

The Lower Silesia Economic Region¹

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¹ This case study is written in the context and according to the guidelines of the EU-financed Eurocap project (www.uni-bamberg.de/sowi/europastudien/eurocap.htm). The second Polish case is the region of Małopolskie (Cracow); therefore, some tables and figures refer to these two regions. The design of the empirical research, the data collection and the empirical field work has been initially coordinated by Vedrana Miljak. Many thanks also to Dominik Syga, who assisted us in this field work and who translated and transcribed the interviews.

1. Introduction

Like all countries in Central and Eastern Europe, Poland has faced a period of intense changes since the end of communism and the beginning of a far-reaching transition period since the early 1990s (Kornai, 1986). One outcome of the political change was the establishment of a new system of regions. In this paper we will focus on the Lower Silesia (in Polish: “Dolnośląskie”) region, one of the newly established Polish regions, which is situated in the South-Western part of the country. We will analyse the current socio-economic situation and the renewal of regional capabilities. While presenting the main assets of the regions, which it brings into the global competition of business locations, we will focus on the question, how the region has renewed its technological, organisational and economic competences so far in order to increase the potential for future economic growth.

This paper is a result of the European Commission funded research project “Social dialogue, employment and territories“. In this context the historic development as well as the current economic, labour market and employment structure of the Lower Silesia region were analysed. This region is especially interested because it is a very interesting example for the restructuring of traditional industrial regions confronted with the challenges of the postsocialist transition and the European integration processes. In addition to the use of openly available statistical and qualitative information on this region, ten interviews with regional experts from science, politics and administration² have been conducted in August and September 2004, in order to analyse the regional development perspectives and respective strategies in detail. The different interviewees were asked how they evaluate the contribution of new regional actors and institutions to the success of local businesses and which kind of contribution is provided by companies in order to renew regional capabilities.

The capabilities of a region depend on the regional companies and their networks as well as on the public and private educational institutions, the research, development and technology transfer facilities and the employee’s, employers’, professional and trade associations. One of the peculiarities of the region is the great impact of traditional industries, such as mining or porcelain production. However, after the collapse of communism the traditional sectors had to be restructured and many people became unemployed. The unemployment rate, ranging as one of the highest rates in Poland at 26 per cent, clearly indicates that this region is still in the

² We conducted ten interviews. Our interviewees belonged to the following organizations: city of Wroclaw, a regional bank, a major regional company, a trade union, a regional employer association, a regional development agency, the regional chamber of commerce, a centre for technology transfer, the office of the regional president and a special regional investment park. .

middle of the restructuring process after the fall of communism and the European integration. Nevertheless, at the same time a movement from resource-intensive to the technological-intensive production can be perceived as well as a considerable change of economic structure into a knowledge based economy. Some of the big car companies like Volkswagen, Volvo or Toyota have settled in the region and the province is engaged in increasing the regional attractiveness for small and medium-sized enterprises. The province has a well-developed industrial infrastructure. The availability of various educational institutions contributes to the huge educational, scientific, research and cultural potentials of the region.

In the following, the emergence of new regional capabilities in the Polish Voivodeship of Lower Silesia is analysed. At first, we will introduce the concept of regional capabilities (2). Then we will briefly explain the main historical developments of the Silesia and the social construction of the Lower Silesia region and its economic identity (3). Subsequently we will analyse the processes in which the industrial capabilities of the region are rebuilt (4). Finally we will analyse the institutional conditions for the successful reconstruction of the Lower Silesia region (5).

2. Economic Region. The theoretical approach

An economic region can be analysed as a societal field which is shaped by the regional companies, regional institutions and identities and individual actors.³ The capabilities of a region are anchored in its organizational capabilities (in its companies, its industrial structure and its patterns of specialisation) and in its institutional structure.⁴ These structures are the „memory“ of a region, the result of path-dependent experiences of cooperation and conflict. These institutional structures have been described by Salais/Storper (1997) as regional orders, as conventions, as “taken-for-granted mutually coherent expectations, routines, and practices“. These institutions (or governance structures, conventions or regional orders) are produced or re-produced in an open, but path-dependent way a) by the transaction-cost-minimising network strategies of enterprises, b) by regional public authorities (especially in federal states) and c) by non-governmental actors (for example trade unions, professional and business associations, NGOs or sometimes even individual actors).⁵ The regional governance structures are crucial for the innovative potential of regions and regional firms, because they are regulating the organizational patterns of work, management and innovation, because they are shaping the inter-organisational patterns of cooperation and competition and because they are regulating the relationships between businesses, science, technology, education and politics.

In the following, we will analyse the impact of companies, public authorities and associations on the governance structure of the Lower Silesian region because it can be assumed that these structures will have a major impact on the competitive strength of this region.

³ “In their most generic guise, such fields are composed of (1) organizations seeking to structure their environments, (2) preexisting rules (i.e., existing institutions) that operate to constrain and enable actors in the arena, and (3) skilled strategic actors who work within organizations to help attain cooperation among disparate groups and interests.” (Fligstein/Stone Sweet 2002: 1211).

⁴ This refers to the concepts of regional innovation systems which has been defined as follows: “Regional innovation system denotes regional clusters surrounded by ‘supporting’ organisations. Basically, regional innovation system consists of two main types of actors and the interaction between them (...). The first actors are the firms in the main industrial cluster in a region including their support industries. Secondly, an institutional infrastructure must be present, i.e., research and higher education institutes, technology transfer agencies, vocational training organisations, business associations, finance institutions etc., which hold important competence to support regional innovation.” (Asheim/Isaksen 2002: 83) In contrast to the cluster concept – which has been defined as “geographically proximate firms in vertical and horizontal relationships involving a localized enterprise support infrastructure with a shared developmental vision for business growth, based on competition and cooperation in a specific market field“ (Cooke 2002: 121) – the relative importance of supporting institutional structures is estimated to be higher.

⁵ In an ideal-typical way, Cooke (1998) has opposed these different forms of coordination as grassroots, network and dirigiste structures of governance (Cooke 1998).

3. The “regional identity”: misfortune and virtue of a border land

3.1 History

Lower Silesia (Dolny Śląsk) is the north-western part of the historic region of *Silesia* (Śląsk) located along the middle Odra River, which today constitutes one of sixteen re-arranged provinces of the Republic of Poland. While being a border land for most of the time, the whole region of Silesia has undergone a history of profound changes throughout the past millennium since it belonged to various empires. In the 9th and 10th century, *Silesia* was subject to the Moravian and then Bohemian rulers covered by today's Czech Republic to the south. From AD 990 onwards it was incorporated into Poland by Mieszko I. and, thus, under the rule of the Polish-speaking Piast dynasty until it became part of the Holy Roman Empire (of German Nations) under the feudal overlordship of the Bohemian Crown in 1348. In 1172 Silesia was split into Lower and Upper parts during the period of Poland's feudal fragmentation. Bolesław the Tall ruled over *Lower Silesia* with the capital in Wrocław and Mieszko Płatynogi over *Upper Silesia* with the capital in Opole. In 1526 the whole territory fall into the hands of the Austrian emperors and was thus annexed to the Habsburg Empire. With the rise and expansion of the Prussian Empire most parts of *Silesia* went under Prussian rule in 1742. It was divided into the districts of Lower Silesia (Niederschlesien), Middle Silesia (Mittelschlesien), and Upper Silesia (Oberschlesien). After World War I, Upper Silesia was divided between Germany, Poland and Czechoslovakia. The German part was reorganized into two provinces: Lower and Upper Silesia. Hence, the Lower Silesian territory was part of Germany until the end of World War II in 1945, until it finally became part of Poland again according to the agreements negotiated between the winners of the Second World War at the Yalta Peace Conference.

Most of the time, the historical region of Silesia has been one of the richer parts of whichever country it happened to belong to. This was mainly due to its favourable geographic position, of which at least two crucial factors can be highlighted, here: First, in the Middle Ages *Silesia* was located at a crossing point of two main European trade routes, the West-East axis which connected Western Europe with the Black Sea, and a North-South route along the Odra river up to the Baltic Sea. Second, the landscape of Lower Silesia combines both wide open spaces as a basis for agriculture and forestry and rugged foothills of the Sudetes Mountains with an exceptional variety of precious minerals. Besides rich deposits of iron ore, a rich pan of lignite was being discovered and a full range of different minerals such as plumb, tin, copper as well

as some traces of gold and silver. Accordingly, the economic situation of Silesia was to a major extent dependent on the development of mining. However, the mining provided the material basis for many other branches of the region's industry, too, since Silesia housed a large number of Europe's leading factories of different branches in particular during the industrialization era in the 19th century. Correspondingly, Breslau (named "Wrocław" today), the historical capital of Lower Silesia, which has always been by far the most important city in the whole area, became an outstanding urban economic centre and a vital cultural driving force. This is can be proven not at least by the fact that an array of internationally well-known scientist, entrepreneurs, artists and thinkers were born in Breslau and lived, there, at that time. The economic and cultural development of Breslau (Wrocław) and the whole region during the Industrialization era was, however, not only due to the fortunate situation engendered by the exploitation of natural resources. Since the region has undergone so many political changes and it is located in an area of intersection between Western and Eastern European culture, Silesia has always been perceived as a "melting pot" of different nationalities and ethnic groups. This multicultural setting with a rather open and innovative climate obviously contributed to the overall beneficial economic development of region. Hence, the downfall of Silesia's cultural bloom was finally commenced under the rule of Nazi Germany, when traditional ethnic groups, like above all large Jewish communities, were systematically displaced and killed. But also right after the Second World War the ethnic composition of Silesia was completely changed as a direct effect of the new political division of Europe. Under the new rule of Soviet communism the German inhabitants, who traditionally constituted the huge majority of the region's population, were forced to leave Poland between 1945 and 1947. Already in 1948 Silesia was almost entirely repopulated by new inhabitants mostly stemming from different Eastern territories of pre-war Poland. This, of course, drastically changed the traditional features and identity of Silesia and most notably of Wrocław as well (Davies/Moorehouse, 2002). Nevertheless, the peculiarity of Silesia being a region of different cultures and cultural exchange hasn't been abolished over the past 50 years, although the official ideology of Polish communist rule was based on political centralization and cultural homogenization. On the contrary, the mix of persisting local traits and different groups of immigrants contributed to the creation of a new particular kind of "melting pot"- culture in post-war Silesia.

3.2 The “Making” of the Lower Silesia region

Without the formerly mentioned historical background the character of the current Lower Silesia region and its specific cultural identity can hardly be understood. In the following chapter some main features of the Lower Silesia region are provided in order to get a first overview of the current situation and recent developments, there. Furthermore, it will be pointed out that the Lower Silesia region, as it exists today, has to be regarded as a rather different social area, since it has only recently, in the light of EU accession, been constructed as a new intermediate administrative unit. However, the huge efforts to build up decentralised regional and local governance structures and a full range of regionally based institutions might be an evidence for the emergence of an economic region as it has been previously defined (see chapter 2). Besides that it can be noticed that the “making” of the today’s Lower Silesia “region” is accompanied by the re-definition of its particular regional identity, which is also based on selective references to history and to the historic continuity of change respectively.

Figure 1: Lower Silesia in Central Europe



Source: www.dolnyslask.pl

The Voivodship of Lower Silesia (województwo dolnośląskie) is located in the South-Western part of Poland occupying 6.4% of its area and has borders with the Czech Republic in the South and Germany (Saxony) in the West. It is inhabited by almost 3 million people and, thus, ranges on place five of all 16 Polish voivodships in terms of population with a share of 7.7% of Poland’s total amount.

A voivodship (województwo) is Poland’s largest administrative unit and the seat of the regional government. The regional government, officially constituted by the regional assembly, is elected in direct elections each four years. Its responsibilities include legislative and control functions as well as the public administrative tasks at the regional level. The main political responsibilities are assigned to the province executive board, which is nominated by the regional assembly and chaired by the province’s chief executive officer, the “marszałek”. However, the central government is not represented by the Marshall of the Province, but, in fact, by the province’s governor, the “wojewoda”, who has to make sure that all decisions made at all regional levels are in accordance with the national legislation and who has to

square kilometre is higher than both the national average (123 inhab./km²) and the average density of population in the former EU-15.

While discussing the current administrative structure and social dispersion of Lower Silesia, it is important to notice that this voivodship just exists as a distinguished social area, like it was described before, since the introduction of the major regional administrative reform in January 1999. Before that time in post-war Poland there was almost no such official regional division and organisation (s. Bachtler et. al, 1999). The notion of regional government, as an intermediate level of government and planning between local (municipal) and national levels, has been known in Poland only since shortly before World War II. In the post-war period regions were of little importance due to the highly centralized state management under communism:

“As a result, the notion of regional identity among the people was weak and survived in only a few parts of the country. Regions had little importance then because of the centralized concept of state management. There were fourteen and later seventeen regions. Regional authorities were visible in the administrative system, although they were not democratic, due to the relatively large size of regions and because of the political power of regional leaders. However, only the Communist Party had any decisive power, whereas administration played mainly an executive role. The life of society was organized around the place of work rather than around the place of living; hence the increasing importance of industrial sectors relative to regions of the country” (Głowacki, 2002, p. 105).

In the course of an administrative reform in 1975 the regionalism in Poland collapsed completely, when the seventeen regions were dissolved and sliced up into 49 smaller units with in average of about 690.000 people each (Figure 3a): “The dissolution of the traditional regions and the formation of new units stemmed from the desire of the central party leadership to curb the local party elites’ efforts at gaining greater regional independence” (Wollmann/Lankina, 2003, p. 101). In fact, representatives of the central government headed these units, but they had little executive power to manage specific regional tasks and problems. After the fall of communism in 1989 the radical change to democracy and market economy was primarily focused and implemented on the national level. The territorial and institutional reform was blocked in the political centre. Thus, the intermediate level as well as the degree of state de-centralisation remained quite weak in post-communist Poland. Only on the very local level there was an introduction of democratic governments at the beginning of the transformation period. However, after long and heated political debates about different concepts of administrative reform the establishment of regional governments and the new administrative division was introduced on January the 1st 1999. This reform resulted in the creation of 16 new “regions”, which are to certain extent based on regional traditions and historic distinctions, but also on arbitrary construction (Figure 3b).

Figure 3a: Territorial organization after 1975



Source: <http://econ.worldbank.org/docs/1212.pdf>

Figure 3b: Territorial organization after 1999



Source: Gorzelak, 2000

The administrative reforms were essentially based on two main principles: First, the guarantee of a high level of autonomy for regional authorities within a unitary state - consequently, no federal concepts have ever been taken into consideration. Second, the reference to the European regionalism to enable an international collaboration between regions (Regulski, 2003). Thereby the EU accession process, which strongly intensified during the second half of the 1990s, must be considered as the main driving force of administrative de-centralization and regionalization in Poland (Gorzelak, 2000). The creation of a new regional administrative structure on the meso-level was prompted by the fact that the existing regional structure was not sufficient enough to absorb the funds provided by the European Union - although the existence of a strong regional government was not an essential condition for the EU accession.

Since the beginning of the transformation process, Poland has received financial assistance from the EU. This was mainly provided in the institutional framework of the PHARE program, which officially means ‘Poland and Hungary Action for Restructuring Economies’, because it was first established in 1989 to support particularly the transformation economies of Poland and Hungary. During its first phase (1989-91) it was designed only for pure humanitarian aid, including food and medicine. Due to its success, the program was quickly enlarged to all accession countries from Central and Eastern Europe. After it was being established, the PHARE program remained the EU’s central financial tool of financial support with regards to the Eastern and Central European transformation countries. But its main focus was changed for several times and during 1993-97 explicitly dedicated to regional and sectoral investments. Głowacki, (2002, p. 106f) highlighted, however, that Poland had used

only seventeen percent of the PHARE funds allocated for inter-regional cooperation in 1997. Furthermore, the inefficiency of the Polish administration in preparing the planning and programming documents necessary for PHARE assistance had turned out to be very acute in 1998, when the PHARE budget allocated for Poland was reduced by EUR 34 million due to poorly prepared projects. Obviously, there was a strong need to rearrange and rationalize the administrative structure in order to be actually able to receive the EU structural funds after the accession to the EU. In this sense, one can say that the EU accession process served as one of the main incentives to undertake fundamental structural administrative reforms, which finally defined the shape of today's Voivodship of Lower Silesia and of the 15 other Polish voivodships.

As it is shown above in Figures 3a and 3b, the Voivodship of Lower Silesia consists of the former four Voivodships of Wrocław, Legnica, Jelenia Góra and Wałbrzych. Each part of this newly constructed voivodship has had its own history of social and economic development during the period of communism. Definitely, this still has a visible effect on the region's actual economic and social performance. For instance, the current situation in Wałbrzych, a former centre of mining and one of the outstanding industrial districts during communism, cannot be compared with the situation in the city of Wrocław having recently rediscovered its old civic heritage, which had been suppressed for more than 50 years before. Due to the huge diversity in Lower Silesia, one interviewee of a regional development agency questioned the applicability of the concept of "region" with regards to social and economic development since he misses a common denominator for the entire voivodship:

"In my point of view, there is no such thing like a common vision of economic development in the region. There is only a vision existent on the national level. The process of regionalization, which is mainly steered by the Marshall's office, is still in its beginnings. The situation in terms of economic development is very diverse in Lower Silesia. The economic structure in the part of the former voivodship Legnica is mainly shaped by one company, the KGHM⁶. In former Wrocław Voivodship the economy is diversified. Again totally different the situation is in former Jelenia Góra, which is close to the border and most tourist of Lower Silesia. In the former Voivodship Wałbrzych there are still problems remaining from the outdated monoculture of mining and steelworks. The big question is, therefore: Which common direction should all these different sectors choose for the future?"

Nevertheless, it must be pointed out that the Voivodship of Lower Silesia is not only an incoherent social area, which was just artificially constructed by a top-down approach of restructuring. For instance, a regional governance structure had already become institutionalized by local, regional and central actors and a complex set of regional policy

⁶ Despite being a "dinosaur" of the former state-owned economy, KGHM Polska Miedź S.A. is today Europe's leading producer of copper products and one of the Poland's biggest companies. Its headquarter is located in Lubin (Lower Silesia).

organisations and informal networks of professionals was put into play. Thereby, not only the professionals at the top level of government, but local and regional elites and the representatives of the local governments as well played an active role in preparing the regional government reform and in shaping the new “region”. As Tatur (2004a; 2004b) described with regards to the case studies of the Voivodships of Upper Silesia and Małopolska, the new reform elites of the local, the regional and the national level were integrating on the basis of networks and shared political values and visions in order to further the process of regionalization. Moreover, Tatur points out that far before the restructuring of the Polish voivodships a strong development of bottom-up institution-building had already been taking place: “Within the opportunities provided by a democratic macropolitical framework allowing for association and organisation on a contractual basis, it was the challenge of economic restructuring that motivated actors to deal with pressing problems and in doing so to create a “region” (Tatur, 2004b: 360).

The “making” of the Upper Silesia and Małopolska “regions”, Tatur further describes, was accompanied by the construction of a particular regional “identity” with selective references to the regions’ history.

“[T]he shift in regional identity discourses can be interpreted as a reaction by local and regional actors dealing with new opportunities and constraints. Reinterpretation was related to new challenges of regional integration. It became possible with the institutionalisation of democratic procedures embodying the region’s ‘historical’ identity” (Tatur, 2004b: 392).

In Upper Silesia, for instance, the regional identity was redefined with a strong emphasis on “diversity” stemming from the changeful history of the region and its role as an enduring economic centre. Most interestingly, the unfortunate situation of Silesia being a border land of different states and empires throughout history and, thus, being shaped by different ethnic and cultural traditions, is now interpreted as one of the region’s big assets in the context of open economic spaces. This can be applied to the definition of Lower Silesia’s new regional identity too: although the huge divergence between the city of Wrocław and the rest of the voivodship is sometimes perceived as being very problematic, the vital role of the region’s urban capital as the main regional centre with a large tradition of open metropolitan culture is an important part of the Lower Silesian’s identity. A representative of one of the leading banks in Lower Silesia said:

“One could look at the city of Wrocław as a good example of constant development, where the money is always spent in the right way.”

Many of our interviewees stressed the meaning of the region’s specific cultural tradition and history and, above all, its special geographic location in order to describe the main advantage of Lower Silesia in comparison to other Polish voivodships: “Compared to other parts of

Poland our region is very well located geographically being close to the German and Czech border”, explained one representative of the “Invest Park” company of Wałbrzych. The representative of the independent Federation Polish Employers of Western Poland said that the human capital of Lower Silesia was of a particular kind: “The foreign investors perceive this region as being interesting not only because of the infrastructure, which still has to be built up, but because of the specific geographic location and the people. The people are our big asset – the ability of being entrepreneurial and to become cosmopolitan” – or as another interviewee from the Wrocław Centre of Technology Transfer put it:

“People who live here are probably more flexible than in other Polish regions. You know from history that people from all different parts of Poland came to this region. (...) It’s easier here to introduce innovations, because people are more flexible. The other thing is that there are no very long conflicts, like in other cities (...). So it’s easier, here, to cooperate with everyone”.

The above statements clearly indicate that the current economic and social situation in Lower Silesia is to a large extent associated with its particular location and historic cultural tradition. The emergence of regional institutions and policy networks has further strengthened the making of a distinct “region”. Therefore the concept of “region” can fully be applied to the new established Voivodship of Lower Silesia. In the following the emphasis will be placed on describing Lower Silesia as an “economic region”. Hence, in the following chapter the main socio-economic features and the industrial and economic situation will be highlighted.

Figure 4: The Administrative Districts (“powiaty”) of Lower Silesia



Source: <http://www.bmp.pl/wojewodztwa/mapy>

4. The industrial and economic structure

4.1 Basic facts and developments

At present, the economic region of Lower Silesia is one of the most dynamically developing areas in Poland as well as in Central and Eastern Europe. Lower Silesia can be considered as being part of the Central and Eastern European “growth boomerang” (Gorzalak, 1996), which rapidly emerged in the Western parts of the Visegrad countries (Poland, Czech Republic, Slovakia and Hungary) during the 1990s. The region’s GDP per capita is with an amount of 10.021 EUR in terms of purchasing power parities (PPS) in 2002, higher than the national average rate (9.661 EUR in 2002). Hence, it ranks third in Poland behind the regions of Mazowieckie (14.713 EUR in 2002) containing Warsaw City - the country’s outstanding political and economic centre being uncoupled to a certain degree from the country’s average economic development - and the old industrial district in Śląskie (10.700 EUR).⁷ Although in the long term comparison (1995-2001) the annual average growth rate of the region’s GDP was not amongst the top three of Poland’s 16 voivodships, accordingly (s. Table 1), most of the interviewees pointed out that the economic boost in Lower Silesia has particularly intensified in the past few years. Exemplarily a representative of one the leading banks in the region said:

“Poznań and Wrocław are cities of similar kind in terms of size, business activities and economic indicators. This had been the case a few years ago, at least. But during the past few years, Lower Silesia has been enormously developing, what one can easily perceive by looking at investment growth, reconstruction or the inflow of foreign investors.”

As an effect of uneven economic development, during the 1990s marked regional disparities in terms of a significant East-West divide became rapidly apparent in Poland and the other reform countries of Central and Eastern Europe as well. The successful regions, which are mainly driven by the dynamics of urban growth poles, such as have already demonstrated the highest potential for restructuring and a quick adaptation to the new economic conditions. Being located at the Western border and embodying Wrocław as a distinct urban growth pole clearly belongs to the leading regions of Polish transformation. Nevertheless, it must be admitted that this region is - like all regions in Central and Eastern Europe - just at the beginning or perhaps in the middle of a huge process of economic restructuring, as another interviewee clearly pointed out. It can be illustrated, accordingly, that the economic output of Poland and of Lower Silesia, in particular, amounts still less than half of the output of the

⁷ According to EUROSTAT online-database, last accessed in February 2004

former fifteen EU member states (Figure 5). The share of the region's GDP per capita (PPS) in 2001 was only 45.6% of the respective EU-25 average (s. Table 1).

Figure 5: Regional Economic Output in Comparison to EU-15

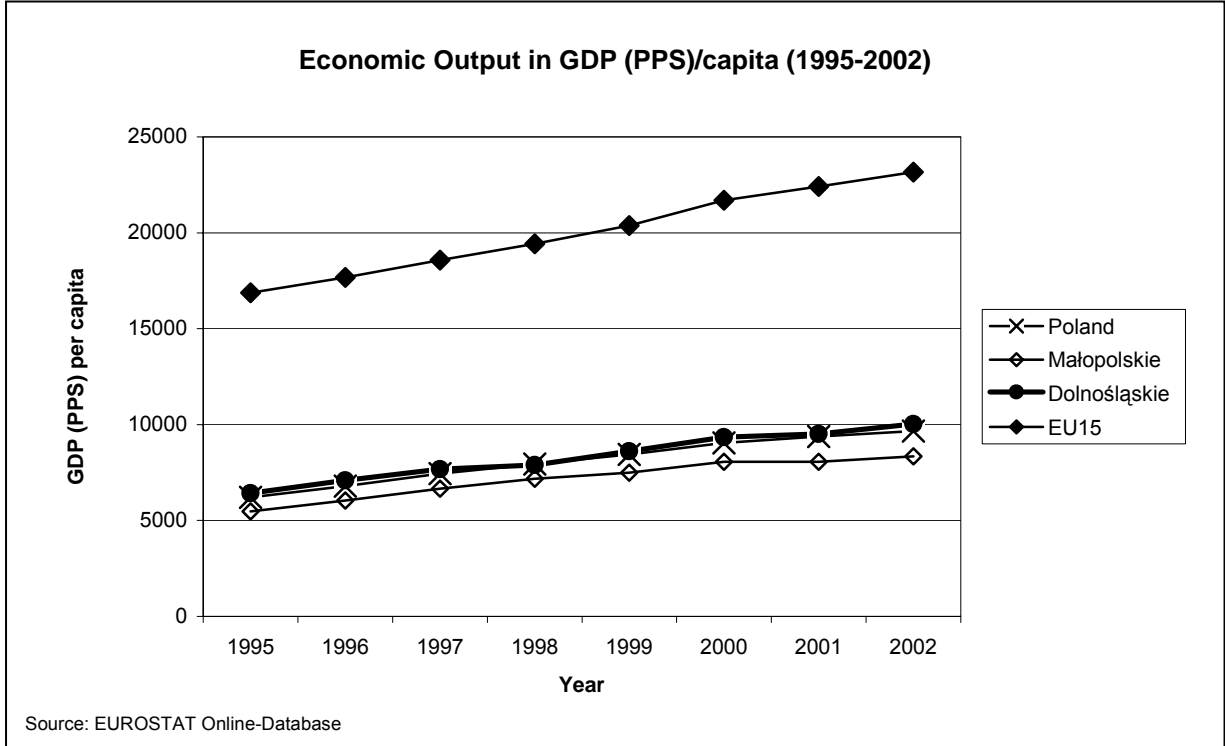


Table 1: Main regional indicators in Poland and EU

	GDP per capita (PPS 2001, EU25=100)	GDP growth (annual average % change), 1995-2001	Employment by sector (% of total), 2002			Employment rate (ages 15-64 as % of pop. aged 15-64), 2002	Unemployment rate (%)			Education (educational attainment of persons aged 25-64, % of total), 2002		
			Agriculture	Industry	Services		Total, 2002	Long term unemployed, (% of total unempl.), 2002	Young, 2002	Low	Medium	High
EU15	109,7	2,5	4,0	28,2	67,7	64,2	7,8	40,2	15,2	35,4	42,9	21,8
N10	50,5	4,8	13,2	32,1	54,7	55,9	14,9	54,5	32,4	18,9	66,3	14,8
EU25	100	2,6	5,4	28,8	65,8	62,8	9,0	44,3	18,1	32,6	46,7	20,6
Poland	44,9	6,3	19,3	28,6	52,0	51,5	19,9	54,8	42,5	19,1	68,3	12,5
Dolnośląskie	45,6	5,8	9,5	32,4	58,2	47,6	26,1	52,7	50,2	17,8	69,6	12,6
Kujawsko-Pomorskie	40,6	4,7	19,1	29,4	51,4	50,6	21,5	53,3	43,2	19,8	69,8	10,4
Lubelskie	31,4	4,5	39,4	18,1	42,5	56,1	16,6	46,7	37,8	22,4	63,9	13,8
Lubuskie	39,9	4,7	10,2	31,3	58,8	45,9	26,3	47,7	50,1	16,7	72,7	10,5
Łódzkie (Lodz)	40,5	5,8	19,8	30,6	49,7	52,8	20,3	62,5	42,1	23,0	64,0	13,0
Małopolskie (Cracow)	38,8	6,2	23,7	27,0	49,3	54,6	16,2	58,6	37,5	16,8	69,2	14,0
Mazowieckie (Warsaw)	69,9	10,4	20,4	21,6	58,0	57,1	17,0	56,0	36,9	18,2	65,2	16,6
Opolskie	36,4	2,7	18,5	32,9	48,7	50,3	19,7	53,0	45,3	19,0	69,3	11,7
Podkarpackie	32,0	5,1	30,8	28,2	41,1	53,2	18,2	67,5	45,7	20,0	68,8	11,1
Podlaskie	34,0	6,3	36,5	18,6	45,0	54,8	16,8	58,0	37,9	23,9	62,4	13,6
Pomorskie	44,6	6,5	9,5	31,1	59,4	50,2	21,5	39,5	45,1	19,4	67,5	13,1
Śląskie	49,0	3,9	4,1	39,5	56,4	46,9	20,1	62,3	42,0	15,0	74,4	10,6
Świętokrzyskie	34,3	5,5	31,0	24,9	44,2	50,3	18,8	53,9	48,7	20,2	67,1	12,6
Warmińsko-Mazurskie	32,5	4,8	17,9	28,1	54,0	46,0	25,9	59,2	52,2	25,9	63,2	10,9
Wielkopolskie (Poznan)	47,6	7,8	20,3	32,7	47,0	52,9	18,2	45,3	38,0	17,9	71,5	10,6
Zachodniopomorskie	44,5	5,8	8,3	29,6	62,2	45,8	26,0	52,7	54,6	20,7	68,0	11,3

Source : Commission of the European Union (2004)

The fact that the process of restructuring is still going on in Lower Silesia becomes most apparent when looking at the region's economic structure. Because Lower Silesia is to a large extent still shaped by deeply rooted and inherited "traditional" industries like mining (hard coal, lignite, copper ore, rock deposit extraction and mineral resources) and the production of clothes, fabrics, crystal glass, table porcelain and china. Above all, the copper mining complexes in the areas of Legnica (Powiat Legnicki) and Głogów (Powiat Głogowski) and the power generation complex in Turoszów (Powiat Zgorzelecki) are up till now considered as very important and prosperous industries.⁸ Other than that the contribution of farming and the cultivation of sugar beets, in particular, may be highlighted as well, although Lower Silesia is not regarded as a typical agricultural area. In the contrary, the region's share of employment in the agricultural sector is only half of the country's total share and, hence, by far one of the lowest in comparison to the other Polish regions (s. Table 1).

All in all, the economic structure of Lower Silesia can be characterised by the large part played by industry in the generation of gross domestic product and a high degree of diversification of its industrial base. In spite of the persisting importance of "traditional" industries, the transformation period after 1990 and the integration of the region into the system of global economy entailed a drastic decline of old industries, such as coal mining, textile and agricultural production. At the same time, however, the economic region of Lower Silesia is witnessing a dynamic process of restructuring into a knowledge based economy and a notable shift from resource-intensive production to technological-intensive production and an extensive growth of a modern service sector has already been taking place. The share of employment in the service sector, for instance, is one of the highest in Poland and significantly above the average Polish share (s. Table 1). Hence, the present-day economic structure and development of Lower Silesia is affected by both declining branches of "traditional industries" and rapidly growing number of "new" industries and businesses, which more and more demand for technological know-how and innovation.

At present, the region accommodates a large number of small and medium sized businesses (95% of number of registered economic units) and, above that, exhibits a high *growth rate of number of companies with foreign participation*. Over 4.600 companies with foreign capital are registered in Lower Silesia accounting for over 30 per cent of all commercial companies

⁸ The copper deposits are extracted by KGHM "Polska Miedź" SA in Lubin. KGHM "Polska Miedź" is one of Poland's largest companies and the largest copper producer in Europe, which employs about 21.000 people. Apart from copper, KGHM also extracts gold, silver and salt. Nevertheless, this company has recently been undertaking a restructuring process investing in sectors, which are not directly related to mining, like for instance, telecommunication. The power plant in Bogatynia, which is run by the Turów SA and fuelled by lignite, is one of Poland's leading power plants and, therefore, represents another example of the successful persistence of traditional resource-based industries.

registered in the region. According to PAIZ, the Polish Agency for Foreign Investment, about 170 foreign investors have invested more than one million USD in order to build up operations in Lower Silesia. Amongst them internationally well-known corporations, such as ABB, Alstom, Cadbury, General Electric, IKEA, McCain, Cussons, Siemens, Toyota, Volkswagen or Volvo, have placed their investments in Lower Silesia. During the nineties the total foreign capital investment amounted to over 1.5 billion USD. In terms of invested capital the region's major investors are German (with a 46.6 % share in 2000), British (5.3 %), Dutch (19 %), North American (7.7 %) and, with rapidly growing shares most recently, Swedish and Japanese. The foreign capital was mainly invested in the following sectors: banking, automotive industry, food processing, machinery and equipment, non-metal goods, chemicals and chemical production, gas stations, supermarkets and hypermarkets, hotels and restaurants. According to the information provided by the official internet portal of Lower Silesia (www.dolnyslask.pl) export was the crucial factor for enhancing the economic growth of the region. In fact, the Voivodship of Lower Silesia ranks among the leading Polish regions in terms of exports and imports at present. With over 50% of the region's total exports Germany is the most important external market, followed by France (almost 7%) and the British, Czech and Belgian markets (equal with about 4%). The region's major exports in terms of values are manufactured goods (47.3 % of total voivodship exports), machines and appliances, transportation equipment (25.9 % of total voivodship exports). The major imports are machines and appliances, transportation equipment (43.4 % of total voivodship imports), manufactured goods (24,4% of total voivodship imports).

After the present transformation period and the leading economic sectors in Lower Silesia are, thus, motor vehicles (automotive, bus and train), electric machinery (e.g. washing machines and refrigerators), electronics, power and construction, chemical and food processing industries, information and communication technology (ICT), mining (copper ore lignite), furniture and textile.

“Lower Silesia Province is Poland's leading supplier of many types of industrial goods. The region ranks: 1st in the production of electrical turbo-machines, domestic refrigerators, deep freezers, washing machines, spin-driers and cookers, table porcelain and china, and crystal glass; - 2nd in the production of cotton and cotton-like fabrics, machinery and tools for the construction industry, machinery and tools for road construction and land improvement industries, as well as detergents and washing-up liquids“ (www.umw.pl/info).

In terms of the meaning of financial services - and more specifically the sector of leasing and collection - the city of Wrocław ranks second in Poland, meanwhile, behind the capital city Warsaw, the undisputed leading financial and economic centre of the country. Last but not least, the rapidly growing importance of tourism must be mentioned in this context as well.

The favourable natural conditions and the rich heritage of cultural goods have contributed to the reputation of Lower Silesia as being one of Poland's main tourist regions.

4.2 Opportunities and threats of the region

Without any doubts the present economic upswing in Lower Silesia is mainly due to the region's strong tradition of industrial production and entrepreneurship. As an effect and, hence, as one favourable pre-condition of development, the region has a relatively high level of urbanisation with a well developed network of settlements. Asked to highlight the main competitive advantages of Lower Silesia almost all interviewees mentioned three main assets of the region: First, the favourable geographic position, second, the relatively well developed infrastructure including a further-intensifying connection to the Western markets, and third, a relatively well educated workforce. Exemplary, a representative of the "Invest-Park" Wałbrzych expressed it in the following way:

"Compared to other parts of Poland our region is very well located geographically, that means that it is close to the German and the Czech border. As for Poland, this region has a very well developed infrastructure. I would say that we have the longest motorway in Poland which will connect the German border with Wrocław in 2005. Compared to rest of Europe, Poland can offer very well qualified labour, at the same time the salary level is much lower than in the rest of Europe".

4.2.1 Favourable pre-conditions for economic upswing

In fact, the strategic location of Lower Silesia at Poland's Western border and the structure of the transportation network have had a significant effect on the economic development of the region, as it provided an incentive for investments in businesses along the major international transport routes. Accordingly, the main axes of economic development often coincide with the big motorways in Lower Silesia - like, for instance, the axis of the A4 motorway, which connects the region with Western and Eastern Europe (to the West via Dresden-Aachen-Brussels-Calais and to the East via Lviv and Kiev) and goes through all five Southern Polish voivodships - or furthermore, the E36 to Berlin, which joins the A4 near Legnica.

Most notably, however, all interviewees emphasized the high standard of education and training in Lower Silesia as one of the main driving forces of the region's economic development. The present-day Lower Silesians were considered as being relatively young, well-educated and open-minded. Interviewees both from the employer's side and from trade unions admitted that there's no problem at all to find the qualification of labour required for

the employment in the new emerging businesses. Moreover, one interviewee pointed out that it is by far more due to the good standards of qualification than due to other factors, like e.g. infrastructure, that foreign companies choose to invest in Lower Silesia. First of all, it is the high density of universities and technical colleges, which contributes to the overall favourable educational situation. In total, more than eight per cent of all Polish students are enrolled in Lower Silesia. With a share of more than 12 per cent of higher and about 70 per cent of medium-level educational attainment the region's structure of qualifications is fully in accordance with the country's average (s. Tab 1). There are 27 universities and colleges with over 140.000 students just in the region's capital city Wrocław. Thus, Wrocław is the main academic centre of the region and one of the most important of the country. The biggest educational institutes of the region are Wrocław University, Wrocław Technical University, University of Economics and the Medical Academy. In addition, universities are located in other cities of Lower Silesia, too, namely in Legnica, Wałbrzych, Swidnica, Klodzko, Jelenia Góra. These are mainly non-public economic or vocational schools as well as the divisions of Wrocław public universities. Their education profile is adapted to local market needs, like, for instance in Jelenia Góra, where tourist industry employees are educated, particularly, or in Legnica where a distinct Master of Business Administration (MBA) programme is implemented. Furthermore, the basic research and development initiatives of the region are most often realised by the big universities, to which most of the money is being offered. However, it was pointed out by some interviewees that the co-operation between universities and private companies hasn't been high since the beginning of restructuring, because the organisational structures and educational schedules weren't adapted for quite a long time. In fact, the situation has changed remarkably up till now and intermediate institutions, like the Wrocław Centre of Technology Transfer (WCTT), have been set up to intensify the exchange between scientific, business and regional development institutions.

4.2.2 Unemployment: a major challenge

Despite these portrayed favourable conditions for economic upswing and the recent positive economic effects of the restructuring process, the most striking problem of the region is the increase and persistence of a high level of unemployment. With an official unemployment rate of 26.1 per cent (by EUROSTAT) the level of unemployment was the worst of all Polish regions in 2002 (s. Tab. 1); with an amount of 26.0 per cent (by EUROSTAT) it remained stable at an extremely high level in 2003, too. This phenomenon must be considered as the huge paradox of the current process of economic restructuring and development in Lower

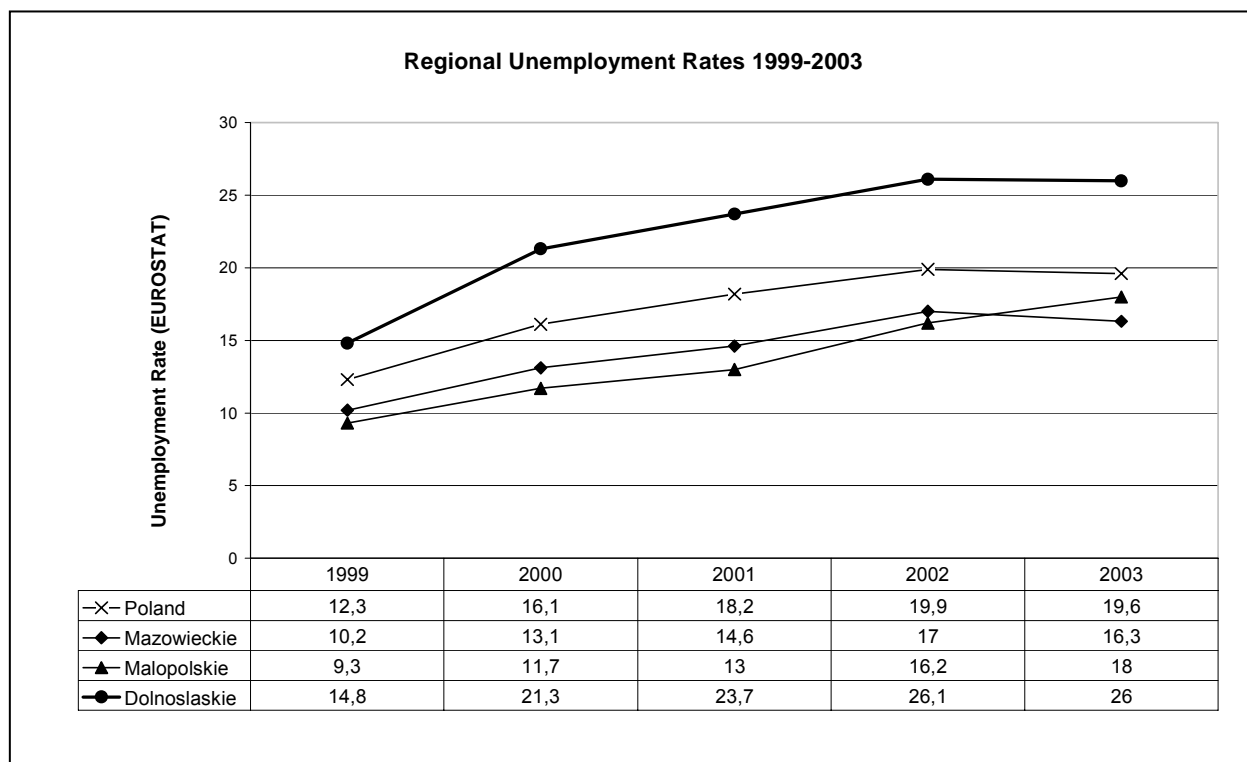
Silesia, what needs to be further explored, here: Because, all interviewees distinctively drew a positive picture of the economic situation and prospect of the region. Lower Silesia was considered as being “one of the leading” and “one of the richest” economic regions in Poland with “an extra-ordinary potential for further development”. A representative of the Lower Silesian Chamber of Commerce put it as follows:

“After Warsaw and Poznan, Lower Silesia is the fastest growing and developing region, in which the service sector, which is related to high-tech production, is developing most favourable. I think that this region will adjust to the standard of the European Union most rapidly and due to this it will develop even better than other Polish regions.”

In fact, the main social and economic indicators underline these assessments and clearly show an upwards swing of the region’s development curve: the growth rate, for instance, is constantly higher than 5 per cent, the inflow of capital is relatively high and the structure of business sectors is embedded in the region and highly diversified. At the same time, however, the unemployment rate doubled in the past five years, while the most drastic increase can be noticed between 1999 and 2000 (s. Figure 6). Certainly, this development is related to the country’s crisis of economic recovery and overall growth of unemployment since the end of the 1990s, but the increase of the unemployment rate in Lower Silesia was disproportionate to the average growth. Only the high rate of long-term unemployment goes more or less in accordance with the Polish total long-term unemployment rate of about 55 per cent (Tab. 1).

The difficult employment situation might be the most evident indicator that the economic region of Lower Silesia is still in the middle of a far-reaching restructuring process. Not surprisingly, the unemployment is highest, where traditional industries collapsed during the period of transformation, but couldn’t be replaced by new job opportunities, adequately. Hence, above all in rural areas and old industrial districts with a monocultural economic structure the labour market situation has been the worst in the region up till now. The opposite situation can be described for urban centres and successfully restructured industrial districts. Most drastically, the social and unemployment situation differs between Wrocław, the outstanding urban centre of the region and the other parts of Lower Silesia. Whereas the rate of unemployment is in some problem areas even much higher than the average regional rate of 26 per cent (in 2003), the unemployment rate was in Wrocław in 2003 significantly lower with an amount of about 12 per cent.

Figure 6: Unemployment in Poland 1999-2003



Source: EUROSTAT Online-Database

As a result of the restructuring process, the gap between rural and urban areas is further widening due to different opportunity structures and attitudes of the locals. As one interviewee from a bank located in Wrocław explained in this respect:

“There is no problem in Wrocław. But in smaller cities and villages one can observe always the same attitude: people just look for jobs close to their home. This, however, additionally contributes to the increase of unemployment in the region”.

Another interviewee, a public official from the city of Wrocław described the impact of the radical economic change on the attitudes of the people as follows:

“There is no problem for foreign investors to find enough qualified labour in the region. (...) The companies praise the standard of labour qualification in Wrocław. Perhaps they have bigger problems with the lower qualified workforce, e.g. the labour-intensive jobs in the production and processing. (...) People had a lack of self-confidence not knowing what their value was like after the economic change and if their abilities might meet the requirements of new employers. This was the problem of Toyota in Wałbrzych in particular. The company needed qualified workers at the assembly line. They were looking for them mainly amongst the available unemployed people, of which each had to pass a written test of simple questions before they were examined in practical terms. – However, the people were frightened to do this test, since they were not used to these kinds of recruitment processes before - and this caused problems (...) Nowadays the situation is changing, but there are still many cases of this kind. Above all in smaller towns or villages, where the access to further training is limited. Unfortunately, the problem of unemployment is worst, there”.

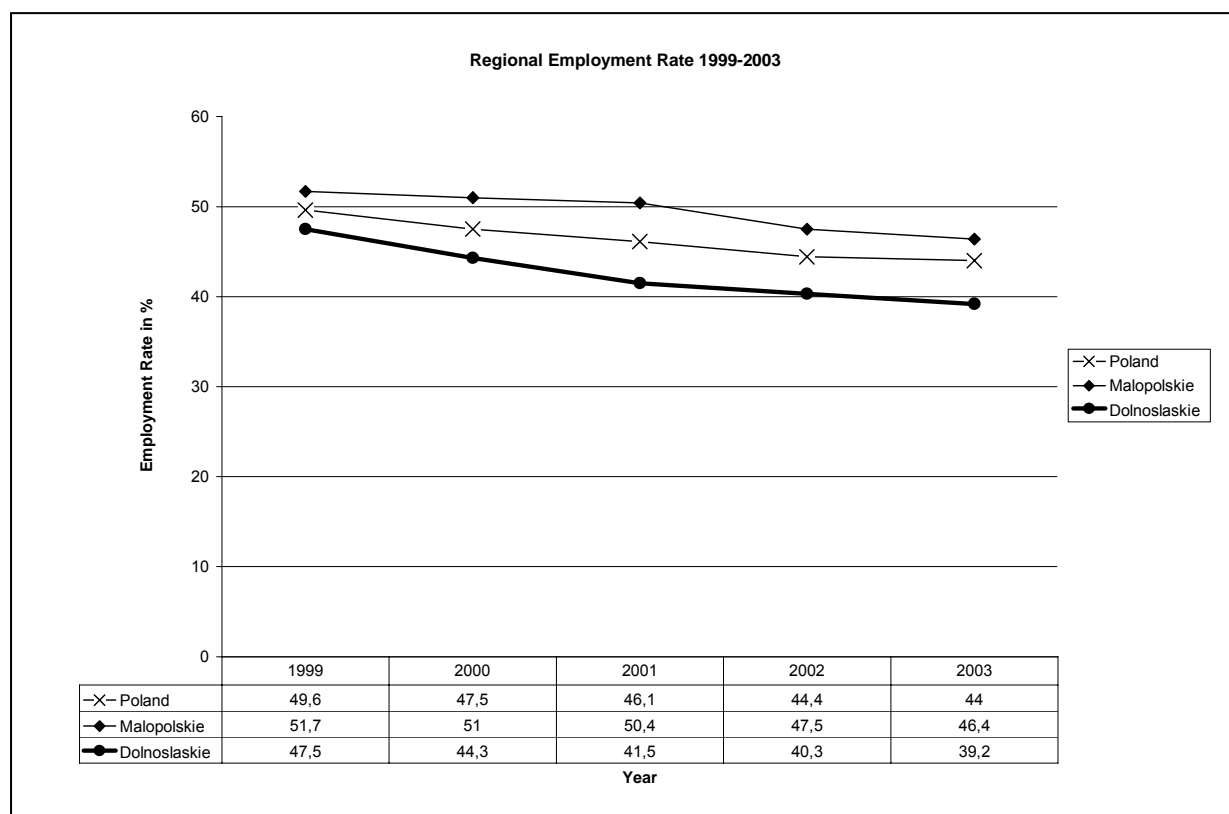
Most remarkably with regards to the current social situation in Lower Silesia is, however, the extremely high rate of youth unemployment with an amount of over 50 per cent. This

obviously thwarts the assumption that the problem of unemployment only concerns the old and unqualified workforce (s. Tab.1). Almost 20 per cent of the young unemployed attended school for longer time than the compulsory nine years or have higher educational attainments. As one interviewee explained, the number of people with completed studies and eligible knowledge of foreign languages looking for a job has been relatively high over the past few years. In fact, the difficult labour market situation led to ambiguous developments as they were further described in detail:

“The programmes of the job centres to fight unemployment of younger people had both positive and negative effects. For instance, the programme ‘first job’ made it easier, indeed, for school-leavers and graduates to find a way into employment. But these jobs were paid by the government and the salary wasn’t higher than the amount of the unemployment benefit. At a certain moment it happened that the private corporations and public offices weren’t willing to employ anybody on normal conditions anymore, but only as a trainee, since they received their payments from the job centre and, thus, the costs for the employers are lowest. Surely, this was one way for young qualified people to gain working experiences and valuable insights. However, this kind of employment was no guarantee to find a regular job afterwards. (...) So you see, the problem of unemployment is too big that this would only affect the unqualified work force”.

This example clearly illustrates the current dilemma of the labour market situation in Lower Silesia. In spite of the drastic shift from resource-intensive production to a knowledge-based economy in the past few years, the creation of new jobs requiring high qualifications did not fully absorb the amount of available qualified manpower. There has been a huge oversupply of qualified employees, which may make it rather easy for employers to find enough employees with adequate qualifications at low labour costs, but does not relax the social costs caused by the economic restructuring. A glance at the development of the employment rate of Lower Silesia reveals that over the past five years of economic restructuring and upswing the share of people in employment decreased significantly (s. Figure 7). The employment rate of Lower Silesia reduced from 47.5 per cent in 1999 (by EUROSTAT) to 39.2 per cent in 2003. While having a lower rate than the Polish average, the employment development follows the country’s overall trend of declining shares. Thus, it seems that one of Poland’s major current problems is the negative balance between the loss of traditional working places and the creation of new job opportunities. As already pointed out before, the situation in the economic region of Lower Silesia is not an exception from that overall trend, although the region’s economic potential is most often supposed to be extra-ordinary well.

Figure 7: Employment in Poland 1999-2003



Source: EUROSTAT Online-Database

4.2.3 Uneven development within the region

The discussion of huge differences of the labour market situation within the region of Lower Silesia leads to another major problem, finally, which became apparent in Poland during 1990s and in all other reform countries of Central and Eastern Europe as well. These countries are not only shaped by a simple East-West divide, but at the same time by huge social divergence between urban and rural areas and uneven development within each single region. As already mentioned before, the particular industrial legacies of different localities and cities have important implications for their developmental potential (Blazyca et. al., 2002). Correspondingly, this is to large extent the case in Lower Silesia with its huge divergences between the dynamic urban centre Wrocław and the rest of the region:

“Everywhere in Poland the regional differences are very high. In fact, the regional differences are lower between different regions in statistical terms, but above all within in the regions one can notice significant divergences. (...) Wrocław is the fourth biggest agglomeration in Poland and, of course, has an important meaning in the region: that is more than 1.3 million people altogether, of which only half of them directly come from Wrocław. That is one third of the total population of the region. Here one can easily perceive a

huge gap. Therefore, most of the investments are concentrated on Wrocław and its surrounding.”
(Representative of the Lower Silesian Marshall office)

This statement indicates that the city and municipality of Wrocław profits by far more than other areas in Lower Silesia from the current economic changes. This is where the region’s professional expertise is concentrated, where most of the profitable production and services are being located, where most of the foreign investments have gone over the past few years. Therefore the social and economic situation is different in Wrocław compared with the rest of Lower Silesia and, furthermore, differs from place to place.

Besides the outstanding role of Wrocław, the economic region of Lower Silesia is divided into three different bands of development. These include a northern band encompassing the right bank of the Odra river, a central band between the Odra river and the Sudetes Mountains and a southern band comprising the Sudetes Mountains. The development bands have been shaped through socio-geographic processes during the centuries - like, for instance, the formation and development of the Copper Mining Area, but changed tremendously through processes of transformation and economic restructuring taking part in the past decades. The northern band is characterized by both a low concentration of economic activity and valuable natural resources. The central band enjoys good spatial and transport conditions for developing economies of scale. And the Southern band with its attractive landscape is increasingly developing modern tourism and recreational services. It can be expected, therefore, that the each of the different bands will feature different development tendencies in the future.

These evolutions are not only emerging spontaneously, but they have become more and more subject to strategic planning and management. The dynamic development of the economy is accompanied by the emergence of a complex set of regional governance actors and institutions, such as regional governments and public administration, development agencies, companies providing services for businesses, a full range of different non-governmental agencies and interest groups, in order to foster social and economic innovations. A common future development strategy, for instance, with detailed analysis and advises for further action was being carried out a few years ago. Business in problem areas is boosted by setting-up of three Special Economic Zones. The financial infrastructure is well developed with four banks having their head office in Wrocław and over 200 branches of commercial and over 100 branches of cooperative banks etc. These are only examples of different regional development approaches, which all together contribute to the reinforcement of economic growth and the institutionalisation of social exchange. With a particular focus on the emergence of regional governance structures this will be further described in the following last chapter of this paper.

5. The institutionalisation of the economic region

As mentioned before, the economic region of Lower Silesia is still in the process of “making” and restructuring. The local actors have faced the challenge of cutting off long existing, but unprofitable business sectors and adapting to a new economic situation. The main aim of the EUROCAP-project is to analyse a region’s main assets and institutional competences in order to transform itself into an innovation centred knowledge based society and to assert its position in the global competition of locations. With regards to recent trends in regional governance and regional development studies in many West European regions a cluster policy approach has been chosen. This was based on the assumption that regions are today more and more capable of fostering a unique economic development through re-definition of a few promising fields of certain regional (entrepreneurial, organisational, technological or scientific) core competences and their integration into coherent economic clusters. However, this cannot be directly applied to the new Central and Eastern European economic regions. Due to their difficult task of societal and economic restructuring and the lack of regional governance structures, an explicit cluster strategy has not yet been implemented, yet, as an interviewee from a regional development agency explained: “Up till now, there’s just a general strategy of regional development that is aiming at the promotion of any kind of business activity, which could contribute to the economic progress of the region”.

Nevertheless, a range of different regional development approaches can be found in Lower Silesia, today. The most important ones are (1) the formulation and implementation of a major regional development strategy, (2) the foundation of three Special Economic Zones and a Technology Park and (3) the institutionalisation of five independent regional development agencies. These three main approaches will be presented in detail in the following paragraph.

In addition, a region’s performance and competitiveness depends on the existence and interplay of many different regional actors and institutions. This is true, for instance, for the regional companies and their networks, the employees and employers as well as a variety of public and private educational institutions and research, development and technology transfer facilities and, professional and trade associations etc. These different actors and institutions all together constitute a new regional governance structure. Hence, a brief discussion of the current performance and interplay of the main regional governance actors will be subject of the last section.

5.1 Regional development approaches

5.1.1 The regional development strategy

In 2000 a “Lower Silesian Voivodeship Development Strategy” was drafted and officially adopted by the regional government, the Sejmik of the Lower Silesian Voivodeship, on December 15th 2000 (<http://strategia.dolnyslask.pl>). The whole process of formulating, implementing and readjusting the strategy is coordinated by the Marshall’s office of Lower Silesia. However, the preparation of the strategy was conducted in cooperation and permanent exchange with different regional institutions ranging from university institutes to regional development agencies. The strategy is mainly aiming at creating a coherent vision of the region and its values in order to reinforce the regional identity of Lower Silesia. Further main targets are the definition of strategic objectives for the activation of the future developmental potential, the definition of a general benchmark for social and economic initiatives as well as intraregional co-operation and identification of key projects which require action on a regional, national and European scale. The formulation of the strategy was based on the following methodological premises:

- perceive civilisation needs and opportunities from the overall global perspective;
- take the advantage of the existing expertise of former Lower Silesian voivodeships, gminas and poviats with respect to strategic studies;
- stimulate regional education, entrepreneurial spirit and innovativeness as basic competitiveness factors;
- formulate a long-term vision accommodating the changing environment;
- implement EU’s principles of subsidiarity sustainable development, cohesion, transparency and concentration.

The strategy paper as such comprises of a detailed diagnosis of the region’s social and economic situation and of clear indications for possible directions of shaping the region’s future development. First, basic development objectives are highlighted in a coherent and cohesive manner; second, particular solutions to ever changing circumstances are presented, such as the conditions for the accession to the EU; third, a clear benchmark for experts, social and self-government bodies, which are concerned with implementing and further development of the strategy is provided. Without any reservation, this strategy can, thus, be regarded as a key element of the region’s further development and as a main contribution to the reinforcement of the voivodeship’s self-government.

Since the year 2000 the general development strategy has been adjusted and modified according to new circumstances and further enlarged by the inclusion of new subjects, such as education, labour market, ecology, security and so forth, as well as the elaboration of many smaller and detailed strategies for municipalities and communes. One interviewee from a regional development agency, which is directly involved in this process, explained that there were many different strategies, at present, since each commune had its own strategy - sometimes even two. Each of these documents is drafted independently, indeed, because it is tailored to the particular needs and situation of one area or administrative unit. They are thus more specific than the general development strategy. But, of course, the smaller strategies are in accordance with the voivodeship's general strategy and often refer to one another.

The final implementation of the strategies' assumptions on the local proceeds rather differently, in fact. This rather depends on the effort of each local administration. There are some exceptional examples, where each decision, each policy and each expenditure is based on the specifications of the respective strategy. As one interviewee pointed out, the strategies were sometimes only drafted, because it was a precondition for receiving extra funds from the for development projects from the central government or from the EU. But usually, the strategy is officially adopted by local council and, hence, constitutes a solid basis for the future choices of local governance.

All in all, it can be said that the whole process of preparing, implementing and readjusting the strategy enhances the formation of a peculiar vision for the economic region of Lower Silesia. It has to be taken into account, though, that the process of regionalisation is just at its beginning. Due to the increasing efforts of the Marshall's office to steer the process of regional economic fortification the "making" of a coherent vision of economic development has been further promoted. The latest improvement was the elaboration of a common regional innovation strategy. The main purpose of this new strategy is the definition of important business sectors of future economic potential. To a certain extent this already is a step into the direction of a cluster approach. However, one interviewee at the Marshall's office, which initiated and coordinated the preparation of the innovation strategy, pointed out that it is rather difficult to agree on a few particular clusters:

"The economic situation in the region is still too complex and the economic dynamics are too huge to be able to definitely identify a few future growth poles. There are still too many divergent opinions in this regard".

5.1.2 Technology Park and Special Economic Zones

The effort of enhancing economic growth and development have also been undertaken through the installation of three special economic zones (SEZ) in Legnica, Wałbrzych and Kamienna Góra and a Technology Park in Wrocław. Whereas the SEZs are all located in certain problem areas of Lower Silesia, the Wrocław Technology Park, which was just founded lately in 2004, is supposed to make use of the advantage that Wrocław, the outstanding urban centre of the region, is an attractive target for investments in innovative technologies. In total, there are about 20 High Tech companies (IT, Biotech and automotive), at present, which are in the Technology Park primarily provided with a well developed IT infrastructure and favourable conditions for networking with important agents of innovations such as university institutes, research centres, financial institutions etc.

This is completely different with regards to the Special Economic Zones. The main idea behind the concept of SEZs is to attract investments in order to boost any kind of economic growth by granting benefits to specific investors, for example income tax exemptions, public funds, simplified administrative procedures, but also simple organisational support during the preparation and realisation of an investment. The initial motivation to offer potential investors these kinds of special incentives was to fight unemployment and related social consequences in problem areas, where the restructuring of traditional industries often resulted in huge redundancies without any prospect of substitution through the creation of jobs of new business sectors. Hence, the special economic zones are mainly designed to promote new businesses in problem areas and to diversify the out-dated monocultural economic structure.

It is quite exceptional, indeed, to have three SEZs in one region, since there are twelve of them in Poland altogether. The Legnica Special Economic Zone is located in the Legnica-Głogów Copper Basin (Legnicko-Głogowskie Zagłębie Miedziowe), the most industrialized part of Lower Silesia. It was set up to bit by bit to create an alternative to the furthermore dominant copper industry. The Kamienna Góra Small Business Special Economic Zone is located in the Sudetes area, where traditional industries have been disappearing, while the area as such possesses high potential for the development of tourism. The Wałbrzych Special Economic Zone was founded in an area, which contains traditional coal mining and textile industry. But the closing of the coal mines during the 1990s entailed a significant deterioration of the economic basis for many other companies which used to be connected with the mines, before. Since the installation of the SEZ in Wałbrzych 1997 38 permits for investment were given, there, and almost 30 companies have already started their business activities, yet, such as Toyota, Henkel, Ceranit, Faurecia etc. That adds up to the creation of

about 8.000 new working places and according to an interviewee from “Invest Park” in Wałbrzych the number of new working places is expected to exceed 15.000 – not to forget the added value of each new created job in the SEZ, as the interviewee further describes: “But we estimate that one working place created, here, creates more place outside. That means that some companies that cooperate with the investors from the SEZ will employ more people as well. There is an impact.”

Institutions like the “Invest Park” in Wałbrzych are set up by the Polish government in order to run and administer the Special Economic Zones. These operators are private and independent companies and, thus, not directly connected with regional government. But they play an important role in the system of regional and local governance, since they cooperate with both investors, who are not familiar with the place at all, and local institutions such as municipalities, chambers of commerce, local companies:

“We are doing our best to provide potential investors a friendly cooperation approach. (...) We are acting here as a coordinator, trying to help the investor as much as possible to establish a relationship with all authorities within the region.”

It is mainly these operators - and not the communes or municipalities, where a SEZ is actually located – which official represent the Special Economic Zones to the outside world, promote it at business fairs and directly contact potential investors. Hence, they are given a certain degree of independence in order to shape the development of the Special Economic Zones.

The introduction of Special Economic Zones decisively stimulated economic growth in the Lower Silesian problem areas. However, it is not sure for how long the positive effect on the labour market and the synthesized economic boom will sustain. On the one hand, the great importance of foreign investments for the long-run economic development was highlighted in different interviews. It was pointed out, above all, that many of the companies further invest in the enlargement of their capacities of production after their initial investment. This is seen as an indicator that the most of the foreign investors were not only interested in skimming the public aids and tax exemptions, but also in a longer engagement in the context of a favourable business environment. But on the other hand, it is not sure for how long the inflow of labour-intensive production can be guaranteed, as the interviewee of “Invest Park” further explained:

“However, the inflow of the producing companies will end sooner or late and thus we have to find other ways to attract investors, here. At the moment we are mainly focusing on production companies. (...) We are also trying to get the investments for advanced technology. But higher advancement means that they will employ less people. We have to find the balance in between.”

Finally, the future existence of the Special Economic Zones is also put into question due to another reason. It is inevitable that the SEZs must be abandoned in the near future because the regulations of the European Union don't allow for extensive subsidies or illicit restrictions of

free competition within the Common European Market. This will definitely have an effect on the future local governance measures with regards to problem areas, since new strategies of enhancing economic growth have to be found.

5.1.3 The Regional Development Agencies

An important contribution to the development and promotion of the Lower Silesian economic region is made by the five regional development agencies, which are set up in the 1990s in different areas of the present voivodeship. All regional development agencies carry out many different tasks and, thereby, act as the main catalyst of the region's social and economic re-animation. The different tasks include: the outside promotion of the region in order to gain potential investors and tourists; the support of foreign investors in order to provide them with most favourable investment conditions; the consulting of public administration ranging from the regional government level down to the level of communes and small and medium sized businesses; training and education; the organisation of fairs and other public events of business promotion; the stimulation of entrepreneurship activities. Last but not least, the regional development agencies also conduct their own businesses in order to be able to finance themselves adequately.

As it is the case with the number of Special Economic Zones, the number of regional development agencies is quite exceptional in comparison to other Polish regions as well. This may be a clear indication that the region is above-averagely active in terms of regional development and integration. As an interviewee explained, however, the existence of five regional development agencies is mainly due to the former division of Lower Silesia into four smaller voivodeships, in which these regional development agencies were initially set up. The five regional development agencies are fully independent from one another and have to work efficiently, since they are organised as non-governmental organisations or as private enterprises respectively. But they don't really compete with one another, because they have signed an official co-operation agreement, the Lower Silesian Regional Initiative, in which they committed themselves to co-ordinate their different regional development tasks with each other. Besides that, the five regional development agencies have specialised in different fields of activities, respectively. The regional development agency in Jelenia Góra ("Karkonoska Agencja Rozwoju Regionalnego Jelenia Góra"), for instance, is mostly concerned with the promotion of cross-border co-operation, since this area is located closest to the border to Germany. Other than that the development agency in Wałbrzych ("Dolnośląska Agencja Rozwoju Regionalnego Wałbrzych") to a higher extent promotes

exports and supervises the realisation of the export strategy of the whole Lower Silesia economic region. The regional development agencies in Nowa Ruda (“Agencja Rozwoju Regionalnego Nowa Ruda”) is also located in the former Wałbrzych Viovodeship. Like the development agency in Legnica (“Agencja Rozwoju Regionalnego ‘ARLEG’ S.A) it focused on a huge traditional mining area and, thus, rather concerned with enhancing new businesses in this particular area. The development agency in Wrocław (“Wrocławska Agencja Rozwoju Regionalnego Wrocław”), in turn, is more specialised on the promotion and support of foreign investors and the allocation of EU funds.

But it has to be pointed out as well that the possibilities regional development agencies or regional governments to co-ordinate and influence all developments in the region of are not unlimited, though. The central government level still has a lot of influence on the development of regions, since the competencies of self-governance are transferred rather slowly, although the official regional policies carried out by the central government are mainly insufficient, as a representative of the Wrocław regional development agencies explained. For instance, the allocation of the main EU funds is still carried out at the national level. Above all, during the during the process of privatisation the powerlessness of the local actors was very evident in Lower Silesia, since central government actors had the possibility to decide upon the “big” business deals without necessarily being obliged to consult with concerned localities. This, thoroughly, led to deep frustrations and reservations concerning the central government level, as Jane Hardy describes in her study about the Wrocław municipality:

“For example, the regional Ministries of Privatization based in the ‘voivodeship’ were an extension of national government and decisions were likely to reflect national priorities and concerns rather than specific local circumstances. Therefore important decisions about large locals SOEs were taken at national level without reference to local actors. (...) A palpable of bitterness and frustration was evident from the outcome of a national decision to sell s local computer firm to Siemens in the early 1990s. Siemens had been forced to buy the Wrocław company as part of a national package to gain entry into the telecommunications market. Part of the agreement was that all 1500 employees would be maintained; however, the redundancy package was so attractive that all jobs were voluntarily ‘relinquished.’ (Hardy, 2004, p. 311).

Up till now, there is no institution, which officially co-ordinates the different regional policies on the national government level. The most important regional policy institution on the central level is the Polish Agency for Regional Development (“Polska Agencja Rozwoju Regionalnego”). The “PARR” was established in 1993 in order to support regional development in Poland. The position of the Agency in the institutional structure of the Polish regional policy comprises the following: PARR status is a State Treasury foundation. The State Treasury is represented by the Minister of Treasury as the Founder, but the relevant

competent government body is the Minister of Economy. PARR operations comprise two interrelated segments – broadly understood promotion of regional and local development and implementation of specific regional development programmes. The former is primarily realised by means of PARR publications, supporting initiatives and events promoting regional and local development and popularising the findings of research through publications and scientific conferences. Pursuing its statutory goals, PARR, for over seven years now, has been functioning as an operational institution with the scope and forms of activities determined by relevant government bodies.

5.2 Main actors of regional governance

As it has been described in chapter 3, until a few years ago the institutional base of local economies and regional governance in Poland used to be rather weak and underdeveloped in comparison to many Western countries. Private businesses, participatory regional government and a range of intermediate and civil society institutions – such as chambers of commerce, regional development agencies, business support centres or consultancies – did not exist (Gorzalak, 2000). However, this has changed remarkably fast in a few years time. The regional government step-by-step gains more independence and under the co-ordination of the Marshall's office a huge variety of different development approaches has been carried out in recent years. The public offices in Lower Silesia were regarded as being extraordinarily open to the needs of entrepreneurs and adaptable to changing circumstances, as it turned out during the interviews. It is not surprising, therefore, that also on the intermediate level many different actors and interest groups appeared to play out their agendas of interest but also to co-operate with regional and local administration.

One of the main actors on the intermediate level are private interests groups. In Poland, the Chambers of Commerce are organised according to the Anglo-Saxon system. This means that - differently to the situation like, for instance, in Germany - a membership in the Chamber of Commerce is not obligatory for all local entrepreneurs and companies. Above that, it is possible to have more chambers in the same region, which compete with one another for membership support on an equal basis but also with other interests groups. Accordingly, in Lower Silesia there are at least two chambers of greater significance – the Lower Silesian Chamber of Commerce and the British Chamber of Commerce - not to forget the significance of other voluntary organisations representing the interests of employers like, e.g. the Federation of Employers in Western Poland (“Federacja Pracodawców Polski Zachodniej”) or

the new associations of the old elite networks. The Lower Silesian Chamber of Commerce was set up in 1989 as a non-profit-making organisation. It is the biggest chamber in the regions with about 400 members, which are to large extent small and medium-sized enterprises. Its main aim is to support entrepreneurs and companies by contacting the local or regional administration and government. Thus, it is the main link between the local economy and the state. The foreign investors, however, have established their own organisations: like e.g. the British Chamber of Commerce. In addition to the founding British firms, US American and Swedish firms became also members. This chamber, above all, facilitates important informal contacts between the foreign investors, who use it as an exclusive platform for the exchange of important information. With this example it becomes evident that the economy in Lower Silesia is not speaking with one voice. In fact, there are different sections of economic interests in terms of size and nationality within the group of investors, entrepreneurs and companies.

Another significant group of actors on the intermediate level are the trade unions - the institutions of organised labour. At least according to some of our interviewees, the trade unions are traditionally strong in Lower Silesia and they still have a significant voice in the region. However, above all the interviewees from the business interest groups, but also from public administration, questioned the importance of trade unions in current regional decision-making processes. They are hardly ever involved in any process. One of the reasons may be the fact that the trade unions are fractured in many different groups, since they are not organised according to professions or business sectors and compete with each other in one company or at each locality. Another reason is that nowadays many employees in Poland don't organise themselves collectively, or join one of the existing trade unions. The only significant trade union is the Solidarity ("Solidarność"), which traditionally has a high degree of impact through political channels. The Solidarity movement, founded after the huge Polish worker's protests in 1980, was one of the main political forces of the Polish political revolution. Today it represents about 7.5 per cent of the total Polish work force. There are Solidarity members in every kind of industry and business sector. The union has a territorial branch structure. Its objectives are to defend the employees' interests as well as their rights and dignity. In Lower Silesia it became apparent that the Solidarity was mainly concerned with trying to mitigate the effects of the impact of rapid transformation, but "(...) played a defensive role with little involvement in any vision of economic development in the locality", as Hardy (2004) points out. Nevertheless, she regards them as decisive "agents of change" in Lower Silesia, since - instead of constituting "blockade capital" - they transformed their

influence into “social capital” to facilitate reforms involving massive restrictions on consumption and far-reaching structural change.

Summing up, one can admit that a vivid institutional base of different regional and local actors was established in Lower Silesia within a short period of time. Compared to other Polish region the huge potential and openness for co-operation was often explicitly mentioned. However, looking at the current structure of different powerful und less powerful interest groups it is not sure, whether there already exists a coherent regional governance structure or rather an accumulation of fractured interests.

5.3 The regional research and development infrastructure

(this part is not yet been finished; here a table with a first overview on the performance of the regional R&D system)

	R&D expenditure (in % of GDP; 2002)	Total R&D personnel (in % of total employment; 2002)	Human resources in science and technology (HRST; in % of active population; 2003)	Tertiary education (HRSTE; in % of active population; 2003)	Science and technology professionals or technicians (HRSTO; in % of active population; 2003)	Scientists & Engineers, tertiary educated professionals or technicians (HRSTC; in % of active population; 2003)
Germany	2,53	1,74	45,93	29,90	32,91	16,88
Bavaria	3,01	2,05	44,88	27,75	32,80	15,67
Central Franconia	3,20	2,41	43,23	26,61	30,74	14,13
Saxony	2,52	1,53	46,07	38,11	27,45	19,49
Leipzig	2,09	1,39	47,95	39,20	28,92	20,16
Poland	0,59	0,89	29,63	19,15	22,19	11,72
Malopolskie	0,87	1,40	29,38	19,45	22,10	12,17
Dolnoslaskie (Lower Silesia)	0,45	0,98	27,80	17,76	20,81	10,76

Human resources in science and technology — HRST

HRST and their sub-groups are measured using characteristics of educational attainment and occupation and follow the guidelines of the *Canberra Manual*.

HRSTO: Human Resources in Science and Technology — Occupation Individuals who are employed in a S&T occupation (ISCO ‘88 COM codes 2 or 3).

HRSTE: Human Resources in Science and Technology — Education Individuals who have successfully completed education at the third level in a S&T field of study (ISCED ‘97 version levels 5a, 5b or 6).

HRSTC: Human Resources in Science and Technology — Core Individuals who have successfully completed education at the third level in a S&T field of study (ISCED ‘97 version levels 5a, 5b or 6) and are employed in a S&T occupation (ISCO ‘88 COM codes 2 or 3).

6. Conclusion

The previous analyses of Lower Silesia demonstrate the dynamic development of the regional economy and its institutional environment. In the past 15 years the region of Lower Silesia underwent a profound transition from a traditional, resource-based industrial region integrated in the international division of labour between socialist countries into a modern, increasingly service-based region integrated in the international division of labour between advanced Western, mostly European countries. The present economic structure of Lower Silesia is characterised to large extent by both industry with a high degree of diversification and a rapidly growing service sector. The economic region of Lower Silesia is supposed to be one of the most dynamically developing areas in Poland and is also considered as being part of the Central and Eastern European “growth boomerang” (Gorzela, 1996). Especially Wrocław, the economic and urban centre of Lower Silesia, is the uncontested growth pole of the whole South-Western area of Poland. In this city the region’s professional expertise and most of the profitable production and services of the region are concentrated. Not surprisingly a huge share of the foreign investments has gone there in the last years.

The prerequisites of Lower Silesia for economic growth and a vivid social life were extraordinarily favourable. One of the favourable preconditions of economic success was the changeful history of the region and the inherited openness and adaptability to change. Not surprisingly, the present re-definition of the new regional identity was based on selective references to history and, accordingly, to the historic continuity of change. Furthermore, the rich industrial heritage of the region made it easier to adapt to new economic demands, since the region has something to build on rather than building up from nothing. Due to its industrial heritage Lower Silesia has a well developed network of settlements, a high level of urbanisation and a certain educational, scientific and cultural potential. Above all, the skilled and still relatively cheap labour and its favourable position at the East German border attracted hundreds of foreign companies - amongst them many well-known multinational companies mainly from Germany, the United Kingdom, Sweden, the USA and Japan.

In the beginning of the analysis we shortly described the systematic construction of Lower Silesia as new “region”, which – once formed and put into play - has to assert itself somehow in the increasing global competition of economic locations. Most interestingly in this respect, when the central government of Poland created the 16 new administrative districts in the course of the accession to the European Union, it had to delegate some decision-making capacities to the regional level. This has created an institutional basis for regional governance. The single regions therefore had the possibility to influence its own economic profile. In fact,

they are able to conduct a huge variety of different regional development approaches, which are mainly coordinated by the regional government or independent local actors. The most important approaches are (1) the formulation and implementation of a major regional development strategy, (2) the foundation of three Special Economic Zones and a Technology Park and (3) the institutionalisation of five independent regional development agencies. This has been accompanied by a range of newly created intermediate associations which have mainly been created in the past 15 years in order to represent a variety of different interests explicitly within the regional context and its institutional framework. This demonstrates the increasing role of regional actors in the advancement of regional capabilities thus increasing the competitiveness of the region.

At this point the synopsis of the different findings could end with the impression of a total success story of enhancement of regional capabilities for the sake of economic growth and social stability. However, the dynamic development of the region is still accompanied by a huge unemployment rate, a shrinking employment rate and increasing economic disparities between different employment groups and subregional localities. Despite the relatively favourable economic development the unemployment rate even doubled in the past five years. The overall economic productivity of the regions is still lower than half of the current EU-25 average. It became apparent that the region of Lower Silesia is - like all other regions in Central and Eastern Europe - still at the beginning of restructuring, although most of the regions' draw a very enthusiastic picture of its future prospects. But yet it's too early to assess whether the attempts to create the institutional prerequisites for the enhancement of economic and innovative capabilities of the region will facilitate also in the future a positive economic and social development.

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