

Germany: Tackling the East-West Divide

Gerd Lintz¹ and Karl Schmude²

¹ Institute of Ecological and Regional Development, Dresden

² Ministry for Labour, Building and Regional Development Mecklenburg-Vorpommern, Schwerin

1 Introduction

In the last few decades many industrialised cities and regions in Europe have been undergoing a remarkable process of structural change. Some of them have succeeded in adapting to the changing circumstances. However, in many cities and regions the decline of industries such as coal mining, steel production, textile production and shipbuilding has not been compensated by a growth in new sustainable industries. These cities and regions, often termed “old industrialised”, are suffering high unemployment rates, decreasing incomes, deformed urban structures and ecological damage. The challenges for industrial cities and regions with structural problems are of a highly complex nature.

Structural change in Western countries has been driven mainly by the market economy, and changes have been relatively slow and continuous, if at times painful. In the socialist Central and Eastern European countries the moderate pace of structural change as driven by central planning was abruptly superseded by an unprecedented transformation from socialism to capitalism. This necessitated drastic and wide-ranging adaption measures, if these countries wished to integrate into the structures of the world economy.

Germany is situated in the heart of Europe. With around 82 million inhabitants it accounts for almost one fourth of the gross domestic product of the European Union (EU). A recent history of division and reunification has given Germany experience of the problems of sustaining structural change in a market economy as well as a system transformation from socialism to capitalism. Drawing from existing studies, the aim of this paper is to describe and compare the problems of cities and regions in western and eastern Germany while examining the strategies adopted there to tackle these problems.

The article is structured as follows: Following the introduction, the historical development and current situation of old industrialised cities and regions is outlined, stressing the quite different paths of development in western and eastern Germany (second section). The third section deals with the strategies adopted by

the five political-administrative levels in today's Germany to overcome specific problems. In the last section some conclusions and future perspectives are given.

2 Two Different Paths of Development

German cities and regions have shown a diversity of development in the last 60 years. This is primarily due to the entirely different trends of general development in western and eastern Germany (section 2.1). A glance at the map shows that an interesting geographical pattern of old industrialised cities and regions has emerged (section 2.2). The special problems and the reason of decline of such cities and regions are described in section 2.3.

2.1 Trends of General Development

2.1.1 Economic Trends

After World War II, the basic conditions of urban and regional development on either side of the newly imposed internal border of divided Germany could not be more different. The paths of development of West Germany, consisting of the eleven old states (*alte Bundesländer*), and East Germany, consisting of the five new states (*neue Bundesländer*)¹, led in diverging directions. After the decision was taken in favour of an open social market economy, the US Marshall Plan fostered the economic rebuilding and development of *West Germany* to continue with its pre-war dynamism. Rapidly increasing wealth for the great majority of the population and unemployment rates of less than 2 % characterised the resulting "Economic Miracle".

At the end of the 1960s and the beginning of the 1970s (first oil crisis) growth rates began to decline. Aggravated by an expanding population, the unemployment rate increased steadily to an average level of around 10 %. This development was accompanied by ongoing structural change: the share of the national workforce employed in industry decreased, while the tertiary sector saw expansion (cf. Ambrosius 1994, Schröter 2000).

¹ Following reunification the difficulty arose of how to name the territory which constituted the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR), often referred to as West and East Germany in political terms. The (old) FRG consisted of eleven states, now called the "old states" (*alte Bundesländer*). The GDR dissolved into five "new states" (*neue Länder*) and acceded to the FRG. West Berlin merged with East Berlin. Many years after reunification it is becoming less and less appropriate to use the designation "old" and "new" states. So "western" and "eastern" Germany are being increasingly used in the geographical sense (although the German language does not distinguish between west and western or east and eastern). As a consequence, Berlin, one of the "old" states which belonged to West Germany, is now more frequently viewed as part of eastern Germany.

With increasing integration into a dynamic world economy, competition became more fierce for domestic producers. Branches which manufactured products at a relatively low technical and labour-intensive level were particularly affected. For example, the coal-mining industry, textiles and the steel industry lost market share to low-wage countries. In addition, demand for certain products sank for purely technological reasons, affecting the coal and steel industries.

Restricted by high wage levels, not all affected enterprises and factories were able to boost competitiveness through product innovations or rationalisation. Instead many were forced to close. Or, in the case of a successful lowering of labour costs by way of rationalisation, only a reduced workforce could be retained. The spatial concentration of those branches affected by the crisis and certain unfavourable local and regional factors resulted in a spatial concentration of problems such as unemployment and low financial power in some cities and regions.

Reunification in 1990 was initially followed by a short economic upswing in western Germany before economic growth was stifled by the high ensuing costs. Existing structural problems such as an overly expensive social security system and huge public debt were exacerbated. The table below shows that employment in the period of 1990-1998 decreased by 1.2 %, with the unemployment rate reaching almost 10 % in 1998.

Table: Employment and unemployment in western and eastern Germany

	Employees liable for social security contributions		Labour-force participation rate		Unemployment rate
	Development 1990-98	% of inhabitants 1998	1989	1998	1998
Western Germany	-1.2 %	33.0 %	50 %	48.1 %	9.8 %
Eastern Germany	-36.8 %	33.6 %	75 %	53.3 %	18.2 %

Source: BBR 1999a; Employment rate 1989: BMBau 1991, Employment rate 1998: Statistisches Bundesamt 1999.

Labour-force = Gainfully employed persons + unemployed persons; Labour-force participation rate = ratio of labour-force to total working age population; Unemployment rate = proportion of the labour-force who are unemployed.

After World War II, *East Germany* was obliged to pay reparations to the Soviet Union for war damages. The new socialist state was integrated into the Council of Mutual Economic Aid (COMECON) of socialist countries in Europe². Despite the waves of highly selective East-West migration before the erection of the “iron curtain” in 1961, a strong tradition of industrial production gave the German Democratic Republic, GDR, (Deutsche Demokratische Republik, DDR) a leading position in the Eastern bloc. However, economic development rapidly fell behind that achieved in West Germany, with investment in physical capital being particularly weak. This led to low labour productivity, low quality products and high consumption of resources and environment. The GDR also experienced moderate

² Until 1989, more than 70 % of exports were shipped to COMECON countries, 40 % went to the former USSR (Hohlfeld 1999).

structural change, resulting in inefficient structures, i.e. excessive industrialisation. This was deliberately driven by central planning and did not cause unemployment.

Reunification brought an unprecedented transformation from socialism to capitalism. Less than one year separated the falling of the wall in November 1989 and the achievement of national unity in October 1990. The GDR dissolved into five federal states and acceded to the Federal Republic of Germany, FRG, (Bundesrepublik Deutschland, BRD). East and West Berlin merged. The process and outcome of these dramatic changes has been extensively documented (e.g. BBR 2000b and 2001, DIW 1999 and 2000, DIW et al. 2002, Härtel 2001, IWH 2001, Mayr and Taubmann 2000, Pohl 2000 and Sinn 2002).

While in western Germany only a few branches of industry underwent contraction over a lengthy period of several decades, in eastern Germany all branches were negatively affected in a historically unprecedented way within an extremely short period of time (Pohl 1995). The pressure to adapt was tremendous. Industrial employment fell drastically, from approx. 3.5 million people in the year before reunification to just under 730,000 in August 1993. In mid-1993, eastern German industry contributed only 3-5 % to the overall German industrial production (Fischer 1994) – this can be considered a “structural break” and a process of “de-industrialisation” (for example acc. to Scholz 1994, 9). Eastern Germany’s population decreased from 16.6 million in 1989 to 15.2 million in 1999 (Statistisches Bundesamt 2000), mostly a result of net migration to western Germany.

With reunification, the complete economic, legal and social welfare system of the FRG was applied to the former GDR (including introduction of the West’s Deutschmark). Subsequent analysis reveals that the dramatic economic slump had four causes. Firstly, the currency conversion of the Mark (East) into the Deutschmark (DM, West), with wages and salaries fixed at a 1:1 rate, was problematic (Mulke 2000). Since an improvement in the low productivity of the eastern German economy to compensate the increased wages was impossible factories were hard pushed to operate at a profit. Secondly, conversion of the debts of former GDR-enterprises was, in hindsight, unwise. Loans in the GDR had an entirely different function than in countries with a free market economy: enterprises were neither able to independently raise loans nor to use loans for investments. This fact was ignored and enterprises continued to be burdened with the converted loans after 1990.

Thirdly, the way property relations were handled turned out to be an impediment to investments. It was seen as of utmost importance to return unlawfully expropriated manufacturing facilities and other real estates to the lawful owners, even when unclear property relations led to considerable delays in investment. A fourth negative aspect was that demand for domestic products collapsed in favour of goods produced in western Germany and western Europe. Demand from previously predominant markets in other socialist countries also dropped, partly due to the fact that goods had to be paid in DM and partly because of economic problems in those transforming economies. The result was not, as hoped, a second “Economic Miracle”, but instead a painful and still ongoing structural breakdown.

The rapid drop in industrial employment after 1993/1994 finally bottomed out, to be followed by an increase in production, resulting from the implementation of

strong economic support. From 132.5 industrial employees per 1,000 inhabitants in January 1991, the figures for eastern Germany plunged within three years to 46.5; in June 1997, they had risen somewhat to 73.0, still far below the western German average of slightly more than 100 (Nolte and Ziegler 1994; Statistical Offices of the Federal Government and the Federal States). Even allowing for over-estimates in the GDR's industrial employment (many non-industrial services were provided by companies) this development is quite significant.

In the period 1990 to 1998 the number of employees liable for social security contributions (including industrial workers) fell by a total of more than one third (cf. Table). It should also be mentioned that the high unemployment figure in comparison to western Germany is partly to be explained in the much higher labour-force participation rate. The unprecedented number of redundancies was cushioned by numerous social, labour market and economic-political measures. This is one reason why, with 2.36 million jobs lost in eastern Germany by 1998, only 1.38 million people were reported unemployed (DIW 1999). The 18 % unemployment rate was almost twice as high as in the western part of the country. In eastern Germany the gross monthly income in the manufacturing industry is only 75 % of that in western Germany. However, overall economic productivity is still only around 60 % of the western level (DIW 1999)³.

Of great importance for the economic situation in eastern Germany is the privatisation of around 8,000 formerly state-owned enterprises. By 1994, almost all enterprises, parts of enterprises, factories and other property were free for privatisation, reprivatization, communalisation or liquidation (BVS 1995). It should be noted that most enterprises and factories were bought by West German or foreign companies. This distribution of property and control rights might become a problem for eastern Germany in the long term. However, other concrete difficulties connected with branch plants (lack of headquarters, poor levels of research and development) will probably play a more important role than the outflow of investment income.

Serious problems could also arise from the wave of young and qualified employees migrating to western Germany as a result of the economic situation. Together with the dramatic decrease in births – insecurity led to a collapse of the total fertility rate from 1.52 in 1990 to a world record low of 0.77 in 1994 (Schach and Fleischhacker 2000) – demographic developments can be expected to greatly burden the economy and public budgets in the future (cf. BBR 2000a, 9-16).

After the initial slump of the eastern German economy, GDP then picked up, growing at a much higher rate than in western Germany. Although the "Aufbau Ost" (the attempt to adjust eastern Germany to western standards) has made clear strides, the process of catch-up stopped in 1997, with stalled and falling growth rates (SVR 2002, 178). A considerable prop to improved living standards is still financial aid from western Germany. Fortunately industry is steadily growing, although positive effects are still countered somewhat by the decline of the con-

³ The latest study (DIW et al. 2003, 9) says that eastern Germany in 1998 showed 67 % and in 2002 showed 71 % of the productivity of western Germany.

struction sector; this sector previously gained an excessive share in the economy in the first years after reunification.

2.1.2 Environmental Trends

Air, water and soil have been heavily polluted in the industrial regions of both *Western and Eastern Germany*. Furthermore, the landscape of almost all industrialised regions has been transformed by specialised infrastructure such as freight train railways, pipelines and high-tension power lines, often appearing overdimensioned and unsuited for later reutilisation (recreation, housing, commerce).

The strong spatial concentration of the heavily polluting coal, steel and chemicals industries has produced regional centres with serious environmental pollution. Although the large number of pollutants makes generalisations difficult, the most important sources of environmental pollution are the following:

- Combustion processes in power plants and heavy industry, causing massive and far-reaching air pollution with sulphur oxides, nitrogen oxides and dust.
- The air quality in regions with coal and steel industry was also seriously impaired by hydrocarbons from coking plants and exhaust gases from blast furnaces. The hydrocarbons also caused deep-reaching soil pollution.
- The chemical and textile industries emitted a large number of hazardous substances into water, air and soil. Heavy metals and some persistent organic by-products still constitute a problem decades after production has ceased.

The situation in the GDR was worsened by the fact that the entire energy and raw material industry was largely based on technical processes from pre-war times. The use of lignite as the only energy source and a hazardous system of waste treatment produced high emissions of pollutants. Metallurgy industries in the GDR were forced to use inferior ores, requiring a great deal of energy for extraction and processing (SRU 1995, Tz. 532-561).

In West Germany modern environmental legislation was introduced at the beginning of the 1970s, based on the polluter-pays principle⁴; economic structural change then led to a continuous improvement in water and air quality. In eastern Germany air and water quality improved greatly after reunification. The rapid structural change and implementation of West German environmental standards forced polluting industries to modernise or face closure.

Notwithstanding the unquestionable improvements in air and water quality in west and east, the remaining problems of soil pollution on old industrial sites⁵, of

⁴ The “polluter-pays principle” can be regarded as the cornerstone of most environmental legislation. It states that the cost for environmental damage (previously borne by the public purse) has to be paid by the polluter – these external costs have to be internalised.

⁵ According to Hentrich et al (2001), of the almost 300,000 suspicious sites in Germany (Dec 1998), only 10-20 % will eventually have to be cleaned up. The remaining sites will either be classified as harmless, put to new use or closed for public access.

devastated landscapes and of groundwater deficits in open-cast mining regions⁶ still have to be dealt with. Environmental reclamation is, however, costly and time-consuming (UBA 2000a). One special case requiring attention is the radiological contamination of uranium ore mining areas in the southern parts of Thuringia and Saxony.

The fact that many companies have folded in the course of structural change nullifies the “polluter pays” principle, passing the task of soil remediation to the buyer of a contaminated site or to public authorities (who are often not able or willing to raise the required funds). Costs can be quite considerable; according to the planning ministry of Northrhine-Westphalia (MSWKS 2001), the remediation costs for the 110 ha. site “Phoenix-West” in Dortmund – a former blast furnace – will be more than 36 million euros.

The economic ramifications are pointed out by Henckel (1986, 66): the high real property prices in economically attractive regions mean that “wastelands practically do not constitute a problem”, as private enterprises are prepared to buy and use these areas. However in “old industrialised or peripheral regions which have lost their attractiveness for new types of industries (...) the old contaminations from the past – in the broadest sense⁷ – must often be removed, involving high public expenditure.” Several years may go by after a factory closes before the area becomes available for reutilisation (Tettinger and Mann 1994; SRU 1995, Tz. 260). The reutilisation of brownfields thus becomes quite difficult.

It should be emphasised that unlike other problems which old industrial regions are experiencing, environmental damage is not due to the economic breakdown; it is rather the immediate consequence of former economic activities. The issue seems to receive more attention when a given industrial region is undergoing serious decline; when industry is booming, bad news about negative impacts tends to be dismissed, for obvious reasons.

Today, we have the situation that air and water pollution has actually been decreasing for years, and great success has been achieved in soil remediation. However the persistent and unjustly negative environmental image of western and eastern German industrial regions is a key factor in discouraging external investment.

⁶ One of the largest open-cast mining areas in Europe is Lower Lusatia (Niederlausitz) where approx. 800 km² of land are devastated, partly due to the political decision of basing the GDR's energy supply on domestic lignite. Excessive pumping of water to keep pits dry has lowered the groundwater table by as much as 80 m on approx. 2,500 km², with a considerable impact on agricultural, forestry utilisation and biotopic conditions. Now that mines are closed, large amounts of water are required to recover water deficits; the amounts required and necessary quality mean that this cannot be left to natural groundwater refill. Instead water must be supplied via pipelines over long distances (Georgi 1994, 350).

⁷ This includes buildings and specialised infrastructure which characterise these areas.

2.2 Distribution of Old Industrialised Cities and Regions

Influenced by various factors of structural change and the different powers of adaption shown by individual areas, a certain pattern of spatial distribution of old industrialised cities and regions has emerged. As the map shows, cities and regions suffering from incomplete structural change are only thinly scattered across the eleven old states⁸ with much more extensive problem-areas in the five new states (encompassing Mecklenburg-West Pomerania, Brandenburg, Saxony-Anhalt, Thuringia and Saxony). As the situation in unified Germany is heterogeneous, the delimitation of industrial cities and regions requires a pragmatic approach.

The map shows the areas in western Germany given objective 2 status in EU regional policy (declining industrial areas, 1989-1999). With its comparatively low economic power, the whole of eastern Germany is eligible for objective 1 status (regions lagging behind in development). Since all cities and regions which were industrialised before reunification have experienced with dramatic structural change, they can now be classified as old industrialised areas, or as industrial areas with structural problems. The map shows these cities and regions, distinguishing between industrialised and strongly industrialised areas (data from 1971, cf. Scherf and Scholz 1990).

In *western Germany*, regions with the following previously dominant industries were particularly affected: hard-coal mining, iron and steel production, ship building, textile and clothing industry. The result was transient local unemployment rates of up to 20 %, as for example in the Ruhr area (Danielzyk 1992).

The densely populated and strongly urbanised Ruhr District in the centre of North Rhine-Westphalia (pop. five million) is by far the most important old industrialised region in western Germany – and at one time the leading region in Europe (cf. e.g. Blotevogel 1997, Bömer 2000, Dürr and Gramke 1993, Hamm and Wienert 1990, Schrader 1998 and Wood 1997).

Economic development and a changing employment structure in this conurbation has been characterised by a more or less continuous decline in industrial employment since the 1960s and 1979s. Hard-coal mining and steel production have been worst hit, with 500,000 jobs being lost in these two sectors alone (Wienert 2000, 28). Since there has not been a compensatory increase in jobs in other industry branches or in the tertiary sector, unemployment rates have also risen. Development has varied from city to city, but all are confronted with above-average unemployment rates. The Saarland, Germany's second (much smaller) old coal and steel region, is suffering similar problems to those faced by the Ruhr district.

The shipbuilding and harbour industry was also forced to make closures and reduce capacity, causing long-term problems in some port-cities, e.g. Bremen, Bremerhaven and Kiel. The significant loss of jobs in the leather, textile and clothing industries has badly affected regions such as the sparsely populated West-Münsterland Region in the southwest of Lower Saxony and the area around the north Bavarian textile city of Hof.

⁸ Including the western parts of Berlin, formerly an exclave in East Germany.

While unemployment did not officially exist in the GDR, after 1989 the unemployment rate of *eastern Germany* rose to unprecedented heights, in some places exceeding 25 %. In line with the spatial distribution of industry, Saxony, Thuringia and the south of Saxony-Anhalt were particularly affected, as well as some cities and regions in Brandenburg and Mecklenburg-West Pomerania (cf. Bönisch et al. 1982, Häußermann 1992 and Schmidt 1995).

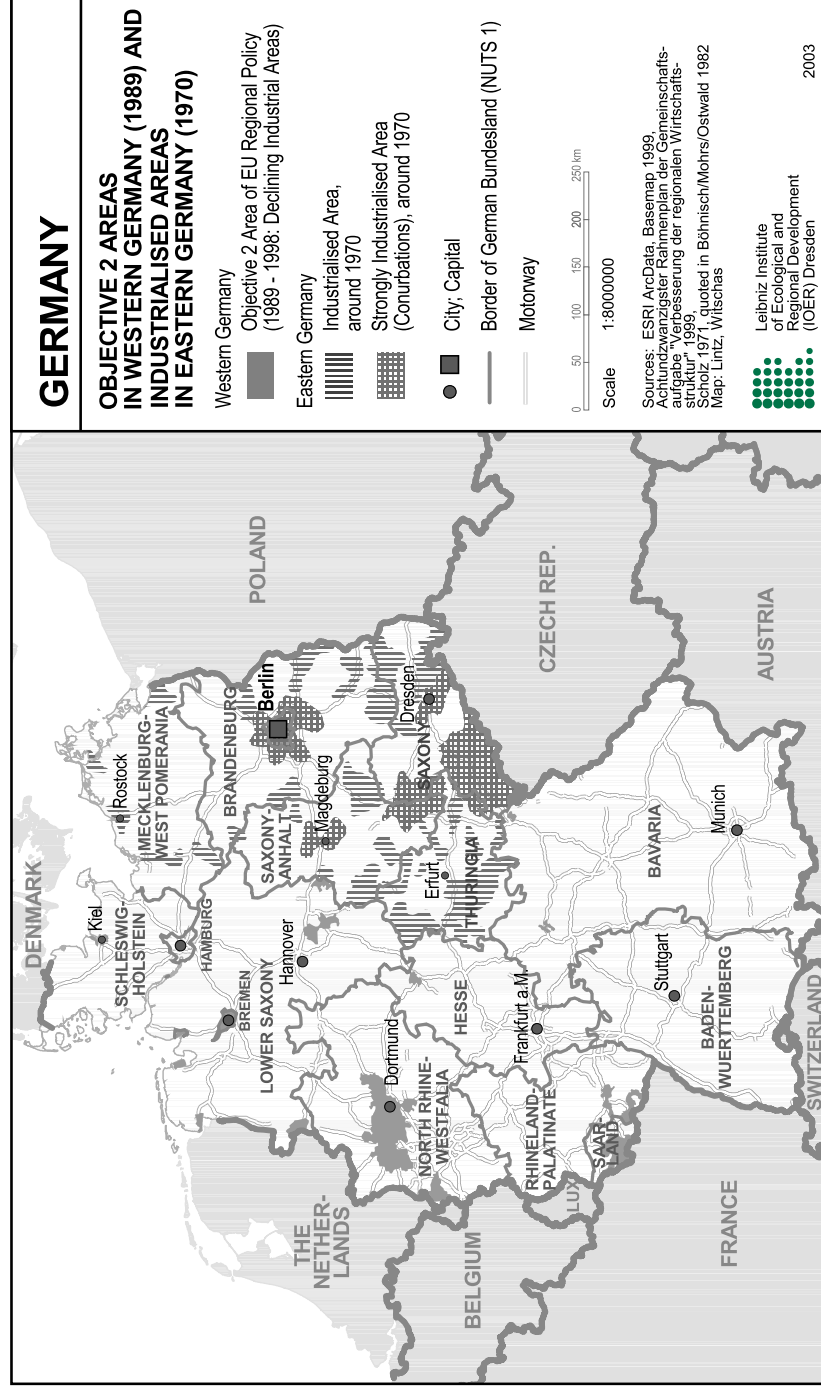
The following problem areas are specifically mentioned in view of their concentrations of declining branches. The Leipzig Lowlands (cf. Oelke 1998) and the area around Cottbus (Lower Lusatia, cf. Kowalke 1998) are former lignite mining, lignite processing and energy production centres. Some derelict centres of chemical industry can also be found scattered around the lignite deposits, for example, within the triangle of Halle-Leipzig-Dessau.

Another important branch of industry was uranium-ore mining in the south of Thuringia (e.g. Ronneburg) and in the southwest of Saxony (e.g. Johanngeorgenstadt), developed as a joint Soviet-German military venture under great secrecy and with no concept for subsequent remediation. The steel industry, later suffering extensive closures, was concentrated primarily in the cities of Brandenburg (state of Brandenburg), Eisenhüttenstadt (Brandenburg) and Riesa (Saxony). Shipbuilding and harbour activities were located in northern Mecklenburg-West Pomerania; these branches have also seen considerable job losses. The textile and clothing industry has disappeared almost completely, reduced to only a few production facilities, predominantly in western Saxony (Kowalke 1998, 428). Considerable adaptation problems also occurred in heavy machinery construction in Magdeburg (Saxony-Anhalt) and in automobile and machine construction in the Chemnitz region (Saxony).

Some regions have managed to maintain their industrial tradition with the help of modern production facilities. For example optics and precision mechanics is being developed in Jena (Thuringia), microelectronics is flourishing in Dresden (Saxony) and a strong chemical industry can be found the region Leipzig-Halle (Saxony/Saxony-Anhalt). Additional potential growth centres are Berlin, Erfurt in Saxony-Anhalt and Chemnitz in Saxony (SVR 1999).

2.3 Regional Problems and Reasons for Decline

Our general analysis shows that the basic conditions of development in western and eastern Germany have been very different. Weak long-term macroeconomic performance has also complicated the processes of structural change over the whole of Germany. It is not surprising that one can find cities and regions that have been unable to meet the challenges successfully; in each case the concrete difficulties are highly dependent on spatially differentiated factors. The problems of affected cities and regions in eastern and western Germany are in principal similar – with the overall situation in eastern Germany being considerable worse, showing particular areas of weakness.



Map: Germany – Old industrialised cities and regions

The heterogeneous distribution of natural resources is reflected in the distribution of negatively affected branches across the country. The higher the share of such branches in the urban or regional economy the bigger the challenge posed by structural change. However, it is important to note that not only the depth of necessary adaptation can vary; the local or regional ability to cope with a certain challenge can also differ (Steiner 1985, 389). The following location factors are decisive for the growth of existing enterprises and the emergence of new enterprises to provide additional employment (cf. Hamm 1991).

(1) The *entrepreneurial potential* of a city or region can influence the pace of adaptation to structural change in a market economy. While one can argue that entrepreneurs and managers in the Ruhr District have concentrated on coal and steel for too long, in East Germany there was almost no entrepreneurial tradition. The principles of the market economy and private-sector management (especially financing and marketing) were largely unknown in the GDR, and have had to be newly learned. This is still a problem today.

(2) In spite of the availability of extensive industrial wasteland, *developed operationally-usable areas* have been lacking. The reasons for this are actual or suspected waste deposits, unclear property relations and dilapidated infrastructure and buildings. In the Ruhr District, the so-called “blockage of land” worsened the situation: old-established enterprises owned the majority of potential areas and refused to sell. A similar effect, at least temporarily, was caused by the insecurities regarding property relations in eastern Germany. Today a lack of areas should no longer play a decisive role.

(3) Traditional industrialised cities and regions usually have a specialised *infrastructure* of ports, railway systems and pipelines, designed to provide bulk goods transportation. This does not meet the requirements of flexible production structures (e.g. just-in-time delivery). It will take many years for eastern Germany to modernise infrastructure in this regard. The federal government and individual states have agreed that the new states will be specially assisted till the year 2019, as part of a financial equalisation policy.

(4) The availability and quality of *labour* is highly important. Often workers have inadequate qualifications or no professional training. Selective migration, such as seen in eastern Germany, can aggravate the situation. With its strong labour unions, the Ruhr District was for a long time a high-wage region, discouraging private enterprise. As already mentioned, labour costs in eastern Germany are too high in view of the lower worker productivity.

(5) The number and size of *educational facilities* is an associated issue. The training of sufficiently qualified personnel is dependent on the capacity of educational institutions. Today, educational possibilities in industrial regions have been expanded from their previous narrow specialisations. Universities, in particular, play an important role in urban and regional development by additionally providing *public research*. The role of research institutions will be addressed in point (8) below.

(6) As hard location factors are becoming widespread, *soft location factors* such as environmental, landscape or urban qualities and the standard of cultural life are gaining in importance. These are especially vital in attracting high quali-

fied employees, because they characterise the image of a town or region and influence managers and workers in creative professions to move to a certain site. While in western Germany a strong environmental policy beginning in the 1970s led to improvements in air and water quality, in eastern Germany the main improvements have come with the rapid industrial decline (Hentrich et al. 2001). With their high spatial concentration of pollution, towns such as Bitterfeld in Saxony-Anhalt or the area south of Leipzig were synonymous with ecological catastrophe.

The urban features of industrial settlements often do not come up to today's standards. Residential areas lack green spaces, housing quality is often poor and the (remaining) industry is a source of pollution. In some cases urban structures were destroyed, as for example in Johanngeorgenstadt (associated with uranium mining) where the historic town centre was deliberately demolished. Cities sometimes formed around mines or factories: Oberhausen in the Ruhr District is only one example of several in that area. In East Germany new industrial cities were planned and built, such as Eisenhüttenstadt in Brandenburg. Industrial wasteland is often situated near the town centre, and needs to be revitalised and integrated into the town. Unfortunately, greenfield development was often given priority over brownfield development (cf. UBA 1998 and 2000). While in the Ruhr District reuse of old areas started relatively early, in eastern Germany there was initially a strong trend of constructing industrial, business and residential areas in the suburban space. Urban deficiencies in East Germany were aggravated by a socialist housing policy which favoured slab constructions, deliberately neglecting pre-war housing in the city centres. Furthermore, the quality of life in old industrialised cities and regions is impaired by cutbacks in social and cultural infrastructure. Despite impressive efforts in the Ruhr area and in large parts of eastern Germany, there are still deficiencies in soft location factors.

(7) The *commitment of local politicians and administrators* also plays an important role in economic development, and the pace of structural change can be particularly affected. In the Ruhr District an attitude which favours the preservation of structures has resulted in delays in implementing sustainable solutions to long-term problems. In eastern Germany a much greater readiness to accept change has been displayed, although unfortunately the necessary experience to ensure success has sometimes been lacking.

(8) Aside from these soft location factors, "*ultra-soft*" *location factors* have also been identified (Butzin 1996). These are strongly connected to the innovation-oriented co-operation between economy, science and politics. Networks form a basis for co-operation (Fürst and Schubert 1998), with the existence of *research and development* (R&D) facilities in the public and private sector being a core element. Positive attitudes regarding co-operation and innovation can also be helpful in fostering a culture of innovation or a "creative milieu". The milieu in the Ruhr District, for example, is considered to be non-innovative by some authors (Butzin 1993, Grabher 1993 and 1994). Many old networks in eastern Germany have broken down, with new regional networks emerging only slowly (cf. Grabher and Stark 1997). While public R&D spending has grown sufficiently, there is still a lack of R&D effort in the private sector. Since innovation has become increasingly important for urban and regional competitiveness, the exploitation of net-

work and co-operation potentials and “creative milieus” is seen as a key factor in development. Ultra-soft location factors provide a central endogenous potential to activate other material endogenous potentials.

Rising unemployment and stagnant wages in affected industries can trigger further problems if no strong development policy is implemented. These problems can lead to a vicious circle of general decline, weakening the aforementioned location factors. Consumer purchasing power is reduced and rising public spending on social security diminishes the scope of action of municipalities. Expenditures are cut back just as more money is needed to improve location factors for economic revitalisation. Decreasing urban and regional attractiveness often leads to the migration of valuable workers. The town of Hoyerswerda in Saxony provides a prime example of these negative processes. Built as a settlement for an energy and chemical production complex (Hamacher 2001), the number of inhabitants decreased after reunification from 65,000 to 45,000, constituting a veritable urban disaster. Areas in eastern Germany with high migration rates have large numbers of vacant flats and residential buildings, as well as showing general signs of decay and social segregation. These factors tarnish the image of afflicted cities and regions, and eventually inhabitants can lose both their confidence and the will to promote a positive development.

The complexity of the problems facing old industrialised cities and regions demands an integrated approach of different policies and measures at local and regional levels, with crucial elements being the commitment and expertise of local and regional protagonists. Their participation in the formulation of development objectives and the granting of financial aid increases the motivation of all parties and raises the likelihood that measures will be accepted.

All things considered, the situation of old industrialised cities and regions has improved, especially in eastern Germany. The implementation of redevelopment strategies has radically changed the face of many cities and regions, with some formerly depressed areas now flourishing. However these success stories must be weighed against those areas still suffering persistently high unemployment.

3 Interdependent Strategies on Different Levels

As discussed above, a considerable number of cities and regions are old industrialised, especially in North Rhine-Westphalia, Saxony-Anhalt, Thuringia and Saxony. Since the end of the 1960s strategies have been developed and implemented to tackle the problems of structural change. The strategies evolved over decades and varied according to the development of problems, practical experience, specific conceptual ideas and the particular institutional framework. The most influential factors affecting structural change are general economic development, the continuous processes of EU integration and, of course, the reunification of Germany. The latter, in particular, dramatically changed priorities in the resolution of spatial problems. After reunification, attention and financial means were very much shifted to eastern Germany.

Germany is especially marked by its multilevel governance. There are no less than five important political-administrative tiers with the responsibility of formulating or pursuing development strategies for old industrialised cities and regions: the European, federal, state, regional and municipal levels. They have different degrees of authority and a diversity of aims, so that a complex system of interwoven and highly interdependent strategies has emerged. Before turning to the strategies of different political-administrative levels some initial points are addressed.

3.1 Initial Points

Germany has made outstanding efforts to support the development of old industrialised cities and regions, both directly and indirectly. There is a relatively strong orientation towards a “social” or “welfare” state, incorporating spatial specifications. Article 72 in Germany’s constitution (Grundgesetz) introduces the aim of establishing “equal living conditions throughout the federal territory” (Tschentscher 2002). Accordingly, the Federal Regional Planning Act (Raumordnungsgesetz) states in paragraph 1: “similar standards of living shall be established in all regions” (Federal Office for Building and Regional Planning 2001, 61).

Strategies to support old industrialised cities and regions are concerned with two aspects. One regards the choice of development aims and supporting measures, e.g. investment incentives for companies, upgrading of infrastructure or environmental remediation (content, policy). Another aspect is the social and institutional process of defining aims and selecting/implementing measures in terms of, for example, the complementary roles of cities and regions, leading to the distinction of top-down or bottom-up approaches (Politics, Polity).

Concerning the first aspect of content, at least three or four strategies to ease structural change can be distinguished. Firstly, existing endangered branches can be safeguarded (i.e. given “economic protection”). This means that companies hit by crisis are stabilised by special support. However in the long run it is often impossible to save old structures and to prevent structural change in this way.

Secondly, new jobs can be created in other industries, particularly in industries which are seen as “future branches”, such as microelectronics or biotechnology (“new jobs”, “innovation”). This approach stresses the necessity of facilitating structural change, enhancing the framework conditions in general, and targeting new branches. Enterprises must be kept competitive and help given in the founding of new enterprises, either directly (subsidy payment) or indirectly (improved infrastructure etc.).

Thirdly, socially-compatible solutions are necessary for the newly unemployed who have little chances on the labour market because of, for example, age discrimination (early retirement schemes etc., “social cushioning”).

Beyond these direct economic objectives, a fourth focus is to make improvements in the environmental situation and the general quality of life. These are major deficits in most industrialised cities and regions (“environmental improve-

ment”). Although all approaches are currently adopted in Germany, the second and the fourth are gaining in importance.

3.2 European Union, Federal Government and States

The federal character of the German constitution influences the way in which structural change is handled. In addition to the Federal Government (Bund) and the 16 states (Bundesländer, Länder) there is a third constitutional level of administration – the around 14,000 self-governing communities. Another relevant issue of increasing importance is the integration of Germany into the European Union. Both the German institutional system and the planning system in general are well documented (in English) by Albers (1999), BBR (2000c) and Turowski (2002).

Strategies at EU Level

Within the framework of *European Union* regional policy (cf. Vanhove 1999), co-financial means from European structural funds were provided to facilitate structural change in those industrialised cities and regions eligible for help under EU regional criteria (Drerup 1997, Biehl and Hoffmann 1998). In western Germany in the period 1989 to 1999, cities and regions designated “industrial regions seriously affected by industrial decline” were given support (Schrumpf 1995). For these German *objective-2-areas*, 1.56 billion ecus⁹ were made available in the programme period 1994 to 1999 (BBR 2000a, 274). A relatively wide range of measures were co-financed, in areas such as private investment, infrastructure, education and the environment (Europäische Kommission 1996). A pre-condition for the provision of structural funds is the establishment of regional development programmes. This requires a certain bottom-up-agreement regarding the selection of regional projects.

Following reunification, all regions in eastern Germany were eligible for *objective 1* status, along with peripheral regions such as Portugal, Greece and Southern Italy (“regions lagging behind in development”). This status allows the broadest scope for using appropriated money and the highest award rate (max. 75 % co-financing rate). For these German *objective-1-areas*, 13.64 billion ECUs were made available in the programme period 1994 to 1999 (BBR 2000a, 274).

A share of the structural funds has been used for *community initiatives*. The initiatives Retex (textile regions), Rechar (coal regions) and Resider (steel regions) of the last programme period should be emphasised for their facilitating of structural change in industrialised regions. These community initiatives were set up in both western and eastern Germany.

Some changes have been made in EU regional policy for the programme period 2000 to 2006 (Europäische Kommission 2000). The new objective 2 areas (“undergoing economic and social conversion”) now encompass both the old objective 2 and objective 5b areas (“development and structural adjustment of rural areas”), covering a smaller population than before. In eastern Germany, EU support under

⁹ Before the introduction of the euro, the ECU served as an artificial accounting currency for calculating Community budgets.

objective 1 increased to 19.2 billion euros (BBR 2000a, 275). The aforementioned community initiatives have been discontinued.

Strategies at Federal Level

The Federal Government (Bund) supports EU regional policy by involvement in policy formulation and by co-financing measures in some programmes (mentioned below). Federal support is essential for development in eastern Germany. The spatial policies (cf. BBR 2000a, 227ff.) of the Federation and the states do not specify particular areas in industrialised cities and regions. Nevertheless these cities and regions are supported by various federal programmes.

(1) In line with the strategies mentioned above, one firstly thinks of classical *sectoral structural policy*. And indeed this policy is used in support of industrial problem areas, with a programme of subsidising hard-coal mining in western Germany being particularly important. Steel industry and shipbuilding have also been subsidised, at least temporarily, to slow the pace of structural change.

(2) Since all branches of industry in eastern Germany were equally hit by the economic crisis, sectoral structural policy as in western Germany was out of question. However the large-scale privatisation of former state enterprises necessitated the intervention of the Federation in economic development. The *privatisation agency* (Treuhandanstalt) privatised, restored to profitability or liquidated around 8,000 former GDR-enterprises with large injections of capital (cf. Kühl 1994). A heated discussion was conducted on the rescue of strategically relevant cores of industry ("industrielle Kerne", Nolte and Ziegler 1994) – for example the chemical industry in Saxony-Anhalt – and the agency doubtless contributed to the stabilisation of relevant industries. However the main task was to help create structures with the potential for long-term growth.

(3) *Regional structural policy* is next in the list of support measures for old industrialised cities and regions. The individual states of the Federal Republic have responsibility for this policy, although the Federal Government participates within the framework of the joint programme "Improvement of Regional Economic Structure" (Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur"). The programme supports all regions throughout the country which are falling behind in growth and face increasing unemployment; the programme subsidises commercial and public investments, fosters business-oriented revitalisation of commercial and industrial zones and elaborates regional development concepts (Eberstein and Karl 1996/2000). The conditions for economic development are thereby improved, with old industrialised cities and regions being the main beneficiaries of the policy. The joint programme covers almost one third of the population of western Germany and Berlin. Eastern Germany is covered completely and investments are supported more intensively there (Zweiunddreißigster Rahmenplan 2003, 17-18). Measures that are part of regional development concepts are given priority. The money can be combined with EU funds to finance projects.

(4) In addition to the nationwide regional structural policy, other instruments were introduced to *attract businesses* to eastern Germany. These include taxation measures (investment allowances and special depreciation), reduced-interest

loans, guarantees and risk capital funds, all directly aimed at enterprises (Prange 2000).

(5) From the viewpoint of *regional policy and regional planning*, there are two further new Federal instruments worthy of mention. The programme “InnoRegio”, developed by the Ministry of Education and Research, promotes 23 innovative regional co-operation networks, mostly in eastern Germany (BMBF 2000). Other model projects of federal regional planning also applicable to eastern Germany are “Rehabilitation and Development” (Müller, Rathmann and Wirth 2002), “Towns of the Future” and “Regions of the Future” (Wiechmann 1999), serving to promote co-operation between various relevant participants. The InnoRegio and “Future” programmes started life as entries to a competition for the best development concepts. Although they are of high conceptual importance, their influence on the general development of old industrialised cities and regions is rather limited.

(6) Another spatially oriented policy concerns *urban development*, connected to soft location factors. Since the beginning of the 1970s the Federal Government and the states have provided investment aids for urban renewal and urban development in a special programme for urban policy (Städtebauförderung). In this second national joint programme, federal funds generally cover one third of the costs of urban redevelopment measures (BBR 2000c, 6). The most important objectives are the revitalisation of specific areas (mostly in or near the city centre), the preservation of cultural monuments and the development of large residential quarters with upwards of 2000 flats (cf. Walter 1997).

In addition to this classical programme for urban policy and the programme “Urban Rebuilding East” (Stadtumbau Ost), a special nationwide programme was introduced in 1999: “The Socially Integrative City” (“Die soziale Stadt”) (Zweihunddreißigster Rahmenplan 2003, 13, Becker 2000). The approach here was to combine in one project the different promotion programmes and sources of funding for the elimination of social problems in rundown neighbourhoods. In general, old quarters near the city-centre or large residential areas dating back to the post-war period were designated for support. The goals in traditional industrial regions included the elimination of deficiencies in urban development, the creation of open green spaces and a general improvement in the ecological situation. Strong tax incentives for the construction of new residential buildings especially in eastern Germany have led to a new problem, gaining in importance: the vacancy of flats and residential buildings. Recently, a scheme for the demolition of buildings or upper floors has been introduced.

(7) While the regional and urban policies described above contribute to infrastructure development on a regional and urban level, federal support provides the necessary *national infrastructure*. This includes, for example, a programme for the support of universities and special public R&D facilities. The Federation also funds large-scale traffic projects in the new states, focusing on the renovation and construction of motorways, railways and waterways. Often these projects receive additional EU support. Lastly, the telecommunication sector (still partly state-owned) has invested heavily in eastern Germany.

(8) Following reunification, the headquarters of several important *national authorities* (federal offices, federal courts) as well as training and research institu-

tions were moved to eastern Germany. The most important decision in this context was surely the designation of Berlin as the capital of reunified Germany and seat of the Federal parliament.

(9) Several special regulations have been issued (Radtke and Eisenbarth 1993, Postlep 1994, Danielzyk et al. 2000) in order to meet the extraordinary challenges of *ecological remediation* in eastern Germany. 21 regionally significant large-scale remediation projects have been established, with a separate financial framework (total annual budget approx. 500 million euros). The instruments of labour market policy determined in the Employment Promotion Act (*Arbeitsförderungsgesetz*) showed significant improvement by 1993, with federal money granted for the labour-intensive dismantling of plants and the remediation of areas by unemployed persons. Large-scale investments for environmental improvements are supported by interest subsidies.

Together with the affected states, the federal government is also financing the immense remediation programmes for closed lignite and uranium mines; these costs would normally be borne by the mine operators. The annual remediation costs in lignite mining amount to approx. 500 million euros (1992-2002) and in 1999 created or sustained approx. 12,000 jobs (Bundesregierung 2000). Beyond the elimination of specific dangers, there also exists the possibility of purposefully adapting the newly created landscapes to some planned use (for example pedestrian greenways, vantage points for tourists). The total costs to restore uranium mining areas were estimated in 1991 at more than 650 million euros (Wismut 2000). A special programme has reduced the radiological loads imposed on humans and on the environment by uranium mining (though values have not yet returned to normal).

The basic legal, technical and financial challenges of environmental contamination and mining remediation have already been met. Urban and regional development has slackened somewhat with the relative low success of brownfield development. In spite of enormous efforts, rundown and abandoned inner-city areas exist side-by-side with commercial suburbanisation.

(10) The strategies, programmes and instruments already mentioned are intended for the development of old industrialised cities and regions. An additional important general mechanism at the federal level aims at compensating for disparities in state budgets. To ensure that "poor" states with inadequate financial resources can realise development projects (for example, the provision of state infrastructure), tax income from the Federation and the "rich" states is redistributed by a process of *fiscal equalisation* (*Finanzausgleich*). The fiscal transfers help such states as Saarland and Bremen which can be characterised as old industrialised. Total fiscal transfers from the Federal government to the five new states were 125 billion euros from 1991 to 1998, thus forming the second largest source of financial aid to eastern Germany (BBR 2000a, 230).

(11) The largest influx of money to eastern Germany comes from the *social security system* (pension, health and unemployment insurance). Of course cities and regions with low incomes and high unemployment rates benefit more than others. These transfers constitute a socially-oriented strategy of easing structural change.

In the framework of the unemployment insurance system, *labour market policy* is of special interest. This field of policy, which is often interconnected with structural policy on a local and regional level, aims at helping the unemployed find work in the so-called second labour market or take part in advanced training courses (for example on the basis of job creation schemes, partly in special public employment businesses). The second labour market policy has come under increasing criticism. Opponents argue that it is very expensive, and that in the long run people are better employed in the first labour market. However policy supporters say that workers in the second labour market have contributed much to the revitalisation of cities and regions by doing valuable work which otherwise would have been neglected. Eastern Germany received around 170 billion euros in the period of 1991-1998, including payments such as unemployment benefit (BBR 2000a, 230). This is by far the largest contribution of any single policy to reducing disparities between states.

Strategies at State Level

While the EU and the Federal Government concentrate on formulating and financing regional policy programmes, the 16 German states, with their close proximity to cities and regions, play a special role in implementing European and national programmes and managing funds. Moreover, they can initiate their own programmes and are responsible for the legal framework of local government policy. The states have also to ensure that fiscal transfers (*kommunaler Finanzausgleich*) allow municipalities with inadequate financial resources (often in industrialised regions with structural problems) to fulfil their obligations.

In the previously mentioned programme “Improvement of Regional Economic Structure”, jointly run by the states and the Federal Government, the states are responsible for the programme’s implementation and have the freedom to place certain emphasis on special topics. Furthermore, the states also develop their own programmes, often with the aim of integrating all available funds. The examples of North-Rhine Westphalia and the five new states are presented in the following.

The policy in *North Rhine-Westphalia* (NRW) for the Ruhr District shows how the focus in terms of policy content has shifted to the integration of sectoral measures, involving local and regional participants in the process of development and implementation of strategies (Heinze and Hilbert et al. 1996, 17ff.).

The first programme of NRW for the Ruhr District in 1968 concentrated primarily on infrastructure measures to create new jobs in industry, particularly in the field of transport. Universities and the school system were also expanded. In the programme issued two years later for the whole territory of NRW, further measures for the development of the Ruhr District were adopted. Apart from a desire to establish new firms, emphasis was placed on the improvement of the competitiveness of coal mining (introduction of new mining and processing technology). The extension of research, education and training infrastructure is considered the greatest success of both programmes. Following the Ruhr Conference, where representatives of many relevant groups were involved in discussions, the state issued the “Action Programme Ruhr” in 1979. This was a considerable step forward, including not only measures to improved qualifications, introduce innova-

tive technologies and boost investment, but projects were also formulated in the fields of town planning, cultural policy, environmental protection and infrastructure. Since 1984, the Property Fund NRW has financed the acquisition, development and sale of selected brownfields for urban development, at the request of municipalities¹⁰.

Facing another crisis in the coal and steel industries in 1987, the state developed the programme “Future initiative for the mining region”. Although in terms of content this was a continuation of the previous programme, the approach was completely different: The idea was to ensure the greater participation of cities and regions in implementing the state structural policies. Regional conferences were used to foster a decentralised dialogue between the relevant participants. Expert knowledge and the practical ideas of local people from cities and regions could be integrated. Funds had to be used more efficiently in this co-operative approach and new projects quickly realised. The main incentive was that projects were only supported when integrated into a concept for regional development. In 1989 this regionalised structural policy was extended to all parts of NRW. Subsequently, this approach to development has proved successful in other regions in Germany.

In the same year, a second highly influential state initiative was launched: The International Building Exhibition (IBA) Emscher Park. This exhibition was designed to benefit one of the worst afflicted areas in the Ruhr District; the small river Emscher, highly polluted by industrial effluents and emblematic of the area’s problems. Involving 17 cities and 2.5 million inhabitants, the exhibition ran for ten years (Faust 1999). The IBA represented a new understanding and approach to the renewal of industrial problem regions (Kilper 1999, 309). The strategic concept makes this clear: the programme’s aim was to integrate, in 120 projects, various issues such as economic structure (e.g. infrastructure for innovation), ecology (e.g. landscape parks), social improvement (e.g. regeneration of urban districts), culture, history (e.g. industrial heritage, factories as the “cathedrals of the industrial epoch”) and aesthetics (architecture). The projects were highly innovative and included the creation of landscape parks, the renovation of workers’ housing estates, the night-time illumination of blast furnaces and innovation centres built using ecological principles.

Institutional innovations were necessary in order to make all this possible. The IBA planning corporation was specially founded to coordinate both the programme and the decentralized projects. Support for projects was allocated by way of open competition (applicants included municipalities and co-operatives). As a final point it should be mentioned that representatives from the private and public sectors have founded an “Initiative Group Ruhr” (Initiativkreis Ruhr) to promote a better image for the Ruhr District.

¹⁰ The Property Fund (Grundstücksfonds) North Rine-Westphalia (established 1984) was the successor of the Property Fund Ruhr (est. 1980). Between 1980 and 1994, almost 800 million DM (mainly from the Land NRW) were used to defray the non-profit costs (UBA 1998); by 2001 more than 2,500 ha. land was bought and about 50 % developed and sold – totalling approx. 70 locations (<http://www.leg-nrw.de>).

Uranium Mining – Rehabilitation and Development

The “Uranium Mining Rehabilitation and Development Area” is located in the Ore Mountains of the Free State of Saxony, near the border with the Czech Republic. It embraces the towns of Johanngeorgenstadt and Schwarzenberg and five surrounding communities, with a population of 21,200 (1998). After the Second World War the Soviet-German Joint-Stock Wismut Company (SDAG Wismut) began the mining of uranium; from 1946 to 1958 a total of approx. 5,500 tonnes of uranium was extracted. In the industry’s heyday in the 1950s, 115,000 people were employed at 19 pits. Structural changes in the wake of German reunification have brought high unemployment to the area, with economic development hampered by the legacy of uranium mining, i.e. mining dumps, subsidence, urban deformation and a poor image.

In order to provide assistance, the region was designated a Rehabilitation and Development Area as part of the Saxon State Development Plan, and a model project was initiated by the State of Saxony and the Federal Government. A multistage approach was adopted (Müller, Rathmann and Wirth 2002). First, a general rehabilitation and development concept was formulated. Second, the problems and potential of the region were analysed in greater detail by a steering committee, leading to the drafting of a provisional master plan. This master plan, acting as a basis for all work, comprises three elements. To begin, the project’s guiding objective is set out in detail. Then seven fields of action with concrete measures are defined. These are titled – “Repairing the damage of uranium mining”, “Transport”, “Labour market”, “Regional value-added chains”, “Tourism”, “Dealing with Wismut estates” and “Strengthening centre functions”. Finally a concluding section addresses the issue of sustainable development, with suggestions on the enhancement of inter/intra-regional co-operation, the strengthening of “endogenous” potential, and the intensification of cross-border co-operation. Third, details regarding the implementation and funding of proposed measures are set out. The main result so far of this multistage approach was the launching of the first state-financed rehabilitation measures in 2001. Support for the action area since the project’s introduction amounts to a total of 7.5 million euros. Since 1997 the basis for self-supporting development has been formed by a process of co-operation between local authorities in the framework of Regional Management, involving a steering committee and regional conferences, as well as enterprises, associations and committed individuals.

Peter Wirth, Institute of Ecological and Regional Development, Dresden

North Rhine-Westphalia, with a population of 18 million, has more inhabitants than the five new states put together. Along with this disparity in size, there are also fundamental differences in the troubles afflicting NRW as outlined above and the eastern regions. The latter are affected by state-wide de-industrialisation, with

associated problems demanding urgent solutions. The new states are economically and financially much weaker, and a functioning administration system has had to be developed to handle the new situation. All these difficulties necessitated a great deal of outside help. In the first few years after reunification the eastern states received administrative help by a process of twinning with western German states.

State policy has played a relatively minor role in comparison to policy initiatives at the federal level. Nevertheless, the success of efforts to reduce disparities is very much influenced by state policy.

The following state measures can be mentioned: creation or remediation of basic infrastructures, such as traffic and education; creation of an infrastructure with direct economic benefits, such as commercial and industrial zones or investment and innovation promotion (whereby large-scale projects play an important role). Moreover, new approaches to improve the environment and landscape quality, to develop urban areas and to support cultural activities have also been adopted. The new states have also taken steps to activate regional co-operation, in particular the co-operation between municipalities (Danielzyk and Wirth 2000), in order to promote the efficient and direct use of funds by local actors. Like North Rhine-Westphalia, Saxony-Anhalt is pursuing a regionalised structural policy. Saxony has introduced a central-place system, based on co-operation between municipalities (Müller and Beyer 1999), which promote the formulation and implementation of development concepts for selected regions.

The model provided by the IBA Emscher Park has migrated eastwards. The Correspondence Region of Saxony-Anhalt for the EXPO 2000 in Hanover was organised along similar lines, based on preliminary work of the Bauhaus Dessau (Leimbrock and Lintz 2003). In 2000, the lignite-mining area of Lower Lusatia initiated a landscape-related IBA Fürst-Pückler-Land, with the aim of creating new landscapes from areas damaged by mining activities.

3.3 Regions and Cities

Strategies at Regional Level

In Germany, the regions constitute a policy level between the states and municipalities. Some planning regions are part of the spatial planning system of the states, while others, more problem oriented, are basically free co-operations between local actors (mostly municipalities); these are of growing importance for regional development (ARL 2000, BBR 1999b, Benz and Holtmann 1998). With their specialist expertise and wide range of possibilities for action, regional actors can do much to facilitate structural changes. Active competition among municipalities generally makes it necessary for superior levels (especially the states) to offer special incentives for regional or inter-municipal co-operation.

The content of regional strategies is fundamentally the same as strategies applied on a municipal level, the only difference being that they are co-ordinated and that measures are jointly implemented. Only a few examples of successful, regional co-operation in industrialised regions will be given from the great number of initiatives. For example, an institution for the joint promotion of economic

development was founded in the Ruhr district for the region Emscher-Lippe, while in eastern Germany, several cities are co-operating in the development of the economic region Chemnitz-Zwickau, strengthening the field of machine and vehicle building by extending and concentrating innovation and research potentials and marketing the region as a unified site.

In many regions, actors are trying to combine the remediation of environments with the creation of areas of great beauty – beyond the necessities of economic promotion. Thus, the cities Bottrop, Essen and Gladbeck in the Ruhr area are co-operating to restore a small river system to its natural state and design a new valley landscape. The city of Leipzig and the surrounding municipalities are working together to improve the environmental situation, reclaiming derelict land to form local recreation areas and connect regional wildlife habitats. Furthermore, in an area south of Leipzig, a moonlike opencast mining district is being turned into an attractive landscape of artificial lakes, including the biggest leisure park of eastern Germany. The image of the EXPO 2000 correspondence region Saxony-Anhalt is also changing in a similar fashion. For instance, huge excavators formerly used in lignite mining have been grouped together on a peninsula to form an ensemble called Ferropolis, creating an attractive and unusual location for large open-air events.

Regional actors can choose between “hard” and “soft” institutional co-operation, depending on the degree of commitment and intensity of co-operation desired. Examples of “soft” co-operation measures are the pooling of information through meetings and regional conferences, and the joint funding of regional agencies. “Hard” co-operation implies, for example, the establishment of special purpose associations for joint performance of certain regional tasks (Zweckverbände).

Strategies at Municipal Level

Structural problems are directly felt at the level of cities. All measures must be implemented here and the effect of the measures is quickly evident. As a rule, cities mainly use traditional instruments of municipal economic development, including the establishment of new companies and support of already existing enterprises (cf. Hollbach-Grömig 1996). An important factor in economic development is the designation of commercial and industrial zones in the city’s land-use plan, with appropriate land development measures and site marketing. A municipality must co-operate closely with the state if it wishes to extend the supra-local infrastructure with new long-distance railway lines, motorways and airports, or if it intends to establish large enterprises and scientific centres. A further instrument for economic promotion is the innovation-oriented creation of business and innovation centres. Also of importance are special urban programmes to foster a creative milieu and connect research, education, professional training and production to one another; this is achieved through the formation of synergistic clusters of companies and other relevant institutions.

Integrated strategies are gaining prominence in the field of urban redevelopment. Not only economic but also environmental, cultural and social aspects are taken into consideration in order to improve the soft location factors, local quality

of life and the town's image. In the long term, revitalisation of brownfields and their incorporation into urban structure is seen as indispensable to further development. The same holds true for the preservation of the industrial heritage. Instead of demolishing old buildings, nowadays it is common to try to find a new use for them, and an industry-oriented tourism is even emerging. Many cities are now more highly committed to improving neighbourhoods and the natural landscape than ever before. Funds for labour market promotion are frequently used within the framework of municipal employment policy to achieve this.

Complex problems and new strategies for the promotion of economic development on the municipal level necessitate new approaches to the organisation of policy and planning. The relevant actors should be brought together efficiently and flexibly, whether administrative officials, politicians, enterprises, education and research institutions, citizens, associations of enterprises, trade unions, environmental initiatives, cultural initiatives or the media. The catchwords in this context are "discursive planning" and "co-operation", "participation" and "public-private-partnership". A good example is provided by town marketing processes, set up with representatives from all relevant parties. Privately organised associations for the promotion of economic development and location marketing are also being founded. Of course, drawing up a plan is less important than implementing concrete projects.

4 Ambiguous Perspectives

Old industrialised cities and regions in Germany, especially in eastern Germany, are undergoing a dramatic transformation, bringing challenges to all political-administrative levels. Given the tradition and constitutional aim of a balanced spatial development, these problems are being taken seriously. The affected cities and regions have been assisted with generous financial means. Strategies to tackle unemployment and environmental damage have been refined again and again, so that a sophisticated system is now in place. The many political-administrative levels involved have entailed a high (perhaps too high) degree of complexity.

At present, comprehensive approaches involving the enhancement of soft location factors such as the natural environment, culture (including industrial culture) and urban qualities are being stressed. Ultra-soft location factors such as innovative networks and creative milieus are also being examined. This implies that all relevant actors – on different political-administrative levels, in different ministries and departments, in different cities of a region and in the private sector – must coordinate their efforts.

It is difficult to assess the success of these strategies. On the one hand progress is clear and often astonishing, especially in eastern German centres such as Dresden and Leipzig. On the other hand, revitalising all the old industrialised cities and regions in Germany will be a lengthy and highly expensive project. In fact, a general convergence of living standards seems to be a remote goal.

At least two trends may change Germany's strong commitment to spatially balanced development, if only marginally. Firstly, the country's poor economic performance in the last twelve years and particularly the present stagnation have aggravated the financial problems of the public sector and diminished the scope for action in supporting structural change in backward cities and regions. The social security system faces severe pressure from demographical developments, and public debt presents a serious problem. Secondly, EU funding for regional policy in Germany may decrease considerably from 2007 on as a consequence of the EU eastward enlargement in 2004. Brussel's attention and financial means will shift to the new EU members.

Against this background, it is possible that the emphasis will no longer be on spatial equality, but rather spatial efficiency. Proponents of this shift argue that those cities and regions with the highest potential for economic growth should be the focus of support, in order to improve competitiveness on the world market and realise a higher economic growth rate for Germany as a whole.

The question is whether old industrialised cities and regions can form centres of growth. Based on the assumption that the support of eastern Germany should in principle continue, a recent study suggests that economic support should in future focus on a few agglomerations, with the decline of peripheral cities and regions being accepted as inevitable (DIW et al. 2002, 461-463). Since all agglomerations in eastern Germany are old industrialised, their assistance is assured. However old industrialised cities and regions not in the vicinity of these agglomerations would lose support.

Although it is likely that support for old industrialised cities and regions will decline overall, cities and regions still have a strong interest in their own development, motivating an even more efficient use of available support. Local and regional actors will have to learn how to exploit their individual endogenous potential, with intensified co-operation on local and regional levels to optimise development.

References

- Achtundzwanzigster Rahmenplan der Gemeinschaftsaufgabe „Verbesserung der regionalen Wirtschaftsstruktur“ für den Zeitraum 1999 bis 2002 (2003), Deutscher Bundestag 1999, Bundestagsdrucksache 14/776, Bonn
- Albers G (ed) (1999) Planning in Germany. Introduction to System, History and Research. Outline of Ruhr Region, Frankfurt a. Main, Berlin. Special Bulletin '99 of the International Society of City and Regional Planners on the occasion of 35th Congress "The Future of Industrial Regions – Regional strategies and local action", Germering
- Ambrosius G (1994) Ursachen der Deindustrialisierung Westeuropas. In: Abelshauser W (ed) Umweltgeschichte. Umweltverträgliches Wirtschaften in historischer Perspektive. Göttingen: 191-221.
- ARL – Akademie für Raumforschung und Landesplanung (ed) (2000) Kooperation im Prozess des räumlichen Strukturwandels, Wissenschaftliche Planarsitzung 1999, Forschungs- und Sitzungsberichte 210, Hannover

- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (1999a) Aktuelle Daten zur Entwicklung der Städte, Kreise und Gemeinden. Ausgabe 1999. Berichte des BBR Bd 3, Bonn
- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (1999b) Perspektiven für die Region als Planungs- und Handlungsebene. Informationen zur Raumentwicklung, H. 9/10
- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (2000a) Raumordnungsbericht 2000. Berichte des BBR, Bd 7, Bonn
- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (2000b) Regionale Aspekte des wirtschaftlichen und sozialen Wandels in den neuen Ländern. Regionalbarometer neue Länder, Vierter zusammenfassender Bericht. Berichte der BBR, Bd 4, Bonn
- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (2000c) Urban Development and Urban Policy. An Overview, BBR, Berichte, Bd. 6, Bonn
- BBR – Bundesamt für Bauwesen und Raumordnung (ed) (2001) Deutsche Einheit – die erste Dekade im Rückblick. Informationen zur Raumentwicklung, H. 2/3.2001
- Becker H (2000) Das Bund-Länder-Programm "Soziale Stadt". Raumbezüge und Handlungsfelder. Die alte Stadt 2/2000: 139-149
- Benz A, Holtmann E (eds) (1998) Gestaltung regionaler Politik. Empirische Befunde, Erklärungsansätze und Praxistransfer, Opladen
- Biehl D, Hoffmann H-J (1998) Der Einsatz raumwirksamer Finanzmittel der Europäischen Union in den Regionen der Bundesrepublik Deutschland. Eine Bewertung aus der Sicht der Raumordnung. Informationen zur Raumentwicklung 9 (1998): 609-629
- Blotevogel HH (1997) Strukturwandel und Regionalpolitik im Ruhrgebiet. In: Axt HJ (ed) Strukturwandel in Europa, Südosteuropa, Ruhrgebiet und Reform der EU-Strukturpolitik. Südosteuropa Aktuell 26. München, pp 125-140
- BMBau – Bundesministerium für Raumordnung, Bauwesen und Städtebau (ed) (1991) Raumordnungsbericht 1991 der Bundesregierung. – Deutscher Bundestag 12. Wahlperiode, Bundestagsdrucksache 12/1098, Bonn
- BMBF – Bundesministerium für Bildung und Forschung (ed.) (2000) InnoRegio – die Dokumentation, Bonn
- Bömer H (2000) Ruhrgebietspolitik in der Krise. Kontroverse Konzepte aus Wirtschaft, Wissenschaft und Verbänden, Dortmunder Beiträge zur Raumplanung 101, Dortmund
- Bönisch R, Mohs G, Ostwald W (1982) Territorialplanung. Berlin
- Bundesregierung (ed) (2000): Jahresbericht 2000 der Bundesregierung zum Stand der Deutschen Einheit, Bonn
- Butzin B (1993) Strukturkrise und Strukturwandel in "alten" Industrieregionen. Das Beispiel Ruhrgebiet. Geographie Heute, H. 113: 4-12
- Butzin B (1996) Kreative Milieus als Elemente regionaler Entwicklungsstrategien? Eine kritische Wertung. In: Maier, J (ed): Bedeutung kreativer Milieus für die Regional- und Landesentwicklung. Bayreuth, pp 9-37
- BVS – Bundesanstalt für vereinigungsbedingte Sonderaufgaben (ed) (1995) Abschlußstatistik der Treuhandanstalt per 31.12.1994
- Danielzyk R (1992) Gibt es im Ruhrgebiet eine "Postfordistische Regionalpolitik"? Geographische Zeitschrift H. 2: 84-105
- Danielzyk R et al. (eds) (2000) Sanierung und Entwicklung in Ostdeutschland – Regionale Strategien auf dem Prüfstand, IÖR-Schriften Bd 32
- Danielzyk R, Wirth P (2000) Regionale Entwicklungsansätze in Ostdeutschland – Eine Zwischenbilanz. In: Danielzyk R et al. (ed) Sanierung und Entwicklung in Ostdeutschland – Regionale Strategien auf dem Prüfstand. IÖR-Schriften Bd 32, Dresden, pp 165-190

- DIW – Deutsches Institut für Wirtschaftsforschung (ed 1999a) Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland. Neunzehnter Bericht des Deutschen Instituts für Wirtschaftsforschung, Berlin, des Instituts für Weltwirtschaft an der Universität Kiel und des Instituts für Wirtschaftsforschung Halle. DIW-Wochenbericht 23 (1999): 419-445
- DIW et al. – Deutsches Institut für Wirtschaftsforschung et al. (2002): Fortschrittsbericht wirtschaftswissenschaftlicher Institute über die wirtschaftliche Entwicklung in Ostdeutschland, edited by the Institut für Wirtschaftsforschung Halle, Halle
- Drerup D (1997) German Policy Perspectives. In: Bachtler J, Turok J (Ed) The Coherence of EU Regional Policy. Contrasting Perspectives on the Structural Funds, Regional Policy and Development Series 17. London Philadelphia, pp 337-345
- Dürr H, Gramke J (eds) (1993) Erneuerung des Ruhrgebiets. Regionales Erbe und Gestaltung für die Zukunft, Festschrift zum 49. Deutschen Geographentag, Paderborn
- Eberstein HH, Karl H (eds) (1996/2000) Handbuch der regionalen Wirtschaftsförderung. 3. Auflage (Loseblatt-Ausgabe), Stand Juli 2000, Düsseldorf
- Europäische Kommission (ed) (1996) Strukturfonds und Kohäsionsfonds 1994-1999. Verordnungstext und Erläuterungen. Luxemburg
- Europäische Kommission (ed) (2000) Strukturpolitische Maßnahmen 2000-2006. Kommentare und Verordnungen, Luxemburg
- Faust H (1999) Das Ruhrgebiet – Erneuerung einer europäischen Industrieregion. Impulse für den Strukturwandel durch die Internationale Bauausstellung Emscher Park. Europa Regional 7(1999): 10-18
- Federal Office for Building and Regional Planning (ed) (2001) Spatial Development and spatial Planning in Germany, Bonn
- Fischer A (1994) Der industrielle Strukturwandel in den neuen Bundesländern. Wirtschafts- und Sozialwissenschaften Bd. 9. Weiden, Regensburg
- Fürst D, Schubert H (1998) Regionale Akteursnetzwerke. Zur Rolle von Netzwerken in regionalen Umstrukturierungsprozessen. Raumforschung und Raumordnung 56: 352-361
- Georgi B (1994) Braunkohlenabbau und Landschaftshaushalt. Das Beispiel der Niederlausitz. Geographische Rundschau 46/6 : 344-350.
- Grabher G (1993) Wachstums-Koalitionen und Verhinderungs-Allianzen. Entwicklungsimpulse und -blockierungen durch regionale Netzwerke. Informationen zur Raumentwicklung 3/4 (1993): 111-121
- Grabher G (1994) The Weakness of Strong Ties: The Lock-in of Regional Development in the Ruhr Area. In: Grabher G (ed) The Embedded Firm. On the Socio-Economics of Industrial Networks. London New York, pp 255-278
- Grabher G, Stark D (1997) Restructuring Networks in Post-Socialism: Legacies, Linkages and Localities. Oxford
- Hamacher W (2001) Wohnungswirtschaftliche Alternativen versus Abrissdiskussion, Konrad Adenauer Stiftung, www.1.kas.de/publikationen/2001/kommunal/integr_stadtentwicklung/hamacher.html, download June 11th 2003
- Hamm R (1991) Umstrukturierungsprobleme in den neuen Bundesländern und Erfahrungsmuster altindustrieller Regionen. Parallelen und Unterschiede. Raumforschung und Raumordnung, H. 2-3: 91-99
- Hamm R, Wienert H (1990) Strukturelle Anpassung altindustrieller Regionen im internationalen Vergleich. Schriftenreihe des RWI Essen 48, Berlin
- Härtel H-H (2001) Ostdeutschland im nationalen und europäischen Regionalvergleich. Wirtschaftsdienst H. V: 292-296

- Häußermann H (ed) (1992) *Ökonomie und Politik in alten Industrieregionen Europas. Probleme der Stadt- und Regionalentwicklung in Deutschland, Frankreich, Grossbritannien und Italien*. Basel, Bosten, Berlin
- Heinze RG, Hilbert J et al. (1996) *Strukturpolitik zwischen Tradition und Innovation. Nordrhein-Westfalen im Wandel*, Opladen
- Henckel D (1986) *Gewerbepolitik und Gewerbebrache: Aspekte der Flächennutzung im Süd-Nord-Vergleich*. In: Friedrichs J, Häußermann H, Siebel W (Hrsg) *Süd-Nord-Gefälle in der Bundesrepublik?* Opladen, pp 51–68
- Hentrich S, Komar W, Voss G, Weisheimer M (2001) *Umweltschutz in Deutschland - Der Aufholprozess des Ostens*. IW-Umwelt-Service Themen 2/2001, Köln
- Hohlfeld P (1999) *Erfolgreiche Integration Ostdeutschlands in die internationale Arbeitsteilung? Zur regionalen und sektoralen Entwicklung des Außenhandels*. RWI-Mitteilungen 50 (3): 178.
- Hollbach-Grömig B (1996) *Kommunale Wirtschaftsförderung in den 90er Jahren*, Difubiträge zur Stadtforschung 21, Berlin
- IWH – Institut für Wirtschaftsforschung Halle (ed) (2001) *Zehn Jahre Deutsche Einheit – Bilanz und Perspektiven – Beiträge einer wissenschaftlichen Tagung*, Halle
- Kilper H (1999) *Die Internationale Bauausstellung Emscher Park. Eine Studie zur Steuerungsproblematik komplexer Erneuerungsprozesse in einer alten Industrieregion*. Opladen
- Kowalke H (1998) *Dresden und Lausitz*. In: Kulke E (ed) *Wirtschaftsgeographie Deutschlands*. Gotha Stuttgart, pp 407-434
- Kühl J (1994) *Regionalstrukturen von Treuhandunternehmen. Stand der Privatisierung und Perspektiven*. Informationen zur Raumentwicklung 4 (1994): 245-254
- Leimbrock H, Lintz G (2003) *“Der Ausnahmezustand” als Entwicklungsstrategie. Große umweltorientierte Kooperationsprojekte in ostdeutschen Problemregionen*. Raumforschung und Raumordnung, H. 1-2/2003: 58-67
- Mayr A, Taubmann W (eds) (2000) *Germany Ten Years after Reunification*, Beiträge zur regionalen Geographie, Bd. 52, Leipzig
- MSWKS – Nordrhein-Westfälisches Ministerium für Städtebau und Wohnen, Kultur und Sport (ed) (2001) *Städtebauminister Vesper gibt grünes Licht: Land kauft “Phoenix West” in Dortmund*. Pressemitteilung 22. Mai 2001, Düsseldorf
- Müller B, Beyer B (1999) *Regionalentwicklung im kommunalen Verbund – Städteverbünde in Sachsen*. Dresden, München
- Müller B, Rathmann J, Wirth P (2002) *Sanierung und Entwicklung umweltbelasteter Räume. Modellvorhaben in einer ehemaligen Uranbergbauregion*, Frankfurt am Main
- Mulke W (2000) *Zehnjahresbilanz – Gespaltenes Fazit der Währungsunion. Wirtschaftsforscher sehen Fehler im Geldumtausch / Angleichung hilft Rentnern*. In: *Sächsische Zeitung*, 28. Juni 2000: 30
- Nolte D, Ziegler A (1994) *Neue Wege einer regional- und sektoralorientierten Strukturpolitik in den neuen Ländern. Zur Diskussion um den „Erhalt industrieller Kerne“*. Informationen zur Raumentwicklung 4 (1994): 255-265
- Oelke E (1998) *Das Verdichtungsgebiet Halle-Leipzig*. In: Kulke E (ed) *Wirtschaftsgeographie Deutschlands*. Gotha Stuttgart, pp 381-406
- Pohl R (ed) (1995) *Herausforderung Ostdeutschland. Fünf Jahre Währungs-, Wirtschafts- und Sozialunion*, Berlin 1995
- Pohl R (2000) *Die unvollendete Transformation. Ostdeutschlands Wirtschaft zehn Jahre nach der Einführung der D-Mark*. *Wirtschaft im Wandel* 8/2000: 222-238
- Postlep R-D (1994) *Organisation und Finanzierung der Altlastensanierung in den neuen Bundesländern. Altlastensanierung. Zeitschrift für Angewandte Umweltforschung, Sonderheft 5/1994: 71-79*

- Prange, H (2000) Lessons from financing the EU's 'silent' Eastern Enlargement of 1990, *European Urban and Regional Studies* 7(4): 359-369
- Radtke H, Eisenbarth S (1993) Die Finanzierung der ökologischen Altlasten in den neuen Bundesländern. *Umwelt- und Planungsrecht* 13 (1993): 86-91.
- Schaich E, Fleischhacker J (2000) The current demographic shape of Germany: Similarities and differences in eastern and western population processes. In: Kučera T, Kučerová OV, Opara OB, Schaich E (eds) *New demographic faces in Europe. Changing population dynamics in countries of Central and Eastern Europe*. Berlin Heidelberg New York, pp 141-162
- Schmidt R (1995) Strukturveränderungen der Industrie in den neuen Ländern – Ergebnisse und Auswirkungen aus regionaler Sicht. In: Schmidt R (ed) *Strukturwandel und Entwicklungsfragen Altindustrialisierter Regionen. Ergebnisse, Probleme und Chancen eines ökologisch verträglichen Strukturwandels von Industrieregionen in Sachsen, Sachsen-Anhalt und Thüringen*. IÖR-Schriften Bd. 13, Dresden, pp 6-15
- Scherf K, Scholz D et al. (eds) (1990) *DDR – Ökonomische und soziale Geographie*, Gotha
- Scholz D (1994) Wirtschaftsräumliche Strukturveränderungen in den neuen Bundesländern Sachsen und Thüringen zu Beginn der Neunziger Jahre. *Sitzungsberichte der Sächsischen Akademie der Wissenschaften zu Leipzig. Philolog.-hist. Klasse Bd. 133*, Leipzig
- Schrader M (1998) Ruhrgebiet. In: Kulke E et al. (Hrsg) *Wirtschaftsgeographie Deutschlands*. Gotha Stuttgart, pp 435-463
- Schröter HG (2000) Von der Teilung zur Wiedervereinigung (1945-2000). In: North M (ed) *Deutsche Wirtschaftsgeschichte. Ein Jahrtausend im Überblick*. München, pp 351-420.
- Schrumpf H (1995) Die Förderung altindustrialisierter Gebiete durch die Europäische Union (Ziel-2-Förderung) und die Gemeinschaftsaufgabe "Verbesserung der Regionalen Wirtschaftsstruktur". In: Ridinger R, Steinröx M (eds) *Regionale Wirtschaftsförderung in der Praxis*. Köln, pp 98-118
- Sinn, H-W (2002) Germany's Economic Unification: An Assessment after Ten Years. *Review of International Economics* 10(1): 113-128
- SRU – Rat von Sachverständigen für Umweltfragen (1995) *Sondergutachten II "Altlasten" des Rates von Sachverständigen für Umweltfragen*. Bundestagsdrucksache 11/6191, Bonn
- Statistisches Bundesamt (1999) *Tabellensammlung zur wirtschaftlichen und sozialen Lage in den neuen Bundesländern*. Arbeitsunterlage 2/99. Wiesbaden
- Statistisches Bundesamt (2000) *Statistisches Jahrbuch 2000 für die Bundesrepublik Deutschland*. Wiesbaden
- Steiner M (1985) Old Industrial Areas: A Theoretical Approach. *Urban Studies* H. 22: 387-398
- SVR – Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (1999): *Wirtschaftspolitik unter Reformdruck, Jahresgutachten 1999/2000*, Wiesbaden
- SVR – Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2002): *Jahresgutachten 2002/2003*, Bundestagsdrucksache 15/100 vom 15.11.2002
- Tettinger PJ, Mann T (1994) *Industrieflächenrecycling und Altlastensanierung. Altlastensanierung Sonderheft 5* (1994): 63-70
- Tschentscher A (2002) *The Basic Law (Grundgesetz). The Constitution of the Federal Republic of Germany*, Würzburg
- Turowski, G (ed) (2002) *Spatial Planning in Germany. Structures and Concepts*, ARL, *Studies in Spatial Development*, Nr. 1, Hannover
- UBA – Umweltbundesamt (ed) (1998) *Revitalisierung von Altstandorten versus Inanspruchnahme von Naturflächen*. UBA-Texte 15 (1998)

- UBA – Umweltbundesamt (ed) (2000) Handlungsempfehlungen für ein effektives Flächenrecycling. UBA-Texte 10 (2000)
- Vanhove N (1999) Regional Policy: A European Approach. Aldershot Brookfield USA Singapore Sydney
- Walter K (1997) Entstehung und Implementation der Städtebauförderung im bundesstaatlichen System: Eine empirische Untersuchung des föderativen Konflikt- und Konsensverbundes. Berliner Schriften zur Demokratieforschung 5, Frankfurt/M
- Wienert H (2000) Probleme des sektoralen und regionalen Wandels am Beispiel des Ruhrgebiets, Beiträge der Fachhochschule Pforzheim Nr. 91, Pforzheim
- Wismut GmbH (2000) Finanzierung. In: <http://www.wismut.de/> (12.12.2000)
- Wood G (1997) Social and Economic Restructuring in Old Industrial Areas: A Comparison of North-East England and the Ruhr District in Germany. In: Blotevogel HH, Fielding AJ (ed) People, Jobs and Mobility in the New Europe. Chichester. pp 189-215
- ZK der SED – Zentralkomitee der Sozialistischen Einheitspartei Deutschlands (1989) Analyse der ökonomischen Lage der DDR mit Schlußfolgerungen – Im Auftrag des Generalsekretärs des ZK der SED Egon Krenz, 27.10.1989. GVS b 5 - 1155/89, Manuskript
- Zweiunddreißigster Rahmenplan der Gemeinschaftsaufgabe „Verbesserung der regionalen Wirtschaftsstruktur“ für den Zeitraum 2003 bis 2006, Bundestags-Drucksache 15/861 vom 10.04.2003, Bonn

<http://www.springer.com/978-3-540-40478-1>

Rise and Decline of Industry in Central and Eastern
Europe

A Comparative Study of Cities and Regions in Eleven
Countries

Müller, B.; Finka, M.; Lintz, G. (Eds.)

2005, VIII, 274 p., Hardcover

ISBN: 978-3-540-40478-1