



CENTRE FOR ANALYSIS OF SOCIAL EXCLUSION An ESRC Research Centre

Bremen City Report

By Jörg Plöger

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Preface

Europe is a continent of cities with a remarkable history of cultural inspiration, wealth creation, social and political dynamism. But in the late-20th century, many former industrial cities entered a period of steep decline, losing most of their manufacturing jobs and many of their economic functions. Populations declined and wealthier suburbs outstripped the declining inner cities that had housed the "engines of the world" and now housed some of the greatest concentrations of poverty. The US experienced even more extreme decline.

The idea of Weak Market Cities was born at the second UK Government conference on an Urban Renaissance, hosted by Manchester in 2002. European and American city leaders debated the changing fortunes and prospects of former industrial cities. The pressures of growth and sprawl were counterbalanced with inner urban depopulation and decay; the new skills needed for the new "knowledge" and "service" economy were contrasted with high levels of worklessness and poor schools. Cities now house the majority and fastest growing share of the world's expanding population, and they are on a treadmill of physical pressure, social disorder, and economic insecurity.

The London School of Economics' Centre for Analysis of Social Exclusion (CASE) with the Brookings Metropolitan Institute developed a programme to uncover the problems besetting such cities, the recovery measures under way and their impact. Generously funded by the Joseph Rowntree Foundation, CASE researchers identified seven cities across Europe, embarking on impressive recovery actions to reverse decline. We wanted to establish the common ground and differences between a group of comparable cities, exploring their progress and ongoing challenges. Seven cities in five countries became partners in our work: Bremen, Saint-Étienne, Leipzig, Torino, Bilbao, Sheffield and Belfast. The five countries – Germany, Italy, France, Spain and the UK – represent nearly two thirds of the EU's population.

All the cities had four common characteristics: a major industrial and manufacturing history; severe loss of these industries and related jobs; population outflow; a crisis of leadership, economic viability and inward investment. We rooted our study in the actual experience of cities, based on visits, interviews, historical and current local reports. In documenting what we found, we looked for patterns of change and common lessons that might be more widely applicable.

We recognised that the wealth of detailed experience, lived out by local residents, actors and organisations in each particular place, should be captured in some way. Therefore we are pleased to present reports from each of the cities as working papers, documenting what we have found so far and inviting further evidence, comment and debate. The story is both dramatic and encouraging everywhere. But it is also full of uncertainty and only tenuous conclusions are possible. It would be premature to forecast the future trajectory of any of the seven cities.

The seven city reports in this series are seen by us and our city reformer colleagues as work in progress. We hope that students, practitioners, urban researchers and policy makers will find them useful as case studies

and will feed in ideas, reactions and any corrections to the research team. We plan to present a clear overview of how cities facing such acute problems are faring in 2008.

I warmly thank our researchers, Jörg Plöger and Astrid Winkler, for the sheer scale of the undertaking and the immensely detailed work involved in collecting ground-level evidence in the languages of the country and writing up the reports. Sharing their learning through the reports will help many to appreciate the spirited comeback of cities. For as the Mayor of Saint-Étienne argues: "Very often the soul of the city is stronger than the industrial disasters, which drag it down, make it wobble and threaten to wipe it out." (Michel Thiollière, 2007)

Anne Power CASE 26th October, 2007

Acknowledgements

This report on the city of Bremen is based on local field visits, official and local reports, European Union evidence and discussions with many local actors. We would like to thank all the people who have helped us in preparing this report, particularly colleagues in Bremen, the EU, CASE and JRF. Anna Tamas, Nicola Serle, Laura Lane and the LSE Design Unit prepared the report for publication and we gratefully acknowledge their help. We accept full responsibility for any mistakes, inaccuracies or misunderstandings of complex and fast-changing local events. The report reflects work in progress and we would be glad to receive additional information and alternative views on our work. For more information about the programme, please contact Nicola Serle at n.serle@lse.ac.uk.

CITY CONTEXT

Bremen is located in North West Germany on the river Weser, which reaches the North Sea some 60 kilometres downriver from Bremen (see Fig. 1). For historic reasons, the city of Bremen and its downriver sister-city of Bremerhaven form the city-state of Bremen, conferring regional government powers to the city-state within the German federal system (Bahrenberg, 1998). This structure, instituted after World War II, established 13 regional states and three city-states (Berlin, Hamburg and Bremen). The city-state of Bremen is governed by a Senate with legislative powers bestowed on their *Bürgerschaft* (parliament).

The city-state has a population of 665,000 (Statistisches Landesamt, 2006). The city of Bremen with 548,000 inhabitants is Germany's tenth largest city and the second largest in Northern Germany after Hamburg. Bremerhaven has a population of 117,000. In this report we focus mainly on the city of Bremen. Where necessary, we will distinguish clearly between city-state and city level.

Bremen's urban development and economic history is closely related to its function as a major international port. Its harbour is the second largest in Germany, fourth in Europe, and twenty-second worldwide (www.geohive.com). The main modern port activities are now concentrated in Bremerhaven. In the early 20th century Bremen also developed into an important industrial city.



Fig. 1: Germany, location of Bremen

Source: Spiegel online (http://service.spiegel.de/digas/servlet/jahrbuch?L=DEU)

The origins of Bremen can be traced back to settlements in the 1st century AD. Nevertheless, urban development was slow until the 19th century. Harbour and trade-related activities were the main economic functions. As with Hamburg, the development of Bremen's harbour activities was shaped by its location at a ford on a navigable river with easy access to the sea. In the 13th and 14th century, Bremen was an intermittent member of the prospering Hanseatic League (*Hanse*), an important late-medieval trade union with its economic centre in the Baltic Sea region. As a peripheral member, Bremen often pursued its own interests. As a consequence, the city was banned from the *Hanse* several times.

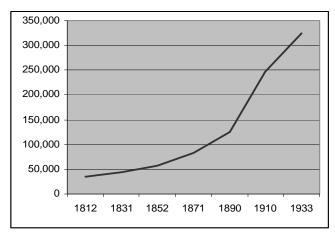
As with other harbour cities, Bremen was constantly forced to adapt to new technologies along with the changing requirements of shipping and international ports. When its harbour was threatened by the increasing silting of the river Weser in the early 17th century, an artificial harbour was built nearer the sea, in the village of Vegesack, north of Bremen. From this period, Bremen also began to emerge as a city-state, representing its own interests and defending its autonomy with more confidence. After the Napoleonic occupation in the early 19th century, Bremen managed to remain a relatively independent associate in the new German Confederation. After the foundation of a united Germany in 1871, Bremen was formally recognised as a city-state with the official title of 'Free and Hanseatic city of Bremen'.

Similarly to other German cities, Bremen experienced a rapid growth in population from the final quarter of the 19th century. This was fuelled by industrialisation and booming overseas trade. The population had passed the 100,000 mark by 1880, and then reached 200,000 less than three decades later, and nearly 350,000 by 1930 (see Figure 3). The growth in population and demand for housing translated into an enormous spread of the built-up area and the transformation of the medieval city. Figure 2 shows the extension of Bremen at the end of the medieval era and at the beginning of the 20th century.

Fig. 2: Bremen, development of built-up area (around 1500 and 1900)

Source: Bremen Atlas, 2006

Fig. 3: Bremen: Population development (1812-1933)



Source: Statistisches Landesamt Bremen (online)

The development of the city was shaped by distinctive characteristics. Its special political and legislative status – as an independent city-state – gave it a high degree of sovereignty from the 17th century. The harbour and trading functions of the city were also key. These two characteristics are shown in the two columns of Box 1.

Box 1: Bremen - Key stages of urban development to 1950

General historical events		Harbour- and trade-related events	
> 1 st c.	First settlements		
788	Diocese of Bremen, founded by Charlemagne	Early medieval	First commercial activities
13 th c.	Liberation from church rule	1260 / 1358	Member of the Hanseatic League (Hanse)
1646	Following the Thirty Years War, Bremen became recognised as a 'Free Imperial city'	1619-1623	First artificial harbour built in Vegesack
1806	During the Napoleonic occupation and dissolution of the German Empire, Bremen receives the title of 'Sovereign Free State'	1827	Foundation of Bremerhaven to guarantee future of harbour function
1871	Becomes part of new German Empire, receives title 'Free Hanseatic City'	1888	Integration into German tariff union; construction of new harbour and port facilities (e.g. Overseas City)
1870s	Rapid population growth due to industrialisation	1887-1894	Dredging the river Weser
1939-1945	World War II, severe bomb damage	1939-1945	Port badly damaged during war
1947 / 1949	The new German constitution establishes city-state of Bremen (incl. Bremerhaven) as one of the new German <i>Länder</i>	Post-WW II	Bremen serves as port for the American allies during post-war period

Leading figures in Bremen were drawn mainly from influential commercial elites, and the functioning of the harbour was crucial to their economic interests (Fig. 4). From the early 19th century, they were pressing for constant remodelling and expansion of the harbours (Taubmann, 1999). The Weser was modified in the late 19th century, mostly through dredging, and a key decision was made in 1827 to purchase land from the neighbouring Kingdom of Hannover some 60 kilometres downriver at the river mouth. It was here that, in 1827, Bremen founded the town of Bremerhaven and built a new harbour to guarantee larger ship access to port and trade facilities (Belina, 2001).

Fig. 4: Bremen, historic merchant buildings



Note: All photos by J. Plöger unless stated otherwise

Figure 5 shows the city of Bremen as it has evolved. In the centre is the historic City, surrounded by the river Weser to the west, and a park which has been developed along the former medieval defences to the east. The late 19th century urban expansion is visible to the far right, with the train station and some office buildings. The left bank of the river is occupied by industries and now gentrified former working-class areas.

Fig. 5: Bremen, aerial view of city centre



Source: Stadt Bremen

Despite the new seaport at Bremerhaven, harbour activities continued to be important in Bremen. In 1888, the large, modern Overseas Harbour was built just north of the city. With this new harbour, Bremen was able to respond to advances in shipping technologies as well as create a free trade zone, outside the tariff union of the new German nation-state founded in 1871. Bremen, and especially Bremerhaven, played an important role as ports for large scale European emigration to the American continent. The new Emigration Museum on Bremerhaven's redeveloped waterfront is a reminder of the millions of emigrants who passed through the port, especially in the late 19th and early 20th century. Bremen still has several harbours, and though most modern container facilities are located in Bremerhaven, most bulk cargoes are still shipped to and from the harbours in Bremen.

During the 20th century, Bremen's economic base gradually shifted from trade and harbour development towards industrial activities (Lange, 2005). Heavy industrialisation reached Bremen only a few years before World War I, but it soon emerged as a major industrial city. Shipbuilding was the most important sector, but automobile and airplane production developed quickly. In the 1920s and 1930s, the city became a significant centre for the arms industry (e.g. war ships, weapons, warplanes, transporters). Both the harbour and its industries made Bremen a major target for air raids during World War II, destroying or damaging large parts of its harbours.

After the war, Germany was divided into allied occupation zones. Bremen became an American enclave in British-occupied Northern Germany because the Americans required the port for the movement of troops and goods – a decision that helped to secure its city-state status in the new federal structure of Germany. Industry was the driving force of Bremen's economy during the post-war boom of the 1950s and 1960s. New industrial sectors emerged, such as machine and engineering industries. The food processing sector also became important during the 1960s. Nevertheless, shipbuilding remained a key industrial sector until the 1970s.

2. CRISIS

The world economy entered a phase of deep recession after the Oil Crisis in 1973. The economies in the industrialised countries underwent massive processes of economic restructuring, shifting from Fordist to Post-Fordist modes of production. Although Bremen's economy proved fairly resilient at first, it entered the **crisis** in the early 1980s (Wauschkuhn, 1998).

For most people in Bremen, the crisis was closely associated with the collapse of its large shipbuilding companies. The city's largest employer, the shipbuilding company AG Weser, founded in 1843, collapsed in 1983. It had employed 16,000 workers at its peak. Approximately 10,000 jobs were lost during the first shipbuilding crisis at AG Weser and supplying industries (R. Imholze, interview). In addition to global restructuring processes, bad management decisions like the focus on the construction of super tankers shown in Figure 6, were blamed for the collapse. More than a decade later, in 1997, the second largest shipbuilding company, Bremer Vulkan AG, founded in 1805, collapsed.. During this last crisis of the sector another 8,000 shipbuilding jobs were lost at the company and suppliers (R. Imholze, interview).



Fig. 6: Bremen, AG Weser shipbuilding yard

Source: http://supertankers.topcities.com/part-1/id395.htm

For a 'harbour city', the loss of its most symbolic industry was a serious blow, but this was only the tip of the iceberg. Further job losses were caused by the restructuring and increasing mechanisation of harbour-related activities and other industrial sectors (Prognos, 2002). However, some of the job losses were compensated by the creation of new industrial jobs in the Mercedes-Benz plant, which opened in 1979. These helped to alleviate the economic and social crisis, as skilled workers were able to find new employment relatively easily. Semi and unskilled harbour workers, on the other hand, found it very difficult to re-enter the labour market. The number of

harbour workers fell from more than 9,000 in 1966 to fewer than 4,000 in 1985 (Belina, 2001:18). The loss of low-skilled work was felt especially in the traditional working-class neighbourhoods located close to the old harbours. It now became obvious that the 'old' economic base was disappearing rapidly, with no alternative yet in sight (G. Warsewa, interview). The overall share of jobs in manufacturing dropped from 33% in 1970 to 19% in 2005 (BAW, Peters, 2005:69). The arms and defence industries were also seriously affected, especially after the political changes in Europe following the collapse of the Soviet Bloc in 1989. Figure 7 illustrates the relative decline in manufacturing and the concomitant rise in service employment for the city-state.

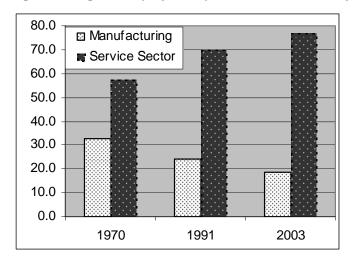


Fig. 7: Change of employment per sector, Bremen city-state (1970-2003)

Sources: Statistisches Landesamt Bremen, BAW

During the 1960s and 1970s, industry had contributed most to the local economy. As a consequence of industrial decline and economic restructuring, trade and international transport, once more, became the most important economic sectors in Bremen in the 1980s (Lange, 2005). But the harbour economy was greatly debilitated by the failure of Bremen to adapt swiftly enough to the new requirements of international shipping, especially containerisation. Although the first container from Europe had been shipped from Bremerhaven in 1966, slow investment in container facilities to replace the restricted capacity of the river harbours led to a loss of market-share to competitor ports in Europe.

Although the process of deindustrialisation continued throughout most of the 1990s, the crisis was worst around the mid-1980s. In only five years, from 1980 to 1985, unemployment jumped from 5% to 15%. In both, Bremen and, particularly, Bremerhaven the unemployment rates were almost double the West German average. In Bremerhaven, declining economic sectors, such as deep-sea fishing, fish-processing and shipbuilding pushed the unemployment rate to almost 20% in 2004, one of the highest rates for any West German city. Figure 8 shows the steep rises in unemployment in the 1980s, contrasting the German average with the rate for the state of Bremen and for the two cities of Bremen and Bremerhaven.

20.0 Bremen (city) 18.0 Bremerhaven 16.0 (city) 14.0 Bremen (federal state) 12.0 Germany 10.0 8.0 6.0 4.0 2.0 0.0 1970 1975 1980 1985 1990 1995 2000 2004

Fig. 8: Unemployment rates for Bremen and Germany (1970-2004)

Source: Stat. Landesamt Bremen, 2006

Note: Unemployment rate for Germany only based on West German figures until 1990

After only a few years, this loss of employment was matched by population decline. After a reaching its peak around 1970, Bremen's population fell to its lowest level in 1987, having lost 50,000 inhabitants (see Fig. 9). Bremerhaven experienced even more dramatic population decline. In Bremen, most of the loss was not caused not migration to more dynamic regions, as for example in most East German cities, but by suburbanisation, natural population decline due to low birth rates, and the return of many 'guest workers' to their home countries.

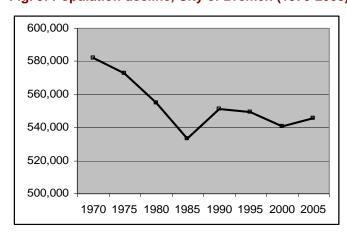


Fig. 9: Population decline, City of Bremen (1970-2005)

Source: Statistisches Landesamt Bremen, 2006

Certain areas of the city bore the brunt of the crisis, as did specific social groups: low-skilled; elderly people; and migrant workers. These groups became increasingly excluded from the labour market, as the growing service sector did not supply sufficient new low-skill jobs. The labour market was also deregulated and there was a shift in low-paid jobs towards less-secure employment and more part-time working. This trend is shown in Figure 10. Traditional working-class areas, previously close to major employment sectors, such as Gröpelingen or Walle, suffered most severely. In addition, some of the large peripheral housing estates, such

as Osterholz-Tenever, became 'problem areas' as they accumulated poorer households. This is a particular problem that we will be exploring in the next phase of our work.

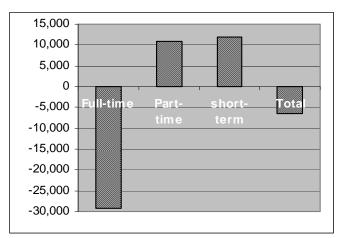


Fig. 10: Changing employment conditions, Bremen city-state (1994-2004)

Source: Peters (2005); Data: Bundesagentur für Arbeit, Stat. Landesamt Bremen Note: short-term employment for 1999-2004 only

As a major international seaport, Bremen fulfils functions from which the rest of the country benefits and which are in the national interest. Nevertheless, during the urban crisis, the city came to face increasing budgetary pressures. As the smallest city-state, Bremen struggles to balance its budget as required of all *Länder* by the federal constitution. It does receive financial compensation through the federal equalisation scheme, which transfers compensatory payments from 'rich' to 'poor' *Länder*. However, its precarious financial situation was exacerbated by the reform of the German tax system in 1969 (R. Baumheier, interview). With the reform, taxes began to be collected from the municipality of people's residence rather than of their workplace. This shift privileges suburban municipalities surrounding larger cities, which generally have more affluent households (Bahrenberg, 1999; Mönnich, 2005). Despite this reduced tax revenue, the core city still had to maintain its functions and services, such as hospitals, transport infrastructure, universities, museums, and so on. In addition, the economic crisis and its social consequences forced Bremen to spend an increasing proportion of its budget on the provision of social services, even as its tax base shrank considerably. Unlike Leipzig, our other German case study, where the city was able to incorporate surrounding suburban municipalities, this is not an option for Bremen. This would cut across regional jurisdictions, because the surrounding municipalities belong to another *Land*.

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The richer German states (especially in Southern Germany) argue against the equalisation scheme. The whole system is currently under discussion. A decision is expected in 2008.

3. RECOVERY: ACTION TAKEN

3.1 Political turning points

During the post-war period, Bremen was run exclusively by the centre-left Social Democratic Party (SPD). Bremen is the only *Land* where the SPD has always been the strongest political party. In 1979, a Green Party first entered a regional parliament in Bremen. Following the 1991 elections, the SPD, while remaining the strongest political party, was forced to form coalitions and therefore to make political compromises. The first coalition was established with the smaller liberal Free Democratic Party (FDP) and the Green Party. Although the practical results of the new coalition were small, this transition phase provided a useful 'moratorium' that enabled debates about the future direction of urban politics (G. Warsewa, interview). This coalition clashed among other issues over proposed development zones and caused the breakdown of the coalition before it had completed its electoral term in 1995. Between 1995 and 2007, Bremen has then been governed by a coalition of the two largest parties, SPD and the centre-right Christian Democrats (CDU). During this latter period, much of the substantive recovery action was undertaken. Figure 11 shows election outcomes for political parties since 1983. After the 2007 election, the SPD formed a governing coalition with the Green Party.

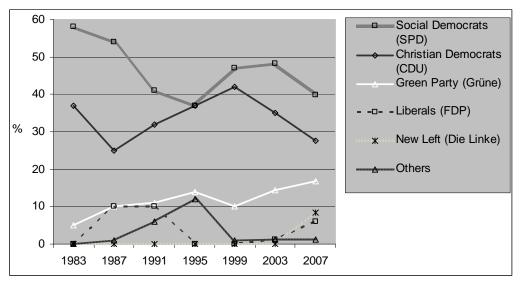


Fig. 11: Election results: Share of parliament seats, Bremen city-state (1983-2007)

Source: Spiegel online

3.2 Bremen's innovation-based approach

Recovery efforts in Bremen began in the early 1980s, as the job and population losses of the city accelerated. These efforts usually involved a project-based approach, linked to the physical upgrading of key areas. This included the redevelopment and remodelling of redundant industrial and harbour areas, the renovation and revitalisation of the city centre and the development of new business parks to attract new jobs. Bremen lighted upon a distinctive focus within its recovery strategies. This needs to be understood as it has made a significant contribution to the successful reorientation of the city's economy. Policy, research and public investment were strongly geared towards innovation and high technology from as early as the 1980s.

Economic Policy Action Plan

At the peak of the crisis, leading members of the city government recognised the need for a drastic reorientation of the city's approach to economic development. It was clear to city leaders that economic restructuring was in full swing and that the process of decline could be slowed down through public subsidies protecting less competitive industries but could certainly not be stopped, even less reversed. Politically, the idea of cutting subsidies and reorienting economic policy was hotly contested in Bremen where the governing Social Democratic Party had strong traditional links to manual workers and trade unions.

The outcome of the intense political problems posed by the crisis was a consensus that the city had to reposition itself. This 'change of path' was to be achieved by encouraging the emergence of a new economic base which could take on future challenges (G. Warsewa, IAW). The cornerstone of the new approach and the first coherent attempt at positive economic restructuring within the city was the Economic Policy Action Plan, or Wirtschaftspolitisches Aktionsprogramm (WAP), which began in 1984. The Action Plan's main objective was to stimulate Bremen's economic transformation from a 'harbour and industrial city' to a modern 'city of science'. The Bremen Economic Research Institute (BAW) had been commissioned by the city to assess the impact of regional structural change and was very influential in the development of new strategic approaches. The Action Plan had two main programmes:

- Restructuring Bremen's scientific landscape: It was argued that, with a different skills profile oriented more towards new economic sectors, the university could function as an incubator for economic spin-offs. With education being a regional responsibility in Germany, the city-state status enabled these policies. In addition, efforts were made to improve the scientific knowledge-base of the city by attracting specific highly regarded non-university research institutes.²
- Strengthening the regional economic base: The city decided to provide assistance to selected wellestablished economic sectors based on advanced technological developments, such as aerospace and aircraft production, automobile production, maritime and logistics services. The plan aimed to establish links between academic institutions and local and regional businesses in order to transfer and apply knowledge.

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In Germany, this pattern of publicly funded research institutes outside government or university structures is common, e.g. Max Planck Institute.

The WAP offered significant investment opportunities (Prognos, 2002). It was mainly funded by the *Land* of Bremen, supplemented by additional EU money (Objective II). In 1994, the WAP was integrated into the large government-backed Special Investment Programme.

Special Investment Programme

The Special Investment Programme, or *Investitionssonderprogramm* (ISP), offered an even greater opportunity to redirect the economic structure of the city-state to meet new requirements. Its implementation was supported by substantial financial aid from the federal government. These funds were granted after the city won its claim in the German Constitutional Court at Karlsruhe in 1991, based on the argument that Bremen was penalised by the reformed taxation system, while still providing key functions required by the federal government. Bremen received a total of about €9 billion in two stages (Prognos, 2002; Wauschkuhn, 1998).

Rather than following a strategy of simple debt redemption to straighten up its negative financial legacy, Bremen secured the agreement of the federal government that the money saved on interest payments could be used for a strategic large-scale investment programme. A total of around €2.6 billion of the Special Investment Programme was dedicated to funding large-scale projects, to facilitate a more varied and up-to-date economic framework for the city and to establish Bremen as a competitive node in the European urban and regional network. Figure 12 shows the four main areas of activity that were financed. The research and innovation area and the industrial and office park investment were a continuation of what had been initiated by the WAP in the 1980s. The first new area of activity was investment in the transport infrastructure, closely related to the development of new business sites. The second new area was intended to increase Bremen's potential as a tourist magnet, through the revitalisation of the inner-city and investment in tourist attractions, conference and entertainment projects.

Fig. 12: Special Investment Programme: main areas of activity

Activity	Examples of funded projects	Investment (in million Eur	os)
Research, innovation and technology	New research institutes; research facilities; transformed university departments; links to new businesses		653
Development of new industrial and office parks	Airport City, Logistics Centre, Technology Park, Overseas City	Business parks:	~ 670
Traffic-related projects	Transport infrastructure for new employment areas; harbour and airport investments; new tramlines	Traffic infrastructure:	~ 460
Tourism-related projects – strengthening the centre city	e.g. tourism, Space Park, events / congresses, city centre	Urban revitalisation: City-centre (retail, tourism): Suprastructure, events: Total: 579	201 205 172
Other spending			293
Total			2,612

Source: Prognos, 2002

3.3 Delivering recovery projects

Implementing the strategy to provide attractive areas for office and industrial (re)location involved modernising existing areas, such as Airport City, redeveloping brownfield and dockland sites, such as Overseas City, and developing new strategic sites, such as the Technology Park. Figure 13 shows the location of the major business and industrial areas in Bremen.

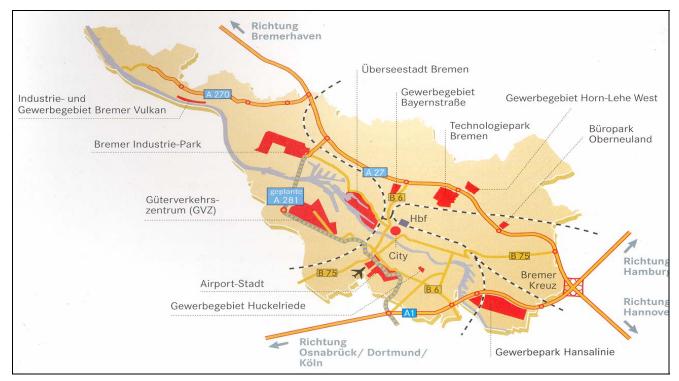


Fig. 13: Location of main business and industrial parks, City of Bremen

Source: BAW, 2005

In order to attract inward investment, the City of Bremen founded an investment agency, Bremer Investitionsgesellschaft (B.I.G.), in 1998. Its main objective is to promote the new business parks and urban regeneration projects. Its strategic orientation is decided by the Economic and Harbour Departments.

A major investor of these new developments was the European Union. The state of Bremen has been receiving Objective II regional funding from the EU since 1994. This programme identifies two main priorities: innovation and knowledge; and strengthening and upgrading urban residential and economic areas (Wauschkuhn, 1998; Stadt Bremen, 2004). In the first funding period (1994-1999), €133m was available and used to support the following activities: environmental protection (44%); strengthening the service sector (35%); and diversification of the industrial sector (20%) (Stadt Bremen, 2004). The focus was on overcoming industrial decline and adapting to change. During the second funding period (2000-2006), the funds available were increased to €226m. More than half was dedicated to strengthening the service sector (57%), while the shares for both environmental protection (25%) and diversification of the industrial sector (9%) was reduced. A new theme – 'assistance for urban problem areas' – was added (8%). In the current period (2007-2013), Bremen will receive €142m of regional funding.

Between 1994 and 1999, Bremen also had access to funding from other EU programmes:

- RESIDER offers support for regions that suffered a crisis in the steel industry (€3.2m)
- KONVER II gives support for regions that depended on military and arms industries (€5.6m)
- PESCA supports regions suffering from declines in the fishing industry (€2.6m)

Below, we detail some of the key projects:

Technology Park University

The decision to develop a Technology Park was influenced by the success of the Silicon Valley in the US. In order to create the linking networks required for IT-based 'knowledge industries', an area was designated where scientific advances and regional businesses would be in close physical proximity. The site developed slowly with funding from the WAP. The first step was the creation of a business incubator, the Innovation and Technology Start-up Centre (BITZ), in 1986, which provided university graduates with the necessary offices and infrastructure to start their own businesses. This 'organic' approach proved so successful that it led to the decision in 1988 to develop the Technology Park itself on 75 hectares of land surrounding the university. The core aim was to stimulate cross-fertilisation between vital economic sectors and institutes of higher education. The real 'turbo-booster' for the Technology Park came with the Special Investment Programme (ISP) in the 1990s (W. Wilms, BAW). The ISP not only provided funding to develop the site, but also to strengthen the scientific base by investing more in university faculties and research institutes. Figure 14 shows the original business incubator and Figure 15 shows the university which is located in the immediate proximity.

Fig. 14: The 'incubator': BITZ innovation centre Fig. 15: The University, now 'embedded' in the Technology Park





Overseas City

Bremen recognised the potential for remodelling its waterfront relatively late compared with other European harbour cities. In the inner-city, both sides of the river have been redeveloped since the mid-1990s with ISP funding. But the large-scale harbour redevelopment project, Overseas City (Überseestadt), only began in 2001. A series of urban round tables on the future of this large area took place from 1998. The 217 hectare area is now set to become one of the largest waterfront development sites in Europe (see Fig. 16). It is estimated that the whole process will take up to 30 years (D. Kühling, interview). The project receives considerable public funding, particularly for land remediation and infrastructure such as the €40m tram line. A particular characteristic of the area is the mix of land uses: there are still some functioning food processing industries, such as Kellogg's; a new wholesale fruit and vegetable market has been located there; and old storage buildings have been restored for university, arts and office uses as well as up-market residential loft apartments (Fig. 17).



Fig. 16: Aerial view and model of Overseas City redevelopment site

Source: B.I.G. (official brochure)



Fig. 17: Restored and re-used former storage buildings

Airport City

The Airport City is a revitalised older business and industrial park, which gradually developed around the airport in the mid 20th century. By the 1980s, it had become very unattractive. In the 1990s, the 128 hectare area was re-named Airport City and attracted considerable funds through the ISP and €13 million of Objective 2 European regional funding for environmental protection and site rehabilitation (from 1992-1999). The revival is linked to the recent success of the aerospace industry, especially of the European Aeronautic Defence and Space Company (EADS) and its suppliers. The other main sector is aircraft production, which has a long tradition in Bremen, initiated by Focke and continued by Airbus today.

The logistics sector has also expanded around the airport. Airport City is now Bremen's largest business park with 13,500 employees in 450 companies (Meurer, 2005). The regional airport of Bremen, which is owned by the City of Bremen, is currently experiencing a considerable increase in passenger numbers since Ryan Air decided to make it one of their European hubs in 2007, offering flight connections to 17 destinations. The airport is close to the city centre, to which it is connected by a new tram service. The Airport City will be fully connected to the highway system in 2007. Normal street access to the area has been financed by central and regional governments as well as the Metro supermarket chain, which has a large store in the area.

3.4 City revitalisation and urban renewal

In the 1970s, the city of Bremen began to lose its role as a prime location for retail, office and residential uses, although the city centre still had 8,800 inhabitants. Local experts identified at least three drivers of decline (R. Imholze and M. Grewe-Wacker, interviews). First, residential and retail suburbanisation increased rapidly from the 1970s, meaning that the city centre now has to compete with massive shopping centres outside its boundaries.³ Second, from the 1970s, Bremen followed a polycentric model of land-use planning, giving intermediate centres equal status with the city centre. This was only reversed in 1992. Third, structural economic change undermined the harbour and trade-related businesses, making the old central port infrastructure obsolete. In the city centre, approximately 20,000 service sector jobs disappeared in the 1970s and 1980s, many related to harbour activities, such as logistics, trading, transportation, storage. Consequently many buildings fell into disuse, especially in the *Schlachte* area on the river Weser.

City centre revival did start in the 1990s as Bremen made considerable efforts to revitalise its central city areas. Some buildings in the city centre were awarded world heritage status by the UNESCO in 2004. The Special Investment Programme (ISP) funds offered a unique opportunity for major projects in this area. The following are some examples:

The Schlachte area involves redevelopment of the riverfront with new bars and restaurants, a modern
arts museum, public spaces and tourist appeal. The project received €20m of Objective 2 European
regional funding in 1989 and 1999.

-

Examples include the Dodenhof Shopping World (100,000m²) in Posthausen or the concentration of big-box retailers (e.g. Ikea) in Stuhr. In order to compete with the suburbs, suburban-style malls were developed inside the city's boundaries (e.g. the 120,000m² Weserpark).

- The Shopping district was upgraded because reports showed that Bremen was relatively weak in the retail index for a city of its size (R. Imholze and M. Grewe-Wacker, interviews). The main retail zone in the city centre was improved through a range of physical interventions.
- Landmark buildings were restored, including the modernisation and restoration of the Kunsthalle art gallery, the Goethe theatre, the Focke museum, the Town Hall, and others.
- The Stephani Quarter is currently developed on the northern edge of the city centre to foster a media cluster around the new offices of the regional broadcasting company.

3.5 Neighbourhood and housing renewal

Alongside the restoration of its centre, the city began reinvesting in its inner and outer neighbourhoods. Bremen's working-class history and long-run government by the Social Democrats meant that social issues were traditionally high on the city's political agenda. Still, the ongoing problems of guaranteeing a balanced budget forced the city-state to restructure its social policy. This involved a shift from the traditional Social Democratic approach, based on equalising living conditions regardless of socio-spatial inequalities, toward a more spatially-targeted approach. This implied linking funds to target the most disadvantaged and deprived neighbourhoods.

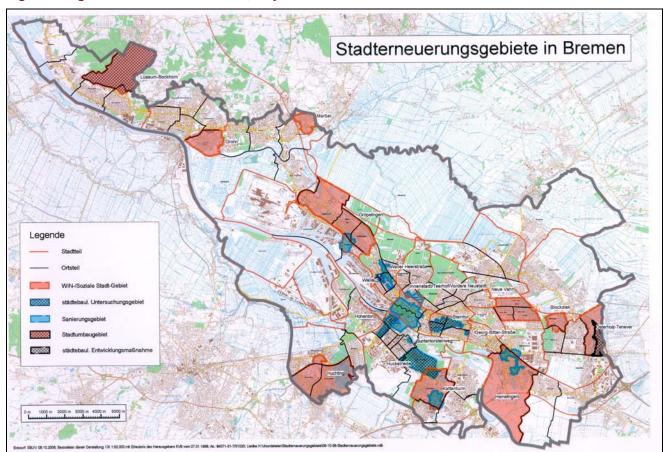


Fig. 18: Neighbourhood renewal areas, City of Bremen

Source: Stadt Bremen, 2006

Neighbourhood Renewal

The programme for neighbourhood and housing renewal in the target areas had three main elements, which could be supplemented by smaller-scale local programmes. These were: neighbourhood reinvestment; physical remodelling; restoration of historic neighbourhoods. Figure 18 shows the areas where neighbourhood programmes were implemented. To aid this, Bremen had access to considerable EU funding, particularly through URBAN (see Fig. 19).

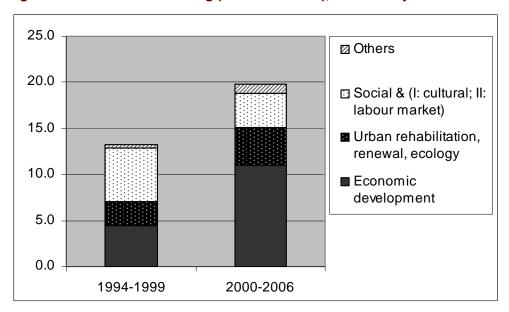


Fig. 19: URBAN I and II: Funding (in million Euros), Bremen city-state

Source: Land Bremen (online)

Two programmes with similar contents supported this: first, Bremen's own neighbourhood renewal programme WiN;⁴ second, the *Soziale Stadt* programme funded equally by the federal and regional governments.⁵ Bremen launched the WiN programme in 1998, developed from a previous programme targeting specific problems in large housing estates. It is jointly managed by the Department of Social Affairs and the Department of Construction, Environment and Transport. Its integrated approach towards social cohesion and empowerment in disadvantaged neighbourhoods meant that WiN anticipated most of the features of the federal-regional *Soziale Stadt* programme which started in 1999 (D. Haubold, interview). Bremen has now integrated the two programmes. Today, 10 areas in Bremen, and one additional area in Bremerhaven, receive funding from one of these programmes. Each project receives about €1.8m funding (Freie Hansestadt Bremen, 2003). Each targeted area is ranked high on the indices of multiple deprivations. A typical area included in the programme is for example Gröpelingen (see Fig. 20). This working-class neighbourhood was deeply affected by the collapse of the nearby AG Weser shipbuilding company. Its social structure is characterised by its high proportion of households from a migrant background and a high proportion of disadvantaged groups.

⁴ Abbreviation for Wohnen in Nachbarschaften" (Living in Neighbourhoods).

⁵ Full translation of official title: Neighbourhoods with specific needs – the socially integrative city.

Fig. 20: Neighbourhood of Gröpelingen, a focus of renewal interventions in Bremen



Physical remodelling

In 2002, the Federal Government launched the *Stadtumbau-Ost* programme to give East German cities an instrument of intervention to stabilise their housing markets, which had been affected by high vacancy rates and decay. While *Stadtumbau* means urban remodelling, the programme is most widely known for its emphasis on demolition of surplus, poor quality housing. It is run by the Federal Department of Construction and Territorial Planning and the Ministry of Transport, Construction and Urban Development.

Fig. 21: Demolition of housing in peripheral estate of Osterholz-Tenever



Alongside the acute problems of the Eastern Länder, a number of West German cities, notably in the Ruhr area, but also Bremen and Bremerhaven, experienced rising vacancy rates due to their rates of unemployment and population losses following industrial decline. A corresponding Stadtumbau programme was therefore designed for West Germany. Bremen actively lobbied for this because of its own housing problems (K. Stadler, interview). Stadtumbau-West has fewer funds and focuses more on finding innovative solutions to housing market problems. Sixteen cities are currently participating in the programme, including Bremen and Bremerhaven. In Bremen, the programme focuses especially on the large peripheral housing estate of Osterholz-Tenever, which developed multiple social problems due to mismanagement by new owners, inappropriate lettings policies for public housing and the increasing stigmatisation of the whole area (R. Schumann and Mr. Schweser, interviews). Figure 21 shows demolition of some the housing blocks in this area.

⁶ For more detailed information on the *Stadtumbau-Ost* programme see our City Report on Leipzig.

Social integration

Because of the growing social problems in declining housing areas, the physical investment programme was accompanied by social investment programmes. A major driver was the need to integrate residents from a migrant background. Like other industrial cities in West Germany, a relatively high proportion of Bremen's population comes from an ethnic-minority background. According to the official statistics, 13% of the city's inhabitants are foreigners, one third of whom are Turkish (Stat. Landesamt Bremen, *Bremen kleinräumig*, online). In addition, there are earlier immigrants who have acquired a German passport and resettlers from German ethnic backgrounds who have migrated from Eastern European countries. Many of these ethnic Germans speak very little German and have trouble integrating. By including all those from a migration background, the proportion of the city population which is from an ethnic-minority background increases to 27%. The composition of the ethnic minority population is approximately: 1/2 foreigners; 1/4 naturalised immigrants; and 1/4 ethnic German resettlers from Eastern Europe. Although most neighbourhoods are relatively mixed, there is a growing concentration of minorities in some areas, rising to over 60% in Osterholz-Tenever (see Fig. 22).

70 Naturalised Citizens 60 50 ■ Resettlers 40 ■ Foreigners 30 20 10 0 Germany Bremen Gröpelingen Osterholz-Tenever

Fig. 22: Percentage of persons with migration background, country, city-state and neighbourhood levels (2006)

Source: Statistisches Landesamt Bremen (online); Stat. Bundesamt; www.focus-migration.de

At the federal level, Germany's approach towards immigration and integration has been hesitant. Earlier policies have been criticised as complicated, lacking coherence and responding to popular opinion. Some policy instruments such as the 'Green Card' system for highly-skilled foreigners have failed in the past. In 2005, to address the problem, the Federal Government ratified a new immigration law. One of its objectives was to improve the integration of people from a migrant background. The post of Federal Migration Officer was created, directly responsible to the German Chancellor. Bremen, with its long tradition of progressive social policy and large numbers of residents from a migrant background, devised a city-based cross-departmental approach (R. Schmidt, interview). Box 2 shows the main events in the process of adjusting German and Bremen policy approaches towards immigration and integration. We will assess the impacts of this approach in our final report.

Box 2: Main steps towards integration of foreigners in Bremen

- 1979: The Office for Migrants was created as an autonomous actor outside of the direct control of public administration in Bremen. The position of the Commissioner for Foreigners (*Ausländerbeauftragter*) was created to run it.
- Late 1980s/early 1990s: The Department of Social Affairs was forced to redesign its policy due to the sharp increase in asylum seekers and immigrants of German ethnic origin (resettlers) from Eastern European countries.
- 1998: The federal coalition between Social-Democrats and the Green Party revisited the approach towards immigration and implemented several reforms, such as easier naturalisation process to secure German citizenship.
- 1999: The very poor school results of Bremen's pupils, especially those from a migrant background, were exposed in the OECD's PISA-study measuring educational achievements in schools across industrialised countries. This generated additional pressure for making concerted integration efforts.
- 2005: Bremen's cross-departmental strategy for integration shortlisted as best practice by the influential Bertelsmann Foundation. The strategy draws together funds from different existing sources such as WiN, Soziale Stadt, and EQUAL (EU).

4. WHAT HAS CHANGED: SIGNS OF RECOVERY?

4.1 Economic restructuring

The various efforts of the city have given rise to economic and physical changes now apparent in Bremen. From the 1970s, deindustrialisation involved both a slow wind-down in some sectors, such as food processing, and a dramatic decline and collapse in others, such as shipbuilding. Nevertheless, Bremen remains one of the country's major industrial cities. Although only Germany's tenth largest city, it has the fifth largest manufacturing workforce (Lange, 2005).

Below we give a brief overview of the surviving and new industrial sectors in Bremen.

- Food and beverages: This sector currently employs around 13,000. Major companies with local roots are beer distillers (Beck's), coffee processors (Jacobs, Eduscho, Melitta, HAG), and chocolate makers (Hachez, Feodora). Global market operations by multi-national companies have had a major impact on the processed food and drinks sector; with many important local producers being taken over, like Beck's, now part of the Imbev Group, Belgium, or Jacobs, now part of Kraft Foods, US.
- Automobile production: The decision by Daimler-Benz (now DaimlerChrysler) to build their new plant in Bremen in the late 1970s softened the worst impacts of deindustrialisation. Many suppliers have since located in the vicinity. Automobile production was not new to Bremen, for example Borgwart was based there in earlier decades. The whole automotive sector employs around 16,000, most of them at DaimlerChrysler, Bremen's largest employer.⁷
- Aircraft and aerospace: Bremen holds a leading position in aerospace, shown in the development of
 the European Aeronautic Defence and Space Company (EADS) and OHB Technology. It also plays a
 major role in aircraft manufacturing, for example with Airbus through EADS. The whole sector employs
 around 12,000 in Bremen and another 6,000 in the region (Tholen and Schekerka, 2003).⁸ The
 strength of this sector is also demonstrated by the success of the Airport City business park.
- Shipbuilding: Although the main employers have disappeared, some companies have managed to restructure and even prosper in market niches, such as the construction of special purpose ships.
- Armaments and Defence: While some military shipbuilding and truck production disappeared, some technology-intensive companies survived in new structures, for example OHB Technology and Atlas Electronics which jointly employ 2,500. After the post-Cold War decline of military production, most companies had to widen into civil production.⁹ The Fraunhofer research institute for Material Studies originates from an institute focussing on the study of armament applications.

The DaimlerChrysler plant, like the BMW plant in Leipzig, draws its workforce from a regional labour market. An estimated 80% of the workers do not live in Bremen, but in surrounding municipalities (R. Imholze, interview).

Problems in the parent company have recently forced EADS to reduce costs. This might cause the closure of one of the Airbus plants in the Bremen region.

For political and security reasons the activities of the defence sector are not very transparent.

Manufacturing decline was matched by growth in services such as health and education. Retail is another big growth area, as are advanced maritime services and high-level logistics based on technological innovation. Figure 23 sets out information on large employers based in Bremen.

Fig. 23: Selection of large employers, Bremen city-state (more than 1,000 employees)

Company	Economic sector	Harbour-related?	Founded (year)	Owned by	Employees
DaimlerChrysler	Car manufacturing	International export via B'haven	1979	DaimlerChrysler (German)	~ 15,000
Arcelor Bremen	Steelworks	Location in industrial harbour	1957	Arcelor (Luxemburg)	3,100
ThyssenKrupp Krause	Engineering (engines)		1950	Thyssen Krupp (German)	1,035
Atlas Electronics	Engineering (defence systems)	e.g. maritime electronics	~ 1900	Thyssen Krupp and EADS (European)	1,750 (mostly in Bremen)
BLG Logistics Group	Harbour-related services	Trading, logistics and storage	1877		6,140
Beluga Group	Harbour-related services	Shipping (special cargo)	1995		1,450 (worldwide)
Melchers	Harbour-related services	Shipping	1806		> 1,000 (worldwide)
Atlanta	Trading (fruit and vegetables)	Trading and storage	1902	Chiquita Brands International (US)	1,070 (in Germany)
Beck's and Co.	Food production (beer)	(export of products)	1873	InBev (Belgium)	1,500
Karl Könecke	Food production (meat products)		1928	Zur Mühlen Gruppe (German)	~ 1,300
Vitakraft	Food production (animal foods)		1867		1,380 (worldwide)
Nordsee (Bremerhaven)	Food production (fish and fast food products)	Originally yes; location near fishing port	1896	Kamps (German) and Nomura (Japanese)	~ 6,000 (mostly in Germany)
Frosta (Bremerhaven)	Food production (frozen food)	Originally yes; Location near fishing port	1905		1,170
Stadtwerke Bremen AG (SWB)	Energy		1854	Essent (Dutch) and EWE (German)	2,300 (in region)

Sources: company websites; City of Bremen; wikipedia

4.2 Impacts of innovation

Recent studies have tried to measure the impact of technology-focused investment on employment in Bremen. Figure 24 shows that employment in the technology sectors increased more than the German average between 1999 and 2004. The increase of employees in research and development is particularly striking.

Fig. 24: Indicators for innovation employment trends, Bremen city-state (1999-2004), in %

	Bremen (city-state)	Germany
Advanced technology	+2.8	+0.7
'Knowledge intensive' services	+3.2	+3.7
Research and Development	+7.2	+1.0
Employees with higher education degree	11.7	7.7

Source: Stenke and Wilms, 2006

Accurate assessment of the direct impact of the Strategic Investment Programme (ISP) on employment and investment in these sectors is difficult but indicators are positive. Figure 25 shows some of the ISP's impact.

Fig. 25: Employment and funding effects of the ISP in Bremen (until 2001)

Directly employed in ISP funded institutes	1,008
Indirectly employed (e.g. companies cooperating with ISP-funded units)	210 (regional)
New jobs in spin-offs (since 1997)	79
External funds acquired by all ISP funded units	38.9m
Private investment induced through cooperation with ISP-funded units	51.5m

Source: Prognos, 2002

Restructuring the university sector: The University of Bremen was founded in 1971. It belongs to the younger generation of higher education institutions created during the expansion of higher education under the Social Democratic government in the 1970s. Following the model of campus universities in the US, it was located outside the urban area, to the east of the city centre. It soon established a reputation for being left-wing with a strong focus on social sciences and humanities. Holding regional powers as a city-state, Bremen decided to shift its scientific focus in the 1980s. The main reason was the recognition that economic restructuring needed to be accompanied by a shift towards high-level technologies, engineering and natural sciences. New faculties were created and existing science faculties expanded in order to create stronger links between logistics, maritime sciences, aerospace and higher education, attracting off-shoots of renowned research institutes such as Fraunhofer, Max-Planck (both in Bremen) and Alfred-Wegener (Bremerhaven). The private International University of Bremen was founded in 1999. It was renamed Jacobs University in 2007, after receiving a €200m donation from the Jacobs Foundation, founded by an influential coffee family. In 2005, as a result of the investments made and their success, the Association of German Foundations and the

Ministry of Education awarded Bremen the title 'Centre of Excellence' for the performance of the six institutes of higher education. To the surprise of some, Bremen was named a 'City of Science' and voted among the Top Ten cities for higher education in the competition for 'elite university' status. External funding and the growing internationalisation of courses helped with this.

Technology Park: Bremen's Technology Park is now the third largest of its kind in Germany with 6,200 employees (Berlin-Adlershof with 12,000 employees and Dortmund with 8,000 employees are larger). Its success is closely linked to the ISP investments. Important technology-based companies from aerospace, aircraft, environmental or medical technologies have their offices on the site. The policy of only allowing companies with a technology-focus onto the site was relaxed when first development was slow, which explains the somewhat heterogeneous structure today. An attraction of the Technology Park for the wider public is the Universum Science Centre, an interactive museum with striking architecture, shown in Figure 26. With a ratio of 1:8, its balance between public and private investment is the lowest for all business/industrial parks in Bremen, indicating a high success rate (Prognos, 2002).



Fig. 26: Universum Science Centre, Technology Park Bremen

An especially rapid increase in employment occurred between 1999 and 2002, when the number of employees doubled to 6,200. This includes 1,700 scientific staff members at the University of Bremen, 600 employees in 14 research institutes, and 250 employees in 50 companies located in the start-up centre BITZ (Wilms, 2003). Figure 27 shows the steep rise in employment in the Technology Park. Approximately three-quarters of the 320 companies have relocated from other areas in Bremen. Only a minority of companies is from outside the region. Since 2002, far fewer new companies have located in the Park. This is due to a shortage of available space, political disagreements have stalled the plan to expand the area, and now available relocation options in other industrial and office parks, such as Overseas City, Airport City, and the City Centre.

7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 1991 1994 1999 2002

Fig. 27: Technology Park Bremen, employment (1991-2002)

Source: Wilms, 2003

Innovision 2010: In 2002, before the ISP funding ended in 2004, Bremen initiated the follow-on strategy, Innovision 2010, a cross-departmental strategic programme. With Objective 2 European funding focusing on innovation and knowledge in the most recent funding period (starting in 2007), key funding for the city has been secured up to 2013. Although the €200 million does not match the earlier ISP funding, it is still a significant commitment. One ambitious objective is to place Bremen in the top ten technology cities in Germany, drawing on seven economic clusters, including the traditionally strong aircraft and aerospace, logistics and maritime sectors, but also the newly formed TIME (telecom, IT, media and entertainment), environmental technologies, health technologies, and design sectors (S. Büssenschütt, interview). The move from 'Harbour City' to a 'City of Science' continues apace.

4.3 The weaker side of city recovery

The precarious and still unresolved budgetary situation of the state of Bremen threatens some components of the strategy, such as university development. It has been forced to cut its expenditure. Other activities have not blossomed in the way innovation has. A significant proportion of the ISP funds were invested in specific tourism and leisure projects, alongside the initiatives in innovation, technology, infrastructure and revitalisation of the city centre. These investments in purpose-built attractions have been much less successful. The Space Park project, a proposed entertainment centre, featuring aerospace technology, was located on the site of the former AG Weser shipyard in Gröpelingen. After about €180 million of public and €420 million of private had been invested, the project collapsed, before ever opening to the public. This may suggest the still halting recovery of more precarious areas. In 2007, the site was sold at a bargain price to an Irish investor who is planning another waterfront development. Another failure was the attempt to inaugurate a musical theatre. Bremen also applied to become Germany's European Capital of Culture in 2010, but lost the competition to Essen. These conspicuous blows to the city's efforts did not stop Bremen from sticking to its recovery trajectory, as earlier sections have shown.

4.4 Labour market changes

Over the 1990s Bremen has lost more jobs than it is gained, indicating that the transformation of the economy is not complete. Unemployment appears to have stagnated at a level above the German average since 1990. Nor is the decline over in Bremerhaven, where the unemployment rate reached an all-time high in 2004. This suggests that while Bremen has increased the provision of high technology jobs at one end of the economic spectrum, there may be long-term exclusion from employment options at the other end. The social inequalities generated by high unemployment lead to deprived areas with a concentration of social welfare dependency. The low-skilled sectors of the population have often not benefited from the economic restructuring and reorientation process. These workers have considerable difficulty in accessing the labour market (Landsberg and Wehling, 2006). Bremen has founded an employment and training agency, BAG (Bremer Arbeit GmbH), which is partly financed through the European Social Fund (ESF) to try and overcome these barriers.

4.5 A major challenge: The future of the city-state

One of the most crucial factors in Bremen's ability to achieve sustained urban recovery is finding a way out of its long-run budgetary problems and increasing debt. Even with generous aid from the federal government, after the successful constitutional case in 1992, Bremen was not able to control its chronic budget deficit. Its debts increased from €8 billion to a record €12 billion by 2005, making Bremen the most indebted German Land per inhabitant. The budget is therefore still unconstitutional. Due to the financial situation, most departments are not allowed to spend for most of the year and all departments are affected by efforts to cut costs. Without new financial aid, Bremen will face bankruptcy and its recovery process will be jeopardised.

In order to avoid this, while securing the ongoing recovery strategy, the city-state submitted a new constitutional claim. The hope for significant federal aid is much lower this time. One reason is the rejection in 2006 of a similar claim brought forward by Berlin, another city-state and the federal capital. Bremen officials believe that their arguments are better founded than Berlin's, but a decision is not expected before 2008 (R. Baumheier, interview). Predictions of the outcome vary significantly between no extra resources and receiving full federal aid. Even if successful, however, the new claim will not solve the underlying problem. The financial situation would only improve temporarily due to the taxation system which does not allow sufficiently for the special functions of city-states. The federal financial equalisation system is also being discussed, although experts do not expect radical changes to the structure (R. Baumheier, interview). There are also discussions about the reordering of the federal structure of North-West Germany. Bremen could for example become integrated into the *Land* of Lower Saxony. According to surveys, the population is not too worried about city-state status. Most interviewed city officials on the other hand were against such a solution, because, understandably, they argue that it would not solve the city's intrinsic problems and only marginally reduce public expenditure.

Another option to control the city budget involves greater privatisation of public functions, but this involves the city ceding some power over service provision to the private sector with its emphasis on profits. A name that often appears on top of the list of possible candidates for privatisation is the public housing company GEWOBA. Arguments produced against the sale include threats to social cohesion, quality of life, and housing

standards, as well as the bad experience with the privatisation of another public housing company, Bremische, which has already been sold on several times to different investors. For the moment, Bremen's budget problems are unresolved, and its future political and regional status remains a matter for ongoing discussion.

4.6 Regional and metropolitan cooperation

Meanwhile, the issue of regional cooperation has become more prominent. The federal state of Bremen and the surrounding state of Lower Saxony began a joint regional planning approach in the 1970s to coordinate large-scale developments such as the proposed deep-water harbour in Wilhelmshaven, the construction of a coastal highway and the location of the four Airbus plants in the region. Bremen is also discussing regional development issues with the booming area of Oldenburg to its south-west. Since 2002, Bremen has been part of a cooperative approach to regional planning issues with 35 adjacent municipalities, which mainly addresses conflicts between municipalities. Bremen's interest in metropolitan and regional cooperation is driven by:

- the desire to influence land-use decisions in surrounding municipalities, such as the location of largescale retailers;
- the ability to realise larger regional infrastructure projects; and
- the implementation of a metropolitan area strategy, for example with regional marketing.

Following discussions about competitive city-regions, the European Metropolitan Region of Bremen-Oldenburg emerged in 2005 (http://www.metropolregion-bremen-oldenburg.de/). With a population of 2.37 million, it is the smallest of the eleven Metropolitan Regions in Germany. Its main aim is to foster regional economic development, which defines as its key role promoting regional business through the Chambers of Commerce. These more informal and collaborative ventures should help city recovery.

4.7 Time line

The timeline below (see Fig. 28) shows the main events during Bremen's recent urban history which have led to decline and to recovery. Bremen's crisis reached its peak around the early 1980s, symbolised by closure of the AG Weser shipyard in 1983. The city's Economic Action Plan (WAP, 1984) gave incentives for adjustment to the new economic requirements and gave emphasis to technology and innovation. New political coalitions allowed for a more consensus-based approach to urban development from the early 1990s. Special financial aid from the federal government since 1994 enabled the Special Investment Programme accelerating urban regeneration. First successes were achieved in the late 1990s and urban experts date the turning-point in Bremen's fortunes around 1998-1999. Strategic interventions and programmes seemed to show positive results, but continuing recovery will depend on a healthier and more balanced budget.

Decision to develop modern Jade-Weser Begin of Overseas harbour with Lower City redevelopment Saxony WiN: Programme for deprived n'hoods 1st West German city Political turning Economic demolishing housing point: formation of development Start of Economic Urban new political coalition agency B.I.G. **Action Programme** Development Plan Met region Bremen officially recognised Lowest post-peak Successful constitutional Special investment Space Park claim: special financial population programme (ISP) Collapse of AG project failed aid enables ISP Weser shipyard Universities Collapse of Decision to develop Most severe labelled "centres Vulkan shipyard Technology Park crisis period for excellence" turning point 1980 1985 1990 1995 2000 2005 **Legend Key** moments Physical key moments Negative events Foundation of new agencies, partnerships

Fig. 28: Timeline of important events in Bremen since late 1970s

Concept and design: J. Plöger

CONCLUDING THOUGHTS

Since the 1990's, Bremen has without doubt been **recovering** from industrial decline. In comparison with other cities in our study, Bremen, possibly alongside Torino, seems to have recovered the most. This view was shared by all local interviewees. Although the smaller sister City of Bremerhaven is still showing decline on most indicators, the City of Bremen itself has successfully stopped population decline and there is some recent improvement in the employment situation. The economic restructuring is now well under-way. While the loss of manufacturing employment has not yet been matched by an equivalent growth in new employment, the number of service sector jobs is increasing more rapidly. There are, however, several factors which put a question mark over how the city will fare in the future, including indebtedness, increasing levels of social polarisation, and long-term durability of the innovation strategy. We briefly look at some of these issues below.

Being a **city-state**, which provides Bremen with municipal as well as regional powers, offers important advantages. The German federal system gives considerable power at the regional level, offering Bremen autonomy over spending and decision-making, a high degree of flexibility over how and where to implement federal and European programmes, such as *Soziale Stadt*, *Stadtumbau-West*, EFRE, and URBAN. It also gives Bremen a good channel for lobbying the federal government. On the other hand, the flaws in the German federal system directly result in the city's precarious financial situation, with high debt and budget deficits threatening the viability of the city.

Generous **federal aid** between 1994 and 2004 allowed Bremen to design an ambitious investment programme which kick-started or supported many important cornerstone projects in urban regeneration (Bahrenberg, 1998). Although the list of projects financed through the Special Investment Programmes includes high-profile failures, such as the Space Park, commentators still argue that the resources have generally been used well (Stenke and Wilms, 2006). However, Bremen will not have the same access to external aid in the future.

The strong focus on **innovation and knowledge** creation has brought the higher education sector closer to the local economy. The development of the Technology Park is one cornerstone of this strategy. At the same time, the university has been restructured with a stronger focus on natural, engineering and high-tech sciences. The science infrastructure was complemented by some renowned research institutes. This has facilitated the ongoing restructuring towards becoming a city of science.

The process of **economic restructuring** includes the development of attractive new or modernised business parks. Some of these areas are already very successful (e.g. Airport City, Technology Park), while others, such as the massive Overseas City waterfront redevelopment are only at an initial stage. As with other cities (e.g. Leipzig), economic development was complemented by the development of an integrated land-supply programme to allow flexible responses to new land demands.

The restructuring **from industrial towards service activities** has been profound but the city still has a significant industrial base. Existing companies often managed to adapt successfully by continuing and modernising older industrial traditions with a higher technology and innovation focus.

Although the decline of harbour activities has contributed to the urban employment crisis, Bremen has been able to establish itself as a **node in the global transport and cargo networks**, continuing with the maritime tradition without the 'hardware'. Harbour cities were constantly forced to adapt to new technologies affecting the transport infrastructure in order to secure their role in the long-run. They also benefit from the increase in international trade due to globalisation. Bremen is currently not only completing the new container terminal in Bremerhaven, which can host the largest generation of container ships, but is also investing jointly with surrounding Lower Saxony in the construction of Germany's only deep-water harbour in Wilhelmshaven (Jade-Weser Port). About one-third of all employment depends directly or indirectly on harbour-related activities (e.g. logistics, shipping, storage, trading). But competition among Europe's major ports is strong. Cities that do not manage to adapt their facilities quickly enough to the new requirements of this sector can easily lose market share. Therefore, in its role as city-state, Bremen is constantly lobbying the Federal Government to improve its transport infrastructure.¹⁰

Further investment went into the **revitalisation of the city centre** but a culture-driven regeneration around entertainment and tourism was not very successful. Several experts describe Bremen's **service sector** as underdeveloped, due to a lack of major company headquarters. The creative service sector is also underdeveloped.

Bremen seems to have a good basis for addressing future challenges, but **social exclusion** remains a serious concern of those who are not ready to fit the new job profiles, especially people from a migrant background, the long-term unemployed, and the low-skilled. Nevertheless, efforts are under way to reverse the social pressures in deprived neighbourhoods. There is a political consensus that urban social problems need special attention and therefore specific funding to overcome the worst effects of structural adjustment.

Considerable attention is given to a number of **deprived neighbourhoods**, both traditional inner-city working-class areas and large peripheral housing estates, focusing on confronting the concentration of disadvantage. The city's efforts have so far prevented the emergence of ghetto-like areas.

The **suburbanisation** of homes, jobs and retail, as well as the problems related to sprawl, have been on the agenda for a while. With many wealthier middle-class households living in and paying taxes in the suburbs, Bremen is left with expensive services and infrastructure. Bremen's efforts at cooperation with the whole

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The Senate for Economic Development and Harbours and the Chamber of Commerce have for example started a marketing campaign to convince the public of the necessity of completing the ring-road around Bremen. A major rail hub to support transport to and from the harbour has already been decided upon. Another decision includes deepening the river Weser in order to support the remaining upriver harbour activities in Bremen.

metropolitan region on larger issues and with single suburban municipalities on particular bilateral issues will be increasingly significant for the future of the city.

Overall Bremen is pulling away from its period of decline, but like all the cities in our study faces challenges of economic and social significance.

SOURCES

Interviewees

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Bibliography

Ausländerbeauftragte des Landes Bremen (2003) Integration und Zuwanderung. Entwicklungen im Land Bremen 2001/2003, Eine Zwischenbilanz.

Bahrenberg, G. (1998) Der Stadtstaat Bremen: zu klein und leistungsschwach für die Selbstständigkeit?, in *Informationen zur Raumentwicklung*, Heft 10, pp 687-694.

Bahrenberg, G. (1999) Bremen: Stadt – Stadtregion – Regionalstadt, in *Berichte zur deutschen Landeskunde*, vol 73, no 2/3, pp 245-267.

Baumheier, R. (2000) Kooperative Siedlungs- und Freiraumplanung in der Regio Unterweser, in *Raumforschung und Raumordnung*, vol 58, no 4, pp 337-342.

Baumheier, R. (2001) Region Bremen? Region Bremen! – Neue Ansätze regionaler Entwicklungsplanung im Raum Bremen/Niedersachsen, in *Neues Archiv für Niedersachsen*, vol 1, pp 43-60.

BAW Institut für regionale Wirtschaftsforschung (2005) Hafenareale als urbane Investitionsstandorte, Regionalwirtschaftliche Studien 21, Berlin.

BAW – Institut für regionale Wirtschaftsforschung GmbH (2005) "europaregion-nordwest.de", Konzeptstudie im Auftrag der Industrie- und Handelskammern.

Belina, B. (2001) Die Bremischen Häfen im Jahr 2050. Zur Zukunft der Häfen in der Stadt Bremen. Universität Bremen – Institut für Geographie, *Materialien und Manuskripte*, no 23.

Berlin-Institut für Bevölkerung und Entwicklung (2006) Die demographische Lage der Nation. Wie zukunftsfähig sind Deutschlands Regionen? Berlin/München, 2 Aufl.

Bertelsmann Stiftung (2005), Demographiebericht Bremen, www.aktion2050.de/wegweiser.

BMVBW/BBR (2004), Stadtumbau West, August 2004.

Industrie- und Handleskammer Bremerhaven and Handelskammer Bremen (2001), Statistischer Jahresbericht 2001.

Bremer Investitionsgesellschaft (B.I.G.) (2004) TechnologyPark Bremen - Area of Innovation.

Bremer Investitionsgesellschaft (B.I.G.) (2004) Airport-Stadt Bremen.

Bremer Investitionsgesellschaft (B.I.G.) (2004) Büro- und Gewerbestandorte in Bremen.

Bremer Investitionsgesellschaft (B.I.G.) (2004) Überseestadt Bremen. Projekte-Flächen-Nutzungskonzepte, *Map.*

Bremer Investitionsgesellschaft (B.I.G.) (2006) Überseestadt Bremen – Standort der Möglichkeiten. 2. Entwicklungsbericht, June 2006.

Bremerhavener Gesellschaft für Investitionsförderung und Stadtentwicklung mbH (BIS), Bremerhaven – Zukunft am Meer.

Bremerhavener Gesellschaft für Investitionsförderung und Stadtentwicklung mbH (BIS) (2005) Bremerhaven wächst am Meer. Umgestaltung der innerstädtischen Hafengebiete "Alter und Neuer Hafen" in Bremerhaven, Oktober 2005.

Bremische Gesellschaft für Stadterneuerung, Stadtentwicklung und Wohnungsbau mbH, Culture and economical development in deprived urban areas, *Conference report* (June 2001).

Franke, T. and Meyer, U. (2002), Bund-Länder-Programm Soziale Stadt. Programmbegleitung vor Ort im Modellgebiet Bremen-Gröpelingen. Endbericht 2002. *Deutsches Institut für Urbanistik*, June 2002.

Freie Hansestadt Bremen, Der Senator für Bau, Verkehr und Stadtentwicklung (1999), Stadtentwicklungskonzept Bremen.

Freie Hansestadt Bremen, Der Senator für Bau und Umwelt und Der Senator für Arbeit, Frauen, Gesundheit, Jugend und Soziales (2002) Wohnen in Nachbarschaften (WiN) und "Stadtteile mit besonderem Entwicklungsbedarf – die soziale Stadt".

Freie Hansestadt Bremen, Der Senator für Bau und Umwelt (2002) Verkehr und Mobilität in Bremen, Bilanz – Perspektiven – Konzept, *Heft 16*.

Freie Hansestadt Bremen, Der Senator für Bau und Umwelt (2003) Technologiegebiete in Bremen – ein Standortvergleich, *Map*.

Freie Hansestadt Bremen, Der Senator für Bau, Umwelt und Verkehr (2006) Stadterneuerungsgebiete in Bremen, *Map*.

Freie Hansestadt Bremen, Der Senator für Wirtschaft und Häfen (2004) IFP 2010 – Integriertes Flächenprogramm für Gewerbe und Dienstleistungen in der Stadt Bremen.

Freie Hansestadt Bremen, Der Senator für Wirtschaft und Häfen (2004) EU-Projekte in Bremen und Bremerhaven.

Freie Hansestadt Bremen, Der Senator für Wirtschaft und Häfen (2006) Wirtschaftsstandort Bremen 2005-2006.

Freie Hansestadt Bremen, Der Senator für Arbeit, Frauen, Gesundheit, Jugend und Soziales (2004) Konzeption zur Integration von Zuwanderern und Zuwanderinnen im Lande Bremen 2003-2007.

Freie Hansestadt Bremen, Der Senator für Arbeit, Frauen, Gesundheit, Jugend und Soziales (2006) Informationen zum Arbeitsmarkt des Landes Bremen, December 2006.

Freie Hansestadt Bremen, Der Senator für Bildung und Wissenschaft (2006) Bremen Atlas. Bremen.

Koschatzky, K. and Stahlecker, T. (2005) Regionale Bindungen und Strukturwandel – Wissensintensive Dienstleistungsgründungen im bremischen Innovationssystem, in *Zeitschrift für Wirtschaftsgeographie*, vol 49, no 3-4, pp 219-236.

Handelskammer Bremen (2006) Wahlprüfsteine für die Bürgerschaftswahl 2007, December 2006.

Handelskammer Bremen und Bremerhaven (2005) Statistischer Jahresbericht.

Handelskammer Bremen und Bremerhaven (2007) Jahresbericht 2006.

IAW (2003) Entwicklungspotential und -optionen der bremischen Wissenschaftslandschaft. Beitrag zum Gutachten "Technologiestadtteil Bremen", March 2003.

Institut für Stadtforschung und Strukturpolitik (IfS) und Forschungsinstitut Stadt und Region (ForStaR) (2004) Evaluation der Programme "Wohnen in Nachbarschaften – WiN" und "Stadtteile mit besonderem Entwicklungsbedarf – die Soziale Stadt" in Bremen, Juni 2004.

Kotthoff, S. and Engelbertz, S. (2001) "Es bewegt sich was" – Die alten Hafenreviere im Wandel, in SCHUBERT, D. (ed) Hafen- und Uferzonen im Wandel: Analysen und Planungen zur Revitalisierung der Waterfront in Hafenstädten, *Edition Stadt und Region*, no 3, Berlin, pp 169-180.

Landsberg, H. and Wehling, W. (2006) Arbeitsmarktperspektiven für Geringqualifizierte und Fachkräfte, *BAW kompakt*, no 10.

Lang, W. (ed) (2004) Bremen. 100 Tage nach der Wahl. Dokumentation der Tagung am 5. September 2003 am Institut Arbeit und Wirtschaft. Institut Arbeit und Wirtschaft, Universität Bremen, March 2004.

Lang, W. (2006) Regionalisierung durch die Metropolregion – Wettbewerb oder Ausgleich? Vortrag am 07. Juni auf der Konferenz des DGB "Metropolregion Bremen/Oldenburg – Motor für Beschäftigung oder leere Hülle".

Lange, H. (2005) Die Entwicklung Bremens von der Handelsstadt zur Industriestadt und zum Dienstleistungsstandort. In: *Statistische Hefte*, vol 1, no 2 (September), pp 53-61.

Lemmen, R. (1999) Vom Campus zum Stadtteil – 30 Jahre Stadtplanung für die Universität Bremen, Delmenhorst.

Meng, F. and Gohlke, M. (2002) Erwerbsintegration von Zuwanderinnen und Zuwanderern in Bremen und Bremerhaven, *Report for Social Dept./City of Bremen*, Akademie für Arbeit und Politik, Universität Bremen, March 2002.

Meurer, P. (2005) Überseestadt und Hafenkante – Gesamtstädtische Positionierung, in BAW Institut für regionale Wirtschaftsforschung (2005) Hafenareale als urbane Investitionsstandorte, *Regionalwirtschaftliche Studien* 21, Berlin.

Mönnich, E. (2005) Ruinöse Einwohnerkonkurrenz. Eine Analyse von Suburbanisierungsproblemen am Beispiel der Region Bremen, in *Raumforschung und Raumordnung*, vol 63, no 1, pp 32-46.

Statistisches Landesamt Bremen (2005) Statistische Hefte, vol 1, no 2 (September).

Peters, J. (2005) Strukturwandel und Beschäftigungsentwicklung des Landes Bremen 1994 bis 2004, in *Statistische Hefte*, vol 1, no 2 (September), pp 64-72.

Prange, M. and Warsewa, G. (2000) Arbeit und nachhaltige Stadtentwicklugn – das Handlungsfeld lokale Ökonomie. *Wissenschaftszentrum Berlin für Sozialforschung*, June 2000.

Prognos (2002) Wirkungsanalyse des Investitionssonderprogramms (ISP) des Landes Bremen, *Evaluierungsgutachten*, Bremen, July.

Regionale Arbeitsgemeinschaft Bremen/Niedersachsen (2006) Metropolregion Bremen-Oldenburg im Nordwesten, Handlungsrahmen 2005-2007.

Schubert, D. (2001) Revitalisierung von (brachgefallenen) Hafen- und Uferzonen, Anlässe, Ziele, Ergebnisse sowie Forschungsansätze- und defizite, in SCHUBERT, D. (ed) Hafen- und Uferzonen im Wandel: Analysen und Planungen zur Revitalisierung der Waterfront in Hafenstädten, *Edition Stadt und Region*, no 3, Berlin, pp 15-36. Statistisches Landesamt Bremen (2004) Statistisches Jahrbuch 2004.

Statistisches Landesamt Bremen (2006) Bremen in Zahlen 2006.

Stenke, G. and Wilms, W. (2006) Innovationsbericht 2006. Benchmarkanalysen zu FuE-Potenzialen und Innovation im Land Bremen, *BAW Studie*, July.

Taubmann, W. (1999) Die Entwicklung der Bremischen Häfen unter dem globalen Wettbewerbsdruck, in Berichte zur deutschen Landeskunde, vol 73, no 2-3, pp 291-314.

Tholen, J. and Schekerka, H. (2003) Arbeitsplatz- und Beschäftigungseffekte in der Luft- und Raumfahrtindustrie und verwandten Bereichen in der Region Bremen, *IAW* (November 2003).

Warsewa, G. (2006) The transformation of European Port Cities – Final report on the new EPOC Port City Audit, *IAW Forschungsbericht* 11.

Wauschkuhn, M. (1998) Strukturwandel und standortpolitscher Handlungsbedarf im Land Bremen, in Materialien des Universitätsschwerpunktes "Internationale Wirtschaftsbeziehungen und Internationales Management", vol 15, April 1998.

Wilms, W. (2003) Technologiepark Universität Bremen. Ergebnisse der Unternehmensbefragung 2002, *BAW Monatsbericht*, no 8 (2003).

Wilms, W. (2003) Technologiestadtteil Bremen. Stadtentwicklungsgutachten für einen qualitative durchstrukturierten Technologiestadtteil in der Freien Hansestadt Bremen, BAW Institut für Wirtschaftsförderung, May 2003.