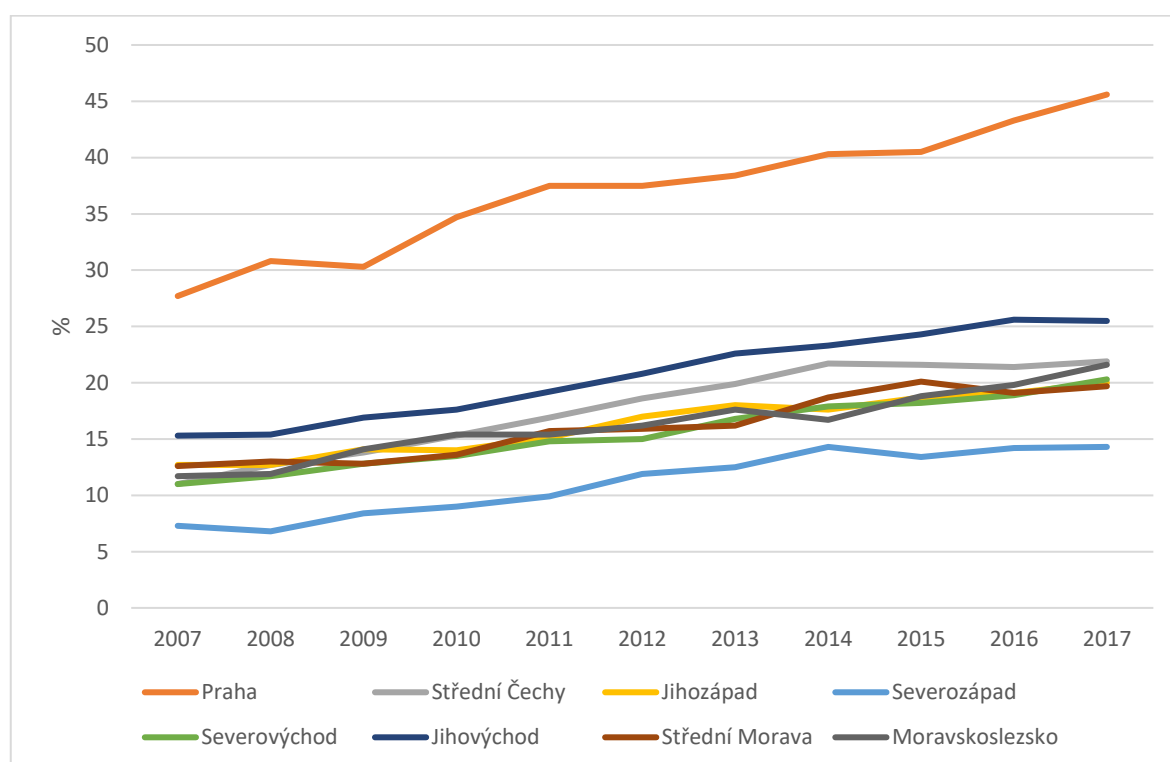
Just like the situation with unemployment, also the proportion of the population with tertiary education is strongly affected by the tendency of the state in which particular region is located. Even though the proportion is different in every region, all of them reported similar development during the observed time period.

Generally said, the proportion of the population with tertiary education is higher in Saxony than in the Czech Republic. However, during the observed period the differences lowered

significantly. Whereas in 2007 the proportion of population with tertiary education was 32.3 % in Saxony and 13.7 % in the Czech Republic, in 2017 it was 29.1 % in Saxony and 23.9 % in the Czech Republic. Saxony experienced small decrease while the Czech Republic reported an increase by more than 10%. (44)

In the Czech Republic, all regions experienced growth in the percentage of population with tertiary education. Apart from Prague (with very high values) the regions do not report high difference (see Figure 17).

Figure 17: Population aged 25-64 with tertiary education (ISCED 2011) in NUTS 2 regions of the Czech Republic

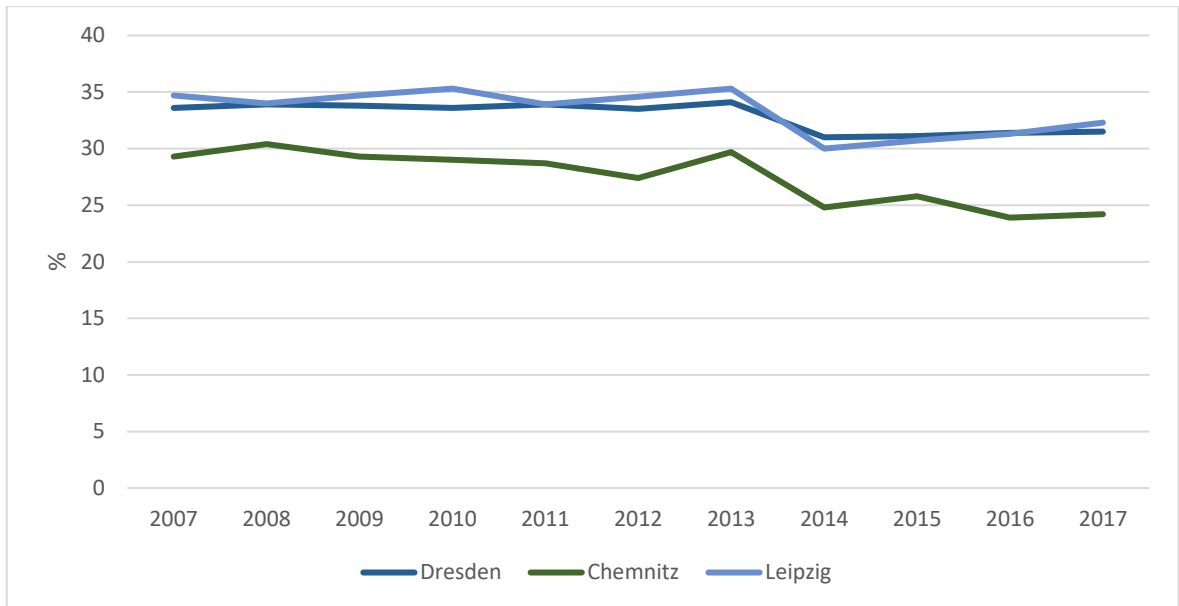


Source: own elaboration based on (44)

The percentage of population with tertiary education in the Region Severozápad was the lowest in the whole Czech Republic during the observed period. However, evenly to the other regions the tendency is increasing.

Similarly, the region Chemnitz reported the lowest percentage of population with tertiary education during the observed period (see Figure 18). Simultaneously, it experienced the largest decrease (by more than 5 %). (44)

Figure 18: Population aged 25-64 with tertiary education (ISCED 2011) in NUTS 2 regions of Saxony



Source: own elaboration based on (44)

5 Conclusion

Despite many similarities, which border, and neighbouring regions have in common, the fact that both observed regions are located in a different state means significant difference in the development and in approaches to implementation the EU cohesion Policy. The basic analysis of economic development in both regions shows that the cohesion policy funding does not necessarily mean that supported regions will convert to the EU-average, which is the case of the region Severozápad.

Two selected regions (Severozápad and Chemnitz) belonged in the beginning of the programming period 2007-2013 to the same objective (Convergence). However, both of them could use slightly different support. The Region Severozápad is located in the Czech Republic which is eligible to use the support from the EU Cohesion Fund. Saxony does not have this option because the entitlement to the support from the EU Cohesion Fund is given on the state (NUTS 0) level. By contrast, Region Chemnitz and the whole Saxony was supported by the resources of Federal Republic of Germany as the western part is economically stronger than the former German Democratic Republic.

Another difference was observed at the usage of funding. Whereas the missing basic infrastructure in the Czech Republic and Severozápad caused, that large amount of funding went into transport investments, in Saxony and Chemnitz, there is no need to invest large amount into such areas and the funding can be used for another purposes, e.g. research and innovation, which is specifically in Severozápad very low.

Some disadvantage for potential beneficiaries could be a complicated system of operational programmes in the Czech Republic in the programming period 2007-2013. Whereas in Saxony, the operational programmes are distinguished according to the particular fund, in the Czech Republic, the system of thematic operational programmes and regional operational programmes was applied. They were governed by different ministries which made the orientation more difficult. Considering the Regional Operational Programme Severozápad, relatively inefficient subsidies receiving could be observed. The real payments reached only a ratio of 73.5 % of the planned payments (in comparison with operational programmes in Saxony with approximately 97 %).

Dealing with the GDP of the regions (specifically GDP PPS per inhabitant), both regions reported small decrease in absolute values. Nevertheless, speaking about the values in % of EU 27 average, region Severozápad reported even small decrease. Region Chemnitz experienced a small increase, however, the increase led to the fact, that region Chemnitz overlapped the threshold of less developed regions and for the programming period 2014-2020 it has been classified as transition region.

The unemployment rate and the proportion of population with tertiary education can illustrate, how the regional performance is affected by national economies. Although both observed regions were economically weaker than other regions (according to GDP PPS per inhabitant) they did not reported any specifics in the development of the unemployment rate or the proportion of population with tertiary education. The trends were in both cases similar to the trends of the other regions of particular state. There is evident that state policies affect the development much more than other factors.

The cross-border cooperation was considered as important initiative despite low amount of support by funding. The social impact is significant as the border area between the Czech Republic and Saxony experienced many changes and difficulties especially during the 20st century and now the area needs to rebuild interrupted contacts. Just cross-border cooperation suits for support of such economic activities which are focused on maintaining traditional manufacturing with high value added (like music instruments or glass making) where both regions have similar traditions, and which belong also to a common cultural heritage.

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7 Appendix

Appendix A: The NUTS levels in the Czech Republic

Appendix B: The NUTS levels in Germany

Appendix C: Regional GDP (PPS per Inhabitant)

Appendix D: Regional GDP (PPS per Inhabitant in % of the EU27 average)

Appendix E: Regional unemployment (%)

Appendix F: Population aged 25-64 with tertiary education (ISCED 2011) (%)