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Dr. Olga Gritsai, ACRE project manager
University of Amsterdam
Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)
Department of Geography, Planning and International Development Studies
Nieuwe Prinsengracht 130
NL-1018 VZ Amsterdam
The Netherlands
Tel. +31 20 525 4044
+31 23 528 2955
Fax +31 20 525 4051
E-mail: O.Gritsai@uva.nl

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2007
AMIDSt, University of Amsterdam

ACRE

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Coordination:

Prof. Sako Musterd
University of Amsterdam
Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)
Department of Geography, Planning and International Development Studies
Nieuwe Prinsengracht 130
NL-1018 VZ Amsterdam
The Netherlands

Participants:

- **Amsterdam** (Amsterdam institute for Metropolitan and International Development Studies, University of Amsterdam, the Netherlands)
  Marco Bontje ~ Olga Gritsai ~ Heike Pethe ~ Bart Sleutjes ~ Wim Ostendorf ~ Puikang Chan
- **Barcelona** (Centre de Recerca en Economia del Benestar – Centre for Research in Welfare Economics, University of Barcelona, Spain)
  Montserrat Pareja Eastaway ~ Joaquin Turmo Garuz ~ Montserrat Simó Solsona ~ Lidia Garcia Ferrando ~ Marc Pradel i Miquel
- **Birmingham** (Centre for Urban and Regional Studies, University of Birmingham, UK)
  Alan Murie ~ Caroline Chapain ~ John Gibney ~ Austin Barber ~ Jane Lutz ~ Julie Brown
- **Budapest** (Institute of Geography, Hungarian Academy of Sciences, Hungary)
  Zoltán Kovács ~ Zoltán Dövényi ~ Tamas Egedy ~ Attila Csaba Kondor ~ Balázs Szabó
- **Helsinki** (Department of Geography, University of Helsinki, Finland)
  Mari Vaattovaara ~ Tommi Inkinen ~ Kaisa Kepsu
- **Leipzig** (Leibniz Institute of Regional Geography, Germany)
  Joachim Burdack ~ Günter Herfert ~ Bastian Lange
- **Munich** (Department of Geography, Ludwig-Maximilian University, Germany)
  Günter Heinritz ~ Sabine Hafner ~ Manfred Miosga ~ Anne von Streit
- **Poznan** (Institute of Socio-Economic Geography and Spatial Management, Adam Mickiewicz University, Poland)
  Tadeusz Stryjakiewicz ~ Jerzy J. Parysek ~ Tomasz Kaczmarek ~ Michal Meczynski
- **Riga** (Stockholm School of Economics in Riga, Latvia)
  Anders Paalzow ~ Diana Pauna ~ Vjacheslav Dombrovsky ~ Roberts Kilis ~ Arnis Sauka

- **Sofia** (Centre for Social Practices, New Bulgarian University, Bulgaria)
  Evgenii Dainov ~ Vassil Garnizov ~ Maria Pancheva ~ Ivan Nachev ~ Lilia Kolova
- **Toulouse** (Interdisciplinary Centre for Urban and Sociological Studies, University of Toulouse-II Le Mirail, Toulouse, France)
  Denis Eckert ~ Christiane Thouzellier ~ Elisabeth Peyroux ~ Michel Grossetti ~ Mariette Sibertin-Blanc ~ Frédéric Leriche ~ Florence Laumière ~ Jean-Marc Zuliani ~ Corinne Siino ~ Martine Azam
- **Milan** (Department of Sociology and Social research, University degli Studi di Milan Bicocca, Italy)
  Enzo Mingione ~ Francesca Zajczyk ~ Elena dell'Agnese ~ Silvia Mugnano
- **Dublin** (School of Geography, Planning and Environmental Policy, University College Dublin, Ireland)
  Declan Redmond ~ Brendan Williams ~ Niamh Moore ~ Veronica Crossa ~ Martin Sokol

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EXECUTIVE SUMMARY

Current socio-economic situation of the city-region of Leipzig

As a former major commercial, trade fair and cultural platform in the heart of Europe, but also as a heavily industrialized city in the former GDR, the city-region has faced ongoing substantial multi-layered transformation processes since 1990. With a current population of approximately 500,000 inhabitants, the city has had to develop new, future-oriented knowledge-based economies as well as service industries which have had to be implemented and also adapted to meet with the needs of the existing regional workforce. Parallel to the implementation of a new market system, a rapidly established housing market challenged urban policy from the early 1990s onwards. As a result, new urban structures with large suburban single-family housing areas as well as newly renovated houses from the 19th century (*Fin de Siècle*) in the inner city with large quantities of derelict industrial plants led to the description of Leipzig as a structurally "perforated city".

The rapid decline in manufacturing industry and the loss of more than 100,000 jobs in the 1990s could not be compensated for by new job opportunities initiated by state-subsidized large infrastructural, transportation and modern manufacturing projects; the city's expected demographic and economic growth prospects failed in the late 1990s. High rates of long-term unemployment, social imbalances between new elites and less qualified marginalized groups and especially the city's youth represent the major social problems facing Leipzig today. The brain drain of young and relatively well qualified women, especially in the 1990s, must be seen as a reaction to rare job opportunities on the regional labour market. Over the course of this development, disillusionment with local politics because of disappointed expectations forced the public administration from the mid 1990´s onwards to strengthen and reconsider Leipzig's urban, cultural and economic potential. Newly defined urban policies and cluster strategies intended to create and extend existing strengths led to ambitious goals (such as the application for the Olympics 2012 which ran until 2005). Since 2000, a small but steady growth in population has taken place. These positive demographic developments are an exception in East Germany, but cannot be explained by positive developments on the labour market: up until this day, approximately 18-20 per cent of the workforces has remained officially unemployed.

Current situation of the creative and knowledge-intensive industries in the city region of Leipzig

In 2005, the city of Leipzig had appro. 60,000 employees in the field of the creative and knowledge-intensive industries; the surrounding counties slightly more than 12,000 employees. Between 2000 and 2005, more than appro. 7,000 jobs have been created especially in this field in Leipzig; that is 14.77 per cent more than in 2000. Nevertheless, this growth could not compensate for the loss of 39,660 jobs between 2000 and 2005 in other economic segments of the city-region of Leipzig; the state of Saxony lost 12.73 per cent of its

workforce. Growth in creative industries was taking place in the core area of the city-region, in this case the city centre of Leipzig, while losses were registered in the neighbouring counties of Delitzsch, Muldentalkreis and Leipzier Land.
Among the professional fields with the highest job cuts (200 to 2,000) between 2000 and 2005, we find architecture and engineering offices, credit businesses, retail businesses and assurance businesses. The highest growth rates (400 to 2,500) can be found in the fields of film and video production and distribution, culture, sports and entertainment, law, tax and consultancy, databases and database related services, temping, human resources services and miscellaneous business activities.

The GDP (gross domestic product) of all economic segments of the city-region of Leipzig rose by 2.86 billion € (16.37 per cent) between 2000 and 2004. The city of Leipzig especially contributed with a positive growth rate of 3.62 billion € (33.39 per cent), compensating for the negative rates in surrounding counties. GDP growth was also very significant in the state of Saxony: creative industries contributed a growth rate of 4.45 billion €, which constitutes for nearly 50 per cent of the total GDP growth rate in Saxony between 2000 and 2004.

Strengths, Weaknesses, Opportunities and Threats for creative industries (and the creative knowledge economy) in Leipzig

Strengths

The city of Leipzig demonstrates a very positive performance in the field of creative and knowledge-intensive industries and positive growth rates in jobs as well as in GDP growth rates. Quantitatively, the media industries and their sub-segments contribute most to these growth rates. The media industry is the central backbone of the creative industries in Leipzig, accounting for more than 50 per cent of the total workforce of appro.60,000 jobs in the field of the creative industries in 2005. This situation is embedded in a broad institutionalised knowledge and educational landscape, with university, polytechnic college, several extra-university research centres and various art, music and technical schools. Policies and state-subsidised transfer facilities and incubator schemes in combination with ultra-modern technical, mobility infrastructures make Leipzig a competitive location: attractive urban qualities, open-minded social milieus, active civil society and cultural facilities in various fields are able to stimulate economic competitiveness.

Weaknesses

Although huge federal and state financial investment has been directed towards forward looking fields of knowledge (mainly in mobility, R&D, high-tech infrastructure, as well as in communication technologies), research effects (number of patents, research funding etc.) do not yet fully justify the financial investment. The weak ratio between the number of inhabitants and highly qualified, skilled engineers in respect to the neighbouring cities of Dresden and Chemnitz, demonstrate in particular that further efforts must be undertaken by public authorities and corporate companies in order to attract highly qualified, creative human resources into the city of Leipzig. Furthermore, creative industries in general have not yet been identified as a strategic field of action by local government in the city of Leipzig. In respect to the positive factual performance in this field, primarily in the media industry, integrative public-private partnership strategies between educational institutions, R&D facilities, cultural production and a coherent urban and economic policy have also not yet been registered. In order to position creative industries as one, if not the potential future economic field, a further integration into Leipzig's cluster policy as well as into the creation of the metropolitan region known as the "Saxon Triangle" appear to be needed.

Opportunities

Existing creative scenes (core creative producers in the field of design, art, painting, fashion, film, music, architecture and photography etc.) play a crucial, though not very visible, role in the everyday life of the city of Leipzig. Mainly located in the core inner city areas of the city of Leipzig (with the exception of the "Spinnerei", a cluster of 50 galleries located in the western part of Leipzig, in Plagwitz – in a former industrial plant), each of these professional creative scenes has its fairly individual networks, meeting places and social practices.

Only a few institutions, such as the Gallery for Contemporary Art, the School of Fine Arts, or art museums, cultural locations such as the naTO Leipzig as well as temporary thematic fairs and exhibitions, serve as places for communication. Numerous creative agents in Leipzig, although internationally renowned, play a relatively insignificant role in the public life of the city. They are not yet seen and labelled as "ambassadors" for Leipzig although they contribute to the attractiveness and quality of the cultural, intellectual and everyday life in Leipzig.

These heterogeneous entrepreneurial scenes and creative milieus can be denominated as diverse cultural urban dimensions, so that they contribute to the attractiveness of the cultural economy in Leipzig. Their precarious socio-economic status reflects the instability, project-orientation and the flexibility required of this economy. There may indeed be debate in the future as to whether the existence of a worded "master plan" installed by local government might have "helped" the emergence of creative scenes in Leipzig: Leipzig's relatively cheap rents and living costs as well as easily accessible workspace for core creative agents have, over the course of time, driven forward and stimulated creativity in these fields of action even more than any other top-down planning procedures could have done. It has to be closely looked how the implementation of "creative industries" in the so-called "Kulturentwicklungsplan" 2006-2015 will focus on new employment fields in creative industries.

Threats

Although Leipzig is considered to be an attractive educational location, especially for students and younger generations, it serves as a temporary "gateway" for many of them. In order to heighten the opportunities to bind highly qualified and talented people to Leipzig's knowledge landscape, further efforts could be established by leading economic, public and educational institutions in order to find intelligent ways to keep this potential in the city.

Focussing strategically on the field of action in creative industries and therefore among the representatives of a so-called Creative Class, it should not be overlooked that existing social polarization and high rates of unemployment in several local government districts in Leipzig must be seen as a problem relating to knowledge, education and qualification. Promoting young, disadvantaged people under the auspices and the agenda of a so-called Creative Class might increase educational competition instead of installing intelligent forms of cooperation and integration. Therefore, strengthening the knowledge and educational basis might gradually lead to an increase in brain drain and thus might threaten the cultural, economic and competitive basis of the city of Leipzig on a national scale.

1 National background

1.1 Introduction

The geographical location of Germany is in the centre of Western Europe. Numbering over 82 million inhabitants, Germany is the most populated European country: it also has one of the highest population densities in Europe. The distribution, however, is very uneven. Significant differences exist between the western and eastern states, the so-called '*Länder*', between the north and the south, as well as between urbanized and rural areas. Some 68 million people live in the eleven West German Länder and only 14.1 million in the five new Länder. Consequently, density in the East is only 145 people per square kilometre, while in the West (former FRG) it is only 261. Nearly one third of the overall population live in the 84 largest cities, all of which have populations of more than 100,000 people. Only 7.3 million live in communities with a population of less than 2,000. Population density also varies between the Länder: from 80 inhabitants per square kilometre in Mecklenburg-Western Pomerania to 521 in North Rhine-Westphalia. By far the most densely populated area of Germany is the Rhine-Ruhr region within North Rhine-Westphalia (some 11 million people within one agglomeration), followed in size by the rapidly growing greater Berlin region, which presently has 4.5 million. (Gans & Kemper, 2001; Laux, 2001a; Laux, 2001b).

1.2 The German political and administrative system

The Federal State (*Bund*), the Länder and the local government districts represent the different levels of Germany's three-tiered administrative structure. These three levels have different responsibilities and tasks.

The Federal Republic of Germany consists of 16 federal states (see Figure 1.1). The powers of the state are divided between government as a whole, the Federal Government and the federal states. The federal states have their own constitutions; own administrations and parliaments as well as their own responsibilities. The Federal Government has the legislative competence for areas such as immigration, foreign policy, defence, criminal law and telecommunications. The Länder are responsible for areas such as municipal law, culture, education and the media. There are three pan-state functions that the individual federal states exercise on their own: schooling (including to a large extent tertiary education), internal security (including policing) as well as the organization of local self-government (Laufer, 1997, Laufer & Münch, 1997). Development planning in Germany is also organized in accordance with a system of graded responsibilities. The Länder and the local government districts have legal competence for spatial planning; the Federal Government only provides the framework. This demands cooperation between the different levels of planning. There is no fixed and determined development plan for the whole of Germany, only models and guidelines which are developed by the Federal Government and the Länder. The Länder ratify these models and concepts in concrete directives and the local government districts ultimately implement them in legal plans (BBR, 2001). This process very clearly illustrates the core concept of the federal structure: subsidiary. According to this concept, the smallest unit in the social community is capable of handling problems, bearing responsibility and making decisions on a whole range of issues, starting with the individual and working its way upwards via the family, associations and local authorities to the states and the nation as a whole.

Figure 1.1: The 16 states of the Federal Republic of Germany

Source: Federal Office of Administration, 2007.

After the Federal State (Bund) and the Länder, the local government districts in Germany represent the lowest level in the three-tiered administrative structure. They also practice self-administration within the boundaries of their territory. Self-administration means that the local government district is responsible for all tasks relating to the local community. Local government districts' own activities represent the core activities undertaken by each local government district and may be voluntary (e.g. theatre, museums, buses, swimming pools etc.) or they may be prescribed by the State as obligatory (e.g. waste disposal, energy supply, construction of schools and nurseries). The local government district is free to handle activities in these fields on its own or outsource them to private businesses (BVA, 2005).

Nevertheless, self-administration by the local government districts has its limits. In a growing number of areas within local government policies, the state government is becoming involved in municipal affairs on the basis of legal provisions, standards and financial subsidies. In reality, the relationship between the State and the local government districts relies on a complex, intertwined system of responsibilities, controlling authorities and financing systems. Through this system, the ability of the local government districts in terms of self administration is therefore restricted (Hafner & Miosga, 2001).

1.3 The German urban system

In contrast to many European countries which are characterized by the concentration of important international functions in one or two metropolises, the Federal Republic of Germany has a decentralized settlement structure. The decentralized pattern of the urban system, was and is further intensified by the federal structure. Each state has its own capital with administrative and governmental functions, like for example the city of Munich for Bavaria.

Agglomerations with a concentration of metropolitan functions like international trade fairs and exhibitions, company headquarters, high-ranking cultural and educational facilities and production facilities in the press, film and television sectors are the Rhine-Ruhr and the Rhine-Main areas, Cologne-Düsseldorf, Munich, Stuttgart, Hamburg and Berlin (BBR, 2005). Furthermore, these city regions have specialized in certain metropolitan functions which are complemented by manufacturing industries and service sector companies. Hamburg, for example, has become a centre for the media and the shipping industry, while Munich is focused on research, high tech industry and the media. Banks, financial services and the chemical industries are primarily concentrated in the Rhine-Main area. Furthermore, Munich, Hamburg, Stuttgart, Frankfurt, Cologne and Berlin are considered to be growth areas, whereas agglomerations which have a large share of old industries like mining, iron, leather and textiles are still facing severe development problems. Examples in this respect include the Saarland and the Ruhr area. Their economic structures are characterized by old industries, a disadvantaged job market and limited knowledge skills. Although the economic restructuring process has been ongoing for years, these regions continue to have a strong need for modernization. The same applies to the agglomeration areas in the New Länder (BBR, 2001).

1.4 Economic development in East and West Germany until 1990

Due to the division of Germany after the Second World War, economic development in the two German states was very different.
West Germany, established as a liberal parliamentary republic with a ‘social market economy’, experienced almost continuous economic expansion from the 1948 currency reform until the early 1970s. The recovery was accompanied by continuous growth in income and employment. High-volume production of consumer goods was prevalent. At the beginning of the 1970s, the first signs of stagnation became visible. When the oil crises of 1973 hit, economic problems in many sectors became apparent. Real gross domestic product (GDP) growth slowed down and even declined; this remained true from the mid-1970s

through the recession of the early 1980s. Unemployment has continued to increase since 1981 and remained at approximately nine per cent until the end of the 1980s (Bührer, 2004). Economic development during the 1980s depended mainly on the growth of the service sectors and high-tech production (see Table 1.1). This structural change has led to unbalanced economic development in terms of territory and sector.

Table 1.1: Employment by Sector 1960, 1970, 1980, 1990 (in millions)

Year	Primary sector	Secondary sector	Tertiary sector	Employees (totaling)
1960	3,5	12,5	10,2	26,2
1970	2,3	13,0	11,4	26,7
1980	1,4	11,6	14,1	27,1
1990	0,9	11,1	16,4	28,4
1994	0,8	10,0	17,5	28,3

Source: Gaebe 1998

In general, the period spanning the 1960s and 1970s resulted in strong changes in West German regional structure. On the one hand, the southern regions with minor environmental problems, but a strong innovative potential, rose in prominence, whereas the old industrialized regions and the peripheral (rural) areas became depopulated and lost economic power. These developments resulted in a north-south disparity. Since the 1980s, the southern part has been the strongest with lower unemployment rates, higher income as well as more work and investment in R&D (Schätzl, 2002). Development in the eastern part of the country, the German Democratic Republic (GDR) was different. Introduction of the state-controlled economy completely eliminated existing structures. The economic system, with its centralized planning, proved to be highly inefficient and the economy deteriorated. At the end of the 1980s, the economy in Eastern Germany was internationally uncompetitive. The capital stock was outdated and the production processes inefficient (Schätzl, 2002). As a consequence of reunification, most of the former GDR has been de-industrialised, causing increasingly high unemployment; thousands of former East Germans continue to migrate to western Germany to find jobs. This results in the loss of significant sections of the eastern work force, especially highly skilled workers and women who have shown themselves to be significantly more willing to move.

1.5 Economic and demographic development after 1990 – growing disparities

A major shock to Germany's overall economic situation occurred after German unification in 1990. The merging of the two systems has resulted in social and economic problems. Overall, since the early 1990s, the unified German economy has been performing weakly. This has been accompanied by a lack of domestic demand, harder competition and changing market structures and stagnation in investment.

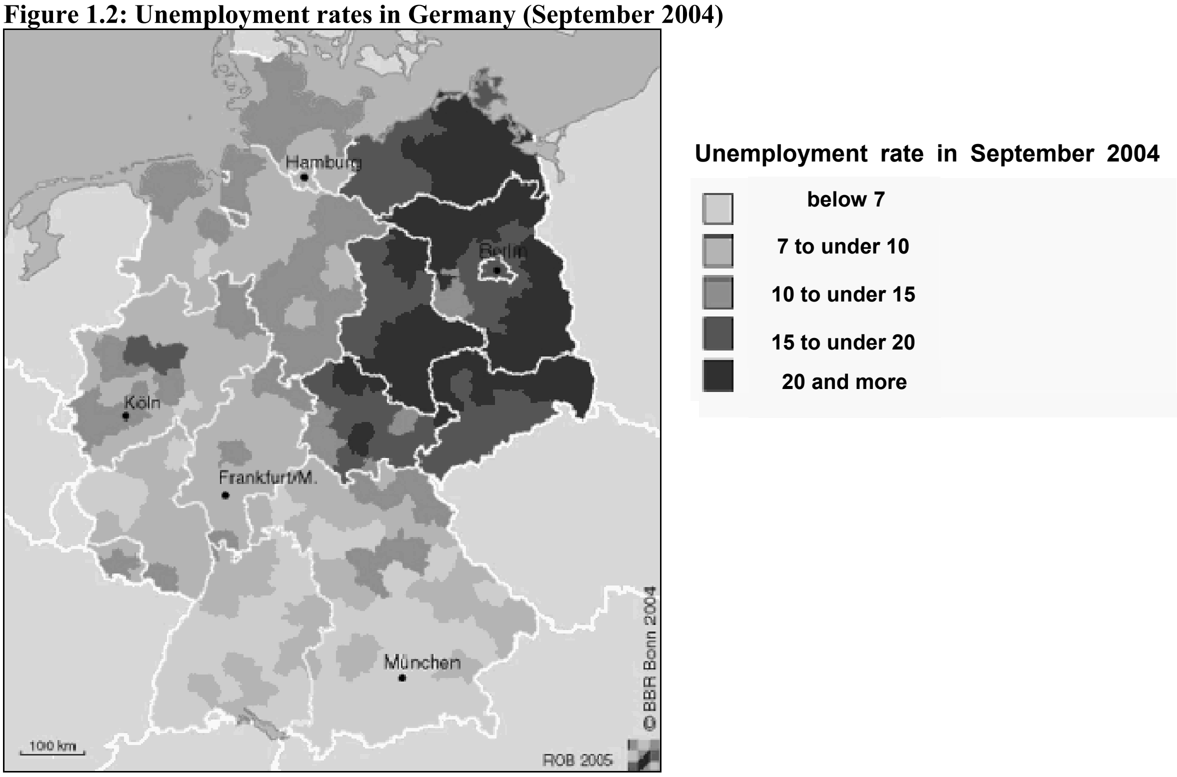
Furthermore, since unification the economic, social and ecological differences between the regions have been overlapped by disparities between the old and the new Länder. So far the adjustment of living standards has not progressed as many had expected and regional disparities have been increasing. In the following section the variable regional economic and demographic structure of Germany will be illustrated by several indicators:

1.5.1 Development of employment in Germany

The evolution and the performance of an economy depend first of all on the number of employees and on progress in sector-related changes from manufacturing to the service industry. Large numbers of highly qualified employees can then be seen as an indicator of regional competitiveness, while large numbers and a positive development of low-skilled employees is an indicator of low regional income and therefore deprived regional opportunities.

Broadly speaking, between 1997 and 2003, the job market development has been negative in east Germany, where some regions lost more than 15 per cent (or even more) of their workforce (BBR, 2005). In West Germany, only a few peripheral regions experienced negative development rates, and these are mainly former heavily industrialized regions such as the Ruhr area and some mono-specialized regions (e.g. Pirmasens with shoe production in the state of Saarland). On closer observation, it becomes obvious that most of the German metropolitan regions have gained substantial numbers of new employees over the last six to eight years. The regions of Munich and Hamburg especially demonstrate growing rates of employment in general, while metropolitan regions such as Berlin-Brandenburg and the Saxon Triangle (Leipzig, Dresden and Zwickau-Chemnitz) in East Germany show rather declining rates of evolution in the workforce (BBR, 2005). This demonstrates a rather paradoxical situation: demographic stability and even growth goes along with declining job opportunities in these regions (see Figure 1.2).

Figure 1.2: Unemployment rates in Germany (September 2004)

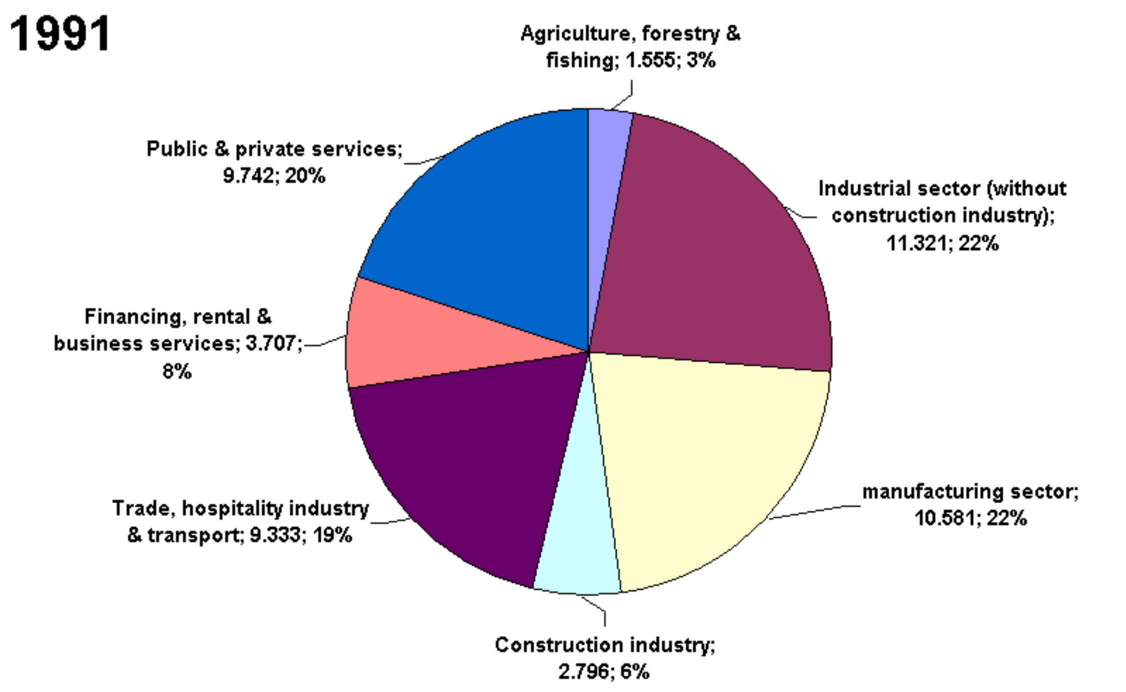


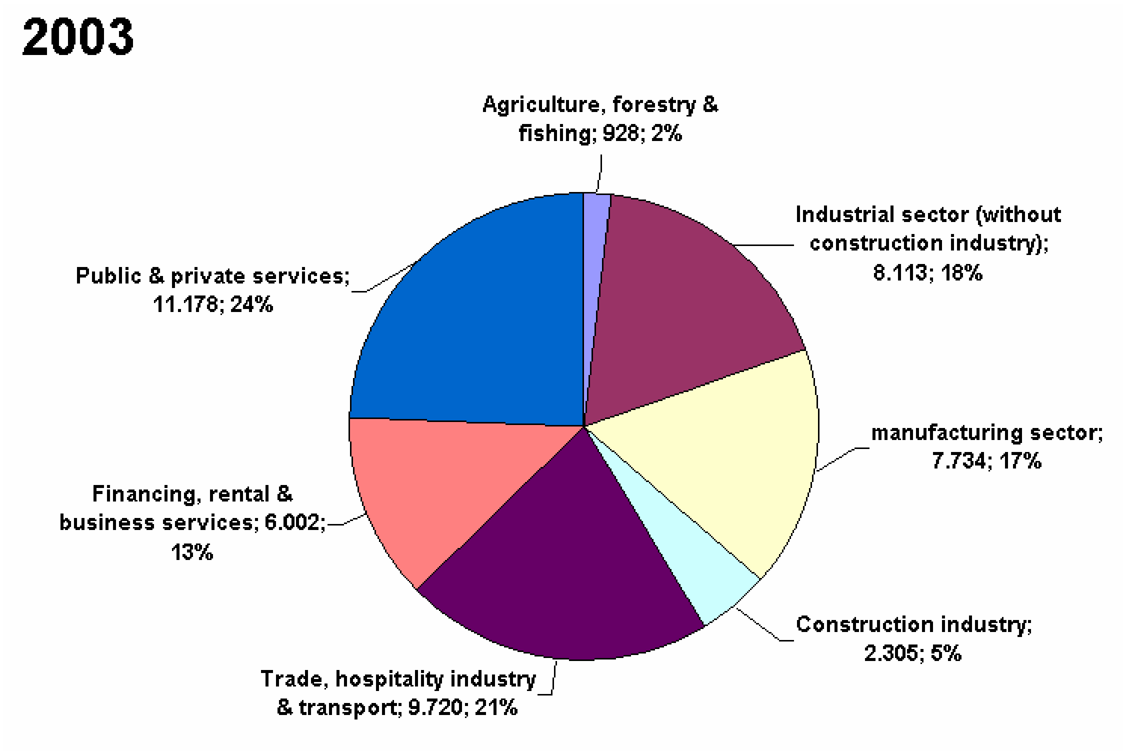
Source: BBR, 2005, adapted

In general, positive rates of development in metropolitan regions mark a significant trend for peripheral regions, which performed positively only before and up until 1990. From the 1990s onward, and therefore over the last 10-15 years, central areas (metropolitan regions with the areas between them [‘Zwischenräume’]) have caught up with regard to total employment numbers (BBR, 2005). On a county level, the decline and increase in the workforce may run in parallel, as might also be the case with regard to demographic changes and their specific evolution. Spatial distribution in workforce development indicates that core cities must be seen in the context of their hinterland, and therefore form a spatial unit. These spatial observations have led to some instances of planning and institutional focus on the role of metropolitan regions at a national executive level. Nevertheless, the heterogeneity within larger spatial units such as regions shows that negative and positive developments might occur in neighbouring counties. This highlights the importance of networks of local agents, who must interact in terms of solving inner-regional disparities using the relevant local endogenous means.

On a national scale, the spatial distribution of the workforce in the manufacturing industries (secondary sector) once more underpins an east-west disparity. It is significant that East Germany registers a rate of less than 50 employees in manufacturing per 1,000 inhabitants, while the southern part of Germany in particular registers rates of 75-125 (and more) per 1,000 inhabitants (see Figure 1.3) (BBR, 2005).

Figure 1.3: Economic sectors in Germany 1991 and 2003 (absolute numbers in thousands and in per cent)





Source: BAW/Statistisches Landesamt Bremen, 2004

When looking at the number of employees in service industries, the picture varies, and a clear east-west differentiation is not discernible. Metropolitan regions in particular have more than 250 employees (or even more) per 1,000 inhabitants, while peripheral and rural regions have a lower rate with less than 175 employees per 1,000 inhabitants (BBR, 2005). In 2003, in terms of the primary sector, agriculture, forestry and fishing accounted for only 1.1 per cent of Germany's gross domestic product (GDP) and employed only 2.4 per cent of the population, down from 4 per cent in 1991. Much of the reduction in employment occurred in the eastern states, where the number of agricultural workers fell by as much as 75 per cent following political reunification. However, the agricultural sector is extremely productive and is the third largest agricultural producer in the European Union after France and Italy. In 2003, services (tertiary sector) constituted 70 per cent of the gross domestic product (GDP), and the sector employed 71.3 per cent of the workforce: the subcomponents of services are financial, rental and business activities (15.7 per cent); trade, hotels and restaurants, as well as transport (25.4 per cent) and other service activities (29.2 per cent).

Based on this observation, development in the workforce figures according to gender, age and qualifications highlights the specific quality of regional labour markets and their regional competitiveness. On a national scale, male employment rates vary between 80 and 83 per cent while the female employment rates vary between less than 60 and 72 per cent and more. Estimates for 2020 demonstrate that male employment rates will decrease and remain stable only in the southern part of Germany (Bavaria), while in the other Länder, they will decrease to less than 80 per cent. Contrary to the evolution in total male employment rates, female rates will significantly increase up until 2020 by more than 10 per cent of the initial 1999 value (BBR, 2005). To conclude on this aspect, it is estimated that on a national scale, few western and southern regions will gain more employees by 2020, while east Germany in particular will in general lose large numbers of employees; the only exceptions to this are the wider Berlin-Brandenburg region as well as a few clusters such as Dresden, Leipzig and Erfurt; they will lose only insignificant numbers of employees compared to other regions by 2020 (BBR, 2005).

Regional economic competition depends on its GDP, its degree of innovation and its number of highly qualified employees. If one takes these three indicators into account, neither a west-east nor a simple urban-rural gradient can be detected. The southern regions in Germany in particular demonstrate high rates of highly qualified employees; indeed, the general level of qualification tends to be higher than in other regions. Highly urbanized regions, mainly metropolitan regions, therefore offer the highest innovative potential, while peripheral suburban regions hold manufacturing potential. This division of labour is most visible in Bavaria and Baden-Württemberg (BBR, 2005). Contrary to the positive level of competition over the last 5-10 years in southern Germany, East Germany in particular lacks a growth rate in R&D activities in order to solve its widespread economic competition problems.

Few employment opportunities, shrinking growth rates and generally disadvantaged circumstances in East Germany have led to an ongoing brain drain from east to west. This process has therefore accelerated regional decline and led to a further loss in job opportunities, especially in manufacturing, trade and industrial production; this has led to substantial east-west income imbalance (Bade, 2006).

Based on the premise that metropolitan regions are considered to be the centres of innovation and therefore contain a high density of R&D with its adjacent milieus, inter-regional competition will increase before it declines. Economic prosperity is nevertheless based on efficient transportation and ICT infrastructures, and might in the course of time allow for innovation within metropolitan regions. While the western-based metropolitan regions already had high-class and efficient transportation and ICT infrastructures, emerging metropolitan regions in East Germany such as the Saxon Triangle (Leipzig/Halle, Dresden and Zwickau-Chemnitz) in the state of Saxony and Berlin-Brandenburg, were initially forced to establish and renew this infrastructural and technological foundation from 1990 onwards. Although the basic infrastructure has now mainly been provided and put in place, the major control functions as well as the familiar global financial functions remain in Frankfurt on Main, Munich and a few core regions of west Germany. These factual imbalances in various fields are therefore subject to different regional and urban policies, designed to tackle this regional imbalance.

The Federal Government has several instruments to influence regional development. The most important is the financial equalisation among the Länder (*Länderfinanzausgleich*). The system of financial equalisation among the Länder is supposed to reduce the differences in income among the Länder. Less prosperous Länder receive adjustment payments. These payments are funded by the wealthy states. The system of financial equalisation among the states ensures that fiscally weak states also have adequate financial resources to fulfil their tasks and develop their sovereignty. Aligning the revenue of the Länder is intended to create and maintain equal living conditions for the entire population in all parts of Germany.

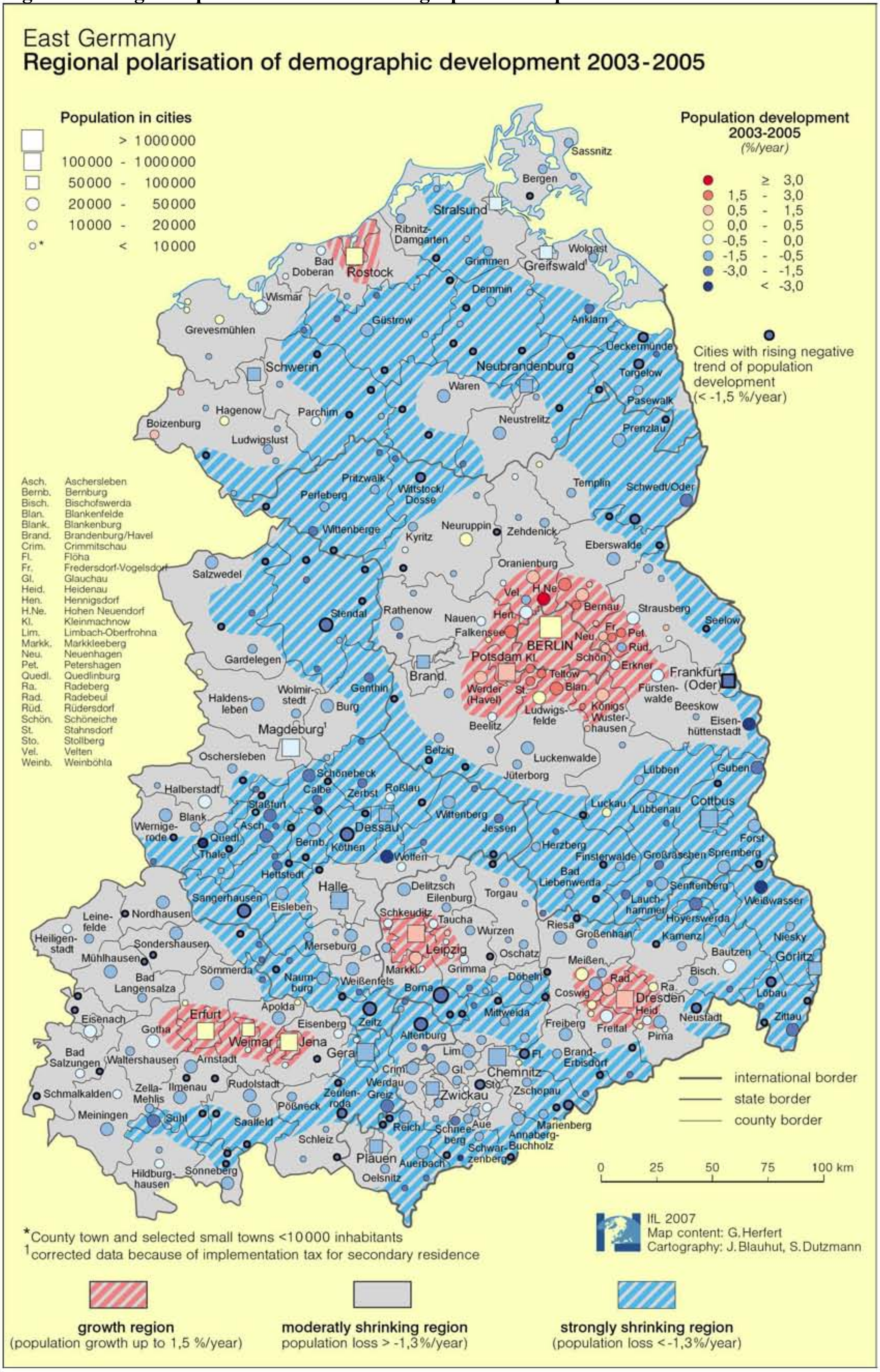
1.5.2 Demographic development in Germany

The most significant demographic changes are taking place along an east-west divide. While West Germany has experienced mainly positive developments, registering approximately 1.5 to 7.5 per cent growth rates, East Germany, apart from the core cities of Berlin and Leipzig, which have enjoyed an almost balanced development, has recorded a negative demographic development in the region of minus 1.5 per cent and more than minus 5 per cent population growth. The north-eastern parts of Germany in particular (including the states of Brandenburg, Mecklenburg Western Pomerania and Saxony Anhalt) have a high growth rate of elderly people aged 75 years and upwards (BBR, 2005). Regional ageing, a rapidly growing rate of death surplus and the migration of qualified young people from east to west lead to what can generally be regarded as shrinking regions in East Germany and growing and booming regions in West Germany.

Apart from the east-west differentiation, it has to be highlighted that on a smaller scale, shrinking demographic processes of shrinkage might occur in parallel processes of boom and prosperity (see figure 1.4 following page for East Germany). While rural and peripheral regions demonstrate constant demographic decline, predominantly metropolitan regions seem bound to sustain either stable demographic evolution or significant growth rates over the course of the near future. Nevertheless, metropolitan regions are confronted with growing regional development on their peripheries. New growth poles (Burdack, 2005b, Aring, 2001) have led to fundamental rethinking of transportation infrastructures, housing costs and ecological solutions. The term post-suburbanisation demonstrates that multi-layered suburbanisation processes have enriched the suburban regional structure and thus raised questions as to the emergence of new functional structures within metropolitan regions. These processes have resulted in politically inspired forms of governance such as the 'Initiative Body for Metropolitan Regions' (*Initiativkreis Metropolregionen*), a national association that caters to the needs of metropolitan regions.

Looking at the age structure on a national level, it is obvious that in the late 1990´s especially, the number of school children declined heavily (around 20 per cent) and will continue to do so (around 33 per cent by 2005). So the basis for further demographic development is missing, weakening the regional demographic structure in the long run. In parallel with demographic dwindling, the national demographic structure is also heavily shaped by a large volume of internal migration, mainly from east to west. Between 1989 and 2004, around 3.5 million people migrated from east to west and in doing so, produced severe regional disadvantages and growing regional imbalances between east and west Germany, but also within East Germany, for example, compared to the few centres of metropolitan regions such as Berlin, Leipzig and Dresden (BBR, 2005). Migration from abroad amounted to 13 million people, but also 9 million people left Germany between 1990 and 2004 (op. cit.).
To sum it up, significant demographic changes such as population ageing, negative death surplus, a decline in young family households and an increase in elderly single households, in combination with an ongoing internal east-west migration, have contributed to intensifying regional demographic disparities on a national scale and have thus led effectively to unequal living conditions in Germany.

Figure 1.4: Regional polarisation of the demographic development 2003- 2005 in the new Länder



Source: Leibniz-Institute for Regional Geography Leipzig 2007, adapted (G.Herfert)

1.6 National policies concerning the knowledge and creative economy

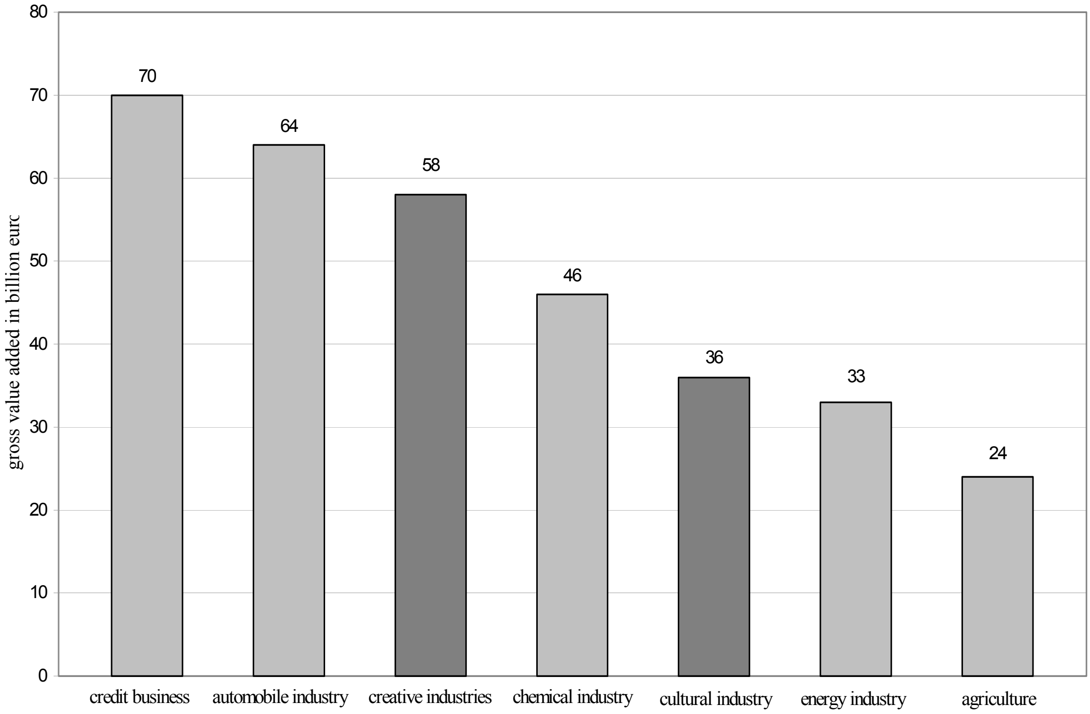
1.6.1 Knowledge economy

As mentioned before, in the Federal Republic of Germany the Länder are largely responsible for R&D policy, university and education policy. At the moment Germany spends 2.5 per cent of the GDP on R&D which is less than the US, Japan or Sweden and many other industrial countries spend on R&D (BMBF, 2006a; Schavan, 2006). However, the national government tries to support the development of new technologies through several initiatives. One example in this respect is the 'High-Tech-Strategy' (2006). One aim of the initiative is to reach the goal of spending 3 per cent for R&D in the year 2010, how it was agreed upon in the Lissabon-Strategy. The biggest amount of the ca. 14.6 billions Euros in the years 2006 to 2009 will go into research and development of new technologies in 17 high-tech-areas like ITC, biotechnology, aerospace, energy, optical instruments etc. (BMBF, 2006a).
Another example is the 'Initiative for excellence of the federal state and the Länder' (*Exzellenzinitiative des Bundes und der Länder*) which aims at promoting high quality research at the universities. The universities will be supported by 1.9 billion Euros, two third of the amount is financed by the federal state. Especially selected universities will receive 21 million Euros per year for the next five months. Two of the selected universities are in Munich, the University of Munich (LMU) and the Technical University (TU), the third university is the University of Karlsruhe (BMBF, 2006a).

1.6.2 Creative economy / Creative industries

Due to the federal system, the Länder (states) are also largely responsible for policies concerning culture, art, film and the media. Therefore, culture as a distinct field of national policy has only been discovered and developed in the last years: the position of a state secretary has been established in 1998 and from this time on, not only culture but also topics such as cultural economy and creative industries appeared on the agenda of the Bundestag (German parliament). Furthermore, the federal states and some bigger cities have detected creative industries as a strategic field of action and have systematically begun to evaluate these branches of industry. 13 reports on the status of the creative industries in have been generated by some cites and federal states (Aachen, Bremen, Nordrhein-Westfalen, Mecklenburg-Vorpommern, Bayern, Sachsen-Anhalt, Niedersachsen, Schleswig-Holstein, Hessen, Berlin, Hamburg, Baden-Württemberg) until March 2007. The German parliament has initiated a committee on Culture and the Media as well as a so-called "Enquete-Kommission 'Kultur in Deutschland'" (Committee for Culture in Germany) which focuses on the development of national statistics on these sectors as well as and on the cultural industries as a location factor. In most of the German statistics and reports the definition of the sector is according to international definitions of the cultural industries. It includes publishing, film- and radio, art, music, journalism, museum, architecture, design, software games and advertisement. Some national data has recently been published in the report on "Kulturwirtschaft 2006" by the Friedrich Naumann Stiftung and the "Büro für Kulturpolitik und Kulturwirtschaft" (Söndermann, 2007):

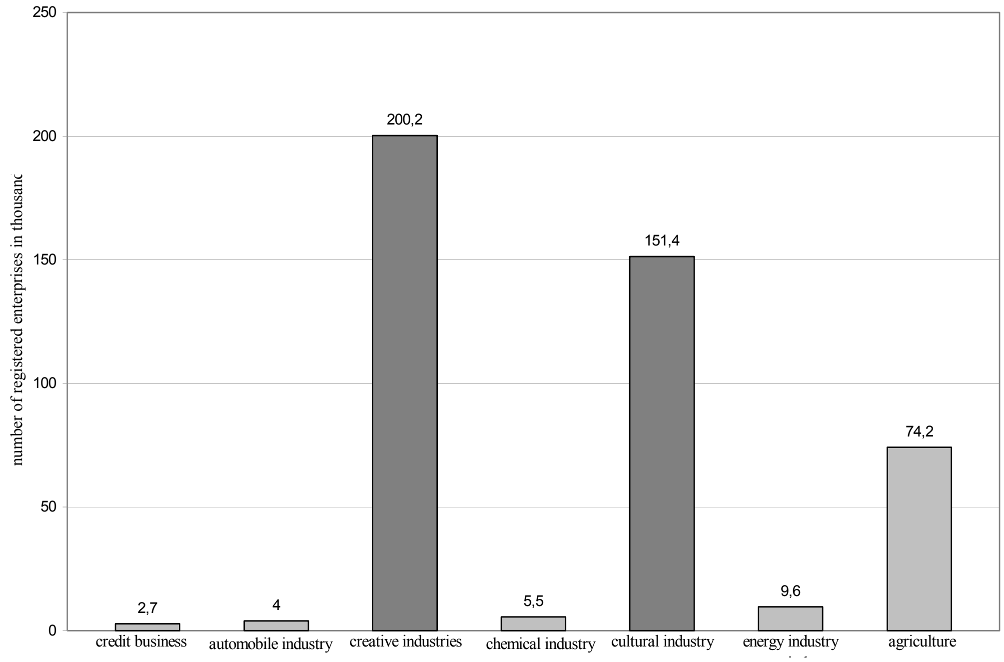
Figure 1.5: Gross value added of creative industries compared to other industries in Germany 2004



Source: (Söndermann, 2007, p. 12) ("Creative Industries" include the 36 billion share of "Cultural Industries" and include estimations by Söndermann)

According to this report the German creative industries had a turnover of 117 Billion € in the year 2004. The yearly growth rate had been 2,2 per cent in the years 2002 and 2003. Especially design (6,4 per cent) and software and games industry (11,4 per cent) contributed to this growth. 151.000 enterprises have been registered in this segment in 2004. Most of these companies are very small and consist of one to five persons. It is estimated (Söndermann 2006, p. 14) that more than 210,000 businesses operate in creative industries with a yearly turnover of less than 17,500 Euro which are not registered in any statistics. As figure 1.5 shows, the structure of enterprises in creative industries differs significantly from that of other economic fields. It has to be acknowledged that comparable statistical data are not available and that highly aggregated data often are based on individual estimations.

Figure 1.6: Number of enterprises in "Kulturwirtschaft" and creative industries in Germany in respect to other branches in 2004



Source: Söndermann, 2007, p. 16

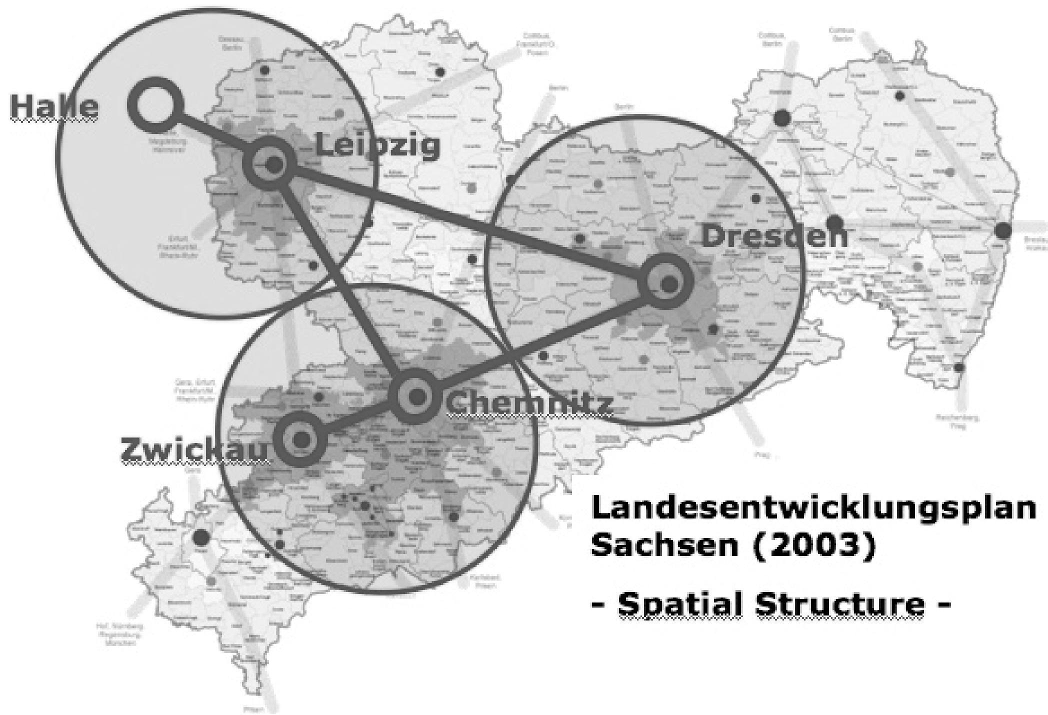
Coherent statistical data on the national level which would allow international comparisons has not been established yet. Most of the federal states opt for setting up an international comparable statistical framework that would enable inner state cross-sectoral comparisons. Based on these statistics policy strategies could then be established and promoted by the national level. Nevertheless, the newly established "Bundeskulturstiftung" is a first institutionalized framework, apart existing promotion of film and media industry on a national level, that promotes creative projects, resources on the national and international level.

2 INTRODUCING THE LEIPZIG CITY REGION

2.1 Geographical/demographical context

Leipzig is situated in the Free State of Saxony in eastern Germany. It is the largest city in Saxony, closely followed by the state capital, Dresden. Leipzig is one of the core cities of the metropolitan region known as 'Sachsendreick' or 'Saxon Triangle' (see Figure 2.1), consisting of the cities of Leipzig, Dresden and Chemnitz/Zwickau. On a smaller scale, the axis linking the adjacent cities of Leipzig and Halle forms a conurbation with around 1.5 million inhabitants. The city of Leipzig itself has a population slightly exceeding 500,000 (30 June 2006) (Stadt-Leipzig, 2006a).

Figure 2.1: Metropolitan region "Sachsendreieck" (German for "triangle of Saxony")



Source: Staatsministerium, 2003

The *city* of Leipzig refers to the city of Leipzig itself as an administrative unit; the *city region* of Leipzig refers to the city of Leipzig *plus* three surrounding districts (see Figure 2.1). When analysing Leipzig's creative knowledge industries, we refer to the *city* region of Leipzig, consisting of the city of Leipzig together with the surrounding districts of Delitzsch, Muldentalkreis (Mulde Valley) and Leipziger Land, which describe a radius of approximately 15 km around the core city of Leipzig.

Figure 2.2: City-region Leipzig

Source: Cartography by Institute for Regional Geography, 2007 (G. Herfert)

The geographical layout of the city has primarily been shaped by various phases of suburbanisation over the past 15 years, leading to new poles of economic growth at the periphery and thus giving a new spatial structure to the city region of Leipzig. Besides the expansion on the fringe, inner-city regeneration efforts (mainly housing, trade and industry, and transportation) have tried to overcome the growing vacancy rate in housing and commercial buildings in east and west Leipzig.
Huge investments into the transportation infrastructure such as roads, railways and a new runway at Leipzig-Halle Airport have led to the further integration of the city region into national and European economic areas.

The small but constant growth in the population attributes to the positive migration balance to Leipzig is compensating for the brain drain, a declining birth rate coupled with a growing death rate, as well as a relatively stable unemployment rate of approximately 20 per cent in both the city and the city region. After the unification, Leipzig "extended" its territory by incorporating surrounding municipalities. The slow population recovery (for more detail see

Chapter 5) and the stagnating economy contradict Leipzig's marketing labels as the 'boomtown of the East' and 'boomtown Leipzig' (Glock, 2006, p. 97).

2.2 Economic specialisation

Leipzig's economic strategy focuses on both traditional and new sectors. The main economic activities are trade shows and exhibitions (chiefly organised by the Leipzig Fair), automotive production, retail and distribution, logistics, healthcare and medical engineering, biotech and life sciences, energy and environmental technology, and media and communication.

Figure 2.3: Overview of key economic activities and their major players

Economic field	Major players	… in Leipzig since...	… workforce in 2005	Turnover in 2005
Media production	MDR	1924: Founded 1946: Refounded by USA/ USSR 1952–89: Local broadcaster 1989–91: Restructuring 1992: Complete relaunch	2122 (in 2004)	–
Automotive industry	Porsche, BMW	Porsche: 2000 BMW: 2001	Porsche: 500 BMW: 1500-5000	Porsche: - BMW: -
Trade fairs	Leipzig Fair	…17th/18th centuries	Leipzig Fair: 400	€68 million
Science and biotech	University of Leipzig, IfL, UfZ	University: 1409 IfL: 1992 UfZ: 1992	University: 3196 IfL: 60 UfZ: 800	–

Sources: (www.bmw.de), (www.porsche.de), (Knieling & Rahlf, 2005)

2.2.1 Vehicle manufacturing

Historically speaking, the city of Leipzig had not been a centre of vehicle production, in contrast to the nearby cities of Zwickau and Chemnitz (also in Saxony). But in 2002, Porsche erected a €127 million manufacturing plant in Leipzig to assemble the Cayenne, its new sport utility vehicle. Taking into account knock-on investment, a total of €500 million has been invested in the city region as a result. Moreover, all in all 800 jobs have been created at Porsche and its local suppliers.

Although the city is now marketing itself throughout the world as an expanding centre of vehicle production, only 1,167 people in 2005 are actually employed full-time in the core of this sector, equating to less than 1 per cent of total employment in the city. Nevertheless, the city region (Leipzig and its counties) is cooperating in the 'Autoregio' network to nurture the automotive industry in the region and has begun collaborating internationally in the 'CityRegio' project with the regions of Plzen (Czech Republic) and Linz (Austria) to expand vehicle manufacturing (Burdack, 2005a, p. 140).

2.2.2 Media and communication

In contrast to the recent arrival of the automotive industry, media and communication go back a long way in the city of Leipzig. Many publishing companies were forced to leave Leipzig before and during the Second World War as well as during the socialist GRD period. A few returned to Leipzig after unification in 1990 and traded on Leipzig's proud publishing heritage. Moreover, in 1992 MDR (Mitteldeutscher Rundfunk, the regional broadcasting corporation serving the states of Saxony, Saxony-Anhalt and Thuringia) opened its headquarters in Leipzig. Shortly afterwards, a media development agency entitled *Medienstadt Leipzig GmbH* was set up to support the growth of media-related activities. Bentele (Bentele et al., 2006) estimates that this sector employs 32,800 people (including around 9,700 self-employed), accounting for about 12 per cent of total employment in the city of Leipzig. About 4,300 jobs are in publishing and printing, along with 4,200 in TV, film and radio. Most of the media-related firms are very small, explaining why there are so many (1,350 in 2002; for more details see Chapters 2.3 and 6).

2.3 Position in European networks and hierarchy

Leipzig's role as a leading European centre of business and the arts dates back around a century to a time when the city's innovative cultural, entrepreneurial milieus led to huge invested heavily in not just new technology but also science, culture and knowledge production. This attracted large numbers of employees to Leipzig. Weakened by the loss of its status as Germany's intellectual, cultural and financial capital in connection with the Second World War, Leipzig declined into a second-class national centre in the DDR period. The 'international fairs', when the city became the platform for the socialist regime to display its mainly industrial and manufactured goods to the world twice a year, were the only opportunity for the city of Leipzig to present itself as the 'window of the East'.

The Iron Curtain also curbed Leipzig's European significance, its historical role as an important transport hub between East and West being curtailed for decades. Since 1990, however, various local, regional and national policy strategies have been developed in an attempt to regain the city's European importance. The Leipzig Fair, newly founded Leibniz research institutes, the high-speed railway network and a brand-new telecoms infrastructure provided the foundations for boosting Leipzig's status on a European scale on the basis of the service sector, knowledge and science.

The accession of the Czech Republic, Slovakia, Hungary and Poland to the European Union propelled the Leipzig region to the new centre of the enlarged EU. However, the gap between Leipzig's estimated strategic potential and its actual repositioning on a European scale is still wide. Below, a few indicators providing a picture of the real situation of the city on a national and international scale are examined.

2.3.1 Leipzig's trade fair business in a European context

Despite its structural economic crisis, Germany has maintained its position as the world's premier trade fair centre. Although attendance in 2005 declined somewhat, events like the

Hanover technology fair CeBit and the Frankfurt Book Fair are still expanding. In fact, two-thirds of the leading international trade fairs are hosted in Germany.
With cities like Frankfurt and Leipzig being major crossroads to other business centres in Europe, German trade fair organisers have successfully cashed in on the country's central location. These days, cities such as Frankfurt, Düsseldorf, Hanover, Munich, Cologne, Berlin, Nuremberg, Stuttgart, Essen, Leipzig and Hamburg host the world's leading trade fairs in an astonishing number of industrial and service sectors. In Leipzig, Auto Mobil International and the Leipzig Book Fair rank among the top exhibitions in both Germany and Europe, only being eclipsed by the corresponding events in Frankfurt.

Altogether, Germany's 140 or so trade fairs and exhibitions every year attract 160,000 exhibitors, who rent a total of 6.5 million square metres of floor space. They also draw between nine and ten million visitors, according to the Berlin-based Association of the German Trade Fair Industry (AUMA, 2006), accounting for almost a quarter of the entire European market. The European Association of Trade Fairs (Emeca) estimates that 1,000 trade fairs are held each year across Europe, attracting about 40 million visitors. Furthermore, the trade fairs also bring in scores of visitors from other countries. For the first time ever, according to AUMA, in 2002 at least 20 per cent of all visitors to German trade shows were foreigners, mostly from other European countries. They come to Germany because of the lack of very large trade fairs in other parts of Europe and overseas.

Even so, in what is one of the toughest economic crises experienced by Germany since the Second World War, the trade fair sector is by no means untroubled. But whereas the number of people visiting CeBit, the world's largest computer exhibition, has dwindled by 20 per cent, the turnover of the exhibitions hosted by the Leipzig Fair in 2005 was up by around 8 per cent over 2004, while the number of exhibitors grew by around 10 per cent Leipzig-Messe-GmbH, 2005, p. 14). In 2005, Leipzig's trade fair business ranked 39th worldwide AUMA, 2006). Recently, the Pop-up fair devoted to pop, rock and independent music has emerged in Leipzig out of the local cultural scene and since 2004 has quickly become the second most important trade event in its field in Germany after the Berlin-based Popkomm.

2.3.2 Leipzig's media and communication sector on a national scale

In 2003, Leipzig's media sector ranked ninth in Germany in terms of the number of employees (Schönert, 2004, p. 3). Between the crisis and the bubble of the New Economy hype in 1999 and 2001, Leipzig improved its position on a national scale: 2.5 per cent more employees led to Leipzig ranking fourth in the development of the media sector in Germany. In sub-segments such as advertising, radio/TV, and signal services, Leipzig even managed to stabilise and improve its position, ranking eighth, second and first (Schönert, 2004, pp. 7–8). Schönert (Schönert, 2004, p. 9) points out that Leipzig bucked the national trend by expanding its role in the field of publishing, radio, TV and film. Then again, this was an area where Leipzig had plenty of catching-up to do and had therefore started from a much lower base in the 1990s.

2.3.3 The (New) Leipzig School

The term ‘Leipzig School’ or ‘New Leipzig School’ represents a recent trend in modern painting arising between the 1970s and the 1980s through numerous painters originating from Leipzig, mainly Leipziger Kunstakademie (Academy of Fine Arts).
Rooted in Leipzig’s art scene of the 1960s, Bernhard Heisig, Wolfgang Mattheuer and Werner Tübke are considered the three main founders of the Leipzig School. They all studied at the Academy, which nowadays is known as ‘HGB/Hochschule für Grafik und Buchkunst Leipzig’ or the Academy of Visual Arts, where they later attained professorships. Their distinctive, individual forms of expression came to be labelled as representing the ‘New Leipzig School’ and made Leipzig internationally famous as a Mecca for painting in modern art.

The term ‘Leipzig School’ does not refer to a specific teaching model. Instead of a codified set of styles, it stands for a heterogeneous field of different approaches crossing styles and generations (Schüle, 2005). Bernhard Heisig is known as the main representative, followed by Hartwig Ebersbach, Gudrun Brüne, Sighard Gille and Frank Ruddigkeit, as well as the graphic artist Peter Schnürpel. Another trend of painters invoke ‘objective’ and ‘factual’ modes of painting, originally coining the term ‘Leipzig School’. Nevertheless they have integrated metaphors and allegories in their paintings and remained associated with what is known as ‘Neue Sachlichkeit (the ‘new functionalism’) as well as with leading German romanticists.

Two former students of Heisig, Mattheuer and Tübke, Professors Sighard Gille and Arno Rink, who both lectured at the HGB during GDR times, achieved international success when their own students recently attracted international attention. It was painters such as Neo Rauch, Tim Eitel, Martin Kobe and Matthias Weischer, who had studied under Gille and Rink and been influenced by their styles, who coined the stylistic form ‘New Leipzig School’ when their paintings sold for high prices at international art fairs and even at Sotheby’s in New York. The Leipzig School has two centres: one is obviously the Academy of Visual Arts in the city centre, while the gallery hub is in the western part of the borough of Plagwitz on the refurbished premises of a disused spinning mill, where more than 50 artists, various galleries and related businesses are now situated.

2.3.4 General assessment of Leipzig’s position on a European scale

The Bertelsmann Foundation conducted a survey among businesspeople to ascertain how business-friendly the 25 largest German cities are. Respondents were asked to rate cities along with their local authorities, facilities and institutions on a scale from one (very good) to six (very bad). Leipzig, in what used to be eastern Germany, was voted the most business-friendly German city, while the country’s traditional economic powerhouses Frankfurt, Munich, Cologne and Berlin all rated 'could do better' Allensbach-Institut, 2003 for the following quotes)[1].

The findings indicate that Leipzig has grasped the opportunity of reunification to top the poll. The city has always been famous for its international trade fairs and also put in a serious bid to host the 2012 Olympics. Bremen and Karlsruhe tied for second place, followed by Gelsenkirchen, Dusseldorf and Wiesbaden. Leipzig was the only city from eastern Germany in the top six.

In the survey, Leipzig scored particularly highly for business development and administration. At first glance, the poll seems to give the impression that all the cities are relatively business-friendly (Leipzig has an average of 2.73 for all six assessment criteria, placing it just a few tenths ahead of the bottom city, Berlin, with an average of 3.19), but the real situation becomes apparent from direct comparison. In Leipzig, business support and city administration were rated at 2.47 and 2.87 respectively – the best scores among all the 25 cities studied. In addition, employers in Leipzig found local politicians (2.13) and the town council (2.87) to be far more business-friendly than the averages of 3.06 and 3.21 respectively. By comparison, Berlin's business leaders gave the city's industry support 2.79 and the city administration 3.64 – both significantly lower than Leipzig. Since all the other service institutions questioned in Berlin mostly scored below average, its bottom position was justified.

To conclude, on 27 June 2006, a UBS (United Bank of Swiss) survey stated "Moscow is the world's most expensive city while Leipzig is the cheapest one in Europe". Leipzig's successful efforts in terms of image, marketing and its cluster policy (see Chapter 5) have restored the city's national and international importance. Moreover, being one of the handful of leading 'east German boomtowns', the city region of Leipzig has regained its strategic position as the 'gateway to the East'. But against the background of the harsh, complex conditions of transformation, only rarely does the city's excellence scale European heights. However, it should not be forgotten that modern painting, one of the traditional local arts, emerged from its artist and educational niches after unification and resulted in the distinctive Leipzig School as of the mid-1990s. Over the past 2–3 years representatives of the Leipzig School have commanded very high prices at art fairs, exhibitions and auctions at Sotheby's, drawing attention to Leipzig around the globe.

[1] The study was a cooperative venture between Bertelsmann, business magazine *Impuls*, and international multi-utility RWE. It was conducted by the Allensbach Institute (Institut für Demoskopie), one of Germany's leading opinion research institutes. The findings are based on a poll of 2,556 CEOs in the cities concerned.

3 HISTORICAL DEVELOPMENT PATHS IN THE CITY REGION OF LEIPZIG

3.1 Pre-1950

3.1.1 Fair trade

For centuries, the city of Leipzig has benefited from its privileged location within the trans-European transport network. Located in the state of Saxony in East Germany, the city's location at the crossroads of two continental trade routes catalysed the rise more than 800 years ago of what later became known as the 'Leipzig Fair'. The city developed into a centre of trade, culture, science and learning, and still continues to function as a bridge between East and West. For the following quotes, we refer to the historian Hocquél (Hocquél, 1990).
Traders and merchants had shaped the layout of Leipzig as early as the Middle Ages. In fact, it was commerce that determined the development of the town from the outset. Several East–West and North–South trading routes crossed precisely here in Leipzig. Moreover, Leipzig's importance as a trading centre was consolidated by a number of privileges. In 1466, for instance, Kaiser Frederick III granted a privilege that put Leipzig on a par with market fairs in southern German and upper Italy.

Leipzig eventually became the leading regional centre and in 1507 even the biggest German trading centre for the exchange of goods between western and eastern Europe. By this time, the city was already known as the gateway to the East. After numerous ups and downs in the turmoil of the 16th and 17th centuries, the sales fairs increasingly suffered from a lack of space as of the mid-19th century following the Industrial Revolution. The arrival of mass-production prompted a new format of fairs, the 'sample fairs'. To host them, Leipzig City Council commissioned a purpose-built exhibition centre, 'Städtisches Kaufhaus', which was opened in 1896.

Various fairs specialising in areas such as books, printing machinery and textiles led to an enormous boom in Leipzig's trade fair business as well as the establishment of an institutional body responsible for organising trade fairs. In the 1920s the Leipzig Fair also expanded its facilities by erecting 17 new pavilions, creating a total exhibition area of 130,000 square metres. Under the Nazis, Leipzig was designated the 'Reichsmessestadt' ('Reich trade fair city') and was the only city allowed to hold international trade shows. Yet although the volume of visitors reached new heights before the war broke out, increasing numbers of foreign exhibitors shunned the Leipzig Fair. The fairs were halted as of 1942 and the exhibition halls converted to munitions production.

After the collapse of the Nazi regime, the Soviet military government and the Fairs Office made every effort to revive Leipzig's role as a trade fair centre and on the 8 May 1946, the 1st Peace Fair brought together exhibitors from all four occupation zones as well as companies from the Soviet Union, the only foreign country to exhibit. With the integration of the GDR into the Eastern bloc, Leipzig became the most important trade fair venue in Comecon. The slogan of the time "Leipzig – showcase of the world" underlined how important the Leipzig Fair was for the political leadership regarding the GDR's impact abroad.

3.1.2 Books, publishers, printing, and the university sector

The Leipzig Fair is closely connected to the printing and publishing sector. A watershed in the development of the latter was the publication of the world's first daily newspaper in Leipzig in 1650. In fact the city has been a centre of publishing and printing since the first book was printed there in 1481. To this day, the annual March Leipzig Book Fair is of particular importance. As early as 1550, the university library was one of the largest in Europe. Moreover, since 1912, a copy of every book and journal published in the German language has been stored in 'Deutsche Bücherei', part of the German National Library.

The publishing sector is in turn closely associated with the historical role of the University of Leipzig, which also enjoys a long heritage. It was founded in 1409, making it one of Europe's oldest universities. It boasts a whole host of famous alumni such as jurist and philosopher Christian Thomasius, author and critic Johann Christoph Gottsched, and poet Christian Fürchtegott Gellert, and more recently the philosophers Hans-Georg Gadamer and Ernst Bloch. Johann Wolfgang von Goethe arrived in Leipzig in 1765 to study law, and his famous play *Faust* is partly set in Auerbachs Keller, a tavern in central Leipzig. In 1825 the German Booksellers and Publishers Association was founded. In 1826 the publishing company Brockhaus began industrial scale book production. Just two years later, Anton Philipp Reclam founded a lending library and later a publishing house, turning Leipzig into a European centre of publishing and book production.

3.1.3 The economic impact of the arts

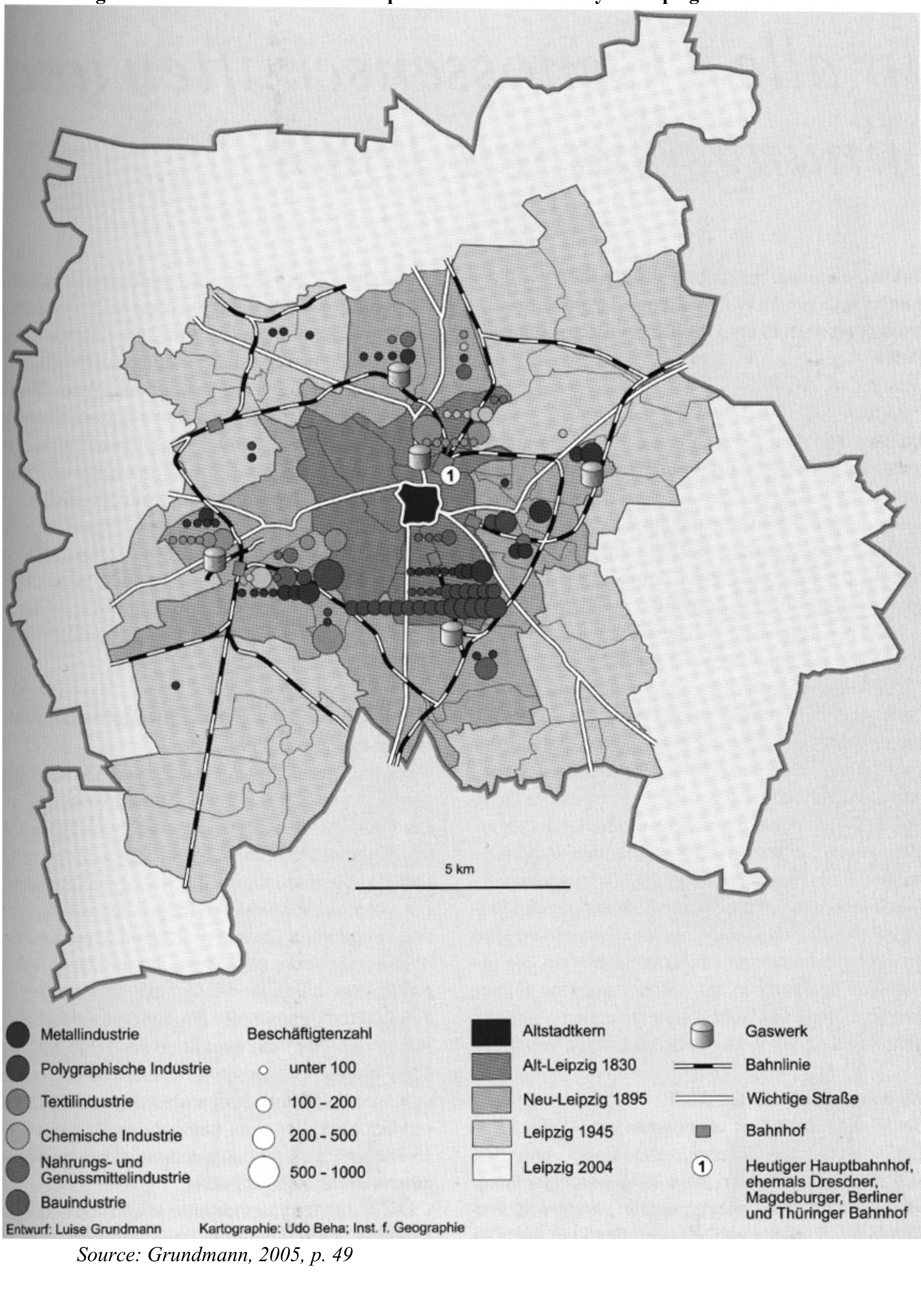
Apart from publishing, Leipzig became known for its musicians, composers and scientists. Between 1723 and 1750, Johann Sebastian Bach was the town's director of music and the choirmaster of St Thomas's. The year 1743 saw the launch of both the 'Grand Concerts' (the forerunners of today's Gewandhaus concerts) and the Gewandhaus Orchestra, the oldest German civic concert orchestra. St Thomas's Boys Choir and the Gewandhaus Orchestra frequently perform elsewhere in Germany and abroad and have conveyed the cultural image of Leipzig worldwide. When in Leipzig, the orchestra often accompanies St Thomas' Boys Choir in St Thomas's Church and performs in productions of the Leipzig Opera House. But apart from Bach, Leipzig's musical life is also closely associated with other great composers such as Richard Wagner, Felix Mendelssohn and Robert Schumann, under whose influence the city's musical and opera tradition flourished. Between 1835 and 1847, Felix Mendelssohn worked in Leipzig as the conductor of the Gewandhaus Orchestra.

Stimulated by these innovative milieus, the success of the local arts prompted further economic and urban development. In 1858 the Museum of Fine Arts was opened, followed in 1868 by the New Theatre, while the reconstruction of the university building took place between 1891 and 1897. Culture and trade must be considered the backbones of the development of Leipzig, strongly supported by the middle classes and their deep sense of responsibility for the city. The advent of the samples fair in 1894 and the improvement of the transportation facilities made Leipzig a leading centre in Germany. The city grew substantially between 1860 and 1900, expanding mainly south and south-westwards. It was in the late 1870s that the previously independent areas of Lindenau and Plagwitz to the west of Leipzig were transformed into the city's new industrial centres (see Figure 3.1 on next page).
Between 1882 and 1895, the number of employees in manufacturing tripled, reaching 90,000 by the end of the 19th century. The labour required for the city's industrialisation led to new residential housing blocks, especially in the first ring of expansion around the old town of Leipzig (Grundmann, 2005, pp. 48–49). Another reason for the growth of Leipzig's population from 63,824 in 1850 to 465,156 in 1910 was the incorporation of numerous surrounding villages such as Neuschönefeld, Volkmarsdorf, Gohlis, Eutritzsch, Schleussig, Plagwitz, Lindenau and Connewitz (Glock, 2006, p. 98).

Large lignite fields became the basis for economic and demographic growth, making Leipzig a centre for modern petrochemical industries directly based in Leuna, Buna, Bitterfeld and Wolfen. In due course, Leipzig increasingly shouldered regional and even national administrative and service functions. According to Grimm (Grimm, 1995, p. 324), Leipzig evolved as the fifth biggest city in Germany, its population peaking at 713.000 in 1933 (Glock, 2006, p. 99; Stadt-Leipzig, 1999).

In the 1930s and 1940s, Leipzig was transformed into a major armaments production centre. Companies like Allgemeine Transportgesellschaft (ATG), Erla Maschinenwerke GmbH and Mitteldeutsche Motorenwerke GmbH in Taucha were geared to aircraft production. By 1943, Leipzig had around 200 munitions plants and inevitably became a strategic target of Royal Air Force bombers, at first in October 1943. Weakened not only by severe air raids but also the loss of leading Jewish economic and cultural players, in 1945 Leipzig came under Soviet control. By this time 130,000 people were homeless and around 45,000 buildings had been totally destroyed, particularly in the inner city (Bode, 2005, pp. 52–53). According to Huth/Kirste/Oehme (Huth et al., 1990, p. 274) and Kabisch (Kabisch, 1994, p. 101), the historical housing stock largely survived the air raids and harboured potential for development.

Figure 3.1: Locations of industrial plants in 1900 in the city of Leipzig



Source: Grundmann, 2005, p. 49

3.2 1950–90: Political mainstreaming – civic upheaval in the GDR

3.2.1 Political structures – planned economy – civil upheaval in the early 1950s

In order to understand the social, cultural and especially the economic situation of the city of Leipzig and how it changed between 1950 and 1990, attention needs to be paid to the structural and national contexts, since in East Germany they had a much greater influence on local conditions than national policy in a liberal-democratic society. For the following data: (Hocquél, 1990).

In November 1948, the DWK ('Deutsche Wirtschaftskommission' or German Economic Commission), including antifascist bloc representation, assumed administrative authority. Five weeks after the declaration of the western Federal Republic of Germany, on 7 October 1949 the DWK formed a provisional government and proclaimed the establishment of the German Democratic Republic (East Germany). The SED ('Socialist Unity Party') controlled the National Front coalition, a federation of all political parties and mass organisations that preserved at least initially political pluralism. The 1949 constitution formally established a democratic federal republic and created the State Chamber and the 'Volkskammer' or 'People's Chamber'. The Volkskammer, according to the constitution the highest state body, was vested with legislative sovereignty. However, the SED controlled the Council of Ministers and reduced the Volkskammer to a rubber-stamping legislature. Election to the Volkskammer and the state legislatures (later replaced by district legislatures) was based on a joint ballot paper prepared by the National Front; voters could merely register their approval or disapproval.

The Third SED Party Congress of July 1950 threw its weight behind industrial progress. The industrial sector, at that time employing 40 per cent of the working population, was subjected to further nationalisation, which resulted in the formation of the 'VEB' ('Volkseigene Betriebe' or 'People's enterprises'). These combines accounted for 75 per cent of industry. Centralised state planning was introduced by the First Five-Year Plan (1951–55), which set high production quotas for heavy industry and required increased labour productivity. The pressures of the plan caused an exodus of East Germans to West Germany, with monthly emigration figures in 1951 fluctuating between 11,500 and 17,000. By 1953 an average of 37,000 men, women and children were leaving each month. Political pressure on the newly installed GDR between 1951 and 1953 came to a head on 17 June 1953 when strikes and demonstrations broke out against the communist government. Although East Berlin, East German capital, was the centre of the uprising, Leipzig played an important part in a revolt ultimately crushed by Soviet tanks.

Only a few weeks after the death of Stalin, construction workers in Berlin were on high alert when the newspaper *Neues Deutschland*, despite being the official government mouthpiece, published an article on Sunday 14 June 1953 criticising a 10per cent increase in work norms without an equivalent rise in wages announced by the Politburo, and condemning the way the latter was handling the nation's poor economic situation. The newspaper's editors in chief lambasted party leader Walter Ulbricht's harsh line and supported a more moderate group in the Kremlin and the Politburo. The workers were among those most affected by the new directives and were acutely aware of the contradictions involved in the party's call for socialism to be built on the basis of more work for less pay.

On Wednesday 17 June, the uprisings spread from Berlin throughout the country. Around 370,000 people in over 700 cities and towns went on strike. Altogether, about a million people from all social classes protested on the streets, including 100,000 in Berlin alone. Other main centres of protest were Leipzig, Halle, Gera and Jena. The demonstrators called for more freedom, the resignation of the government, free elections, unification and better living conditions.

In Halle 8,000 railway workers seized the SED headquarters, council offices and prisons. In Leipzig workers occupied the youth movement headquarters and destroyed all the portraits except those of Karl Marx. This revolt would later be known as the first upheaval in the name of greater freedom in the countries of the Warsaw pact.
The events had a profound effect within the GDR and particularly the party. The struggle inside the Politburo, which had been apparent since the beginning of the year, had grown since Stalin's death and the introduction of the 'new course'. Each side privately blamed the other for what had happened on 16th and 17th of June, although the immediate result was a public façade of unity and calm. Both wings in the Politburo were stunned by the events, but wanted to convince the Soviets that the SED was in full control. Behind the scenes, discussion was heated. However, a temporary compromise was reached under which the 'new course' was reaffirmed and the blame for the upheaval was placed squarely on American and West German 'warmongers'.

3.2.2 Economic planning

Under the NES ("New Economic System"), the task of establishing future economic development was assigned to central planning. Decentralization involved the partial transfer of decision-making authority from the central State Planning Commission and National Economic Council to the Associations of People's Enterprises (English for "Vereinigungen Volkseigener Betriebe, or VVBs"), parent organizations intended to promote specialization within the same areas of production. In Leipzig repositioned itself as a cultural and academic city. Due to the absence of high quality iron ore in the GDR, brown coal fields played a major role as a basic source for generating chemical-based products. In the southern part of Leipzig, large open cast mining stimulated the allocation of further industrial plants in chemical industry. The region of Bitterfeld – Halle – Leipzig became a leading chemical production centre within the GDR.

Framed by the guidelines of the central planning authorities, overall production goals have been implemented, but each VVB could still determined its own internal financing, utilization of technology, and allocation of manpower and resources. As intermediary bodies, the VVBs also functioned to synthesize information and recommendations from the VEBs. The "New Economic System" (NES) stipulated that production decisions be made on the basis of profitability, that salaries reflect performance, and that prices respond to supply and demand.

The NES brought forth a new elite in politics as well as in management of the economy, and in 1963 Ulbricht announced a new policy regarding admission to the leading ranks of the SED. Ulbricht opened the Politburo and the Central Committee to younger members who had more education than their predecessors and who had acquired managerial and technical skills. As a consequence of the new policy, the SED elite became divided into political and economic factions, the latter composed of members of the new technocratic elite. Because of the emphasis on professionalisation in the SED cadre policy after 1963, the composition of the mass membership changed: in 1967 about 250,000 members (14per cent) of the total 1.8 million SED memberships had completed a course of study at a university, technical college, or trade school.

The SED emphasis on managerial and technical competence also enabled members of the technocratic elite to enter the top echelons of the state bureaucracy, formerly reserved for political dogmatists. Managers of the VVBs were chosen on the basis of professional training rather than ideological conformity. Within the individual enterprises, the number of professional positions and jobs for the technically skilled increased. The SED stressed education in managerial and technical sciences as the route to social advancement and material rewards. In addition, it promised to raise the standard of living for all citizens. From 1964 until 1967, real wages increased, and the supply of consumer goods, including luxury items, improved. Failure to meet estimated national as well as international oriented goals resulted in the conclusive termination of the reform effort in 1970.

3.2.3 Leipzig's economy – industrial specialisation within the region of Saxony

After the division of Germany into East and West, the "trend industries" of raw materials and heavy industry were built up and had to provide the basis for the national income. In GDR times, the three Saxon districts contributed 40 per cent of the GDR industrial production, the second highest in the Comecon bloc after the Soviets. Zwickau, with its now-famous "Trabi" was the automobile production centre of the GDR, and Leipzig was a centre for printing and publishing. Coal mining and power generation took place in the area around Hoyerswerda. But the Halle/Leipzig-Chemnitz-Dresden "triangle" dominated industry and chemicals in the GDR. According to Gorning and Häußermann (Gornig & Häußermann, 1998 p. 345) the agglomeration of Saxony is considered to be the loser of central planning efforts and the allocation of its resources in the GDR. New houses with its new industries have been placed in rural and peripheral areas, leading to weakening former industrialized areas such as the southern part of the GDR, which remained on the productive level of the 1930s. Leipzig also lost leading entrepreneurs, who migrated to West Germany, as well as various forms of administration.

3.2.4 New housing policy, prefabricated housing, socialist renewal

The wartime destruction, the dismantling and removal of the existing industrial remnants by the Red Army, and the large quantities of refugees from eastern Europe all posed enormous pressure on the city administration. The newly implemented SED regime had tremendous urban problems to solve. First of all, the ravages of war had created an enormous shortage of housing and ruined the transportation and sewerage infrastructure. Combined with the socialist conviction that new, anti-bourgeois forms of living would stimulate the new socialist society, large quantities of prefabricated housing were built, especially in western Leipzig, where an entire new town was built in the borough of Grünau on the outskirts of Leipzig.

These efforts were indirectly supported by the complete failure to refurbish or regenerate old inner-city housing areas, which became almost completely dilapidated. Measures such as caulking roofs in the late 1980s demonstrate the dramatic need for restoration, planning and construction. Plans to demolish 53,000 buildings in the inner city could not be accomplished because of the lack of both resources and planning procedures (Glock, 2006, p. 100).

Based on a masterplan ('Generalbebauungsplan'), the urban planning administration focused on two major goals. The first was to carry out reconstruction based on the historical urban patterns while transforming the physical appearance in line with socialist aesthetic standards. Secondly, the administration focused on efforts to reduce the housing shortage. Accordingly, 37,600 units of prefabricated housing were erected in Grünau and another 6,700 units in Paunsdorf, both on the outskirts of Leipzig (Scheller, 2005, p. 54-55). Growing ecological problems and decreasing living standards in old buildings resulted in ongoing population decline, with mainly academics and skilled workers migrating north (Glock, 2006, p. 101). In 1950 the city had 584,593 inhabitants, a figure that by 1989 had dropped to 530,010 (Stadt-Leipzig, 1999, p. 23).

The socialist regime's efforts to solve the city's housing shortage changed the urban layout of the inner city. In 1960 the opening of the New Opera House on the site of the New Theatre, which had been destroyed during the Second World War, marked the first visible attempt to change not only cultural life but also the architectural environment. In 1968 the demolition of the University Church in the central square Karl–Marx-Platz, now Augustusplatz, underlined the regime's intention to overcome the cultural past and establish a new cultural identity. The completion of the new buildings of Karl Marx University (nowadays the University of Leipzig) on the site of the former University Church in 1975 as well as the inauguration of the new Gewandhaus Concert Hall in 1981 completed these politically driven efforts.

3.2.5 New trade fairs –window of the East

The tradition of fairs and trade shows was revived shortly after the war. The spring and autumn fairs showcased the production of industrial and consumer goods in both East and West and served as a platform for communication exchange and trade in the Cold War period. However, publishers such as Reclam had to move westwards and re-establish themselves. In 1950, the original private company was nationalised. The former centre of publishing and printing with its attendant book fairs never really recovered from the destruction or the loss of human and manufacturing resources caused by the war.

3.2.6 Brain drain – Loss of intellectual potential

Leipzig's economy as well as its intellectual milieus suffered because many distinguished Leipzig academics fled to Western Germany to escape growing political and ideological pressures. Later, attempts were made to separate the University from its past as far as buildings were concerned too, as illustrated by the new University complex on Karl-Marx-Platz (Augustusplatz). So, in 1968, the Universitätskirche St. Pauli (German for "University Church of St. Paul"), although undamaged by bombing, as well as the only partly damaged and still usable old main building, the Augusteum, were destroyed. Until the peaceful revolution in 1989, university life was characterised by political instrumentalisation of science and restriction of academic self-government. Parallel to the ongoing systematic brain drain the annual industrial growth rate declined steadily after 1959. In 1963 Ulbricht introduced the New Economic System (NES), an economic reform program providing for some decentralization in decision-making and the consideration of market and performance criteria. The NES aimed at creating an efficient economic system and transforming East Germany into a leading industrial nation.

3.2.7 Private activities – civic engagement

The degree of private activities and proto-entrepreneurial activity in the economy needs to be appreciated in order to understand the post-socialist transformation processes occurring as of the 1990s. Between the 1960s and 1980s the private sector of the economy was small but not entirely insignificant. In 1985 about 2,8 per cent of the national product came from private enterprises. The private sector included private farmers and gardeners; independent craftsmen, wholesalers, and retailers; and individuals employed in so-called free-lance activities (artist, writers, and others) Kaiser, 2005). Although self-employed, such individuals were strictly regulated. In 1985, for the first time in many years, the number of individuals working in the private sector increased slightly. According to East German statistics, in 1985 there were about 176,800 private entrepreneurs, an increase of about 500 over 1984. Certain private sector activities were quite important to the system. The SED leadership, for example, had been encouraging private initiative as part of the effort to upgrade consumer services.

In addition to those East Germans who were self-employed full time, there were others who engaged in private economic activity on the side. The best-known and most important examples were families on collective farms who also cultivated private plots (which can be as large as 5,000 m²). Their contribution was significant; according to official sources, in 1985 the farmers privately owned about 8.2 per cent of the hogs, 14.7 per cent of the sheep, 32.8 per cent of the horses, and 30 per cent of the laying hens in the country. Professionals such as commercial artists and doctors also worked privately in their free time, subject to separate tax and other regulations. Their impact on the economic system, however, was negligible. Nevertheless, the societal kit experienced a distinct quality.

Apart legal individual economic activity, 'informal' economic activity became extremely important in order to overcome the general shortages affecting consumer goods, materials and services. One kind of informal economic activity included private arrangements to provide goods or services in return for payment. An elderly woman might have “hired” a neighbour boy to haul coal up to her apartment, or an employed woman might have “paid” a neighbour to do her washing. Closely related would be instances of hiring an acquaintance to repair a clock, tune up an automobile, or repair a toilet. Such arrangements took place, and given the serious deficiencies in the East German service sector, they may have been very necessary in order to make the daily living. They were doubtless common, and because they were considered harmless, they were not the subject of any significant governmental concern.

3.2.8 Cultural niches – privatisation of artists and cultural activists

The oppressive political system of the GDR had expanded its will to restructure society in the field of culture from the very beginning. Cultural has been understood as a way to educate society and has thus been organized top down. Cultural organisations had constantly worked toward balancing individual unwished cultural positions with the politically induced claim of official cultural perspective. Cultural houses targeted to collect different forms of cultural representation under one roof, in order to provide a system-conform as well as “adequate” place within socialist society. As a result of the limited cultural spaces and shrinking articulation realm, many leading poets, writers, artists, actors, musicians, and painters left GDR to West Germany in the 1970s and 1980s. As a result of growing political suppression, many remaining cultural activists and artists tried to escape official cultural policy and operate in their privacy or outlasted silently in universities, academies, or as workers in different industries.

This form of retreat enabled some artist to survive GDR times. From 1990 onwards many artist have been “rediscovered” either by colleagues or the art market. In the case of Leipzig, many painters did so and “survived” as lectures, professors, or in other professions at the Academy of Visual Arts (English for Hochschule für Grafik und Buchkunst) or at other institutions. After unification, many were honoured and their work was presented anew. Artist such as Heisig, Mattheuer und Tübke, as well as Gille and Rink, are considered to be the fathers of the younger generation of painter, who represent the “New School of Leipzig” worldwide. For an overview see Schüle (Schüle, 2005).

3.2.9 Civil uprising in Leipzig – regime collapse in 1989

Nearly 40 years later, the city of Leipzig again became the centre of political upheaval. The 1989/1990 Monday demonstrations were a series of peaceful political protests against the East German government following services for peace conducted at St Nicholas’s Church in central Leipzig by Pastor Christian Führer. After gathering outside the church, the demonstrators were eventually forced into the nearby Karl-Marx-Platz when the churchyard could no longer accommodate them all. Safe in the knowledge that the Lutheran Church supported their stance, the many dissatisfied participants from Leipzig and elsewhere in East Germany demanded rights such as the freedom to travel abroad and to elect a democratic government.

Kept abreast of these events by television and friends, demonstrations on central squares began to be held in other towns and cities throughout East Germany. By October 1989, more than 250,000 people in Leipzig alone had joined the anti-government demonstrations. The most famous chant was “Wir sind das Volk!” “We are the people”. Although some demonstrators were arrested, the threat of large-scale violent intervention by the security forces never materialised. The demonstrations eventually ended in March 1990, around the time of the multi-party elections that led to German reunification. In August 1989, Hungary's reformist government removed its border restrictions with Austria – the first breach in the so-called “Iron Curtain”. In September 1989, more than 13,000 East Germans managed to escape to the West through Hungary. Meanwhile, mass demonstrations in Dresden and Leipzig demanded the legalization of opposition groups and democratic reforms.

On 9 November the Berlin Wall ‘fell’ (a common term denoting the opening of border crossings, albeit illustrated with TV images of some impromptu attempts to dismantle parts of the Wall), and in the following days increasing numbers of East Germans took advantage of this to visit West Germany or West Berlin. The whole socialist system of East Germany was unravelled when its parliament voted on 1 December that same year to abolish the constitutional provision granting the SED the leading role in the state. Egon Krenz, the Politburo and the Central Committee resigned two days later.

The switch to the free market brought about by German reunification in 1990 quickly led to the widespread collapse of the traditional economic structures which had been shored up for many years in the communist system. The lack of competition in the GDR had led to the preservation of conventional industrial structures in the old built-up areas. This, combined with flagging investment activity, led to dwindling international competitiveness. Companies went bankrupt en masse after reunification or were restructured by the Treuhand (Federal German agency for organising economic restructuring in East Germany) in such a manner that economic collapse was simply staved off for a limited period. The direct result was widespread unemployment, especially in the early 1990s.

4 STRANDS OF DEVELOPMENT IN THE LEIPZIG REGION UNTIL 2000

4.1 1990–2000 – Leipzig between continuation and rupture

At the end of the 1980s, probably none of the GDR's major cities had such a down-at-heel appearance as Leipzig (Nuissl & Rink, 2003b). Leipzig, a centre of commerce for many centuries, concentrated its efforts on revitalising the historical centre, as can be seen from the gentrification of the main railway station, the old merchants' warehouses and the shopping streets. Even though three-quarters of the old buildings were refurbished during the 1990s, the migration of people away from the city could not be halted. Of the 320,000 housing units, 55,000 are still unoccupied today (although fortunately this figure is slowly dwindling).
Between 1989 and 1997, the volume of retail space rose from 160,000 square metres to more than 900,000. A total of 400,000 sqm of this newly constructed retail space was built at locations on the outskirts of the city (Nuissl & Rink, 2003b). The retail space needed in the inner city dissolved at the city fringe and led to not only new growth poles but also new traffic (Burdack, 2005a).

From 1989 to 1993, Leipzig experienced a radical process of deindustrialisation when the city's manufacturing workforce shrank from roughly 80,000 to below 17,000 (Nuissl & Rink, 2003a, p. 28). Apart the harsh economic and social problems emerging, empty residential and industrial areas made the city's urban structure instable. Some 800,000 sqm of newly built but unused office space as well as 60,000 empty flats in the mid-1990s led to Leipzig becoming the city with the highest vacancies in eastern Germany.

The combination of radical economic decline mostly in the first ring around the inner city and the growth of retail space in the second ring on the periphery of Leipzig led to what has been coined the "perforated city" structure of Leipzig (Lütke-Daldrup, 2004a).
In Leipzig, as in other cities, urban shrinkage exists side by side with suburban growth. From the early 1990s, 34,000 semi-detached houses alone have been built on its outskirts. Nearly half the firms on the periphery have relocated there from a site in the city proper. Moreover, the first elements of a globally oriented economy are emerging on Leipzig's northern fringe, in the shape of the airport, motorway, freight transport centre, the new Leipzig Fair exhibition centre and the new BMW car plant, designed by Zaha Hadid.

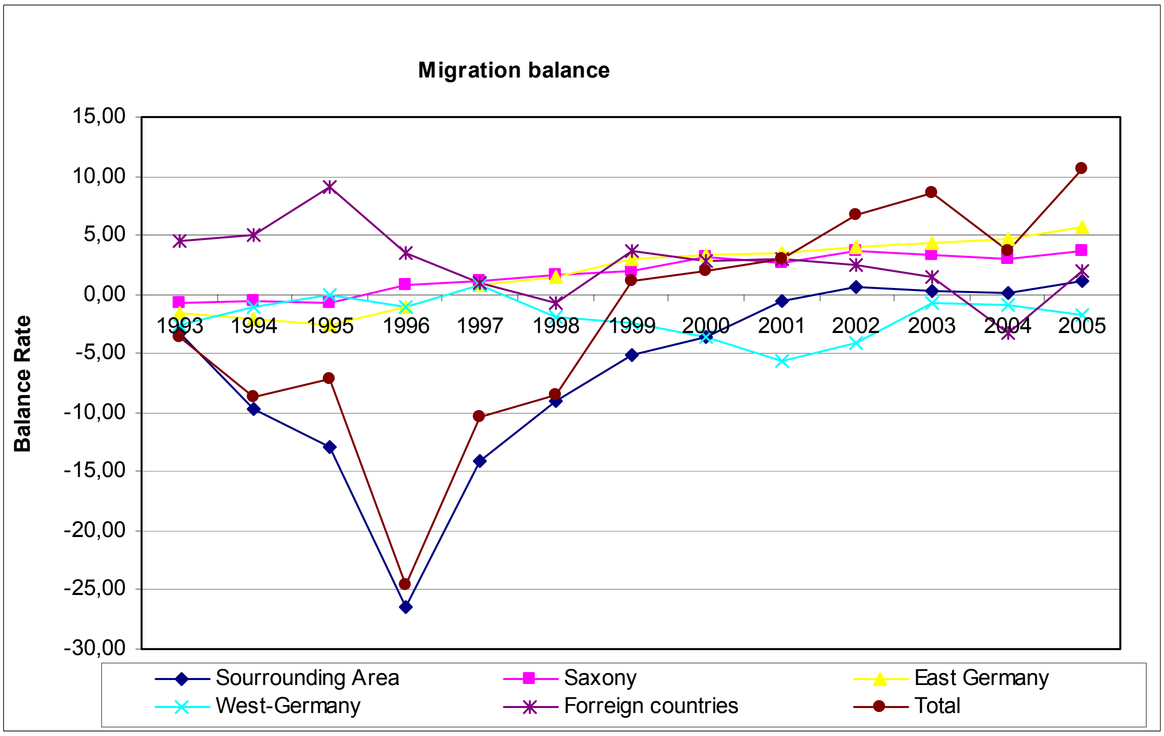
In spite of its enormous problems, especially in its eastern districts and the borough of Grünau, Leipzig is seen as one of the winners of German unification. The city has managed to maintain the high status of the Leipzig Fair, and even the Book Fair has stood up well to its competitor in Frankfurt. In 2003, Leipzig succeeded in its bid to become Germany's candidate for the Olympic Games in 2012, eventually losing out to its rivals London, Madrid,

Moscow, New York and Paris. The early beginning of inner-city revitalisation in line with historical patterns drew attention to the city's proud architectural image and was indirectly supported by the growing popularity of housing in buildings of this type.
The radical changes in 1989 and 1990 precipitated substantial changes concerning the population composition, industrial structures and social structures. New local government schemes were set up in an effort to overcome social polarisation and urban fragmentation, and to maintain Leipzig's reputation as a welcoming, cosmopolitan city.

4.2 Population structure

According to a comprehensive study by the urban planning department of Leipzig, the consultancy office 'empirica' and the 'office for urban projects', the region of Leipzig (consisting of the districts of Leipziger Land, Muldentalkreis and Delitzsch, and the city of Leipzig) lost 41,000 inhabitants between 1991 and 2001, around 5 per cent of its population.
The following figure demonstrates the migration patterns in respect to different geographical locations, such as the surrounding neighbourhoods, Saxony, East German states, West German states, and foreign countries.

Figure 4.1: Migration in the City of Leipzig between 1993 and 2005

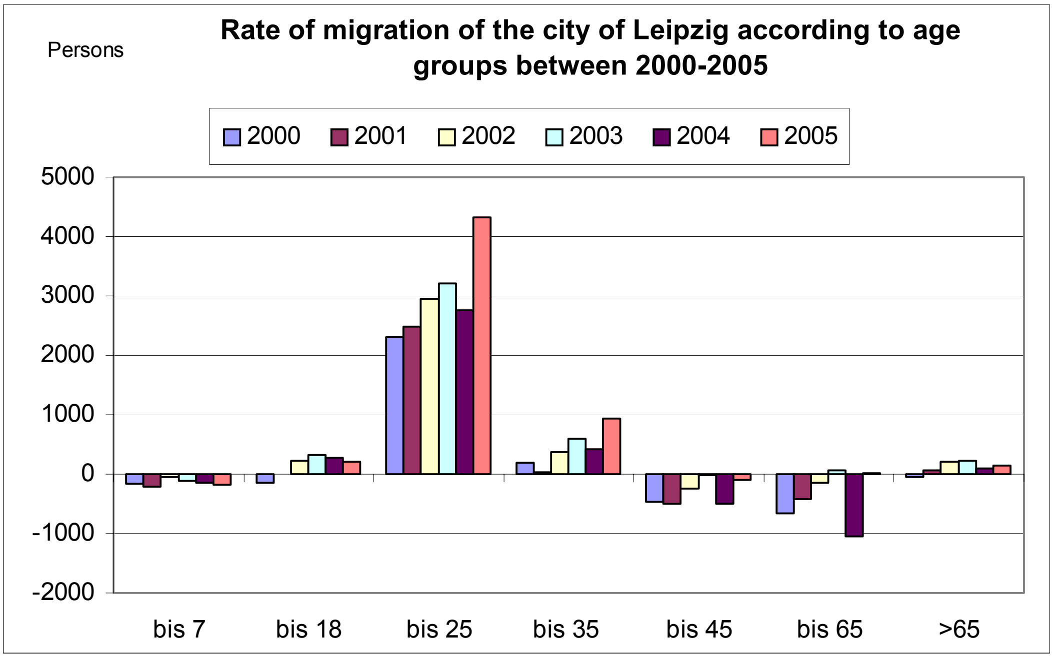


Source: Stadt-Leipzig, 2006b

The city of Leipzig itself lost 100,000 inhabitants between 1990 and 2000, almost 18 per cent of its population (Lütke-Daldrup, 2004b, p. 12). The incorporation of neighbouring districts had a slightly positive effect on the number of residents but could not reverse the negative trend. According to the moderate estimate drawn up by the consortium behind the study 'Leipzig 2030', the Leipzig region will lose another 70,000 inhabitants (approximately 8 per cent) by 2030.

Regarding the city of Leipzig, by 2002 the population had declined by 37,000 from 511,079 in 1991, mainly because of residential migration to the neighbouring districts within the region of Leipzig and to the west. The number of deaths in relation to the number of births rates 54,000 in 2000, leading to a negative population surplus rate. Taking into account the brain drain westwards of young people aged 20–25, the balance of migration has led to an even lower population. Nevertheless, since 2001, the number of inhabitants has risen and the population shrinkage has largely stopped (Lütke-Daldrup, 2004b, p. 13). The incorporation of surrounding villages and districts in 1998/99 stabilised the official population figures. The following figure 4.2 demonstrates the migration of the city of Leipzig according to age groups between 2000 and 2005. It highlights that especially young age groups, mainly students, migrate to the city of Leipzig and compensate (temporally) the loss of demographic shrinkage.

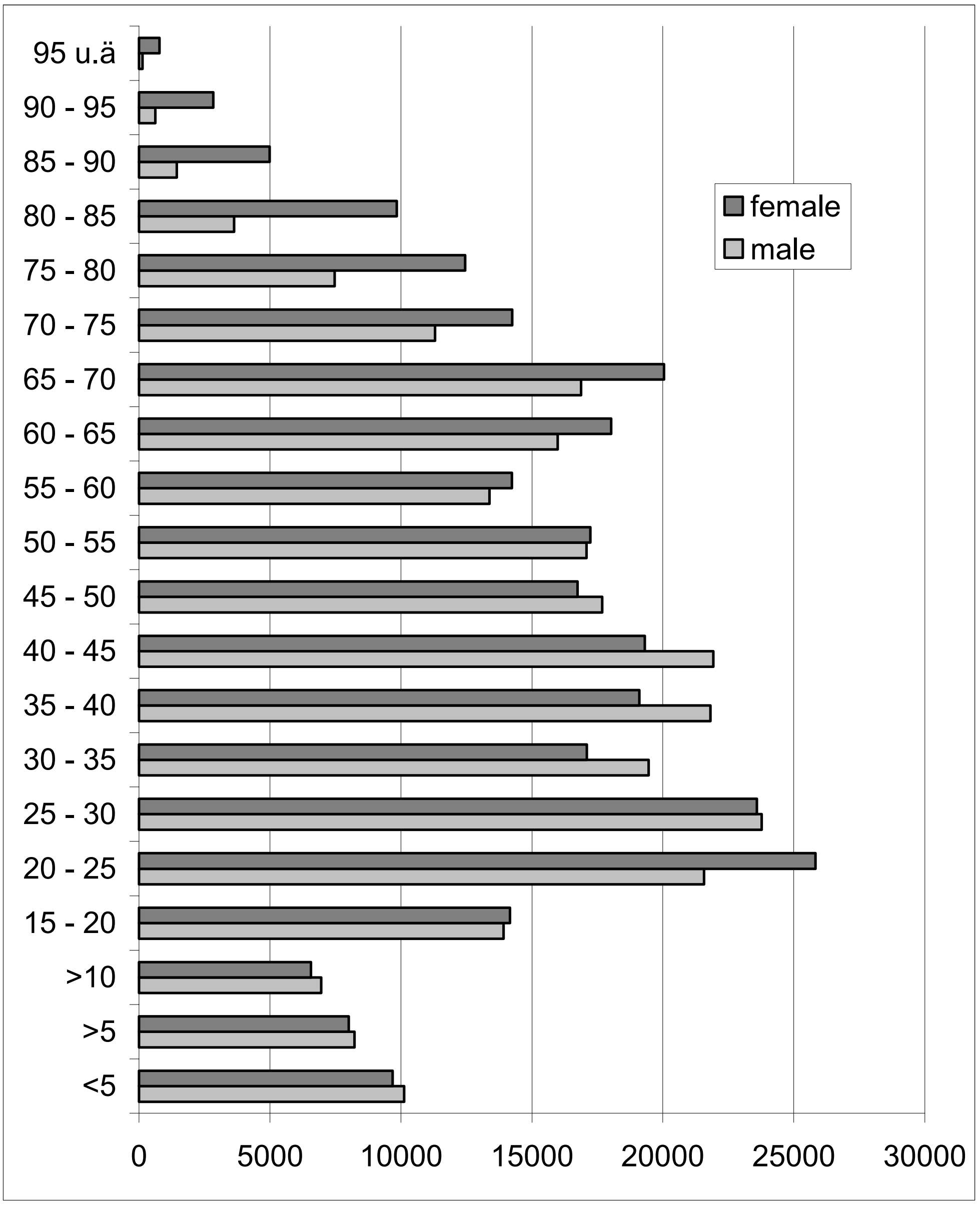
Figure 4.2: Rate of migration of the city of Leipzig according to age groups between 2000 and 2005



Source: Stadt-Leipzig, 2006b

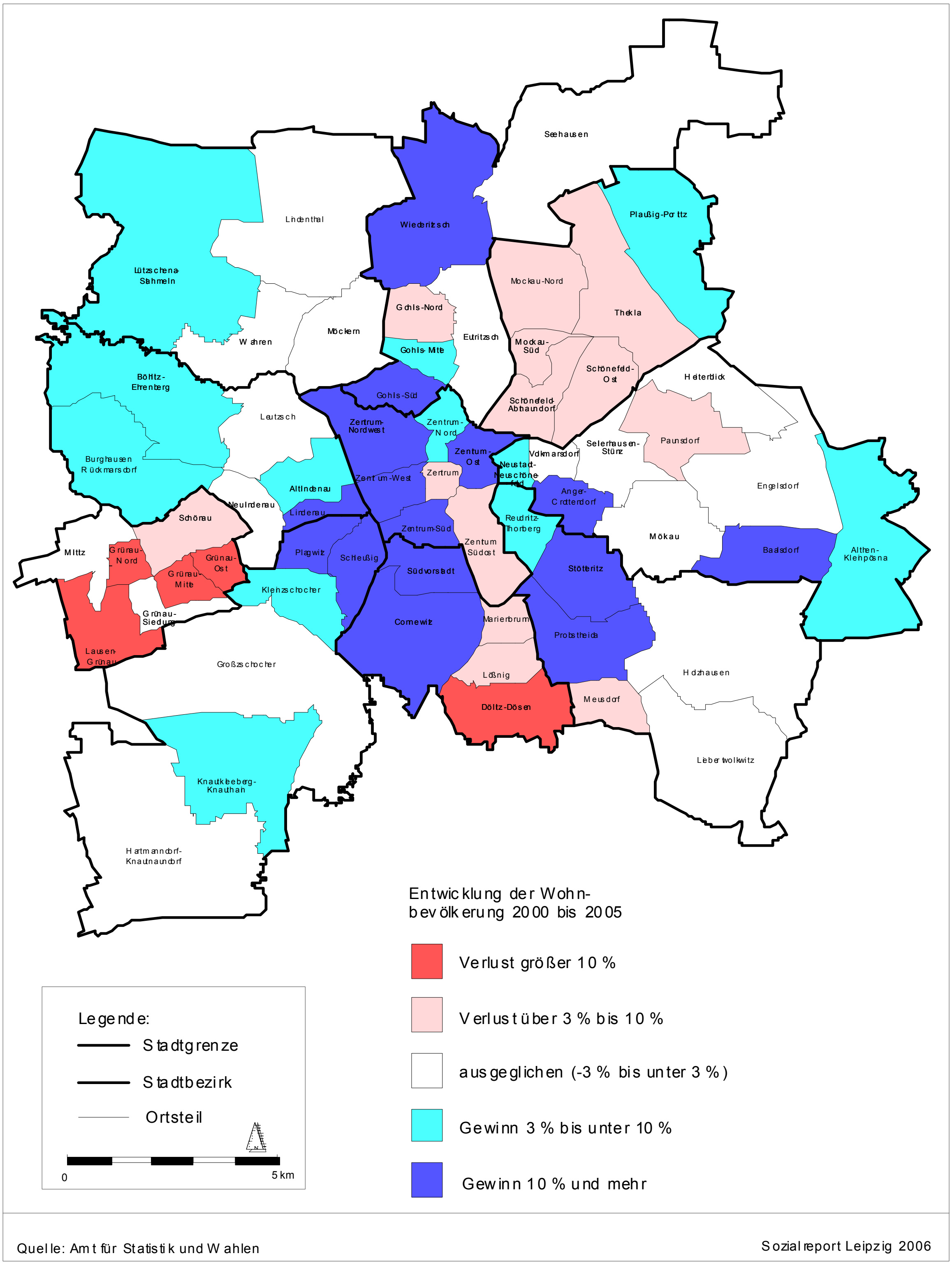
The following figure 4.3 demonstrates the age structure of the city of Leipzig in 2005. It is obvious that especially in the age group of 30-45, the share of females is significantly lower than in the older age segments and in the younger segments (20-25 years). That means that more women have left the city for other purposes. In respect to the critical situation on the labour market and few job opportunities, especially men remained in the city while women tend to migrate or have migrated already earlier. The following figure 4.4 demonstrates the spatial distribution of losses (red) and growths (blue) of population on the level of Leipzigs districts.

Figure 4.3: Age structure of the city of Leipzig in 2005



Source: Stadt-Leipzig, 2006b

Figure 4.4: Spatial development of the population between 2000-2005



Source: Stadt-Leipzig, 2005

4.3 Industrial structure

The percentage of the workforce in Leipzig accounted for by traditional industries such as machinery manufacturing and energy generation declined from 38 per cent in 1990 to 18 per cent by the end of the 1990s. However, within a decade of economic transformation, the service industry was unable to compensate for the job losses in the manufacturing sector. According to the Chamber of Industry and Commerce (IHK), the service industry expanded its position from 42 per cent to 58 per cent IHK-Leipzig, 2000). In absolute figures, the number of people working in manufacturing industry in Leipzig declined from around 80,000 employees in 1989 to below 17,000 employees in 2000 (Glock, 2006, pp. 102–106); Nuissl & Rink, 2003b, p. 28). Compared to Dresden and Chemnitz, the other two once high industrialised large cities in Saxony, the decline suffered by Leipzig's industrial workforce was more severe, despite having a more diversified industrial sector. Furthermore, Leipzig's industrial base (industrial employees per 1,000 people of the total population) also declined in relation to other West German cities. Whereas Leipzig had 44.8 industrial employees per 1,000 inhabitants in the year 2000, Frankfurt had 174.1 and Hanover 161.9.

Instead, as of the mid-1990s the city's economic structure began to be dominated by other branches such as the service sector, retail and commerce. Until 2000, the manufacturing sector was dominated by steel, mechanical engineering and construction, and electrical engineering. On the other hand, the provision of services (especially banking, insurance, publishing and business services) expanded enormously. Major projects included the refurbishment of the railway terminus, the new Leipzig Fair exhibition centre, and the construction of a new television centre for central German broadcaster MDR on the grounds of the old slaughterhouse. Until 2000, the industrial profile of the Leipzig region had several drawbacks. In particular, manufacturing industry was beset by a constantly shrinking workforce which by the turn of the millennium had dropped to a very low level even compared to other cities geared to the service sector in both eastern and western Germany. In a nutshell, the lack of a private service sector prior to German reunification spawned huge growth in diverse services as of 1990 in the city region of Leipzig (as in all towns and cities in eastern Germany). Nevertheless, the city administration in Leipzig believes the local service sector still harbours high untapped potential.

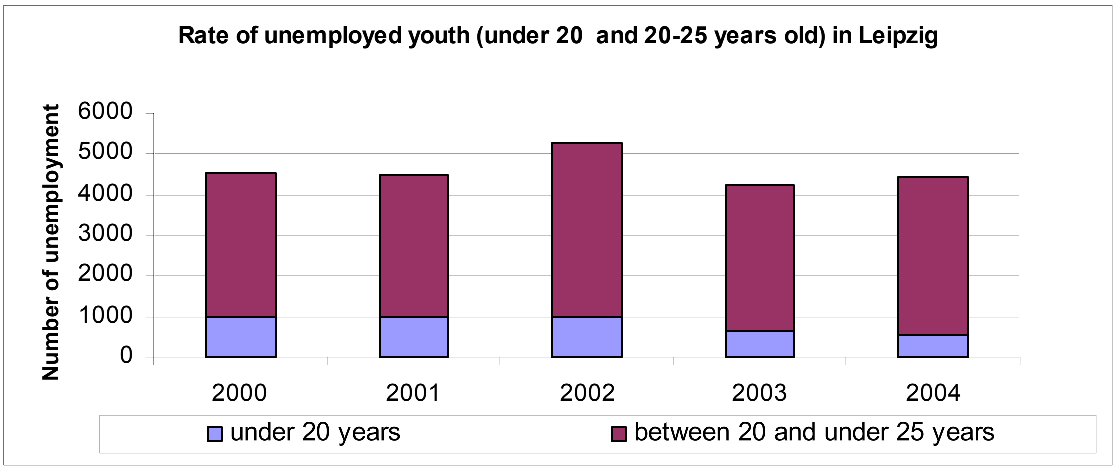
4.4 Socio-spatial polarization

In the city region of Leipzig, the process of urban sprawl in the 1990s was equal to a fundamental reorganisation of functional-spatial patterns, i.e. how residential and commercial land uses have been distributed anew. However, the allocation and relocation of facilities in suburbia was only partly responsible for this development. The decline of the dominating manufacturing industries, the crash of Eastern markets as well as the withdrawal of guiding and leading policies led to discharge of large amounts of labour (Nuissl & Rink, 2005). The economic transformation deprived Leipzig, which used to be a very mixed city with a strong industrial base, of almost all its industrial workplaces. Although the transformation of the former planned economy to a market economy was based on huge quantities of state investments transferred from West to East, economic prosperity evolved very slowly (if at

all). The loss of numerous workplaces and the disappointment of not materialising rapid economic growth (the so called expected “Blühende Landschaften”) led to growing frustration and disbelieve into the freely chosen and elected democratic system.
Obviously in Leipzig, huge areas of mixed neighbourhoods (built in the late 19th and early 20th centuries) have been completely transformed to residential use and often include vast brown lands. The city centre and also some more peripheral estates (such as the new Leipzig Fair exhibition centre) have become ‘hotspots’ of the service sector, whilst at the urban fringe (in particular to the north-east and north-west), a new, albeit much smaller ‘industrial face’ of Leipzig has re-emerged. However, although the inner-city districts have clearly undergone a process of functional ‘de-mixing’, at a regional level the separation of functions is still moderate (Nuissl & Rink, 2005).

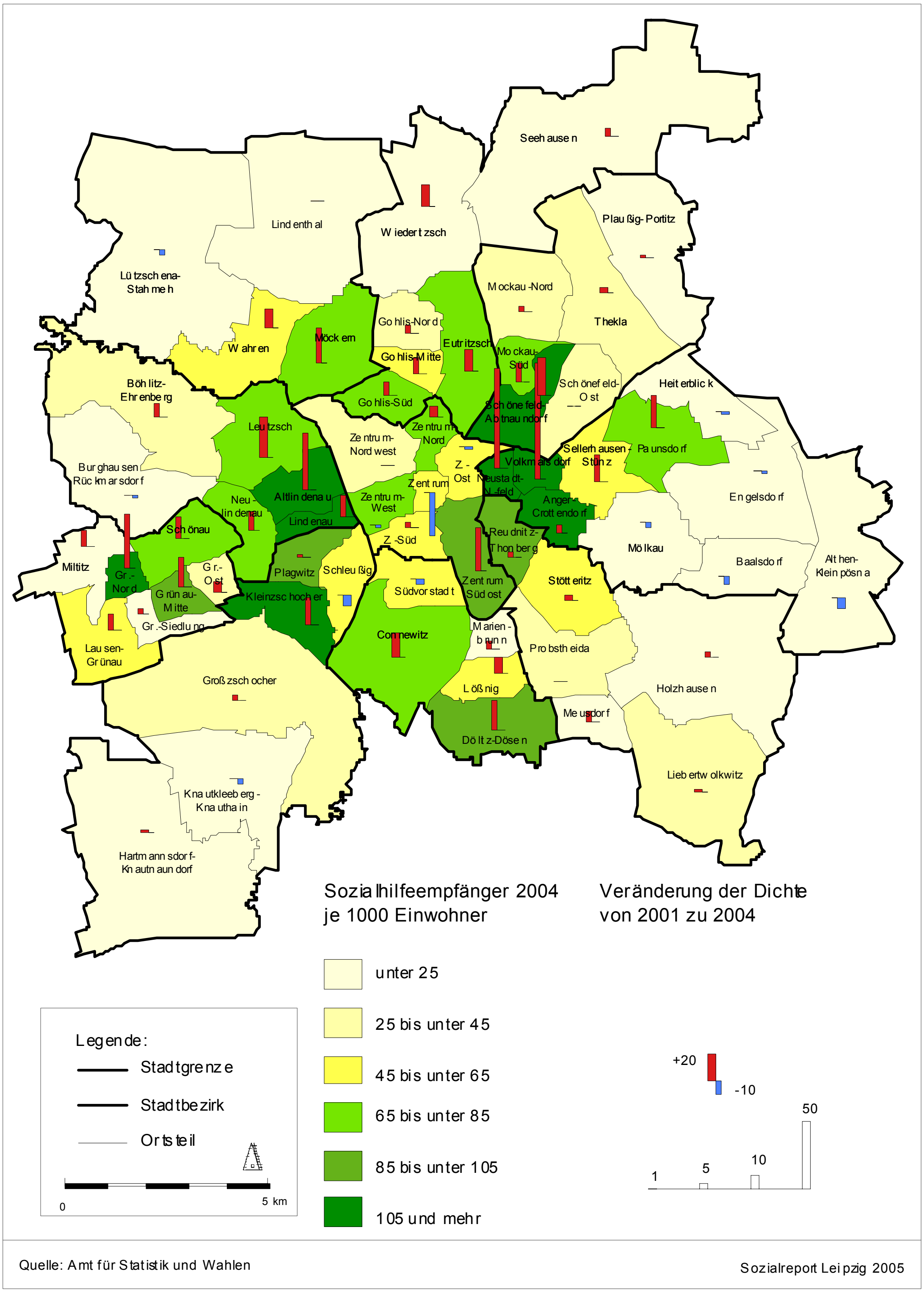
Below, unemployment, the spatial distribution of welfare benefits, and the rate of vacant housing in the city of Leipzig provide an overview of the scale of the polarised urban landscape and the degree of social polarisation. Besides economic disadvantages, the level of education among youngsters and the rate of unemployment express further details of socially dispersed and fragmented social strata within the city of Leipzig. In contrast to the increasingly socially instable districts formerly dominated by industrial employees, residential poles in the inner city (e.g. Waldstrassenviertel, Südvorstadt, etc.) and in the outer suburban city region of Leipzig can be considered socially stable and economically well-off, and represent the image of new urban milieus. The growth of unemployment between 1990 and 2000 increased in the Halle-Leipzig region from almost zero to 15 and 20 per cent within the first years after unification. Figure 4.6 (following page) shows the significant concentration of social welfare recipients, mainly in the inner city as well as in the critical boroughs of east and west Leipzig. The spatial density of welfare recipients tallies very well with that of unemployment benefit recipients. It should be stressed that between 1995 and 2004, the number of welfare recipients per 1,000 inhabitants increased from 21.5 to 68 (Stadt-Leipzig, 2005, p. 26). The following figure 4.5 shows the rate of unemployed youngsters (under 20) and young adults (20–25 years old) who failed to find educational opportunities (e.g. apprenticeships) or jobs.

Figure 4.5: Rate of unemployed youth (under 20 and 20-25 years old) in Leipzig



Source: Stadt-Leipzig, 2005, p. 46

Figure 4.6: Spatial distribution and density of social benefit / welfare recipients



Source: Stadt-Leipzig, 2005, p. 25

Figure 4.7 indicates the proportion of foreigners. It is evident that low density rates are to be observed in the core area of the inner city (1-7 per cent). The main national groups are Vietnamese, Russians and Poles.

Apart from the polarisation induced by labour and income, the degree of access to residential and housing markets is also related to demographic, cultural, functional and physical determinants. On the one hand, the housing market in Leipzig's inner-city districts is beset by high imbalances between supply and demand. On the other, following political unification, a shortage of suitable housing prompted significant building activities at the fringe of the city region of Leipzig in particular (Nuissl & Rink, 2005). The existing structural imbalances of a high degree of tenants compared to the numbers of owners can only be explained in the context of cultural, social and economic structures. Leipzig experienced the brisk refurbishment of 'Gründerviertel' (fin-de-siècle areas) in its inner-city districts, with boroughs such as Südvorstadt, Waldstrassenviertel and Graphisches Viertel being slowly but surely made more attractive to new urban milieus and featuring new housing types (Wiest & Hill, 2004, Wiest & Zischner, 2006). Then again, the restoration of inner-city residential attractiveness has not yet led to the complete abandonment of structurally disadvantaged residential quarters such as Grünau, which is dominated by prefabricated housing.

Nevertheless, socio-spatial segregation can be observed in terms of social strata. Residential suburbanisation and urban sprawl are regarded as a major reason for social segregation as well as social polarisation. Usually people with the necessary wherewithal move out of the city, leaving the less affluent behind. In the Leipzig region, however, this characteristic feature of urban sprawl is far less pronounced than is usually assumed to be the case in the literature (Jackson, 1985). The main reason for this specificity is probably the high proportion of apartment blocks built in the course of recent urban sprawl, in contrast to the detached or semi-detached homes that 'traditionally' dominate suburbia.

It is only more recently that these apartment blocks have been adequately complemented by a similar quantity of 'traditional' suburban single-family housing (Herfert, 2002, Herfert & Röhl, 2001). In correspondence to these two housing types, a kind of dichotomous residential suburbanisation can be detected (Nuissl & Rink, 2005). The inhabitants of the suburban apartment houses are fairly mixed in terms of both their socio-economic status and their demography. They in particular have helped the suburban zone to gain population from the urban core in all demographic groups – i.e. including single-person households and the elderly, who wouldn't normally be conceived of as 'typical suburbanites' – although young couples aged 25–34 are clearly over-represented. By contrast, as to the privately owned, suburban single-family homes, families with one or two children (i.e. the 5–15 and 30–45 age groups), higher education and above-average income prevail (Herfert, 1996, p. 36; Herfert & Röhl, 2001).

Figure 4.7: Spatial distribution and rate of foreigners

Source: Stadt-Leipzig, 2005, p. 75

The diversification of the housing market and the competition between various housing market segments must ultimately be seen in the context of the structural, economic, cultural and urban transformation and shrinkage of the city region of Leipzig. Over time, it has led to growing inner-urban migration flows, weakening districts such as the formerly working-class districts of eastern Leipzig. The movement of households out of these deprived districts held in low esteem intensified social imbalances on the level of growing vacancies in housing, shops, commercial facilities, and the social and educational infrastructure.

4.5 Xenophobia

Despite severe problems with xenophobia in the early and mid-1990s in numerous east German cities followed by extreme right-wingers trying to enter local councils and regional parliaments with their newly institutionalised parties, these movements were opposed by the strong, active civil society in Leipzig. Rooted in the protest movements of 1989, the observant civil society invented subtle forms to draw attention to growing xenophobia on an everyday level (e.g. postcards, meetings, interventions, etc). Although an appreciable number of foreigners mainly from other socialist countries had always been present prior to 1989, the low rate of foreigners (approximately 5 per cent in 2002) and migrants in Leipzig nowadays has not yet led to the emergence of ethnic clusters or substantial ethnic neighbourhoods that can be spatially identified. The highest proportion of foreigners in total (12–14 per cent) lives in inner-city neighbourhoods such as east and south-east Leipzig (Kindler, 2005, pp. 90–91). Kindler points out that the city of Leipzig has the highest proportion of foreigners in the state of Saxony, mainly Polish and Vietnamese people. Nevertheless, no connection is apparent between the density of foreigners and destabilised districts. The highest rates of unemployment for example are encountered in the inner-city boroughs of Lindenau and Volksmardorf (Rink, 2005, p. 86–87), which are mainly dominated by Germans. Both districts also have the highest numbers of welfare benefits recipients: around 140–160 people out of 1,000 inhabitants (Rink, 2005, pp. 84–85). Parallel to the increase in social polarisation in the course of deindustrialisation, the rate of crimes rose between 1992 and 2002. In the same time period, due to new efforts to reduce crime the rate of solved crimes dropped from 99,497 in 1992 to 68,231 in 2002 (Rink, 2005, pp. 84–85). Leipzig was the focus of organised car theft in the mid-1990s, although illegal import-export practices have been reduced thanks to the intensive efforts of the city administration.

4.6 Governance/policies

It has been pointed out above that the city region of Leipzig is subject to profound, substantial structural transformation processes. In this connection, two conceptual perspectives need to be borne in mind: firstly, the labelling of the transformation process as “catching up with modernisation” (Ott, 2000), and secondly, the specific, path-dependent mode of east German transformation (Matthiesen, 2005a). The former is linked to the structural, institutional, financial and social transfer policies designed to eventually result in comparable conditions between east and west German states; the latter is a critical response to misleading (and failed) attempts to equalise east and west German social and living standards as well as the realisation that east German states have not caught up with west Germany within the last 10–15 years (and will not do so either over the next 15 years). These researchers understand urban and regional transformation policies and governance modes as individual, case-specific forms of handling complex spatial transformation processes.

Referring to the case of Leipzig, different stages of urban, economic, spatial and infrastructure policy as well as planning practice can be made out. Regarding the major transformation challenges (providing adequate housing and retail infrastructures, solving socio-spatial fragmentation, attracting new forward-looking industries, and organising urban regeneration), the adjacent planning policies are presented below chronologically. It is especially important to highlight the role of unintentional forms of cultural articulation and self-organisation, which are considered to be specific forms of societal organisation within harsh transformational contexts.

4.6.1 Providing adequate housing and retail infrastructures

After German unification, providing an adequate housing and retail infrastructure was one of policymakers' major objectives. Based on optimistic economic and demographic expectations, the city administration paved the way for almost any investor to act in the city region of Leipzig. In the first years after 1989 till today, 822,000 sqm of retail space have been built in Leipzig, 48 per cent in the inner city, and 52 per cent at the periphery (see: http://www.leipzig.ihk.de, retrieved 14.12.2006). Surprised by failed expectations of general economic growth, labour increment, decreasing loans in the mid 1990s, growing rates of vacancies of newly erected office, retail, and housing space were the obvious signs of a failed and misleading urban policy. The administration began to rethink its policy and invented new, 'soft' forms of governance, new networks, and alliances between policymakers, planners and the public. Joint administrative efforts can be presented – not just on the city level, but also on a regional level – such as the development toward a 'Sachsendreieck' metropolitan region.

4.6.2 Solving socio-spatial fragmentation

Contrary to the evolution towards a demographically and economically shrinking city until the end of the 1990s, most of the organised planning activities have to be seen in the context of assumed economic growth and prosperity. Dealing and planning in the context of economic, demographic, urban shrinkage was a slippery and unknown professional and administrative field. Based on expectations of future economic growth, planning law provided the decision-making basis for suburban expansion. Huge numbers of building development plans were politically approved, leading to large quantities of both factual and potential residential and retail suburbanisation processes. How did the local and regional government react to urban sprawl?

Although urban sprawl was regarded as a problem of at most minor importance in eastern Germany in the first half of the 1990s, various attempts were later made to contain it. The federal states and their planning institutions, regional planning boards and some local authorities (primarily the big cities) are now trying to combat sprawl. One of the aims behind the territorial reform act in Saxony, under which the city of Leipzig was able to almost double its area by the turn of the millennium, was to enable the core cities to better control the exuberant land-use change in their (former) surroundings.

Thus, in a legal sense the problem of urban sprawl has at least partly been made up for since many residential and enterprise zones as well as retail facilities in 'suburbia' have been reintegrated and 'recaptured' by the central city. Nevertheless, intensive debate is now raging between Güntersdorf, the fairly small municipality about 15 km away from Leipzig in the federal state of Saxony-Anhalt where Saale-Park – a huge shopping district – was established. The regional planning authorities and the district to which Güntersdorf belongs on the one hand, and the planning authorities Leipzig City Council in the federal state of Saxony on the other, are debating the steps of modernisation and the further enlargement of this mall.

Due to the difficult economic situation in eastern Germany, almost all local and regional decision-makers are prone to set aside their scruples to promote urban sprawl whenever there is the prospect of attractive industrial investment. This is apparent with the development of the BMW site to the north of Leipzig in an ecologically sensitive area, where the local authorities worked hard to quash any objections. Just recently, local residents went to great lengths to restrict the expansion of Leipzig-Halle Airport required for DHL (the express and logistics giant originally founded by Adrian Dalsey, Larry Hillblom and Robert Lynn, and since 2002 a wholly owned subsidiary of Deutsche Post World Net) to invest there.

4.6.3 Attracting new forward-looking industries

The rapid decline of manufacturing industries led to the need for new, forward-looking industries. The city administration acted on various levels. Besides financial assistance in the form of large EU subsidies (EFRE, ESF), the city administration devised marketing tools fronted by the slogan "Leipzig kommt" (German for "Leipzig is coming!") in order to replace its negative image as a grey, industrial, disadvantaged GDR city. This led to new technologies and infrastructure such as biotechnology, media, and communication technology taking root.
In addition to paving the way for a new beginning with known marketing tools, the city administration reorganised and modernised its administration body (Glock, 2006).
Parallel to the local reorganisation of the public and planning administration, the administrative city bodies of Leipzig, Chemnitz, Halle and Dresden agreed that cooperation among cities (as opposed to competing for shrinking investments) might lead to benefits for all against the background of declining financial resources, the emerging locational advantages of adjoining areas in Eastern Europe, and harsh labour market conditions. In 1994, the first formulation of a metropolitan region was included in the state development plan for Saxony. In 1997, the state secretaries for spatial planning integrated the region as a European metropolitan region. Later, in 2005, a set of guidelines was published, followed by a joint declaration by city mayors and the establishment of an organisational framework to coordinate shared activities. Formal cooperation can be found in the fields of science, transportation, trade fairs and tourism (Staatsministerium, 2003).

4.6.4 Organising urban regeneration

Confronted with economic, demographic and spatial shrinkage, a "perforated city structure" (Lütke-Daldrup, 2004a), and brownfield, abandoned and vacant land (east Leipzig), the city administration reacted by placing emphasis on upgrading the urban space in order to improve spatial qualities. Planners and policy-makers acknowledge that the simultaneity of urban sprawl and urban decline in the Leipzig region needed further investigation into new perspectives of urban development and urban planning.
Firstly, urban sprawl in declining cities such as Leipzig appears to bring about a particular kind of urban form with a somewhat 'perforated' structure of both the inner city and the adjacent 'first ring'. The spatial fragmentation and perforation of the urban fabric may prove to be a burden in the future. On the other hand, the increase in vacant plots in the inner city

could open up new opportunities to improve the environmental quality of urban spaces and thus to make the inner cities attractive places to live in (again).

Numerous projects, such as the new pocket parks, new green space, and regenerated areas in housing districts, have tried to invent new procedural and planning formats to deal with this new type of urban constellation. Although initial insights have been achieved into the emerging urban form of declining and sprawling cities, more attention should be paid to this problem, which will become important to a growing number of cities in the industrialised world in the future.

It should also be mentioned that Leipzig's city planning administration participated successfully in numerous competitions in order on the one hand have the financial resources to analyse and invent appropriate strategies to deal with urban shrinkage and growth. On the other hand, it promoted early and openly the invention of new planning tools and worked hard against the image of a deprived city in 'eastern Germany'.

4.6.5 Unintended formations of creative and entrepreneurial agents

Apart from formally organised and politically induced crisis-solving policies, Leipzig's cultural scenes contain numerous modes of self-organising formations. Even though the formal labour market has to be considered weak, inaccessible or unattractive, many cultural activists launched their own rather unusual entrepreneurial start-up businesses in the midst of a substantial structural crisis. Informal networks provided an important backbone in order to cope with minimal financial income, hardly any venture capital, or any other similar formal and 'known' support structures (Bismarck & Koch, 2005, Steets, 2005).

In combination with existing cultural capital which had survived the GDR times (such as painting, photography, design etc.), cultural scenes became more and more visible and so regained importance not only for the heterogeneity of cultural life and cultural consumption, but also as professional opportunities. In due course, architectural firms (such as L 21, KARO, URBIKOM etc.), artistic collectives (such as NIKO 31), a gallery agglomeration in the former cotton mill in Plagwitz in east Leipzig, the leading cultural centre known as naTo in Südvorstadt, as well as a prospering media and film-related experimental creative scene emerged in the course of the harsh transformation processes in the mid-1990 (Bismarck & Koch, 2005).

The structural crisis thus led to creative actions by different agents and also informed and stimulated various knowledge institutions, e.g. the Academy of Visual Arts, to react to this professional situation of its alumni and thus reposition their curriculum, urban involvement, and their institutional role in the process of urban transformation (Bismarck & Koch, 2005). Nevertheless, relatively little socio-spatial research has been conducted so far in order to understand the value of these formations for the city.

4.7 Physical infrastructure/layout of the city

Urban sprawl is usually blamed for leading to the decline of the inner city. The situation in Leipzig, however, does not neatly live up to this assumption. In fact the physical layout of central Leipzig has undergone rather positive development since the mid-1990s.
Huge parts of the housing stock have been refurbished and entire quarters have been revived and rediscovered as attractive areas to live in. A similar change has taken place with respect to the retail sector in the city centre: whereas in the early 1990s city-centre retail suffered severely from the new competitors on the urban fringe, new investments have greatly enhanced the city centre's attractiveness in terms of shopping.

However, large sections of Leipzig's 'outer inner city' (especially the west and east of the city centre) appear not to be sharing in this 'post-socialist' re-urbanisation and re-aesthetisation. Much of the housing stock there is dilapidated and the huge industrial sites characteristic of these quarters have almost entirely become brownfields covered by ruins.
All this would probably have happened anyway without urban sprawl, albeit to a lesser extent. But urban sprawl has aggravated the problem of decline by contributing to oversupply on the regional housing and office market, making it even easier to overlook the less attractive locations.
Besides efforts to recall Leipzig's architectural heritage, the urban renewal of the 'Gründerzeit' (fin-de-siècle) districts (including green spaces, footpaths and cycle tracks) have improved not only the layout of the city but also the quality of life.

4.8 Tolerance, openness, diversity, quality of life

What brought so many deprived and frustrated Leipzigers together under the shelter of the Protestant church to protest against the GDR regime was their determination and courage. The notion of civil society remains strong, partly because leading organisers work hard to muster Leipzigers to protest against political issues on the local, regional and global scale. For example, Leipzigers collectively went out onto the streets to press for the release of two local residents kidnapped while working in Iraq.
The sensitivity to intolerance, inequity, and social, ecological and political imbalances has led to Leipzig being known for its welcoming, tolerant attitude. As pointed out above, Leipzig has, compared to other metropolitan regions in Germany, a relatively low rate of foreigners, and reports of racially motivated crimes are rare. Open communication platforms for homosexuals (www.gayleipzig.de) on places to meet etc are a measure of the liberal climate in Leipzig. Nevertheless, outbreaks in the local soccer stadium of 1.FC Lok Leipzig in February 2007 tell a rather different story of more or less marginalized and less integrated milieus trying to regain attention as hooligans and organized gangs by violence.

5 CURRENT SITUATION IN THE METROPOLITAN REGION 2000-2005

5.1 Recent economic development

Officially, the city administrative body has selected 5 economic cluster based on their performance since the year 2000 (and previously) (Stadt Leipzig, 2006, p. 1). These clusters are:

- Media- and telecommunications and ICT
- Life sciences, biotechnology and medical technology
- Energy and environmental technologies
- Vehicle and components industry,
- Enabling technologies and business services, especially logistics.

In the following, short descriptions of the recent evolution of economic sub segments, according to the cluster, will be presented.

5.1.1 Media and telecommunications

The media cluster has to be considered one of the best-researched future-oriented segments in the city region of Leipzig. Numerous reports, based on complete surveys with all enterprises since 1996, provide a coherent framework of this segment (Bentele, 1997, Bentele et al., 2006). Bentele´s (Bentele et al., 2006) definition of this segment integrates press and publishing, broadcasting, film and video, data processing, advertisement, marketing, fair and exhibition services, media-related institutions as well as further media services (Bentele et al., 2006, p. 146-149).

Financed by the department (and office) of economic development as well as the "Staatskanzlei" Dresden (the state level), a survey with profound empirical knowledge about size, labour force, structure, and performances of various sub-segments can be presented. In 2005, out of total 1.722 listed enterprises, almost 50 per cent are organized as single enterprises (48.6 per cent), 26.0 per cent are organised in a GmbH (German for: Ltd.), 7.2 per cent as GbR (German: for non-trading partnership), 6.5 per cent as freelancer. For the following data: (Bentele et al., 2006). 18.2 per cent of all enterprises have been founded after the unification in 1990 and 1991. Only 3.3 per cent of all enterprises have been found before 1945 or earlier. 89.7 per cent of all founded enterprises have been founded between 1990 and 2005, 43.7 per cent of them between 2000 and 2005.

Thus, the average age of the all enterprises is roughly 15 years. Most of the start-up`s since 2002 took place in the field of data processing, information technology, and telecommunication. To lesser extend, printing and publishing (20.2 per cent) as well as advertisement, marketing, and public relation, fair- and exhibition services (18.6 per cent). Concerning the location of new start-up launches 83.4 per cent have been founded in the city of Leipzig, only 11.1 per cent have been launched out of the city of Leipzig, either the region, the state of Saxony, or the federal republic. In 2005, 91.8 per cent pointed out, that they do not intend to plan a relocation of their existing enterprise.

According to the enterprise survey, 10.705 employees work in the media economy, either as full-time or part-time. In respect to the branch perspective, Bentele estimates that 20,700 employees work in this segment (Bentele et al., 2006, p. 19). It is very obvious, that small and micro-enterprise dominate: 37.9 per cent of all registered enterprises have only one employee distributed equally among the sub-sectors mentioned above (Bentele et al., 2006, p. 16-17). This type has increased significantly within the last 2-3 years as well as the number of freelancer, who work regularly or occasionally. Bentele et al. estimates that 3,840 people, among around 60.1 per cent of them are male and work as freelancer (Bentele et al., 2006, p. 21). Referring to the media economy as a complete segment, he concludes that 9,500 people work as freelancer (Bentele et al., 2006, p. 22).

The overall development of the number of employees has decreased from 40,200 in the year 2000 to 30,200 in 2005 (Bentele et al., 2006, p. 25). The decrease occurred mainly parallel to the crash of the New Economy in 2000/2001. Between 2002 and 2005, the number of employees decreased "only" from 32,800 to 32,200 (Bentele et al., 2006, p. 25). Bentele et al. underpin this relatively positive assumption of the current development of the media economy, when they refer to the proportion between the numbers of new appointments in respect to the suspension of employees (Bentele et al., 2006, p. 29). Parallel to this survey-based conclusion, 22.4 per cent of all enterprises expect to increase the number of their workforce (Bentele et al., 2006, p. 31). The overall turnover of the media economy rates 2.78 billion € in 2005 and has thus increased between 2003 and 2005 by 3.0 per cent.
Also the wider (public) use of ICT technology shows that Leipzig is catching up. Looking at the 10 cities (and counties) with the highest increase in respect to domain numbers between 2004 and 2005, Leipzig holds the first position. In 2004, Leipzig had 45,496 registered domains, and in 2005, 66.702, which is an increase of 46.61 per cent. (Source: http://www.-denic.de/de/domains/statistiken/regionale_verteilung/2005.html, retrieved 15. January 2007).

5.1.2 Life sciences, biotechnology and medical technology

Routed in the long tradition of Leipzig's Faculty of Medicine (the second oldest in Germany) the Faculty has grown to a centre of healthcare that covers virtually all aspects of medicine, the biosciences, the natural sciences and the development of related technology. Based on broad and profound research and teaching basis between university and extra-university institutions (such as University of Leipzig, Max Planck Institutes, and Helmholtz-Institutes this cluster has led to the foundation of 24 biotech companies that are based in Leipzig (Stadt-Leipzig, 2006a, p. 15). In the course of this development, the city administration opted for the foundation of a so-called "Bio City Leipzig". In this newly installed incubator, business and science are brought together under one roof, which enables close networking and thus ideal

conditions for small businesses to become leading players in Germany and abroad (Stadt-Leipzig, 2006a, p. 15).
An additionally technology transfer company based at Bio City Leipzig offers services for biotech companies, entrepreneurs, and investors in Leipzig. Although more than 50 Mio € have been invested within the last 5 years, (critical) surveys about the outcome and output of this investments have not been subject to scientific research. As one of the rare voices, Franz (Franz, 2005, p. 1 ff) evaluates the number of registered patents (according to the geographical location of the invention) and points out that Leipzig has (in the year 2000) a very low rate, (14.5), compared to neighbouring city regions such as Dresden (59.4), Chemnitz (34.5) and even Berlin (34.9).

5.1.3 Energy and environmental technologies

Although the field of energy and environmental technologies has been identified as a future-oriented cluster, it is mainly dominated by already existing former public suppliers of gas, electricity and water. Some have been privatized, commercialized, and sold to global companies. It is thereby important to point out that Leipzig accommodates the EEX (European Energy Exchange), the biggest trade fair for trading power, power-futures and options. This stock exchange has a yearly turnover of 23.5 billion € with over 132 participants from 16 countries, making it the biggest exchange trading place in continental Europe (Stadt-Leipzig, 2006a, p. 17-19). Along with a series of research institutes, such as the Institute for Energetics and the Environment, the Russo-German Institute for Energy Policy, the Centre for Environmental Research Leipzig-Halle GmbH, a so-called Leipzig-Science Park has been installed (Stadt-Leipzig, 2006a, p. 17-19).

5.1.4 Vehicle and components industry

Current competences and qualification profiles of vehicle production are considered to have its roots in a 100-year long tradition in the region, to a lesser extend in the city of Leipzig. Porsche and BMW have invested more than 1.45 billion € in production sites at the northern fringe of Leipzig within the last 5-6 years. Along with probably almost the same amount of state investment, a new car industry has been installed within the last 5 years, leading to approximately 6,000 new jobs in both companies. It is estimated that more than the same number of employees can be counted in supply and component industry (Stadt-Leipzig, 2006a, p. 20).

5.1.5 Enabling technologies and business services, especially logistics

The foundation of the last cluster is rooted in the specific regional conditions of Leipzig as well as in its position as a (traditional) gateway between East and West. Just recently the DHL opted for Leipzig to build its third global aviation hub along Hong Kong and Wilmington (USA) at Leipzig/Halle Airport. It is accompanied by an investment of 300 Mio € in order to build a distribution centre, hangar, and office block. DHL expects to have 3,500 jobs, whereby the city administration expects more another 7,000 jobs with local suppliers by 2012 (Stadt-Leipzig, 2006a, p. 22). In combination with the investment of DHL, the city, the state and the federal authorities again invest around 290 Mio € in a new runway and further transport infrastructure. Along with a newly renovated central terminal within the inner city, an orbital motorway around Leipzig, the city accommodates new, high-speed as well as high-tech, and full-functioning transportation standards. In this cluster, the fair business with its newly renovated business location is also integrated.

5.2 Growing and declining economic activities and evolution of labour force

5.2.1 Growing clusters

Emerging and growing cluster are media- and telecommunications and ICT, life sciences, biotechnology and medical technology, energy and environmental technologies, vehicle and components industry, enabling technologies and business services, especially logistics as well as fair business. (see for detailed description Chapter 5.1).

On of the fastest growing fields is Leipzig's fair business which is constantly growing: In 2005, the numbers of exhibitors has grown with 10 per cent, the turnover with 8 per cent and the numbers of visitors with 17 per cent (Leipziger-Messe, 2006). The competition of Leipzig to host the Olympics in 2012 (they failed in 2005) also pushed the leading economic actors enormously. Furthermore, this joint alliances encouraged economic and political leader to "think big" and overcome muddling through practices in the course of developing the economy of the city. The failure nevertheless demonstrated the limits of urban growth and rescaled the city to its second rank position on the national as well as European scale.

As it has been described earlier, the factual presence of specific clusters depends on former historic and knowledge basis, such as media and medical technology. Others, such as life sciences, biotechnology and business services have been substantially promoted with state, federal, and EU subsidies in the course of stimulating economic prosperity in the transformation of a planned economy towards a market economy.

What has not yet been taking into substantial consideration from an economic perspective are tourism, and the creative core sectors. Although tourism has been developed strongly, it is not considered as a potential cluster for the department of economic development of the city administration. Core creative practices in the field of arts, music, etc. although visible and important for everyday and the cultural life, have so far not been subject to profound statistical analysis, concerning turnover, image, and economic performances.

5.2.2 Declining industries

As mentioned earlier, the traditional labour-intensive manufacturing industries have undergone a rapid decline and continue to do so. The collapse of the economic system in 1989 washed away the less competitive, labour intensive and unproductive industries, such as car-supply industries, the energy sector, and the manufacturing sector. Though this collapse did not occur slowly but as a harsh and radical rupture with the industrial path of the past, there is hardly a constantly declining industry segment to discover in the city region of Leipzig any more (such as e.g. the coal and mining industry of the Ruhr area, which obtains state subsidies since decades and is nevertheless though intentionally constantly declining).

5.2.3 Skilled vs. less skilled labour - General development of labour force in Leipzig

Generally speaking, the ratio of employees per 1000 inhabitants is relatively low in Leipzig in 2002 (398) compared to Dresden (446), Chemnitz (436), Halle (400) and Zwickau (499) (Franz, 2005, p. 1). The rate of unemployed people has changed only slightly and numbers 20.3 per cent in mid-2004, 22.8 per cent in mid-2005, and 20.3 per cent in mid-2006 (Stadt-Leipzig, 2006b). The rate is higher in Leipzig compared to other cities in Saxony. The growth of employment in the city region of Leipzig declined between 2000 and 2005 by 7.2 per cent, the federal average declined by 4.4 per cent.

The development of the relation between declining population numbers and less employment opportunities over the time period 2000 and 2005 did not lead to positive and over-average rates. In respect to the importance of the development of labour force as the key for further economic performance, a comparative survey by the initiative "Neue Soziale Marktwirtschaft", the Institute of the German Economy in Cologne and the magazine "Wirtschaftswoche" compared 50 cities in Germany according to their labour force performance and their economic dynamic in 2004 (IW-Consult, 2006):

Figure 5.1: Leipzigs performance in respect to 50 other German cities

Indicator	Dimension	Date	Value	Average	Rank of Leipzig	Best City
Income	€ per inhabitant	2004	8,887	10,954	48	Munich
Tax yield	€ per inhabitant	2003	495	761	43	Frankfurt
Unemployment rate	percent	2004	20.4	13.5	47	Munich
Job supply	percent	2003	53.2	55.1	35	Munich
Income per employed person	Euro	2004	21,835	27,254	46	Frankfurt
GDP per inhabitant.	Euro per inhabitant.	2003	22,234	33,952	45	Frankfurt
Business location	per 10.000 employees	2003	49	52	26	Braunschweig
Location	points	2004	7.7	7.5	18	Düsseldorf
Productivity	Euro	2003	40,853	57,402	49	Frankfurt
Labour costs	Euro	2003	27,629	34,891	3	Erfurt

High qualified employees	percent	2004	16.7	11.6	6	Dresden / Munich
Commuter balances	per 100 inhabitants	2004	8.4	10.5	29	Frankfurt
Headquarter	Number	2005	2	12	33	Munich
Business friendly	Percent on positive answers	2005	71	55	1	Leipzig
Structure	points	2004	4.8	7.5	47	Munich
Social welfare and unemploymen t receivers	per 100 inhabitants	2004	12,4	8,4	48	Freiburg
Criminal acts	per 100.000 inhabitants	2003	15,587	11,515	45	Solingen
Quote of elderly employed people	per 100 inhabitants aging 55-65 years	2004	25.1	28.1	44	Munich
	Points	2004	2.4	2.5	32	Düsseldorf
Debts per person	Euro per inhabitant	2003	1,776	2,118	22	Oldenburg
Investments per person	Euro per inhabitant	Averag e 2001-2003	354	208	5	Düsseldorf
Overall level	Points	2004	35.9	50.0	46	Munich

Source: IW-Consult, 2006

Leipzig demonstrates strengths in the rate of communal investment as well as providing a generally business friendly climate, according to the survey (IW-Consult, 2006). A large number of service registrations have led to a high ranking and the second best position. Overall, this has led to an increase of income per employee between 2000 and 2005 by 14,8 per cent, whereby the average among the selected 50 cities increased only by 10,9 per cent.

Nevertheless, Leipzig has weaknesses and structural problems mainly because of the high rate of unemployment, long-term unemployment as well as the constantly high rate of the so-called “Hartz-4” (German for social welfare) recipients. Therefore, the productivity, the ratio of gross domestic product per registered employee, is almost the lowest in the comparison of 50 German cities. According to Engelmann (Engelmann, 2005, p. 11-13), the state of Saxony has a constantly high rate of unemployed less-skilled labour force. Because of migration of less qualified jobs in neighbouring countries (e.g. Czech Republic, Poland, Slovakia, etc.) constantly shrinking job opportunities in the state of Saxony have led to a high structural unemployment rate for less skilled people. In respect to the constant high rate of less-qualified unemployed people in the state of Saxony, Leipzig fits into this structure.

On the other side, Leipzig demonstrates strengths, for instance when it reached the 6th highest rate of high-qualified employees in 2005 (ratio between high-qualified employees of all registered employees) (IW-Consult, 2006). The development of this indicator (between 2000 and 2005) demonstrates a slight increase. Nevertheless Leipzig has a relatively low rate of high-qualified engineers per 10,000 inhabitants of the city population in regard to neighbouring cities such as Dresden and Chemnitz.

Figure 5.2: Indicator for high-qualified labour force

Indicators	Leipzig	Dresden	Chemnitz	Berlin	New states in East Germany
"Industriebesatz" (employees per 1,000 inhabitants in 2002)	43.2	67.6	71.4	42.7	65.2
Patents registration (Number of patents per 10,000 in the year 2,000 according to site of residence)	14.5	59.4	34.5	34.9	18.1
Number of engineers per 10,000 inhabitants in 2002	114.8	196.8	143.5	83.7	67,5

Source: Bundesagentur für Arbeit; Calculation of the Institute of economy in Halle (Franz, 2005, Knieling & Rahlf, 2005)

Although the investment into hard technical, physical and transportation infrastructure is high, a critical observation cannot ignore that Leipzig is still – in terms of competitiveness and economic productivity – relatively weak (compared to neighbouring cities Chemnitz, Dresden, and Zwickau within the state of Saxony). Franz (Franz, 2005) underpins these assumptions by referring to indicators such as gross domestic product (GDP), number of registered patents, and the number of high qualified engineers.

In 2001, the metropolitan region Leipzig/Halle rates only 11th in the respect to general R&D-investment; the national average was 1.74, while e.g. the Stuttgart region dominated with 5.78 (IHK-Stuttgart, 2003, p. 64). Another indicator for the Leipzig region performance is the money acquired from the German Research Funding (DFG) per professorship in the field of sciences and engineering sciences: In 1999, the University of Leipzig rated 20th and in 2001 22nd, while the University of Leipzig ranked 51st in the overall ranking of targeted research funds per professorship in all disciplines (Knieling & Rahlf, 2005, p. 25).

All these indicators can not ignore the fact that Leipzig's degree of competitiveness is still not fully developed, although the physical, technical, and transportation infrastructures has been reinstalled on highest global standards with huge financial investments in order to propel the necessary transformation processes from an old, less competitive toward a more successful economy in the near future.

5.3.4 Economic profile, specialization and future stability

As mentioned earlier, the city administration of Leipzig has implemented a cluster policy according to the most obvious and best performing sectors, such as media- and telecommunications and ICT, life sciences, biotechnology and medical technology, energy and environmental technologies, vehicle and components industry, and enabling technologies and business services, especially logistics.

The formulation of these profiles and cluster nevertheless cannot hide the fact that existing development rates of regional employment for Leipzig are far beyond optimistic. The evolution of regional development rates as it has been analysed by Bade (Bade, 2006, p. 307) demonstrates a rather pessimistic future development of the city-region of Leipzig. Bade (ibid.) estimates a development rate of the employed labour force for the city region of Leipzig of minus 10.6 per cent between 2001 and 2010 compared to the national average. As for former East Germany in general a further (continued) decrease in employment is quite likely as well as for the time period till 2010 (Bade, 2006, p. 308). This observation is underpinned by Peter Franz (Franz, 2005, p. 3-4), when he questions the structure and the stability of emerging clusters for the future. Large subsidies by the state, e.g. for the Mitteldeutscher Rundfunk (German for Mitteldeutsche Broadcasting, MDR), structures the existing media cluster in a distinct way and thus the strength of a newly positioned economic cluster. How stable the positive development rates in the media industry are has to be observed furthermore.

The decline of the employment rate in the near future will hit less skilled labour force stronger and will also stabilize the already existing “long term unemployed” (unemployed since more than 12 months) workforce. In 2005 out of 49,841 registered unemployed work forces, 22,609 of them are defined as “long term unemployed” (Stadt-Leipzig, 2005, Stadt-Leipzig, 2006a) (see Figure 5.3).

Just recently, in November 2006, the federal government and city administration launched the project idea that long term unemployed people should work as services aids (“bus marshals”) in the local transportation company. Their task was to help old people and also to avoid hassle among teenagers. Paid by the “agency for labour”, regularly employed workers in the transportation company fear their job. The “agency for labour” argues that they want to integrate long term unemployed in the second labour market and thus finance low-paid jobs. Protesters point out that these unqualified employees will control transportations, trespass the action space of the police force and thus would operate in a not legitimized public realm.

Figure 5.3: Long term unemployment in 2004 (31.12.2004) in the city region of Leipzig

Districts	Long term unemployed			Share of long-term unemployed in unemployed in %		
	total	male	female	total	male	female
Leipzig, City	20,213	10,630	9,583	46.0	43.6	48.9
Delitzsch	5,449	2,379	3,070	43.7	36.1	52.1
Leipziger Land	7,123	3,303	3,820	47.6	41.8	53.9
Muldentalkreis	5,584	2,505	3,079	45.1	38.5	52.3

Source: Statistical Office of the Free State of Saxony. 2004 – 2006 (Stadt-Leipzig, 2002, Stadt-Leipzig, 2004, Stadt-Leipzig, 2005, Stadt-Leipzig, 2006a, Stadt-Leipzig, 2006b)

5.3 Population composition

The following perspective focuses on recent trends in the field of social, household, and demographic composition in the city region of Leipzig. The core area of the city region of Leipzig, the county "City of Leipzig", plays the major role and thus will be highlighted.

Social composition
While the population figure of the city of Leipzig increased from 493,208 in 2000 to 502,651 in 2005, the surrounding county Delitzsch lost 4.8 per cent of its population between 2003 and 2004, the county Leipziger Land 8.8 per cent, and the county Muldenkreis 6.1 per cent in the same time period. Especially the county "City of Leipzig" demonstrates a migration surplus in respect to the natural population development. Especially the age group of 18 to 25 provided a migration-specific surplus (2000: 2,201 to 2,670 in the year 2004) (Sozialreport Leipzig 2005, p. 12). Nevertheless, the share of age group 65-80 year old seniors grew from 13.8 per cent in 2000 to 15.8 per cent in 2004.

Household composition
The number of households in the city of Leipzig increased from 264,100 in 2000 to 280,100 in the year 2004. As in other metropolitan city regions, the number of single households increased constantly and numbers almost 50 per cent (Stadt-Leipzig, 2005, p 17). The age group 15-35 years dominates 130,000 single unit households, around 60 per cent of them female (cit op.).
The number of household, obtaining housing subsidy by the state, increased significantly between 2000 and 2003, from 35,459 to 44,525 (Stadt-Leipzig, 2005, p. 23) (see following figure).

Figure 5.4: Number of households according to the size of household

	1998	1999	2000	2001	2002	2003
Welfare receivers (total)	30,819	32,864	35,459	38,422	41,289	44,525
Share of households obtaining social welfare in respect to all households among	12.2	12.9	13.4	14.1	14.9	16
1 person households	17.9	18.5	17.9	18	18.7	20.3
2 person households	7.3	7.9	8.6	9.0	9.4	10.5
3 person households	9.2	9.0	10.6	12.1	13.2	13.5
4 person households	10.5	12.5	11.6	13.2	14.0	13.4
5-6 person households	31.4	22.8	40.5	41.6	52.0	54.8

Source: Stadt-Leipzig, 2005, p. 23

Demographic composition
As in many other German cities, the demographic change is as obvious in Leipzig as in other urban agglomeration. The share of those under 18 year old citizens demonstrates the highest decrease between 2000 and 2004 (Stadt-Leipzig, 2005, p. 13). On the other side, the age group of 65-80 year old citizens expanded their share from 13.8 per cent in 2000 to 15.8 per cent in 2004. Spatially, the inner city core boroughs tend to be "younger" than the outer boroughs such as Grünau, Gohlis, and Schönefeld-Ost (Stadt-Leipzig, 2005, p. 14). The share

of the "best agers" (over 65 years old) rates almost a fifth of the overall population of the city of Leipzig.

5.4 Social polarization

The following indicators underpin the notion, that social polarisation has evolved as one of the fundamental problems of Leipzig's future development. Firstly between 2000 and 2003 the group "relative poverty" has grown from 6 to 10 per cent, while the group with middle income has declined from 50per cent to 44 per cent. Taking into account that the group with higher incomes has expanded in the same time period from 20per cent to 22 per cent, a divergence of social income groups can be diagnosed within the last years (Stadt-Leipzig, 2005, p. 22).

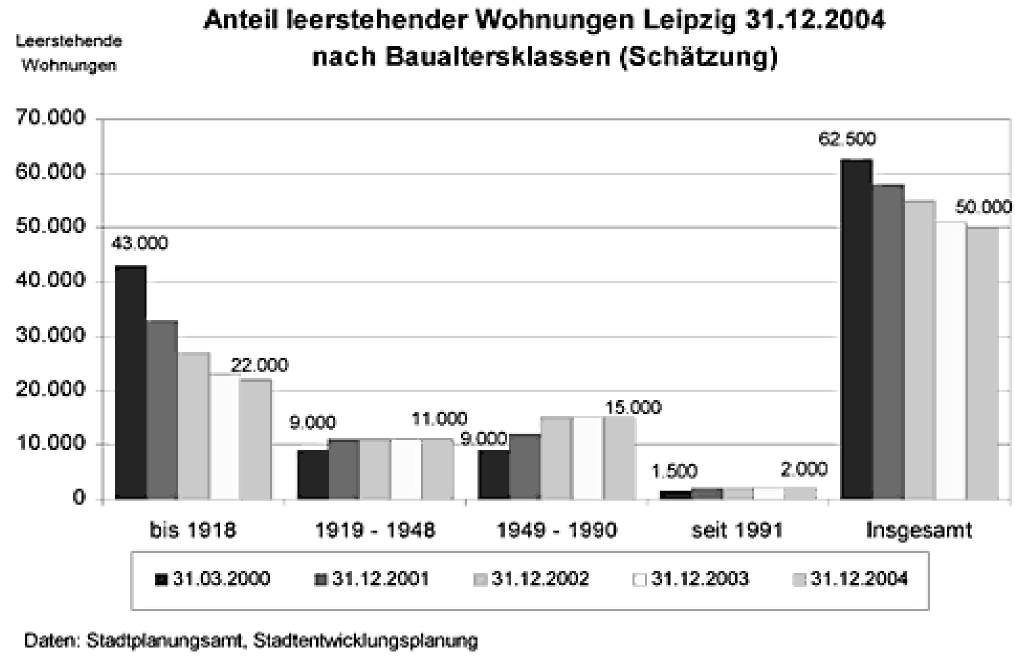
Secondly, the evolution of income shows that income from welfare subsidies, pensions, and "others" (such as interests, education subsidies, stipends etc.) have all increased, whereas alimony by family members has decrease with the last 4 years. Overall, in 2001, 196,400 employees obtain their livelihood through their employment, whereas in 2004, only 178,700 did so (Stadt-Leipzig, 2005, p. 24).

Thirdly, well-off and socio-economically poor people are more and more spatially separated. In 2003, the share of boroughs with welfare recipients varies between 0.8 and 21.1 per cent, the share of unemployed varies between 4 and 22.4 per cent (Tesch, 2006, p. 912; Stadt-Leipzig, 2005 p. 25-26). Few boroughs, such as Neustadt-Neuschönefeld and Volksmarsdorf, experienced a five times higher increase in the share of people obtaining welfare than the city average within the same period of time. In respect to these few indicators it can be concluded that not only social polarisation has increased within the last 4-5 years, but also that social polarisation becomes detectable on the boroughs level. Some inner city boroughs of the city of Leipzig tend to accumulate socially deprived citizens: low income, few job opportunities, poor housing conditions and thus often high rates of socially instable neighbourhoods lead to an unprecedented degree of urban poverty. (It has to acknowledge that comparable data for the surrounding districts Leipziger Land, Delitzsch, and Muldenkreis were not available in the same degree of accuracy.)

5.5 Housing market

Demographic decline, brain drain, and natural population development led to a surplus of living units on the housing market. The following figure demonstrates the structure of existing vacancies on the housing market of the city of Leipzig. In 2005, Leipzig counted 280,100 living units (Stadt-Leipzig, 2005, p. 15). In 2004, 51,000 vacant living units have been counted (Stadtplanungsdezernat-Leipzig, 2005). The oversupply of housing depends also on existing and future building activities with unrealistic expectation concerning the development of the overall city population. Therefore, a high number of vacant living units is and will be subject to urban transformation and the housing market in the near future. Newly built houses after 1990 and the slow process to dismantle vacant and unattractive housing units in the late 1990s and the beginning of this decade have "produced" a structural (and factual) surplus.

Figure 5.5: Share of vacant living units in Leipzig, according to age of building groups



Source: Stadt-Leipzig, 2005

After the political unification the demand for new single family houses has led to substantial building activities at the fringe of the city of Leipzig as well as in the neighbouring districts Delitzsch, Muldenkreis, and Leipziger Land (Herfert, 1998, Herfert, 1996). The relaxed housing market has led to an increase of living space in each segment (from single to 4 person households). On the other side, the improvement of the housing standards has increased the costs for rental. Leipzigers have to spend approximately 30 per cent of their income for housing costs (Stadt-Leipzig, 2005, p. 17). The prices for flats vary between 2.74 €/sqm for low standard to 6.65 €/sqm in 2005 for higher standards and newly built housing units. From the perspective of costumers, in terms of accessibility, flexible, and offers, the housing market can be considered as relaxed, especially compared to other metropolitan regions: it is inexpensive in almost each category.

5.6 Tolerance, openness, and diversity

Social polarisation has definitely led to spatial segregation and to aggravation of social tensions, stimulated because of very few opportunities on the regional labour market within the last 5 years. The absence of appropriate employment opportunities has thus negative impacts on daily living, and because of the stagnation of economic development, has, in the course, led to decreasing trust in political leadership and regional economic guidance. Therefore, the economic crisis of the city region of Leipzig has resulted in slow and silent decline of social bonds, family ties, and the devaluation of existing social networks and its related social fabrics. Informal interaction are thus considered to have specific "East German" connotations and have always played an important role in the past, when an economy of scarcity in the GDR forced many people to invent informal exchange systems to overcome consumptive shortages within their daily life. Based on this assumption, East Germany is often considered to have had a specific sociality and "interaction culture" based on shared experiences of the past. This asset, and thus the proverbial openness of the Leipzigers, is heavily under pressure when the lasting economic crises forced each citizen to think of him-/herself first of all to make his/her living.

Apart from the economic induced social tensions, various efforts have been undertaken by political administration in order to motivate deprived social groups in disadvantaged neighbourhoods to challenge their deficit situation. These approaches are conceptually influenced by the catchword "civil society". Different applied projects have thus tried to redirect power, decision-making, and social interaction to the local level. Participation in urban change seems to be a central element in order to offensively integrate underprivileged and excluded social groups. Especially in critical and socially instable neighbourhoods such as in East-, West-Leipzig and Grünau, explicitly formulated participation processes in the field of urban, housing, and cultural planning aimed at reanimating public as well as social life.

Projects such as "Soziale Stadt", "Stadtumbau Ost", and "Städtebauliche Sanierungs- und Enwicklungsmaßnahmen“, "Leipziger Agenda 21", "Quartiersmanagement" as well as „Städtebaulicher Denkmalschutz“ have all (to various degrees) been introduced by the federal government, the state of Saxony, and the city administration of Leipzig in order to activate local population and to solve specific problems on the local scale. Within the last 5 years, as a result, the number of initiated associations in the field of sports, culture, child care, neighbourhood development, political platforms, and educational programs have at least formed substantial interaction and articulation realms for different target and age group.
Moreover, locally oriented alliances between the public and the private have led to various opportunities for deprived, unemployed, and excluded people to cope with their difficult situations and even create new social contexts for exit options of their deprived circumstances.

Nevertheless, is has to be acknowledge that strengthening and addressing the local level as the decisive scale for urban change is often associated with the notion of "opposing" the bad global world, global economy, or global power structures. The local is then characterized as the spatial, social and living world dimension, where political power can be experienced and thus articulated, organized and, in the course, reclaimed by the people. Strengthening the local level is based on the concept of civil society and then is associated with notions of forming collective power, rediscovering individual talents, reorganizing sociality on behalf of the collective will. Nevertheless, social bonds, biographies, and lifestyles are still questioned, transformed according to new and not only locally rooted economic, social, and cultural values.

Angela Jancius (Jancius, 2006, p. 229) emphasises that the discourse on "civil society", "community economy" (projects in the so-called "third labour" sector) as well as voluntary work in Leipzig in order to reactivate and reintegrate oneself into the social community, unintentionally mirror elements of a neoliberal rhetoric (cit. op. and see also http://www.freiwilligen-agentur-leipzig.de). Stimulated through practices of an "activating state", the notion of acting likewise "entrepreneurially" for oneself is again connected to practices of a global neoliberal economy and has then sometimes been rejected in the Leipzig's debate as an opportunity to overcome individual socio-economic lock-ins.

To conclude, the ongoing economic transformation in Leipzig has led to growing social tensions. The most "problematic case" of the city region of Leipzig is – as in other East German regions and as presented in the last chapters -, thus male, young, and less skilled. The everydayness of tolerance, openness, and diversity has thus to be seen under critical scrutiny, in order not to be overwhelmed by its harmonic implicit or (normative) understanding. Contrary to the critical condition, the Leipzigers have demonstrated various efforts to improve social cohesion and in the course not to give up its civil strengths regained in and after 1989. Within the last 5 years various efforts took place in order not to loose its social bonding within harsh processes of ongoing transformation processes.

6 State of Creative Industries and Knowledge-Intensive Economy between 2000-2005

6.1 Knowledge-intensive economy

The knowledge intensive economy is defined as a set of products and services based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, as well as rapid obsolescence of established products and practices (Matthiesen, 2005b). The key component of a knowledge economy is a greater reliance on intellectual capabilities than on physical inputs or natural resources (Bryson, 2000, Cooke, 2002, Meusberger, 2000, Simmie & Lever, 2002). Next to the societal dimension and the conceptual metanarratives within the framework of a so-called “knowledge society”, “knowledge based (urban) development”, “knowledge economy” or others, the following paragraphs will highlight the institutional and infrastructural as well as the factual situation of the knowledge economy in Leipzig.

6.1.1 Institutional and infrastructural perspective

Existing knowledge-based institutions in Leipzig are mostly public – such as schools, academies, universities, and extra-university research facilities, run by Helmholtz-, Max Planck-, and Leibniz-Associations. Private and corporate companies in the field of medical and pharmaceutical research run services related research enterprises and thus mostly represent public-private-(research) partnerships.

Leipzig numbers almost 40,000 students. The University of Leipzig holds more than 31,000 students, the University of Applied Sciences 5,600 (Stadt-Leipzig, 2006a, p. 11). Smaller institutions are the Academy for Visual Arts and the University of Music and Theatre, both educating around 1,200 students in 2006. In 2005, the University of Leipzig had approximately 2,000 scientific employees. In addition to 1,200 non-scientific members 3,200 employees can be counted. Looking at the number of scientific employees for the city-region of Leipzig, another 3,000 high-qualified extra-university employees lead to almost 5,000 high-qualified scientific employees in Leipzig’s core knowledge production entire segments.

Apart from the existing “human” dimension and human capital in general, the physical and technical infrastructure is of high quality. The German Telecom provides ultramodern technical networks and had installed one of the most powerful communication networks in Germany recently. Thanks to the presence of telecommunication company “Telecom” in Leipzig, the knowledge centres are connected to the German high-speed internet backbone (Stadt-Leipzig, 2006a, p. 13-14).

But the communication infrastructure is not the only infrastructural element, which enabled the formation and creation of new technologies. Based on its long medical and pharmaceutical tradition at the University of Leipzig, in 2003, a so-called Bio City Leipzig has been opened with 20,000 sqm and around 50 Mio € investment in the inner city area. A quarter of the area is used by the University of Leipzig's Centre for Biotechnology and Biomedicine and other university related institutes. A rather similar structure is the so-called "Wissenschaftspark Leipzig e.V." – a science park – which works towards transferring knowledge results to market standards.

Closely related to biotechnology and pharmacy is the medical research sector, which has a strong basis in Leipzig: 8 hospitals are closely connected to the university and thus to research and development, making the "med in Leipzig" segment a strong institutionalized knowledge element in Leipzig's economy. Though the creation of new standardized products out of research results is one of the key aspect of forming biotechnology incubators, institutionalized service related facilities support start-up-initiatives with consultancy, management services for sciences, business, and financial affairs. These existing technology-transferring institutions are needed in order to support start-up companies, entrepreneurs, and investors and thus serve as a platform for exchange of financial, intellectual, and human capital.

6.1.2 Factual situation of knowledge-intensive economy

Dividing the broad field of so-called Creative Industries (1) into the fields of ICT (Information and Communication Technologies) (2), Law and other businesses (3), Finances (4) and R&D (Research and Development) the following picture can be derived:

Figure 6.1: Evolution of the number of employees in knowledge-intensive industries (2) – (5) in the city of Leipzig and the surrounding districts between 1999 and 2005

	Leipzig, City	**Surrounding districts (Delitzsch, Muldentalkreis, Leipziger Land)**
Economic fields	**Changes (Absolute / Relative)**	
Information and Communication Technology (2)	+431 (+10,0%)	- 8 (-0,8%)
Finances (3)	-1097 (-12,6 %)	-756 (-28,2 %)
Law and other business services (4)	+3240 (+26,5 %)	+50 (+1,8 %)
R&D and higher education (5)	+4241 (+82,1 %)	-324 (-82,2 %)

Sources: Statistics of the Federal agency for Labour 2000 and 2005

Especially ICT, Law and R&D performed very well in the core of our research area while the surrounding districts performed negatively, in respect to the city of Leipzig.

6.1.3 Dynamic, development, and comparative perspective

As listed above, the factual (and financial-intensive) physical infrastructures have to be evaluated in respect to and compared with the city's competitiveness. As mentioned previously, the number of patents, acquired research funding per professorship demonstrate a first and then rather different picture of the city's competitiveness (Franz, 2005). On a comparative regional level, regional economist Franz-Josef Bade (Bade, 2006, Bade et al., 2003) but also other researchers (Prognos, 2002) evaluated the performances of the city region of Leipzig. According to regional economist Bade (Bade et al., 2003, p. 120) and Franz Franz, 2005) the decline of the rate of employment will not be compensated by the emergence of new knowledge based service industries. The decline of job opportunities in manufacturing industries and others till 2001 will furthermore lead to a continuation and so, in the course, "stable" decline of job opportunities till 2010, as estimated by Bade (Bade, 2006, p. 307). From an overall structural perspective, it is estimated, that the core area of agglomeration regions in East Germany will loose less job opportunities (-5.7 per cent) than the surrounding peripheries (-8.7 per cent) till 2010 (Bade et al., 2003).

Comparing Leipzig's development with other urban agglomerations in the state of Saxony (Dresden, Chemnitz, Zwickau) Franz (Franz, 2005) points out that the number of patents, acquired research grants per professorship and the number of engineers per 10,000 inhabitants (in 2002) demonstrate that Leipzig's knowledge basis has not yet lead to a substantial shift in the evolution of its regional employment forces.
In respect to other indicators, such as strategic, marketing, and policy actions, Leipzig nevertheless has propelled its image as a business friendly, open-minded, and innovative city. In a first step, the next chapter will evaluate the creative potential of Leipzig.

6.2 Creative Industries

6.2.1 Definition

Based on the selected NACE codes, the following economic activities represent the "creative industries": textile production, publishing, distribution of recording medium, production of business machines, credit business, insurance business, data processing, research and development, consulting business, architecture and engineer business, culture, sport and entertainment, film- and video production, radio and TV, further cultural businesses, news production, library, archive, and museum, further entertainment businesses (See Footnote for of identified NACE Codes, in accordance with the ACRE-project team[2]). This definition refers mainly to the DCMS definition of creative industries:

[2] **Designer fashion**: 171 Preparation and spinning of textile fibres, 172 Textile weaving, 173 Finishing of textiele, 174 Manufacture of made-up textile articles, except apparel, 175 Manufacture of other textiele, 176 Manufacture of knitted and crocheted fabrics, 177 Manufacture of knitted and crocheted articles, 181 Manufacture of leather clothes, 182 Manufacture of other wearing apparel and accessoires, 183 Dressing and dyeing of fur; manufacture of articles of fur, 192 Manufacture of luggage, handbags and the like, asddlery and harness, 193 Manufacture of footwear. **Video, film, music and photography**: 223 Reproduction of recorded media, 748 Miscellaneous business activities, 921 Motion pictures and video activities. M**usic and the visual and performing arts**: 923 Other entertainment activities, 927 Other recreational activities. **Publishing**: 221 Publishing, 924 News acency activities. Computer games, software, electronic publishing: 722 Software consultancy and supply. **Radio and TV**: 922 Radio and television activities. **Architecture**: 742 Architectural and engineering activities and related technical consultancy. **Arts/antiques trade**: 524 Other retail sale of new goods in spezialised store, 525 Retail sales of second-hand goods in store. **Advertising**: 744 Advertising

*"those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property." (*DCMS, 1998).

The DCMS creative industries categories consists of production in the following sectors: Advertising, Broadcast network talent, Design, Architectural Design, Communication Design, Designer Fashion, Editorial Commentary Journalism, Film and Video Industry, Fine Art Illustration, Game Development, Handicraft, Antiques Restoration Market, Music Industry, Performing Arts, Publishing, Software Development and Computer Services.
In Saxony, according to our information, an empirical survey with the statistical focus on these economic fields has not yet been done so far. For Leipzig, the media segment is statistically and empirically very well prepared on will serve as a reference source in order to understand the potential of creative industries so far. For the media segment in Leipzig, see Bentele (Bentele, 1997, Bentele et al., 2006,) for the media segment in relation to the federal state and other cities, see Schönert (Schönert, 2004, Schönert & Willms, 2001).

6.2.2 Creative industries in Leipzig, situation and employment changes between 2000 and 2005

In the following paragraphs, the situation of the creative industries will be presented, in respect to the situation of the federal state and the state of Saxony. In 2000, 27,979,593 people have been registered as employees in "all economic segments" in the Federal Republic. In Saxony, 1,526,528 people have been registered as employees in "all economic segments" and 328,524 people have been registered as employees in "all economic segments" in the research area of the city-region of Leipzig (see Figure 6.2, next page).
In the federation, the number of employees in "all economic segments" demonstrates an overall decline between 2000 and 2005, also in the state of Saxony as well as in our focused research area in the city-region Leipzig. Most of this decline is primarily caused by the loss of job opportunities in manufacturing. The field of creative industries on the contrary demonstrates positive performances between 2000 and 2005 in the city of Leipzig. While the number of employed persons in Creative Industries declined by more than 13,496 persons in the state of Saxony, especially the city of Leipzig performed relatively well. The number of employed people increases about 1,033 between 2000 and 2005 while the total number of employees in "all economic segments" in the city of Leipzig decline about 18,319. From an overall federal perspective, the loss of job opportunities is also detectable in the field of creative industries, albeit to a lesser extend.

Focussing on the situation of creative industries in our research area, it is obvious that especially the geographical core area – the city of Leipzig – has gained more job opportunities than the surrounding counties Delitzsch, Leipziger Land and Muldental which demonstrate significant losses of employment opportunities between 2000 and 2005. The three surrounding counties lost not only in the overall category of "all economic segments", but also in the creative industries while the core area – the city of Leipzig – has gained employees. The following figure demonstrates the absolute and relative changes of "all economic segments" as well as creative industries.

It is obvious that the city of Leipzig performs on the one hand the least losses of job opportunities in the targeted research regions, and, on the other, the best performances of newly created jobs (+4,77 per cent in respect to the year 2000). It is striking that the surrounding counties demonstrate high losses not only in the category "all economic segments" but especially also in the field of creative industries, where they lost almost 20 per cent their workforce.

Figure 6.2: Employment in creative industries in 1999 and 2005 (absolute numbers)

Summarized economic fields, bases on several NACE Codes	Leipzig (City) 1999	Leipzig (City) 2005	Changes in %	Surrounding Districts 1999	Surrounding Districts 2005	Changes in %
Designer Fashion	540	190	-64,81	317	359	13,25
Video, film and photography	2255	4439	96,85	677	1507	122,60
Music and visual/ performing art	1810	1940	7,18	430	212	-50,70
Publishing	1649	1636	-0,79	53	26	-50,94
Computer games, software	825	1657	100,85	203	224	10,34
Arts/ antiques trade	5316	5122	-3,65	4579	3260	-28,81
Architecture	6025	3575	-40,66	2076	1135	-45,33
Advertising	793	1269	60,03	252	183	-27,38
Radio and TV	2465	2883	16,96	10	0	-100,00
Total	*21678*	*22711*	*4,77*	*8597*	*6906*	*-19,67*

Sources: Statistics of the Federal agency for Labour 2000 and 2005

In the following figure 6.3, the five fields of the creative industries with the most significant employment losses in the city of Leipzig will be presented as well as the economic fields, which gained more than 200 employees between 2000 and 2005:

Figure 6.3: Gains and losses of employment changes in creative and knowledge-intensive industries by more than 200 employees between 2000 and 2005 (Highlight on Leipzig)

NACE codes	14 Saxony	14365 Leipzig, City	14374 Delitzsch	14379 Leipziger Land	14383 Muldental kreis	City-region Leipzig
Total economic segments	- 194,288	- 18,319	- 7,518	- 7,602	- 6,221	- 39,660
742 architecture- and engineer offices	- 5,690	- 1,973	- 265	- 305	- 153	- 2,696
65 credit business	- 6,748	- 1,332	- 867	- 28	- 41	- 2,268
524 Retails	- 8,930	- 393	- 534	- 231	- 109	- 1,267
66 Insurance business	- 379	- 351	0	17	24	- 310
333 Manufacture of industrial process control equipment	- 163	- 190	0	- 14	0	- 204
Segments of creative and knowledge-intensive industries with changing rates of less than minus or / plus 200 employment between 2000 and 2005						
73 R&D	939	197	- 5	- 280	18	- 70
922 Radio and television activities	149	227	- 9	0	- 3	215
744 Advertisement	- 2	271	- 34	16	- 2	251
67 Credit and assurance related businesses	821	287	221	4	38	550

921 Film- and video production and distribution	62	359	- 10	1	0	350
92 Culture, sports and entertainment	- 1,785	647	- 21	- 46	- 380	200
741 Law-, tax- and consultancy	85	660	- 149	- 73	- 18	420
72 Databases and database related services	3,056	1,296	- 23	35	33	1,341
745 Personal- and Human Resources services	6,429	1,495	- 16	163	37	1,679
748 Miscellaneous business activities	7,310	1,778	652	- 80	131	2,481
Sum of employees in creative and knowledge-intensive industries	- 12,006	2,396	- 890	- 773	- 866	- 133

Source: Statistics of the Federal agency for Labour 2000 and 2005, own calculation

Highlighting the city-region of Leipzig (and not only the city of Leipzig), the following results can be presented (see figure 6.3). The major losses can be found in the field of architecture and engineering offices. Substantial gains can be found in the field of radio production and advertisement, film and video production. While the losses of jobs are more or less similar to those of Leipzig, especially losses of jobs on R&D in the surrounding counties are significant.

6.2.3 GDP of creative industries in Leipzig between 2000 and 2004

Referring to the gross domestic product (GDP) of the selected spatial units, the following picture can be presented for the GDP of "all economic segments" and for the "creative and knowledge-intensive industries".

Figure 6.4: Changes of the rate of GDP of "all economic segments" and of creative and knowledge intensive industries between 2000 and 2004

	Saxony	Research Area				
		"Leipzig City region"	Leipzig, City	Delitzsch	Leipziger Land	Muldental-kreis
	Taxed turnover in 1 000 €					
GDP all segments 2000	80,640,774	17,489,069	10,841,637	2,385,915	2,160,643	2,100,874
GDP all segments 2004	90,848,112	20,351,902	14,462,119	1,962,831	1,883,833	2,043,119
Rate of change (absolute)	10,207,338	2,862,833	3,620,482	-423,084	-276,810	-57,755
Rate of change (relative) 2000/2004	12.66%	16.37%	33.39%	-17.73%	-12.81%	-2.75%
GDP creative and knowledge intensive industries 2000	16,402,612	3,058,720	2,467,993	203,278	194,762	192,687
GDP creative and knowledge intensive industries 2004	20,860,882	4,626,927	3,984,772	192,656	230,749	218,750
Rate of change (absolute)	4,458,270	1,568,207	1,516,779	-10,622	35,987	26,063
Rate of change (relative) 2000/2004	21.37%	33.89%	38.06%	-5.51%	15.60%	11.91%

Sources: Statistics of the Federal agency for Labour 2000/2004, own calculation

The official GDP statistics does not list all selected NACE codes, either because of secrecy or because of incalculability (see for complete overview appendix), Therefore, based on the existing data only a rough picture of the amount of GDP can be presented.
Nevertheless, the GDP of Saxony has increased by more than 10 billion € between 2000 and 2004, that means that less employees have also increased their productivity as well as new production fields contribute to the regional economy. Looking at the GDP development of Leipzig and its surrounding counties, this effect is even more obvious: the city-region has increased its GDP about 2.8 billion € between 2000 and 2004. Furthermore, especially the core area, the county City of Leipzig, has contributed to the overall GDP of the Leipzig city-region with an increase of more than 33 per cent between 2000 and 2005 in respect to the GDP in 2000.

Focussing on the GDP development rates of creative industries, it is obvious that creative industries demonstrate enormous growth rates in respect to heterogeneous GDP development rates in the surrounding counties. (The relative small quantities of the GDP in the counties of Delitzsch, Leipziger Land, and Muldental also reflect the insufficient GDP statistics). Their contribution to the GDP of the creative industries in the city-region of Leipzig is relatively low and the development rates vary strongly.

6.2.4 Discussion of the level of creative industries according to federal statistics

Federal statistics of employees do not list up entrepreneurs, civil servants and self-employed persons. Federal statistics of employees only list up persons, with a status of being officially employed in a company, public institutions etc. It is estimated that federal statistics cover 75-80 per cent of the factual work force. Especially in creative industries, the share of self-employed persons and entrepreneurs is higher than in other service-oriented industries. Creative industries are build-up mainly by many small (micro-) companies or self-employed persons, which operate in temporally networks, project-based alliance and thus are not listed up in federal statistics of employees. Self-employed persons and entrepreneurs nevertheless have to register their enterprise and in the course the number of enterprises can be detected. Only when creative professionals are organized in specific professional associations according to their creative production they can be systematically found and be subject of empirical evaluation.

6.2.5 Discussion of the level of creative industries according to other studies

It is obvious that official statistics are not fully capable to cover the field of creative industries, especially in emerging and not yet fully established creative economic scenes and milieus. These relatively fluid and ephemeral constellation are nevertheless present on an implicit communication level in the city of Leipzig: Everybody speaks about it, precise information on the numbers of creative workers, their locations, income situation, modes of interactions, clients, and modes of self-organization etc. do not yet exist in the case of Leipzig. On of the best researched professional creative field in Leipzig is the media industry (Bentele, 1997, Bentele et al., 2006). Bentele and his team use the “Medien Handbuch”, the “media handbook”, a register for professionals in the field of media industries provided by the Department for economic development of the city of Leipzig. With a standardized questionnaire, Bentele et. al gathered first-hand information of the media industry of Leipzig: he focuses on the legal form, year of foundation, location of foundation, networks, number of employees, number of “employed” free-lancer, turnover, evaluation of Leipzig, and a general estimation of the evolution of the future development has been subject of his research.

The situation of the number of employees in the field of media industry highlights the gap between the accuracy of federal statistics and the “real” empirical situation: Bentele (Bentele et al., 2006, p. 18-19) counts 9,079 full-time employees in 396 companies, 3,774 of them female. Based on this survey, as well as his previous surveys on the media industry in Leipzig in the year of 1996, 1998, 2000, and 2002, he estimates that in 2006 approximately 20,700 people work in the field of the media industry. Bentele´s (Bentele et al., 2006, p. 22) primary data are based on 538 registered companies with 7,763 free-lancer in this segment, which leads to an estimation of overall approximately 9,500 freelancers. Bentele calculates that in the field of radio and film production 3,000 freelancers are not fully employed, while 3,800 are so and thus form the total sum of 7,300 workers in this sub segment. On the contrary, in the sub segment of telecommunication, data processing, hard and software, only 500 out of 6,600 are freelancers, the rest are full-time employees. In sum, Bentele concludes, that approximately 30 per cent of those operating professionally in the media industry are freelancer, and that approximately 20,700 are employees in this creative segment (Bentele et al., 2006, p. 24). In respect to Bentele’s studies about the media industry as one segment of Leipzig’s creative industries, from an analytical and statistical perspective, the following conclusion can be drawn:

- The federal employment statistics cover around 70 per cent of the work force of a specific branch; entrepreneurs and self-employed persons are only registered either with their company, or, as member of professional alliances (and thus do not appear directly in federal statistics).
- With the exception of the media industry, there is little systematic data available about the case specific situation of sub segments of creative industries.
- Looking from a data perspective at the ascertainability of creative industries subbranches, it has to be highlighted that these fields and its agents represent a key example of a new economic mode: Self-dependant, multi-tasking, creativity- and identity-oriented production, with hardly any structured work organisation (such as units, work councils etc.).
- Looking at other creative branches, such as the art and gallery sub segment and the field of design, advertisement, architecture, film, photography or even the art scene, “hard” data about numbers, scale, locations, income, modes of self-organisation and clients are not yet systematically gathered.

6.2.6 General consideration of creative industries in the City-region of Leipzig

Based on very heterogeneous empirical databases, it can be pointed out that creative industries (based on the calculation of the selected NACE codes) have performed relatively

well in the time period of 2000 and 2004/5 in the city-region of Leipzig. Most of its positive development rates took place in the core area of the research area, the city of Leipzig. The surrounding counties have performed negatively. The creative industries nevertheless could not compensate the loss of work forces and job opportunities in other economic segments, such as manufacturing.
Especially the field of media industry is not only very well researched by Bentele (see above) and Bathelt (Bathelt et al., 2004) it has also reached the focus of public administration; as one segment of the creative industries, it has been integrated in the cluster policy of the city of Leipzig.

Apart the well researched media industries, more informal, ephemeral, as well as subcultural oriented creative scenes are either not well researched or only present on an implicit level: The impact of the “Neue Leipziger School”, popcultural music industries and their newly institutionalized fairs and platforms (“Popup Fair”), innovative architectural offices, small clusters of design offices such as “Buero am Ring” (a bloc with more than 20 young design, architectural and other creative offices very close to the city centre), meet highest international reputation and standards, but are not yet fully accepted and even known in the public administration. Some administrative bodies “know” that these agents are present in the city, but the level of precise and concrete information concerning size, number of (self-employed) workers, number of start-ups, turnover, strategic practices of young entrepreneurs etc., is more or less not present. It leads to a relatively diffuse knowledge about the relevance of these emerging creative agents as incubators for other professional groups.
The lack of recognition by public authorities has led to new activities by corporate companies, such as BMW and others. Their public-private-partnership activities integrate galleries, such as the “Galerie für zeitgenössische Kunst” (German for “Gallery for contemporary Art”), artists, creative producers, and other creative agents of the city of Leipzig.

Interestingly enough, the city’s marketing company seems to focus on the development and the expansion of the historical cultural potential (not necessarily the creative) such as the music and the person of Johann Sebastian Bach and other classic musicians and composers. They are targeting to follow Salzburgs “Mozart strategy”. Especially in the last months, the debates of new marketing strategies for the city of Leipzig seem to prefer the reinvention of the classic music topic as the communication tool to market the city worldwide. While the existing label “Leipziger Freiheit” (“Leipzig’s liberty”) seem to highlight the openness as well as the diversity of cultural life, creative scenes, as well as a heterogeneous civil society it is not yet clear how new marketing themes such as classic music will be able to integrate especially young creative but also entrepreneurial cultures.

6.3 Challenges

From a broader perspective, the city of Leipzig faces several challenges in order to position itself again as an innovative, prospering, and future-oriented place to live and work on the global scale. First of all, the transformation process after unification has led to large quantities of long-term unemployed people. Social welfare, lack of qualification, inflexible (or

inaccessible) regional labour markets, and growing second or even third labour markets have to be considered as the major obstacles to solve urban transformation.
Nevertheless, the city has reacted strategically and installed several tools in order to regain its historically known competitiveness. On the local policy level, the city has installed neighbourhood projects in order to improve local living conditions. Thereby, a great deal of work has been addressed to the civil forces on the local level. Agencies such as "Pro Leipzig" are facing the challenge of bridging locally oriented social networks with the forces and the dynamics of global capital.

On the regional level, the implementation of the Sachsen-Dreieck ("Saxony triangle") is the most notable approach in order to pool disparate and different regional strengths under one roof, the metropolitan region "Sachsen Triangle". Nevertheless, on both levels, creative industries are – from our perspective – not yet seen as an incubator and as an integrative tool for strengthening the local as well as the regional competitiveness.
Though there is not yet a coherent knowledge about the size, scale, and numbers of creative industries for the city of Leipzig in general, a suitable policy does not exist so far. Ironically, that might have led to flourishing creative scenes and the creation of a creative biotope, stimulated also by relatively low rents, cheap places, accessible work spaces, short distances to partners and potential collaborators within thick networks in Leipzig. The relatively absence of a clear agenda by the public administration might have stimulated more creativity than any other "masterplan for creative industries" could have done.

On the other side, the city of Leipzig has integrated the subsegment "media industry" in their strategy to improve and upgrade new emerging clusters. Large amounts of investments have been pulled up in the region in order to provide the infrastructural and technical basis for innovative technologies, international standards in the field of mobility, fair business, and distribution of goods. The city is aiming at (re-) positioning itself (again) on the international scale, although the overall population with approximately 500,000 inhabitants might be too small.

Regional cooperation in the institutionalized framework of formulating the metropolitan region "Saxony triangle" has to be seen as a major challenge where the status of creative industries, as defined in chapter 6, is, from our perspective, missing till today. The creation of the metropolitan region "Saxony triangle" in classic terms, with high rates of population, work, and density rates, tradition, and a distinct cultural life of the metropolitan region, poses new demands and challenges. In respect that this emerging metropolitan region will not only be a conglomerate of smaller spatial units, but also represent a cultural product with a distinct identity, the degree of self-description as a larger spatial unit is missing, but might be stimulated by the creative industries. Their abilities to invent symbolic and immaterial products might then be connected with the idea of a "Saxony triangle", with a distinct identity, which – from our perspective – could not yet be detected. It might be needed in order to invent future-oriented communicative and marketing strategies for this region.

In regard of the situation of Leipzig, it might be concluded that the formulation of a distinct cluster policy, embedded in an attractive affordable urban space, has changed the formerly unattractive city. The effects of repositioning the city on a national and even international scale have to be seen in its different economic fields and its variations as well as in respect to the national context with other spatial profiles. Although the city is aiming at regaining top position on a national and international scale, the relationship between investments and factual results, especially in the field of knowledge economy, demonstrates that further efforts have to take place, in order to compete successfully even with cities such as Dresden within the state of Saxony. Nevertheless the vision of regaining its historical determined position as the gateway between East and West in the context of a rapidly changing geography in Europe is still not fully developed.

Appendix 1: Number of employees in 2000

Employees in all economic segments

Date: 30.6.2000

WZ93	14 Saxony	among			
		14365 Leipzig, City	14374 Delitzsch	14379 Leipziger Land	14383 Muldentalkreis
All econmic segments (NACE Codes)	**1.526.528**	**207.164**	**42.065**	**41.672**	**37.623**
DB17 Textilgewerbe	15.399	311	30	9	174
DB171 Spinnstoffaufbereitung usw.	1.432	160	-	-	-
DB172 Weberei	1.871	*	-	-	77
DB173 Textilveredlung	1.600	119	-	4	-
DB174 Herst. v. konfektion. Textilw.	2.479	*	15	4	*
DB175 Sonstiges Textilgewerbe	4.308	11	15	*	96
DB176 Herst. v. gewirk. u. gest. St	3.077	19	-	-	-
DB177 Herst v gewirk. u. gest. FE	432	-	-	-	-
DB18 Bekleidungsgewerbe	3.318	166	13	28	4
DB181 Herst. v. Lederbekleidung	43	-	-	-	-
DB182 Herst. v. Bekleidung	3.241	161	11	20	4
DB183 Zuricht. u. Färben von Fell	34	5	*	8	-
DC19 Ledergewerbe	2.064	18	5	*	70
DE221 Verlagsgewerbe	3.929	1.616	11	6	39
DE223 Vervielf. v. bespielten Tontr.	17	-	-	-	-
DL300 Herst. v. Büromaschinen usw.	815	7	*	-	-
DL313 Herst. v. isolierten Kabeln	1.120	-	-	-	8
DL321 Herst. v. elektron. Bauelement	7.252	52	-	-	*
DL322 Herst. v. nachrichtentech Ger.	2.733	160	41	53	4
DL323 Herst. v. Rundf.- u. Fern.ger.	617	62	-	15	-
DL332 Herst. v. Meßinstrumenten usw.	4.325	367	9	162	85
DL333 Herst. v. industrie. Prozeßst.	441	230	-	57	-
GA524 Sonstiger Facheinzelhandel	48.170	5.455	1.633	1.165	1.130
JA65 Kreditgewerbe	27.464	6.031	1.451	304	490
JA66 Versicherungsgewerbe	6.692	3.537	*	51	50
JA67 Kredit-u.Versicherungshilfsgew	3.390	467	80	72	57
KA72 Datenverarbeitung u.Datenbank.	9.700	2.566	180	110	148
KA73 Forschung u.Entwicklung	6.926	1.825	5	332	-
KA741 Beratungsunternehmen	23.124	4.504	573	412	370
KA742 Architektur- und Ingenieurbüro	25.799	5.548	553	767	538
KA743 Tech., physik. u. chem. Unter	3.284	905	57	123	66
KA744 Werbung	3.486	998	116	52	35
KA745 Gewerbsm. Verm. v. Arbk.	17.242	4.103	223	94	515
KA748 Erbring. v. so. Dienstleist.	10.975	1.694	217	376	200
OA92 Kultur,Sport u.Unterhaltung	21.733	6.749	136	227	577
OA921 Film- und Videofilmherstellung	1.301	608	16	4	-
OA922 Hörfunk- und Fernsehagenturen	3.149	2.656	9	-	3
OA923 Erbring. v. so. kultur. Leist.	6.856	1.541	17	86	19
OA924 Korrespondenz- u. Nachrichten.	151	68	-	-	5
OA925 Bibliotheken, Archive, Museen	4.535	801	26	13	129
OA927 Erb. v. so. Unterh.Dienstl.	1.714	302	20	82	310

* Daten aus der Statistik sind Sozialdaten (§ 35 SGB I) und unterliegen dem Sozialdatenschutz gem. § 16 BStatG. Aus diesem Grunde werden Zahlenwerte kleiner als 3 anonymisiert.
Quelle: Informationsangebot der Statistik der Bundesagentur für Arbeit (BA)
[2006-11-21]

Appendix 2: Employees in 2005

Employees in all economic segments

Date 30.6.2005

WZ03	14 Saxony	darunter			
		14365 Leipzig, City	14374 Delitzsch	14379 Leipziger Land	14383 Muldentalkreis
All economic segments	**1.332.240**	**188.845**	**34.547**	**34.070**	**31.402**
17 Textilgewerbe	11.727	139	65	6	162
171 Spinnstoffaufbereitung und Spinnerei	706	41	-	-	-
172 Weberei	1.618	*	-	-	53
173 Textilveredlung	1.626	87	-	4	5
174 Herstellung von konfektionierten Textilw	1.840	3	38	*	*
175 Sonstiges Textilgewerbe (ohne Herstellun	3.391	7	27	-	103
176 Herstellung von gewirktem und gestrickte	2.117	-	-	-	-
177 Herstellung von gewirkten und gestrickte	420	-	-	-	-
18 Bekleidungsgewerbe	2.069	40	9	66	7
181 Herstellung von Lederbekleidung	40	-	-	-	-
182 Herstellung von Bekleidung (ohne Lederbe	2.001	36	5	59	7
183 Zurichtung und Färben von Fellen, Herste	28	4	4	7	-
19 Ledergewerbe	1.034	12	5	-	44
221 Verlagsgewerbe	3.503	1.557	13	7	6
223 Vervielfältigung von bespielten Ton-, Bi	12	-	-	-	-
300 Herstellung von Büromaschinen, Datenvera	822	6	107	11	6
313 Herstellung von isolierten Elektrokabeln	1.209	-	-	-	-
321 Herstellung von elektronischen Bauelemen	12.333	55	-	-	*
322 Herstellung von Geräten und Einrichtunge	2.837	159	4	59	*
323 Herstellung von Rundfunkgeräten sowie ph	493	29	-	18	-
332 Herstellung von Mess-, Kontroll-, Naviga	4.807	357	21	197	64
333 Herstellung von industriellen Prozesssste	278	40	*	43	-
524 Sonstiger Facheinzelhandel (in Verkaufsr	39.240	5.062	1.299	934	1.021
65 Kreditgewerbe	20.716	4.699	584	276	449
66 Versicherungsgewerbe	6.313	3.186	*	68	74
67 Mit Kredit-u.Vers.-gewerbe verb.Tätigk.	4.211	754	301	76	95
72 Datenverarbeitung und Datenbanken	12.756	3.862	157	145	181
73 Forschung und Entwicklung	7.865	2.022	-	52	16
741 Rechts-, Steuer- und Unternehmensberatun	23.209	5.164	424	339	362
742 Architektur- und Ingenieurbüros	20.109	3.575	288	462	385
743 Technische, physikalische und chemische	3.335	913	86	104	63
744 Werbung	3.484	1.269	82	68	33
745 Personal- und Stellenvermittlung, Überla	23.671	5.598	207	257	552
748 Erbringung von sonstigen wirtschaftliche	18.285	3.472	809	296	331
92 Kultur, Sport und Unterhaltung	19.948	7.396	115	181	197
921 Film- und Videofilmherstellung, -verleih	1.363	967	6	5	*
922 Rundfunkveragenturen, Herstellung von Hö	3.298	2.883	*	*	*
923 Erbringung von sonstigen kulturellen und	6.725	1.636	19	75	45
924 Korrespondenz- und Nachrichtenbüros, sel	119	79	-	-	*
925 Bibliotheken, Archive, Museen, botanisch	3.596	825	19	16	61
927 Erbringung von sonstigen Dienstleistunge	1.269	304	18	32	23

Appendix 3: GDP in 2000

Statistisches Landesamt des Freistaates Sachsen

Steuerbarer Umsatz[1] im Freistaat Sachsen für ausgewählte Kreise und Wirtschaftszweige

Quelle: Umsatzsteuerstatistik 2000
Anfrage von Leibnitz-Institut für Länderkunde Leipzig vom 12.12.2004

WZ93	14 Sachsen	darunter 14365 Leipzig, Stadt	14374 Delitzsch	14379 Leipziger Land	14383 Muldentalkreis
	Steuerbarer Umsatz[1] in 1 000 €				
alle Wirtschaftszweige	**80.640.774**	**10.841.637**	**2.385.915**	**2.160.643**	**2.100.874**
DB17 Textilgewerbe	958.817	24.928	.	.	7.637
DB171 Spinnstoffaufbereitung usw.	83.309	.	-	.	.
DB172 Weberei	140.437	.	-	.	-
DB173 Textilveredlung	51.932	.	-	-	-
DB174 Herst. v. konfektion. Textilw.	248.760	.	.	.	.
DB175 Sonstiges Textilgewerbe	346.432	841	.	.	.
DB176 Herst. v. gewirk. u. gest. St	52.213	.	-	-	-
DB177 Herst v gewirk. u. gest. FE	35.534	-	-	-	-
DB18 Bekleidungsgewerbe	132.140	4.573	.	.	750
DB181 Herst. v. Lederbekleidung	.	-	-	-	.
DB182 Herst. v. Bekleidung	128.694	.	.	.	.
DB183 Zuricht. u. Färben von Fell	.	.	.	.	.
DC19 Ledergewerbe	.	.	.	.	.
DE221 Verlagsgewerbe	436.943	.	.	.	.
DE223 Vervielf. v. bespielten Tontr.	2.856	.	-	.	-
DL300 Herst. v. Büromaschinen usw.	253.489	3.657	.	1.846	.
DL313 Herst. v. isolierten Kabeln	83.368	.	-	.	-
DL321 Herst. v. elektron. Bauelement	1.046.539	.	-	.	.
DL322 Herst. v. nachrichtentech Ger.	481.552	7.686	.	.	.
DL323 Herst. v. Rundf.- u. Fern.ger.	76.798	.	.	.	.
DL332 Herst. v. Meßinstrumenten usw.	142.584	13.704	.	.	.
DL333 Herst. v. industrie. Prozeßst.	66.554	.	-	.	.
GA524 Sonstiger Facheinzelhandel	3.594.369	344.044	135.187	70.970	92.086
JA65 Kreditgewerbe	136.349	.	.	.	.
JA66 Versicherungsgewerbe	-	-	-	-	-
JA67 Kredit-u.Versicherungshilfsgew	55.730	.	.	.	.
KA72 Datenverarbeitung u.Datenbank.	565.975	235.618	.	8.243	.
KA73 Forschung u.Entwicklung	238.696	11.919	.	1.339	.
KA741 Beratungsunternehmen	1.527.774	821.554	13.257	17.678	12.940
KA742 Architektur- und Ingenieurbüro	1.464.257	303.735	23.724	41.770	39.642
KA743 Tech., physik. u. chem. Unter	112.306	10.536	2.084	5.628	.
KA744 Werbung	326.168	111.038	4.538	3.417	3.566
KA745 Gewerbsm. Verm. v. Arbk.	125.368	22.882	.	.	.
KA748 Erbring. v. so. Dienstleist.	1.612.455	182.029	11.921	34.698	12.320
OA92 Kultur,Sport u.Unterhaltung	983.596	262.025	8.489	6.092	13.271
OA921 Film- und Videofilmherstellung	73.337	35.575	761	.	.
OA922 Hörfunk- und Fernsehagenturen	166.589	.	.	.	.
OA923 Erbring. v. so. kultur. Leist.	181.383	31.314	2.957	1.612	3.281
OA924 Korrespondenz- u. Nachrichten.	17.850	6.104	360	334	1.358
OA925 Bibliotheken, Archive, Museen	15.093	.	-	.	.
OA927 Erb. v. so. Unterh.Dienstl.	436.566	34.231	.	1.135	5.836

. Geheimgehaltene Daten
Die Einzeldaten der Umsatzsteuerstatistik unterliegen dem Steuer- (§30 AO) und Statistikgeheimnis (§16 BStatG).
Aus diesem Grund werden in den Tabellen Ergebnisse geheim gehalten, bei dem das Steuer- oder Statistikgeheimnis verletzt wäre.
Um sicherzustellen, dass durch Differenzrechnung die unterdrückten Ergebnisse nicht errechnet werden können, müssen weitere Tabellenfelder gesperrt werden.

1) ohne Umsatzsteuer

1

Appendix 4: GDP in 2005

Statistisches Landesamt des Freistaates Sachsen

teuerbarer Umsatz[1] im Freistaat Sachsen für ausgewählte Kreise und Wirtschaftszweige

uelle: Umsatzsteuerstatistik 2004
nfrage von Leibnitz-Institut für Länderkunde Leipzig vom 12.12.2004

WZ93	14 Sachsen	darunter 14365 Leipzig, Stadt	14374 Delitzsch	14379 Leipziger Land	14383 Muldentalkreis
	Steuerbarer Umsatz[1] in 1 000 €				
alle Wirtschaftszweige	**90.848.112**	**14.462.119**	**1.962.831**	**1.883.833**	**2.043.119**
DB17 Textilgewerbe	840.295	9.472	.	.	.
DB171 Spinnstoffaufbereitung usw.	68.518	.	-	-	.
DB172 Weberei	146.962	-	.	.	-
DB173 Textilveredlung	74.994	.	-	-	-
DB174 Herst. v. konfektion. Textilw.	115.581	.	.	.	.
DB175 Sonstiges Textilgewerbe	225.958	466	.	.	.
DB176 Herst. v. gewirk. u. gest. St	162.597	.	-	-	-
DB177 Herst v gewirk. u. gest. FE	44.686	-	-	-	-
DB18 Bekleidungsgewerbe	175.268	1.588	.	.	.
DB181 Herst. v. Lederbekleidung	.	.	-	-	.
DB182 Herst. v. Bekleidung	170.243	.	-	.	.
DB183 Zuricht. u. Färben von Fell	.	.	.	.	.
DC19 Ledergewerbe	.	1.184	.	-	.
DE221 Verlagsgewerbe	492.912	.	.	.	.
DE223 Vervielf. v. bespielten Tontr.	2.476	.	-	.	.
DL300 Herst. v. Büromaschinen usw.	65.228	2.663	.	.	.
DL313 Herst. v. isolierten Kabeln	60.465	.	.	.	-
DL321 Herst. v. elektron. Bauelement	1.835.860	.	-	.	-
DL322 Herst. v. nachrichtentech Ger.	101.741	2.461	.	.	.
DL323 Herst. v. Rundf.- u. Fern.ger.	43.759	.	.	.	.
DL332 Herst. v. Meßinstrumenten usw.	203.185	7.627	.	.	.
DL333 Herst. v. industrie. Prozeßst.	45.835	.	-	.	-
GA524 Sonstiger Facheinzelhandel	3.005.555	319.014	128.630	68.414	88.865
JA65 Kreditgewerbe	117.227	14.773	.	.	.
JA66 Versicherungsgewerbe	-	-	-	-	-
JA67 Kredit-u.Versicherungshilfsgew	1.758.402	1.717.686	.	.	.
KA72 Datenverarbeitung u.Datenbank.	1.179.733	414.273	.	12.521	.
KA73 Forschung u.Entwicklung	1.475.415	26.538	.	381	.
KA741 Beratungsunternehmen	1.703.035	385.243	20.126	68.452	28.681
KA742 Architektur- und Ingenieurbüro	1.960.334	252.595	20.442	34.608	57.348
KA743 Tech., physik. u. chem. Unter	134.547	9.018	.	7.340	.
KA744 Werbung	333.800	109.336	7.641	3.610	4.538
KA745 Gewerbsm. Verm. v. Arbk.	175.556	34.029	.	.	5.391
KA748 Erbring. v. so. Dienstleist.	2.172.274	212.317	9.968	15.382	14.224
OA92 Kultur.Sport u.Unterhaltung	1.038.997	301.641	.	12.152	11.597
OA921 Film- und Videofilmherstellung	106.970	77.459	520	.	.
OA922 Hörfunk- und Fernsehagenturen	141.786	.	-	.	.
OA923 Erbring. v. so. kultur. Leist.	181.102	36.143	2.532	4.150	2.474
OA924 Korrespondenz- u. Nachrichten.	23.833	8.989	.	760	1.460
OA925 Bibliotheken, Archive, Museen	21.517	.	-	-	.
OA927 Erb. v. so. Unterh.Dienstl.	450.236	40.257	2.797	2.979	4.172

Geheimgehaltene Daten

1) ohne Umsatzsteuer

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