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Dynamics of rural areas (DORA): National report - Germany

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Dynamics of Rural Areas (DORA)

National Report – Germany

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Arbeitsbericht 7/2001

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Chapter 1 Introduction

1.1 Research Approach and Objectives of the Project

In this report an overview of the main findings of the German part of the DORA project is given. DORA is an acronym of the FAIR (CT 98 - 4162) project "Dynamics of Rural Areas". DORA is a comparative and exploratory project with the aim to investigate the reasons for differences in economic performance in selected rural areas of the European Community and, in particular, to analyse the role of specific tangible and less tangible factors with regard to their impact on the development path of rural areas. The basic hypothesis of the research is that differences in the development trends of comparable rural areas are explained by a combination of tangible and intangible factors and by the way in which these factors interact under the framework conditions of specific national, regional and local contexts. These factors and their related exploratory variables define different opportunities and constraints for local development, as well as the degree of effectiveness of local, regional and national institutions in using available opportunities and ameliorating existing constraints.

The specific objectives of the project are the following:

- to identify and measure the significant changes taking place in different types of rural areas in Scotland, Greece, Sweden and Germany by selecting from two regions in each country 'matched pairs' of rural areas comprising one successful area and one less successful in terms of economic performance over the medium term (ten years or more);
- to develop from the literature on regional convergence a set of explanatory variables which can be measured directly by official statistics or indirectly by survey, dealing with both 'tangible' and 'intangible' factors and corresponding variables, and to generate hypotheses which link these variables to economic performance of these areas;
- to attempt to explain the differences between successful and less successful economic performance of rural areas over time by analysing these 'tangible' and 'intangible' factors through national and international comparisons of matched pairs of case study areas;
- to investigate the role and interaction of contextual and historical impacts on these processes of differentiation through comparative analysis of study areas;
- to improve the understanding of factors underlying differential performance of rural areas in western Europe and their relative importance in different regional

and national contexts, and in this way to provide new insights and theoretical knowledge on rural development, and to guide policy and practice on improved strategies for public intervention in different types of rural areas.

1.2 Research Design

The basic hypothesis of the project is that the differential economic performance of rural areas can be explained by a combination of „tangible“ and „intangible“ factors and the way in which these interact in specific national, regional and local contexts. The ten explanatory factors of the DORA project were drawn from several disciplines, including economics, economic geography, sociology and anthropology, building on the inter-disciplinary background of the DORA research teams. The factors are:

Tangibles:

- Natural Resources
- Human Resources
- Infrastructure
- Investment
- Economic Structures and Organisation

Intangibles:

- Community
- Institutions
- Market Performance
- Networks
- Quality of Life

The factors were subdivided into variables and indicators, from which exploratory hypotheses were devised. Whilst we recognise that the tangible factors can be important for accounting for differential economic development success of rural areas, we believe that the intangible factors can determine how, and how well, tangible factors are put into use for development progress.

In line with the Technical Annex of the contract of DORA, the German team followed the common methodology developed by all partners of the project. The methodology was defined and harmonised in a first meeting held in Brussels in September 1999, and further elaborated in depth during the second meeting in Braunschweig in February 2000. In a preparatory work phase literature and policy review as well as data analysis on rural areas were carried out. A final selection of two regions and two case study areas per region was provided with statistical material to support the choice using the criteria as outlined in the design of the project. The proposals were agreed with the partners of the other research teams and with the Commission services.

As study regions in Germany the two federal states (NUTS-level 1 regions) Niedersachsen and Mecklenburg-Vorpommern were chosen. This selection has been made on the basis of their GDP per head, their historical background, their status for policy programmes, and their degree of rurality. Furthermore, it was considered worthwhile to compare an East German region (Mecklenburg-Vorpommern) with one from the West (Niedersachsen).

Niedersachsen, as the second largest West German state, contains several rural regions subject to Objective 5b funding of the EU and in receipt of national regional policy spending. On the whole, its unemployment and income per head is close to the German average. Within Niedersachsen two study areas were chosen with respect to their recent medium term differences in economic performance. The county Emsland was chosen as an example for successful development, and the county Lüchow-Dannenberg as an area with lagging economic performance. Both areas are subject to Objective 5b spending, and subject to national regional policy in the form of "GRW"-spending, i.e. “Gemeinschaftsaufgabe zur Verbesserung der regionalen Wirtschaftsstruktur” (=Common task for improving regional economic structure).

Mecklenburg-Vorpommern, as the most backward and most rural of the new states, is entirely subject to European (Objective 1) and national regional policy spending. It is, compared to the other German states, very sparsely populated and suffers from economic stagnation, depopulation and extremely high unemployment. In Mecklenburg-Vorpommern, it was difficult to find a matched pair of study areas with contrasting economic characteristics. Apart from a lack of data, a reform of the regional delineation of county boundaries in 1994 added to statistical problems, and the aftermath of the German unification in terms of structural change still overshadows many other causal factors for differential economic performance. However, due to sharp contrasts in unemployment and economic growth, the county Ludwigslust was

chosen as an example for successful regional development and the county Uecker-Randow as the less successful example.

1.3 Methodology

The methodology of the project involved the formation of a National Steering Group as a new element of feed-back with regional authorities and practitioners in order to assist the development and implementation of the project and the dissemination of results. The National Steering Group for the German study was formed with representatives from the four case study areas and representatives from the two states and the federal level. The group held an introductory meeting and two meetings for presentation and discussion of preliminary and final results. We would like to acknowledge the valuable contribution of the steering group members to the German team's approach to the DORA analysis, to the field work and the results of the project.

The fieldwork was based on a survey, interviews with regional actors and other work necessary to compile all of the variables. Variables were agreed on as a basis for the survey and the interviews during the second meeting of the research teams (Management Group Meeting) in February 2000 in Braunschweig. The activities consisted of two sub-tasks: desk analysis and supplementary fieldwork to gather and collate data on the agreed factors and variables, and field survey by interviews with actors and a postal business survey. A common schedule, prepared by the co-ordinator, was discussed and agreed in the second project meeting and formed the base for the development of a semi-structured questionnaire (phase I: interviews) and the postal business questionnaire (phase II). The two questionnaires were presented and discussed with the National Steering Group members for its finalisation.

Interviews were conducted with a set of thirty to forty local decision-makers, depending on the size of the study area. In each study area the following actors were subject to interviews:

- the ‘county director’ (“Landrat” and/or “Oberkreisdirektor”) as the head of the county administration
- heads of the county administration departments for environment, planning, culture, tourism and economic development
- the women’s representative of the county
- the director of the local savings bank (“Sparkasse”)

- five to eleven local community leaders, depending on the size of the study area and the number of local communities
- the heads of the political parties in the county assembly, the so-called "Kreistag"
- the chairmen or chief executives of the five largest enterprises (by employment)
- the head of the chamber of commerce ("Industrie- und Handelskammer")
- the head of the chamber of trade/craft association ("Handwerkskammer")
- the head of the regional office for agriculture ("Amt für Landwirtschaft")
- one to three executives from the labour exchange/job centre ("Arbeitsämter")
- one to three people from environmentalist or other non-governmental organisations (i.e. "B.U.N.D., Baeuerliche Notgemeinschaft Gorleben" etc.)
- one or two executives from the local press.

In some cases, Steering Group members or interviewees, when being contacted on the phone, suggested further potential interviewees, who added to the group of interviewees. Overall, 142 people were interviewed, 35 in Lüchow-Dannenberg, 41 in Emsland, 31 in Uecker-Randow (+4 interviewed by telephone), and 35 in Ludwigslust. Some interviewees were accompanied by a second person at the interview (e.g. a mayor by the vice-mayor).

In addition to the common interview schedule, the German team conducted a network survey as part of each interview, in order to explore issues of social capital and network structures among local actors in greater detail. The idea of this survey was to measure directly the contacts between the interviewees of a study area. In order to do so, a network form was sent to the interviewee in advance, including the names of all interviewees in rows, and four potential kinds of contacts in columns. The interviewee was asked to name the code number of the persons where a certain kind of contact applied (professional/private/ associations etc.("be able to access somebody directly on the phone"). Furthermore, the interviewee was asked to name any kind of project or issue s/he is engaged in with other regional actors. Finally, we asked for the share of the interviewee's overall professional and private contacts inside the region, as opposed to contacts outside the study area and international contacts. Overall, 119 interviewees participated in the network survey. The network survey was analysed with the software packages "KrackPlot" and "UCINET 5", so that density and structure of networks between the interviewees of the study areas can be measured and visualised. Under the assumption that many of the selected interviewees represent the most important local actors of a study area, the survey is intended to pro-

vide clues about the amount of "social capital" between regional actors in the study areas.

Furthermore, a postal business survey in the four study areas was conducted by the German team in phase II of the fieldwork. The purpose of this survey was to complete results obtained in phase I, to achieve a more profound knowledge about supply/distribution chains, to obtain more detailed information about the entrepreneurs' perception of location factors and to gain deeper understanding of social capital and networks between entrepreneurs in the study areas.

1.4 Report Structure

In accordance with the Technical Annex and in line with the provisions of the third meeting of the four DORA research teams held in Athens in January 2001, the German national report includes six main chapters. Following the introduction given in chapter 1, a summary of the results from the context study for Germany is provided in chapter 2. This chapter includes the impact of the EU and national context as well as the regional contexts of the study areas in Niedersachsen and Mecklenburg-Vorpommern.

The following chapter 3 contains for the region of Niedersachsen in a first section the analysis of the 10 factors explaining the differences in economic performance (DEP) between the two case study areas Emsland and Lüchow-Dannenberg. In subsections the results are presented in an order according to the five tangible factors and five less tangible factors with the related variables as defined and harmonised in the first meeting held in Brussels in September 1999. In a second section of chapter 3, different "themes" and related dynamic aspects which help to explain differences in economic performance are presented and discussed with the intention to explore the findings together with some insights into the relationships between the explanatory factors of DEP, followed by a third section with conclusions drawn from the comparison of the two case studies in Niedersachsen.

The content of Chapter 4 follows the pattern of analysis of factors, themes and dynamics, and conclusions for the second pair of case studies Ludwigslust and Uecker-Randow in the region of Mecklenburg-Vorpommern in the same way as it is presented in the previous chapter 3. Chapter 5 includes a comparison, synthesis and research implications with specific sections on regional and interregional comparisons, and a ranking of explanatory factors for the two regions of analysis. In chapter 6 preliminary implications for policy, designed with regard to the study areas and

the two German regions Niedersachsen and Mecklenburg-Vorpommern are presented. These policy implications include the results of a final meeting of the German Steering Group in September 2001.

Chapter 2 Context

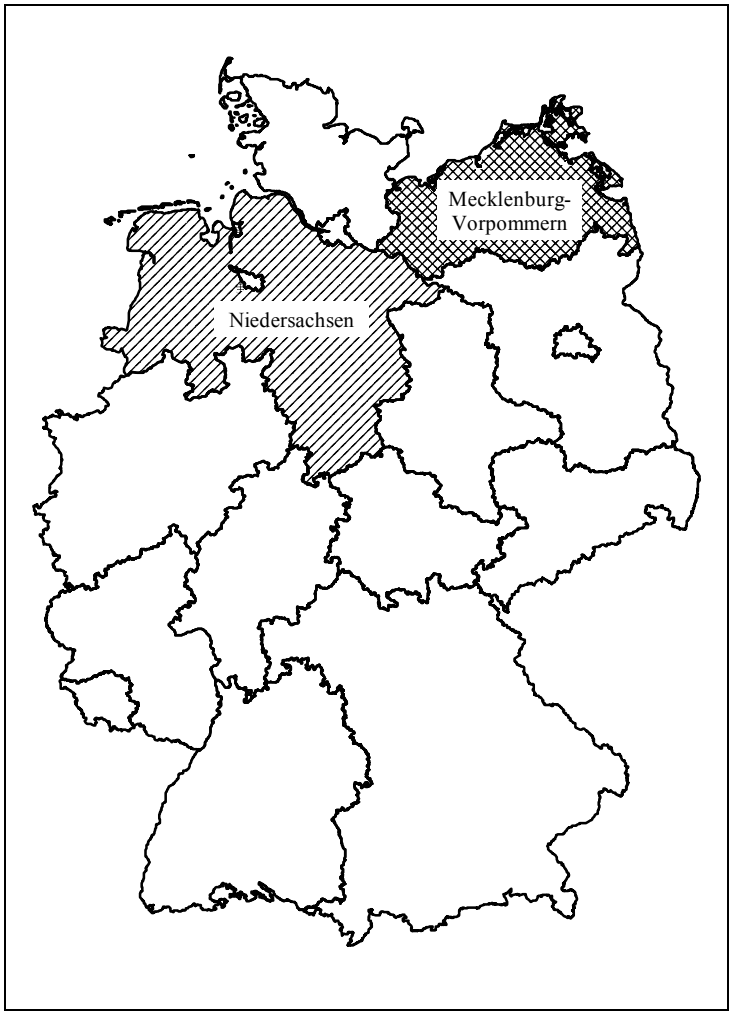
2.1 EU and National Context

The federal states Niedersachsen and Mecklenburg-Vorpommern were chosen as regions for analysis of the German part of the DORA project (map 1). Compared to regions in the other DORA-member states, these are relatively large and heterogeneous. Therefore, it proves difficult in the German case to describe a single regional context which is shared by two study areas. In particular Niedersachsen as the West German study region embodies various heterogeneous socio-economic characteristics: it includes mountainous as well as level areas, areas with Catholic population as well as Protestant areas, industrialised conurbations like Hannover and Braunschweig/Salzgitter/Wolfsburg as well as extremely rural and sparsely populated areas like Lüchow-Dannenberg.

The federal states in Germany have considerable political power and independence, due to the federal structure of the country. The states are represented in the federal assembly (upper house) and are thus involved in the country's legislation process. Furthermore, the states have their own fields of competence in their territories. Legislative responsibility is split up as follows: The states are responsible for culture, police, education, the health system, planning and further topics. The federal administration of Germany, on the other hand, is responsible for legislation on foreign affairs, defence, finance, rail and air traffic and, to some extent, for higher education and environment. Concurrent federal legislation exists on civil law, criminal law, nuclear power, detention of foreigners and some other matters.

About 42% of the overall tax volume in Germany is received by the federal government, while 54% goes to the states and communities. Apart from their respective duties, which the states and the federal government spend these taxes on, some tasks are co-financed by both states and the federal government. These are the building of universities and research centres, incentives for regional policy and structural adjustment in agriculture, social benefit payments for housing, family support and support for university students. Finally, there exists a federal redistribution system, called the "Laenderfinanzausgleich". This system shifts financial resources from the richer states and the federal government to the poorer states, in particular of late the East German states.

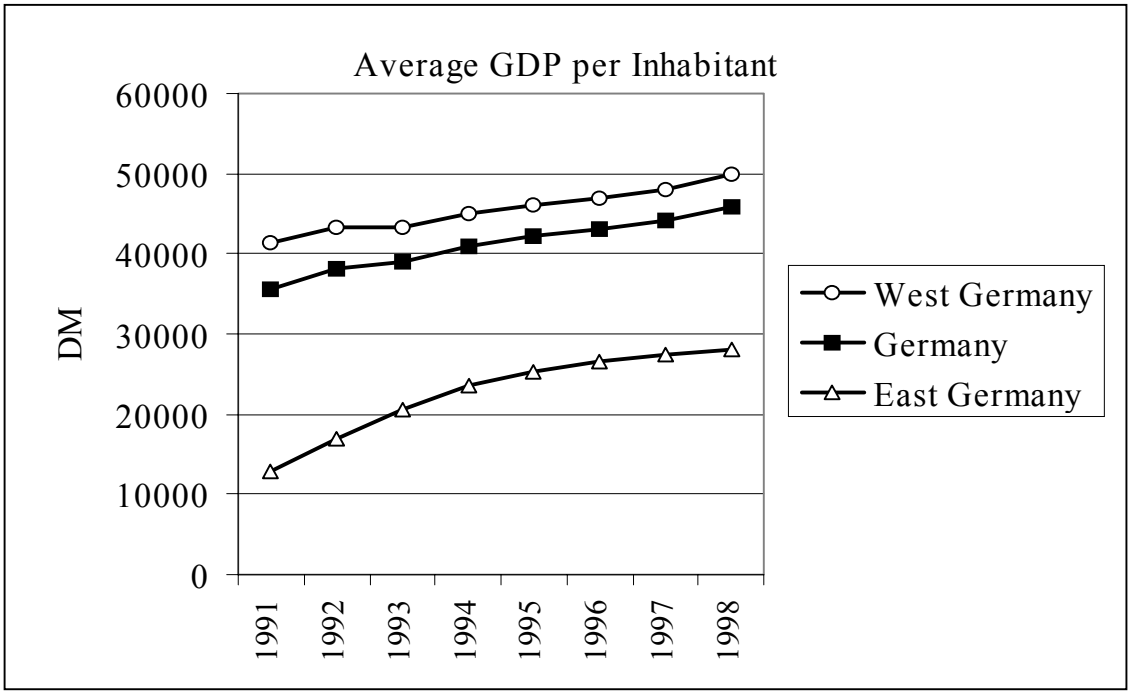
Map 1: DORA regions in Germany



At the local level, there are a variety of taxes belonging to the community administrations, and providing them with a certain amount of autonomy. These are land taxes, real property taxes, trade taxes on earnings, 15% of the income tax, an advance pay of 12% of the interest rates, 2.2% of turnover taxes, a certain share of the state's taxes on income, turnover and corporate earnings, and local excise duties.

As at the state level, a redistribution system exists on the local level, too. This so-called "kommunaler Finanzausgleich" shifts resources from the better-off communities and counties to the poorer, according to a certain assignment scheme which is oriented to the number of inhabitants, the tax potential, and other indicators.

Fig. 1: Income per capita in Germany



Source: Statistisches Bundesamt 1992, 2000

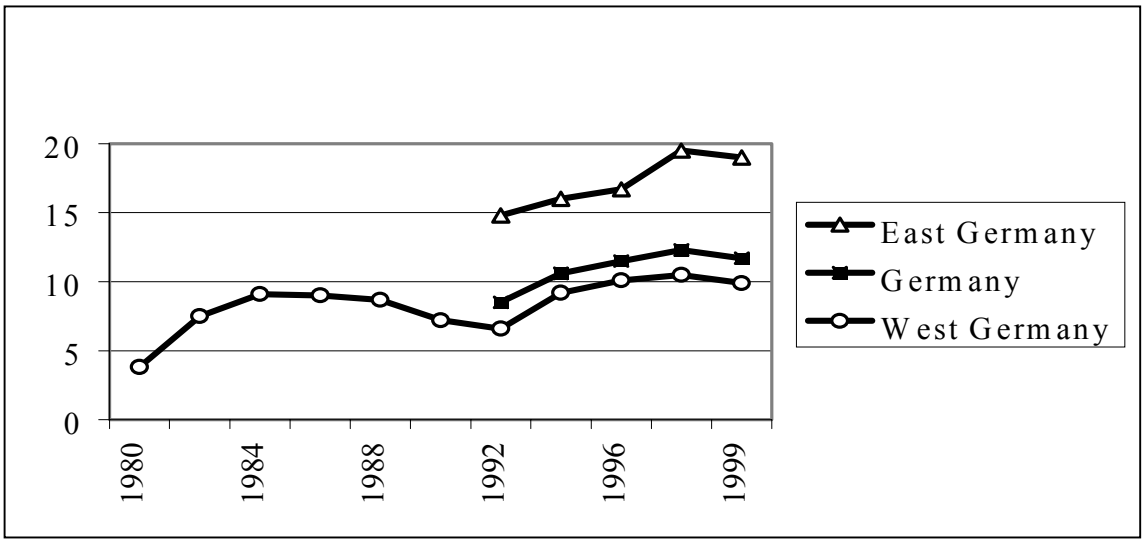
East Germany and the German reunification of 1990 require special attention in the German context. Niedersachsen and Mecklenburg-Vorpommern cannot be looked at as two random regions in Germany. Instead, many regional features are characteristic for either East or West Germany. Sharp socio-economic contrasts became apparent after reunification which still divide the country today. Overall, the effect of restructuring on the West German economy was relatively limited, compared to the outright collapse and total restructuring of East Germany.

A decade after reunification, economic optimism in Germany has disappeared and instead, concerns about the Eastern states becoming a 'German Mezzogiorno' have spread. Since 1990 there have been massive financial transfers from West Germany to raise East German incomes closer to West German levels and prevent emigration of East German citizens to West Germany. An important target for transfers has been the infrastructure, especially transport infrastructure, telecommunications and institutions. Furthermore, there have been considerable subsidies from the federal budget for investments in the East, covering up to 80% of public investment costs. As a result, the East German construction sector in particular experienced an enormous expansion. However, today the East German economy is still lagging behind in

terms of income (Figure 1), and the catch–up process which took place in the early 1990s seems to have slowed to a near stop.

The main reason why the transfers did not result in the 'gap' between East and West Germany closing in the medium term is that the transfers were to a large degree directed towards the demand-side of the economy, (in the form of pensions, social benefits, wages, etc.) and did not sufficiently stimulate productive forces in the medium and long term.

Fig. 2 Unemployment in East and West Germany, 1980 – 1998



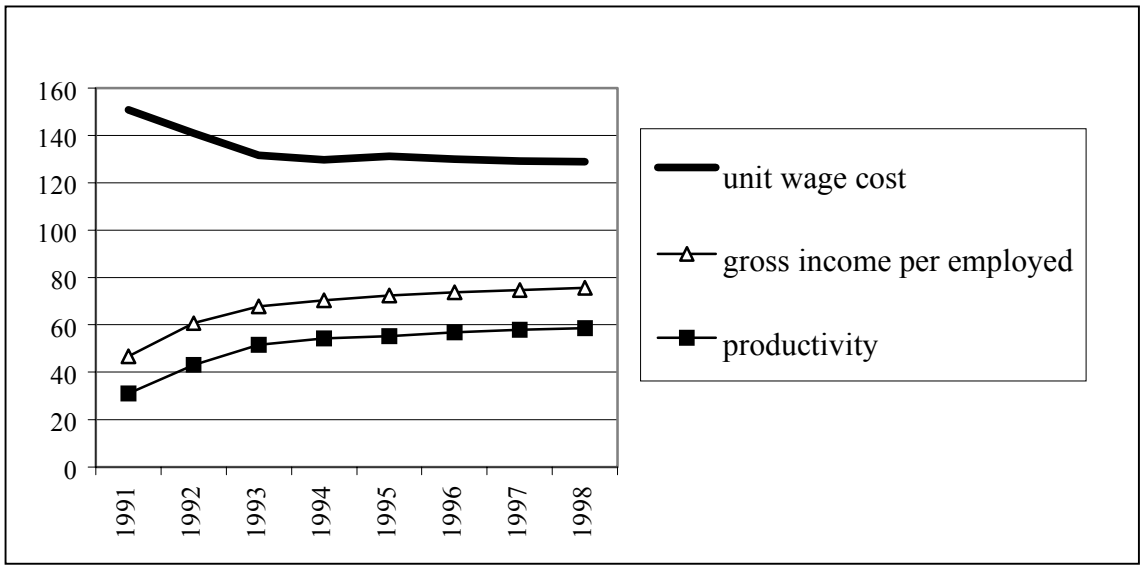
Source: Statistisches Bundesamt 1982, 1999, 2000

The economy of Eastern Germany still does not have the energy for self-sustained growth and it will probably take decades rather than years for them to catch up with West German income levels. Assuming 5% higher growth rates in the East than in West Germany, it would still require ten more years for the income per capita to reach 85% of the West German level. With a more realistic assumption of a growth rate 2% higher than the West, this level would be reached in the year 2030.

However, the high rate of unemployment in Eastern Germany at present (Figure 2) is considered to be a more pressing problem than lagging income. Starting from a situation with no official unemployment at all (but considerable 'hidden unemployment') under the socialist system until 1989, many employees were made redundant as a result of privatisation, the collapse of Eastern European markets, and a sudden rise in wage costs after the introduction of the D-Mark.

The underlying cause for today's unemployment rate and one of the major obstacles to international competitiveness in Eastern Germany is that wages have not adjusted sufficiently to the low productivity (see WEGNER 1997). East Germany has a very high level of real unit wage costs as a result of relatively high wage levels combined with lagging productivity. Figure 3 shows that the gross compensation per employee in the East is much closer to West German levels than is productivity. Compared to relatively high productivity increases in the early 1990s, the catch-up process has been slowing down considerably since then and at present, real unit wage costs are still some 30% higher than in West Germany.

Fig. 3: Real unit wage costs in East Germany compared to West Germany (West Germany=100)



Source: Braun 1997

Next to the East-West divide of income distribution across Germany, we generally find a South-North slope on both sides. In West Germany, the southern regions such as Bayern and Baden-Württemberg are better off than regions like Niedersachsen, Bremen or Schleswig-Holstein in the North. In Eastern Germany, the industrialised regions Sachsen or Thüringen in the South generate higher income per capita than the northern states Mecklenburg-Vorpommern, Sachsen-Anhalt or Brandenburg.

The export share in the East German economy is remarkably low, with only 17.4% of manufacturing turnover in 1999, compared to 34.3% in West Germany. Given that

exporting industries are an important contributor to regional income, this underlines the structural bottlenecks facing the East German economy.

The rural regions in Germany do not generally share the classic attributes of lagging behind urban regions in economic development. Instead, the urban-rural contrast in economic performance has been weakened by recent structural change (IRMEN 1996, p. 6). Many rural areas have developed so well that they fell out of regional policy measures, whereas certain urban areas became new recipients of regional policy spending. Therefore, rural areas cannot generally be seen as the 'problem regions' in Germany.

Tab. 1: Unemployment rates in different types of regions in East and West Germany, 1997

	West Germany	East Germany
Regions with agglomerations	10.9	17.0
Urban regions	10.1	19.5
Rural regions	8.9	19.8

Source: BBR 1998

However, those rural regions which do suffer from the problems traditionally attributed to rural areas are more often located in East Germany (especially in Mecklenburg-Vorpommern, Brandenburg and the northern part of Sachsen-Anhalt) than in the West. Most rural areas in East Germany are more peripheral (in terms of travel distance to agglomerations), more 'rural' (in terms of people engaged in agricultural activities) and more sparsely populated than West German rural areas. These features are especially marked in Mecklenburg-Vorpommern. In general, rural areas seem to lag behind in overall regional development to a more pronounced degree in East Germany than in the West, as Table 1 indicates. Rural areas in both parts of the country however seem to possess similar assets of cultural and social infrastructure.

In West Germany after World War II many rural regions were characterised by lagging incomes and living conditions, and a loss of population as a result of declining employment opportunities in agriculture. Population pressure in rural areas was additionally fostered by large numbers of war refugees. Deficits were particularly observable in rural regions without traditional industries or favourable natural or/and structural conditions for farming, as well as in those along the border with East Germany, the so-called 'iron curtain'. Attempts to counteract these developments

concentrated on the creation of stable jobs outside agriculture and on the improvement of structural conditions within agriculture in order to stabilise family farming.

In 1969, the partly competing activities of the federal and the state governments in regional policy interventions were given a new constitutional basis by creating so-called joint tasks ('Gemeinschaftsaufgaben') between the federal and the state level. These tasks were directed towards two fields of activities, (a) the improvement of the regional structure of the economy (GRW) and (b) the improvement of the structure of agriculture and coastal protection (GAK), both of which affected rural regions. Funding is supplied partly by the federal budget (50% to 70%) and partly by the state budgets. The states are responsible for the execution of the programs in their respective territories. The GRW investments are aimed at establishing, expanding, readjusting, or rationalising industrial enterprises producing commodities or services tradable across the borders of their respective regions (including tourism), as well as extending local infrastructure. Investments are restricted to regions lagging behind economically due to structural changes.

The promotion programs within the GAK joint venture schemes have generally been offered countrywide. These were basically on-farm investments to modernise and expand the income capacity of individual farms, direct 'compensatory' payments to farmers in less favoured areas, improvements of marketing conditions, infrastructure, renewal of buildings, and the protection of the coasts from tidal damage. Between 1972 and 1989, the federal and state budgets together annually contributed about 690 million DM for the GRW and about 2.2 billion DM for the GAK.

The period between the early 1970s and the late 1980s was also characterised by a steady expansion of activities of the EC in structural policies. On one hand, the EC participated in co-financing national programs to promote structural adjustments and also developed Community-wide programs with this objective. On the other hand the European Commission strengthened its control of national programs with respect to their effects on competition on the common market, thus limiting the expansion of the GRW joint task during the 1980s.

After the comprehensive reform of the Community's structural funds in 1988, including a concentration of the funding on six objectives, objectives 5a and 5b became particularly relevant for rural regions in the FRG. From 1989 to 1993 objective 5b program regions in the FRG covered 21% of its territory and 7% of the total population. These regions were concentrated in the states of Bayern and Niedersachsen and received about 1.1 billion DM from the three EC structural funds.

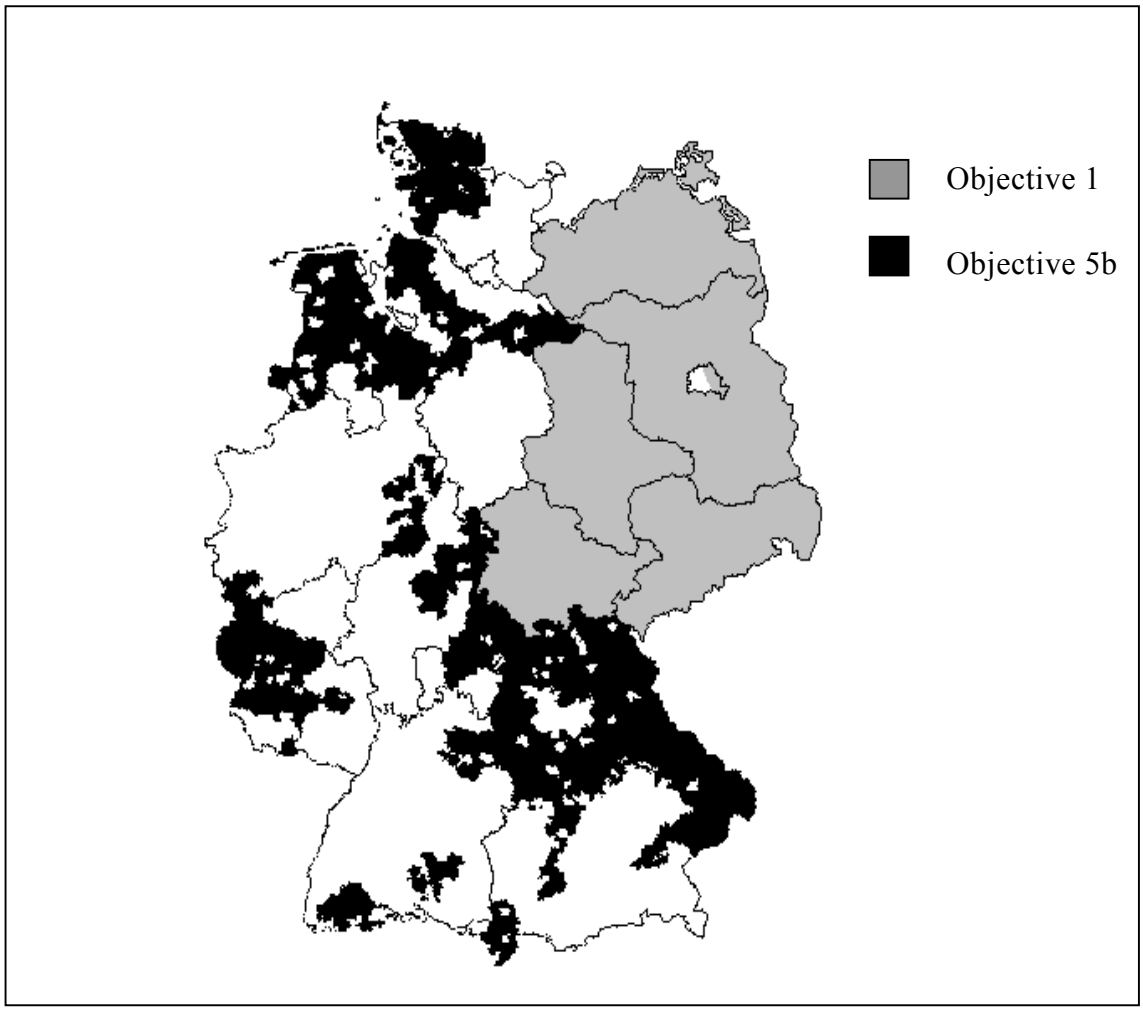
In socialist East Germany (GDR) the foremost goal of rural development policy in the post-war period was to bring working and living conditions in agriculture and in rural regions closer to those in industrialised and urban centres, in accordance with the ideology of the supremacy of the industrial working class. The realisation of this goal was never reached, in particular not in the less developed northern regions of the GDR. In the aftermath of World War II, attempts of the rural areas to catch up were hampered by the separation of rural regions in the north of the GDR from important metropolitan cities, such as Hamburg in the West and Stettin in the East, and by an above average load of refugees and others expelled from the former German territories and East European countries.

Extremely large agricultural enterprises were created in the course of collectivisation in the 1950s and 1960s, and with the introduction of industrial production and organisation methods in the 1970s. The farms frequently covered the territory of several villages. In selected urban areas or new settlements in rural regions, attempts were made in the 1950s and 1960s to improve employment and housing opportunities. Nevertheless they were unable to completely prevent the out-migration from small villages and towns to larger conurbations driven mainly by better housing and employment opportunities, but also by legal and illegal emigration to West Germany.

The German reunification in October 1990 resulted in far-reaching changes for rural regions in East Germany. To increase labour productivity under the new conditions, old (transformed) as well as newly established farms had to get along with as few employees as possible and release the rest. Furthermore, many industrial enterprises established in rural regions under the GDR authorities had to close down due to a lack of competitiveness. Thus, employment shrank even faster in rural regions than elsewhere. In order to prevent massive out-migration from rural regions, interventions were needed to stabilise the remaining jobs and to modernise economic structures.

With the unification, the joint programs GRW and GAK came into effect in the new states of East Germany. Their whole territory became eligible for the GRW programs with promotion conditions significantly more attractive than in the ‘old states’ in the West. Symmetrically, in West Germany, the GRW promotion was reduced, particularly the one dedicated to regions along the former internal German border. Additional funding was directed to the GRW in the new states.

Map 2: German regions eligible for support by EU structural funds,* 1994-1999



*Delimitation is municipality-based according to specification by European Commission

The contributions of the West German states to the new ones were supported by the provision of additional financial means from the EU structural funds, some 2 billion DM annually from 1991 to1993. There were additional efforts to support and accelerate the necessary adaptation of the economic and social structures in East Germany to the new conditions, especially in rural regions. These were accompanied by retraining for persons affected or threatened by unemployment in primary labour markets, creating secondary labour markets for such persons, and offering early retirement.

From 1994 to 1999, in the second phase of the application of the reformed EU structural funds, several changes were introduced in the policies for developing rural

regions (NEANDER et. al. 1997). The new states, with a GDP per capita of less than 75% of the EU average, became fully eligible for EU structural funds according to objective 1 (map 2).

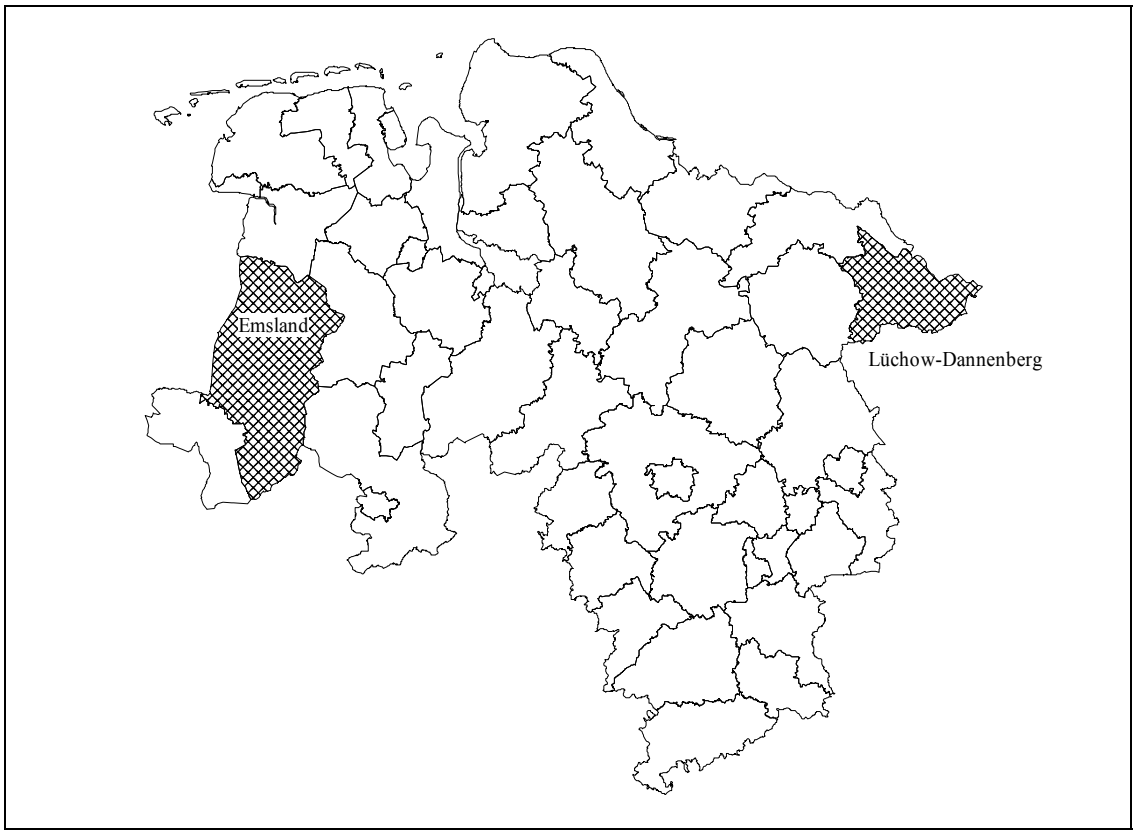
In the old states of West Germany the areas eligible for promotion of rural development under objective 5b have been expanded by 75% compared to the first phase, and the funds earmarked for this objective have been increased to 2.3 billion DM.

In addition to the programs already mentioned, so-called 'Community Initiatives' may also be supported by EU structural funds. For rural regions the relevant Community Initiatives are LEADER and INTERREG. From 1994 to 1999, a total of 395 million DM have been committed to LEADER II projects (175 million DM in east Germany, 220 million DM in West Germany) and another 920 million DM for projects under INTERREG II in both parts of Germany.

In March 1999, the European Council decided upon a further reform of EU structural policies for the time period 2000 to 2006. The new states remain objective 1 regions since 1999 with the exception of the Eastern part of Berlin. Thus rural regions in the new states will remain under an EU promotion regime roughly similar to the 1994 program. In West Germany, only a few rural regions qualify for promotion under the new objective 2.

2.2 Regional Context and Study Areas in Niedersachsen

Map 3: Niedersachsen (NUTS level-1 region) and the study areas (NUTS-level 3 regions)



The territory of Niedersachsen ('Lower Saxony') is slightly larger than Switzerland, and the population is almost equal to that of Sweden. Niedersachsen has physical features similar to Mecklenburg-Vorpommern. It consists of a coastal strip along the North Sea with picturesque islands, followed by lowlands with minor moraines. Contrary to Mecklenburg-Vorpommern however, the south of the region is mountainous and hilly. Niedersachsen is less peripheral geographically than Mecklenburg-Vorpommern. It contains some medium large agglomerations (Hannover, Braunschweig/Salzgitter/ Wolfsburg) and has good access to further agglomerations outside the region (Bremen, Hamburg, Ruhr-area). The region borders the Netherlands on the West, and the states Nordrhein-Westfalen, Hessen and Thüringen on the South, Sachsen-Anhalt on the East, and Mecklenburg-Vorpommern, Hamburg and Schleswig-Holstein on the North.

In the early Middle Ages, what is now 'Lower Saxony' was the heart of the old Saxony, which extended from the Netherlands to the Baltic sea. From then on, the history of Niedersachsen defies any systematic description, the territory was divided and united several times. This is also the reason for the heterogeneous religious pattern in the region. Overall, Niedersachsen is predominantly Protestant (about 65% of the population) in the tradition of the Kingdoms of Hanover and Prussia. However, in the former Duchy of Münster to the West of the region, the population in the Western part is predominantly Catholic. This has had significant consequences, for example, for political and reproductive attitudes.

In the first three post-war decades the state was governed by changing coalitions under the leadership of the Social Democratic party. In 1976, the conservative Christian Democratic party took over and remained in office until 1990. Then, today's federal chancellor Mr. Schröder came to power as the head of a coalition of Social Democrats and the Green Party. Since 1994, Social Democrats have governed the state alone.

The sub-regional political pattern of political attitudes has been such that most of the rural areas, especially the predominantly Catholic areas in the West, tend to vote conservative, while in the larger cities, the more industrialised areas and the East Friesian area in the very North-West of the region there has generally been a Social Democratic majority of votes.

With 47,613 km² and 7.9 million inhabitants (Table 2), Niedersachsen is the second largest state of Germany measured by area, and the fourth largest by population. 20% of the area is covered by forest, and almost two thirds of the area are under cultivation. With a population density of 165 inhabitants per km², the state is more thinly populated than any other in West Germany. This is partly due to there being many rural areas in the region, but it is also the result of being close to the cities of Hamburg and Bremen, which are states in their own right. The Northern and Western parts of Niedersachsen are generally more sparsely populated than industrialised areas around Hanover (the state capital), Osnabrück, Braunschweig and Salzgitter in the South and South-East.

Tab. 2: Socio-economic profile of Niedersachsen

		Emsland (leading study area)	Lüchow-Dannenberg (lagging study area)	Niedersachsen (region)	West Germany
Population	1997	297,500	52,100	7,845,400	64,548,300
Size (in km²)		2,881	1,220	47,613	248,454
Density (inh./km²)	1997	103	43	165	260
Population change (%)	1980-1997	+23.6	+6.8	+8.1	+8
Net migration per 1000 inhabitants	1995 1997	19.1 2.1	15 9.2	9.2 3.6	 1.6
Employment change	1990-1998	+16.8	+14.1	+2.5	-1.2
Unemployment rate (%)	1980 1998	 11.9	8.1 18.7	4.7 12.3	3.8 10.5
Sum of manufacturing wages per employee in DEM	1998	5480	4554	5494	5902
Recipients of social benefits per 1000 inhabitants	1997	37	37.2	43	35.1
GDP per inhabitant in ECU	1996	21,200	16,000	21,250	
Gross value added at market prices per employee in DEM	1980 1996	56,627 107,838	41,090 76,416	48,721 91,147	52,481 99,228

Source: BBR 1999, SLMV, NLS

On contrast to Mecklenburg-Vorpommern, Niedersachsen has witnessed an increase in population over the last few decades, above the average West German population growth. One reason has been a higher than average birth rate. The birth surplus has been especially marked in the (Catholic) West of the state (where the 'leading' study area Emsland is located). Net migration for Niedersachsen in the last 20 years has also been positive and above the West German level. This came about through international immigration (mainly asylum seekers and people from the former Soviet Union territory with German ancestors), sub-urbanisation from the nearby city-states

of Bremen and Hamburg, and, to a lesser extent, by emigration from East Germany. The main target areas for intra-regional migration in Niedersachsen were the hinterlands of the cities and agglomerations, especially South of Hamburg, and the rural Western areas. Cities and towns in the South-West of Niedersachsen, by contrast, generally experienced emigration.

Both study areas experienced an overall population growth in recent decades. However, in the lagging study area Lüchow-Dannenberg, this growth was close to the regional average and mainly caused by immigration of foreigners or elderly people. In Emsland, by contrast, the increase in population has been significantly above regional levels, which was caused by a combination of immigration and one of the highest birth rates in Germany.

The unemployment rate in Niedersachsen has generally been above West German levels over the last two decades. Recently however this gap has been narrowing. Particularly high unemployment prevailed in the North-Western areas and in the South-East of the state. The highest unemployment rates can be found in the 'lagging' study area Lüchow-Dannenberg, while in Emsland the unemployment was above regional levels at the beginning of the 1980s, and is close to average today.

The sectoral structure of Niedersachsen's economy seems more favourable than in Mecklenburg-Vorpommern. Niedersachsen has a larger agricultural and public sector than the German average too, combined with services and manufacturing sectors slightly below average. However, these features are less marked than in Mecklenburg-Vorpommern. Furthermore, productivity in the agricultural sector in the region is extraordinarily high in the German context, because of relatively large farm sizes (NLS 1999) and favourable production conditions. The state is the main contributor to agricultural production in Germany

The manufacturing sector of Niedersachsen has a share of chemicals and electronics industries below the German average, while the sectors of food processing, energy and metal processing are above the German average. Clearly the most important manufacturing branch in Niedersachsen however is the production of transport vehicles, based mainly on shipyards and, more importantly, the presence of the Volkswagen company. After its headquarters in Wolfsburg, Volkswagen maintains four production plants in the region, with a substantial number of supplier enterprises. Every third car produced in Germany originates from Niedersachsen, and every fifth regional employee in manufacturing works in this sector. More than half of the car production is exported to other countries.

The parliament and government of Niedersachsen is located in the state capital Hanover. The administration of Niedersachsen as a federal state is partly concentrated in Hanover, but is, as in most German states, further divided into 'government districts' ("Regierungsbezirke"). These districts are the 'executing' level of the state government. The four districts in Niedersachsen are Braunschweig in the south and South-East, Hanover in the centre, Lüneburg in the North-East, and Weser-Ems in the West and North-West of the region.

Below the districts as the 'second' state level we find the county level, with 38 counties ("Kreise"), and 9 cities. Each county and city has its own parliament ("Kreistag") and is responsible for regional planning and for the provision of infrastructure insofar as this is not provided for at the federal or state level. The top of the county hierarchy can either be shared by two persons (with the "Landrat" responsible for the political representation and the "Oberkreisdirektor" directing the administration), or it is represented by only one person ("Landrat"). The counties in Niedersachsen are again divided into 1020 communities, consisting of small towns, villages, or a set of villages. The counties are responsible for planning on the community level and minor administrative duties.

Since the reform of the structural funds in 1988, a selected number of rural areas in Niedersachsen have been supported by EU structural funds according to objective 5b and the Community Initiative LEADER. During the period 1989 to 1993 some 108 mn ECU from the three EU structural funds have been committed to objective 5b regions in Niedersachsen. This number relates to around 20% of the amount of the EU funds committed to West Germany and to the corresponding shares of population and area in Niedersachsen. For the period 1994 to 1999 the sum of EU funds for objective 5b in Germany has been increased by 133% to 1.2 bnECU. The EU funds for objective 5b regions in Niedersachsen increased by 127%. Emsland with the exclusion of the cities Lingen, Meppen and Papenburg as well as the whole area of Lüchow-Dannenberg belong to the objective 5b area in Niedersachsen.

Since the end of the 1960s selected areas in Niedersachsen have taken part in national regional policy spending within the framework of the joint task GRW. The areas eligible for regional support are defined on a yearly basis by the joint task committee. Since the initiation of the GRW, both study areas have been included at least partially in its regional support scheme. In the 1990s, the study area Emsland has been subject to GRW spending with the exception of some villages in the south, while the study area Lüchow-Dannenberg as a whole has been subject to GRW spending.

Despite the fact that Niedersachsen is quite sparsely populated and contains peripheral areas, an important strength of the region lies in its geographical features. The region is located at an important crossroads between Western Europe and the Scandinavian and middle European countries. This provides good conditions for export-oriented industries to reach their markets, which are, to a large extent, in the EU.

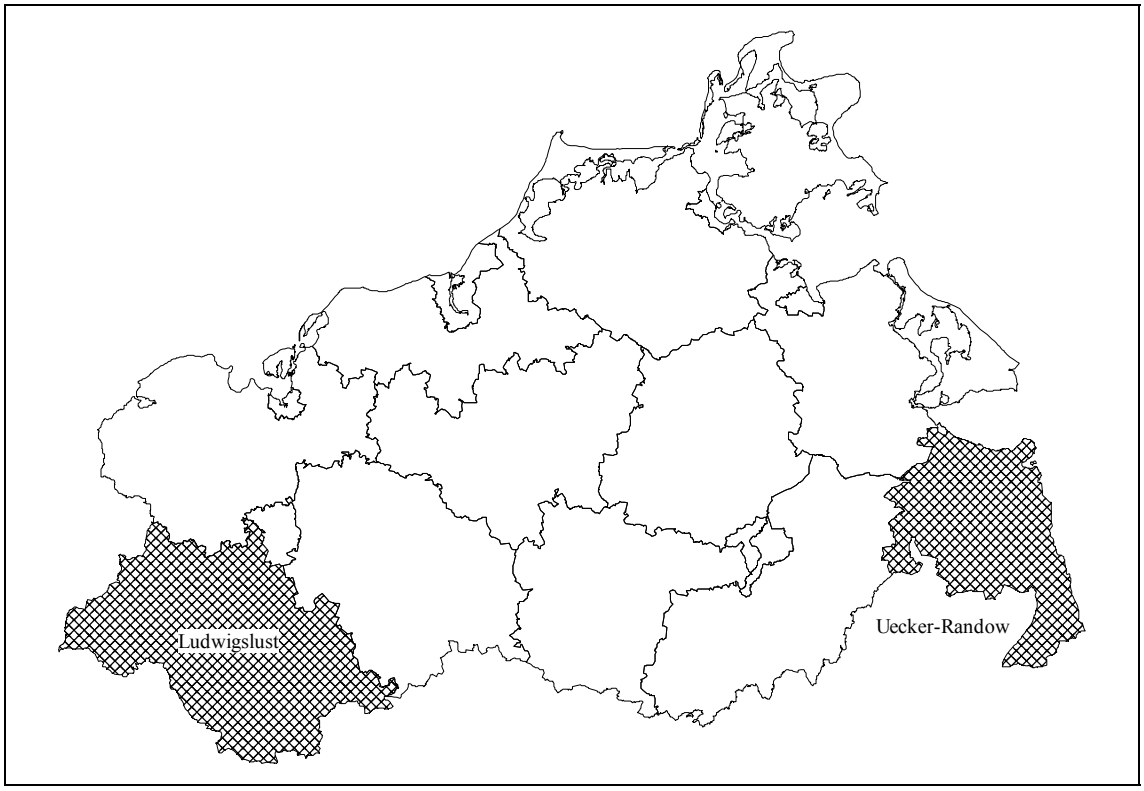
Compared to Mecklenburg-Vorpommern, Niedersachsen is a far less homogeneous territorial entity. Accordingly, most of its strengths and constraints cannot be attributed to the whole of the region, but instead apply to certain areas only. In terms of demography, employment and economic development, the South-Western areas and the hinterland of Hamburg are more dynamic. In contrast, the economic and demographic development of the North-West, the East and the South-East of Niedersachsen is characterised by stagnation or below-average performance.

The most important strength for the economy of the whole of Niedersachsen is the diversified and well-developed manufacturing sector. The most prominent branch of this sector is automotive production, which provides considerable export revenue for Niedersachsen's economy, with plants and suppliers spread over the whole region. Despite the above average share of agriculture, this sector is a further strength of the region, due to relatively large farm sizes and high levels of specialisation and productivity. The share of the service sector, by contrast, is still somewhat lagging behind the national average, but is catching up all the time.

2.3 Regional Context and Study Areas in Mecklenburg-Vorpommern

Approximately 1.8 million residents live in the 23,170 km² area of Mecklenburg-Vorpommern, making it the most thinly populated state in Germany, with only 79 inhabitants per square km. The region's 1,712 km coastline, with 354 km of outer coast, is the longest of any German state. The interior of the region is dominated by lowlands, with some moraines, forests and picturesque lakes. With the coastline and its multitude of lakes, Mecklenburg-Vorpommern has become an attractive summer tourist destination in Germany.

Map 4: Mecklenburg-Vorpommern (NUTS level-1) and study areas (NUTS-level 3 regions)



The geographic location of Mecklenburg-Vorpommern is somewhat unfavourable, compared to other German states (see also 4.2.1). It is located at the North-Eastern periphery of Germany, bordering the East German region Brandenburg on the South, the West German regions Schleswig-Holstein and Niedersachsen on the West, the

Baltic sea on the North and Poland on the East. There are no major agglomerations or conurbations in the region; the nearest large conurbations are Hamburg and Berlin.

With the gradual opening of the East European markets the region is moving somewhat closer to the 'centre' of Europe, but its economic ties and trade links to central and Eastern European countries are still weak. The entry of Sweden and Finland into the EU and the growing economic ties with the Baltic states have improved the region's position as a transit state and helped the local economies of ports like Sassnitz, Warnemünde and Travemünde. However, trade with the Scandinavian and Baltic countries is still very small compared to the EU countries in the West. Particularly unfavourable is the location of the 'lagging' study area Uecker-Randow in the very East of Mecklenburg-Vorpommern. This area represents the former hinterland of Stettin, which became Polish territory after the Second World War, so that now the hinterland suffers from being cut off from its former centre. By contrast, the location of the 'leading' study area Ludwigslust is more favourable, with good highway connections to the West, particularly to Hamburg.

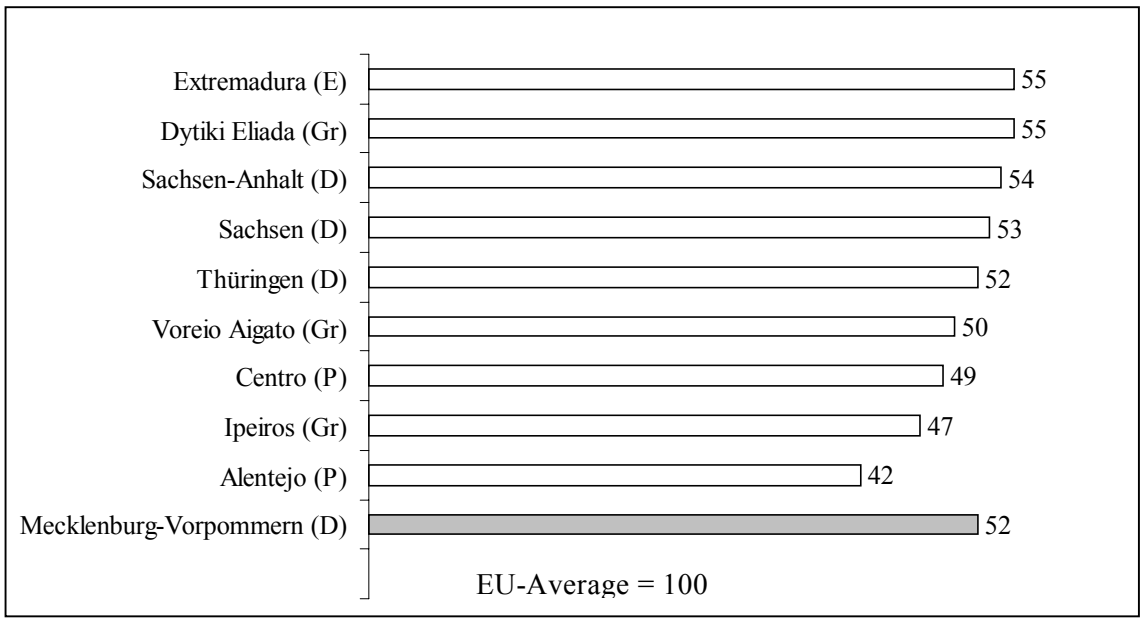
In terms of history, the state Mecklenburg-Vorpommern unites two different regions. The two sub-regions of the state, Mecklenburg and West-Pomerania, have a multitude of common geographical and cultural aspects. Nevertheless, during the past centuries their histories developed mainly separately.

After the second world war, the SED party, which developed from the unification of the Communist and Social Democratic party, won the parliamentary elections of 1946. The population was swollen heavily by refugees, who were coming to Mecklenburg from the East. In 1952 the states of Mecklenburg and Vorpommern were abolished and subdivided into the districts of Rostock, Schwerin and Neubrandenburg. The economic structure of the region in the time of the GDR was dominated by agriculture and shipyards. The system of "centrally planned economy" intended to integrate a large workforce into the production process. Profitability, however, played a minor role.

In the fall of 1989 the peaceful revolution reached Mecklenburg, and the government and the 'SED Politbüro' resigned. The GDR-borders opened and on October 3rd 1990, the GDR joined the FRG. The state of Mecklenburg-Vorpommern was composed of the former districts of Rostock, Schwerin and Neubrandenburg. Schwerin again became the state capital. The first freely elected state government was lead by the Christian Democrats. From 1994 until 1998, a coalition of Social Democrats and Christian Democrats ruled the country. Since 1998 a coalition of Social Democrats

and the socialist PDS-party (the successor of the SED party which ruled the GDR until 1989) has been in power. It is the only case in East Germany, where the PDS participates in a coalition governing a state. The actual distribution of seats in the state government is as follows: Christian Democrats 24, Social Democrats 27, PDS 20. The regional pattern of political attitudes in Mecklenburg-Vorpommern is such that the Eastern sub-region of Vorpommern is more conservative (tends more to the Christian Democrats) than the people of Mecklenburg, where the Social-Democrats have their strongholds.

Fig. 4: Gross domestic product per inhabitant in low-income regions of the EU, 1997



Source: EU-Commission, quoted in: Braun 1997

The restructuring of the economic system brought about by German reunification suddenly exposed the region's economy to world-wide competition. Additionally, demand from Eastern European countries collapsed as a result of the political changes and, more importantly, the sudden rise of prices for regional products, caused by the introduction of the D-Mark in East Germany. The need to produce with a regard for profitability and competition led to massive lay-offs in Mecklenburg-Vorpommern and all over East Germany. Furthermore, the competitive crisis of German shipbuilding and structural change in agriculture hit the region disproportionately hard, due to the prominent role of these sectors in the region (http://www.mvweb.de).

Mecklenburg-Vorpommern is the economic problem child of East Germany. It lags behind in almost every socio-economic indicator. As Figure 4 shows, with only 52% of the EU average, the region generates one of the smallest GDP per capita in the European context. The 'lagging' study area Uecker-Randow, as the poorest area of the region, has a GDP per head of only 22% of the EU level.

Tab. 3: Socio-economic profile of Mecklenburg-Vorpommern

		Ludwigslust (leading study area)	Uecker-Randow (lagging study area)	Mecklenburg-Vorpommern (region)	East Germany
Population	1997	129,600	88,400	1,807,800	17,509,100
Size (in km²)		2,517	1,624	23,170	108,567
Population density (inhabitants/km²)	1997	52	54	78	161
Net migration (%)	1997	14.6	-6.4	-1.9	-0.6
Employment change (%)	1994-1998	+3.8	-6.3	-7.4	-5.7
Unemployment rate (%)	1995 1998	12.9 16.4	19.8 24.1	16.2 20.5	14.9 19.5
Business start-ups per 1000 inhabitants	1997	8.3	7.2	8.9	8.7
Employees in mfg. per 1000 inhabitants	1998	34	15	24	38
Sum of manufacturing wages per employee in DEM	1998	3,380	2,677	3,844	4,251
Gross value added at market prices per employee in DEM	1992 1994 1996	40,198 53,247 59,011	38,153 49,088 54,708	41,071 52,905 62,057	41,198 55,486

Source: BBR 1999, SLMV 1999, NLS 1998

Table 3 shows some key socio-economic statistics on Mecklenburg-Vorpommern and its study areas, compared to the East German average. Rising unemployment

and massive depopulation in most parts of the region constitute the key problems for regional society.

Unemployment rates in East Germany rose sharply during the 1990s, but in Mecklenburg-Vorpommern it was even more pronounced than in general. The considerable unemployment rate (which would be much higher without special work schemes by the federal government, so-called "Arbeitsbeschaffungsmaßnahmen") causes a variety of secondary social effects, such as low incomes, widespread resignation, vandalism, neo-fascist youth, and so on. While the 'lagging' study area Uecker-Randow has suffered particularly from unemployment and depopulation, the 'leading' study area Ludwigslust has a positive population and employment record.

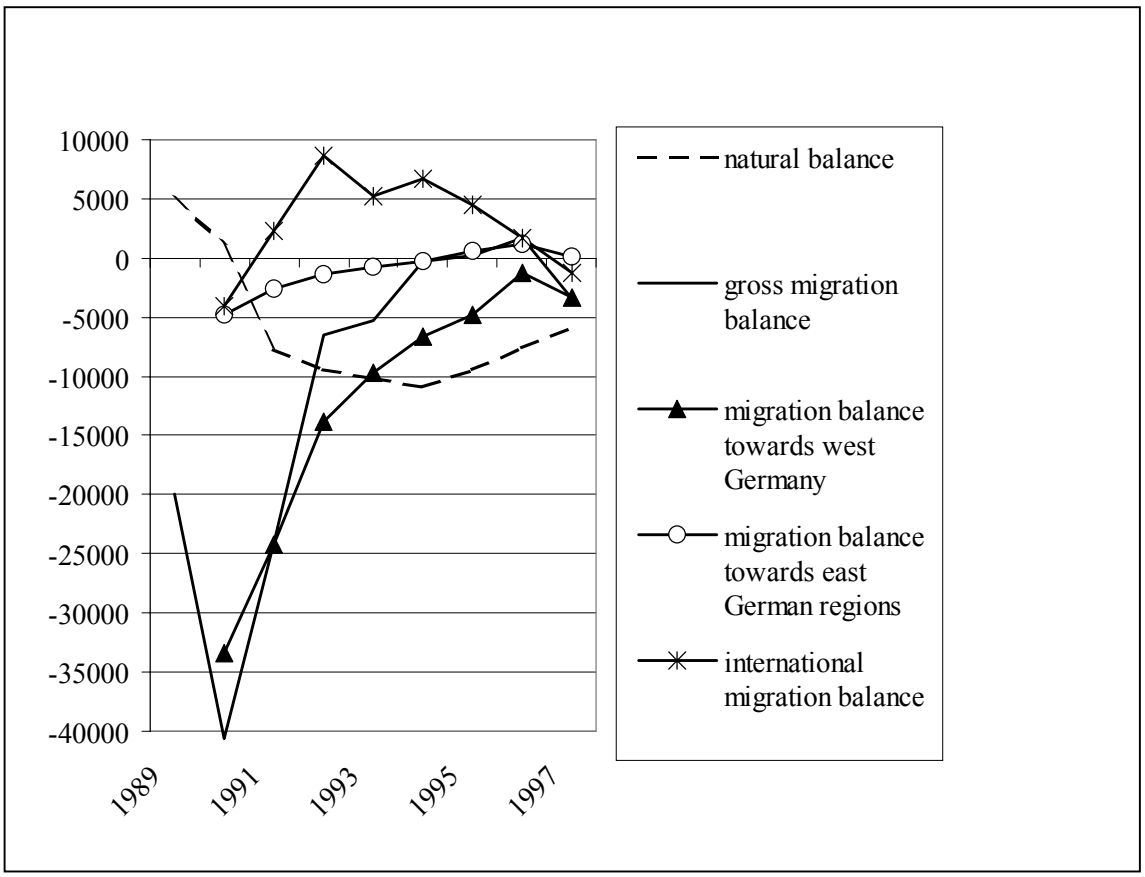
Figure 5 provides a more detailed picture of the population shifts in Mecklenburg-Vorpommern during the 1990s. The region experienced severe gross emigration in the years after 1990, which came to a halt in 1994 and turned into immigration at a very low rate in 1996, before it turned again into emigration since 1997, but at a relatively low rate. Net international immigration and the decrease in the negative balance towards West Germany in the mid-1990s was mainly caused by 'Russian Germans', moving via West German regions, or directly from Russia, into the region. On the whole, the region lost more than 100,000 inhabitants (~5%) by emigration between 1989 and 1998. The population declined by a further 60,000 (~3%) through natural population decrease in the same period. Emigration was the dominant factor contributing to overall population decline from 1989 to 1992. Since then, regional population decreased mainly through a lower birth rate.

Apart from migration to and from outside the region, there have also been substantial *intraregional* migration flows in the last decade. Generally, these have been from the cities and towns towards the outskirts and hinterland. This has also been the case in our two study areas, where people moved out of the towns of Ludwigslust, Pasewalk and Ueckermünde to the outskirts and the countryside. These migration flows were mainly caused by lower land prices in the hinterlands and improved traffic conditions, not by better job opportunities.

The gross value added (GVA) per employee in Mecklenburg-Vorpommern has been below the East German average, with the gap increasing during the 1990s. The GVA per employee in the 'leading' study area Ludwigslust has been relatively close to (and in 1994 even above) the regional average, while GVA per employee in Uecker-Randow was lagging behind considerably.

The composition of the industrial structure in Mecklenburg-Vorpommern is quite unfavourable, compared to Niedersachsen. Traditionally, the region has always had an agricultural character and still its share of agriculture is the highest in Germany. Accordingly, the layoff of agricultural workers has been one of the major sources for unemployment since 1990. Furthermore, the share of the manufacturing and service sectors is below German average, while the share of construction and public administration is above the national level.

Fig. 5: Population shifts in Mecklenburg-VorpommernSource: ISP 1999



Source: ISP 1999

The industrial structure of Mecklenburg-Vorpommern is not only different from the national pattern, but also dominated by single branches and less diversified. In the manufacturing sector, the main industries of Mecklenburg-Vorpommern have been food-processing (1993: 40% of turnover) and shipbuilding (1993: 20% of turnover) (BANDELIN 1994, p. 34). With a cost disadvantage compared to its main competitors, Korea and Poland, the shipbuilding industries in the region today depend to a large degree on subsidies, delaying structural change for the regional economy. Furthermore, the shipyards are concentrated in a few cities along the coast and have little economic impact on their hinterlands. Food industries have only small growth rates in general, so that this second pillar of the manufacturing sector cannot provide the basis for growth either. The other industries are of minor economic importance for the region: wood processing, agro-chemical production, mining, machinery, transport equipment and electronics. The construction sector in Mecklenburg-

Vorpommern is disproportional large, due to a construction boom in the early- and mid-1990s, supported by investment incentives.

The tourism industry represents a particularly high share of the service sector in the region. Tourism is located mainly in places along the coastline, apart from a lake district in the centre of the region. Furthermore, tourist industries in the region suffer from pronounced seasonality and over-capacity. One of the few industries with a slightly more promising performance is the transport sector (HEISE 1997, p. 68), especially the ports, which benefit from a growing amount of shipped goods to Scandinavian countries and the Baltic countries. Again however, this sector is geographically highly concentrated.

The parliament of Mecklenburg-Vorpommern and the government with its eleven ministries is located in the state capital Schwerin. The state administration of Mecklenburg-Vorpommern has no 'government districts' ("Regierungsbezirke") as do Niedersachsen, due to the small population of Mecklenburg-Vorpommern. On the county level ("Kreise"), we find 12 rural counties and 6 cities. Each county and city has its own parliament ("Kreistag") and is basically responsible for the provision of infrastructure insofar as this is not provided for by the federal government or the state (for example minor roads, hospitals, school buildings, waste and sewage treatment, etc.). In contrast to Niedersachsen, there is only one top position of the county hierarchy ("Landrat") as both the political representation and the head of the county's administration.

Between 1991 and 1993, the transformation process in the former GDR was supported by the three EU structural funds amounting to 3 bn ECU. The region of Mecklenburg-Vorpommern participated with a share of 23% from the funds provided by the EU. From 1994 to 1999 the new states have been supported under objective 1 with an amount of 13640 MECU by the three EC structural funds. 23% of the amount has been provided for the development of rural areas. The region of Mecklenburg-Vorpommern has participated with a share of 22%. The whole area of Mecklenburg-Vorpommern belongs to the support framework of regional policy spending in the framework of GRW by the federal budget (see 3.1.4.).

The most relevant constraints for economic development in Mecklenburg-Vorpommern are the region's weak industrial structure, the peripheral geographical location inside Germany and the EU and the relatively poor human capital. One of the strengths of Mecklenburg-Vorpommern lies in its natural uniqueness, the intact environment and the rich landscape in many parts of the region. The latter factors, in

combination with the coastline along the Baltic sea, make the region a famous summer holiday destination for (mainly German) tourism.

Chapter 3 Region Niedersachsen

3.1 Analysis of Factors

3.1.1 Natural Resources

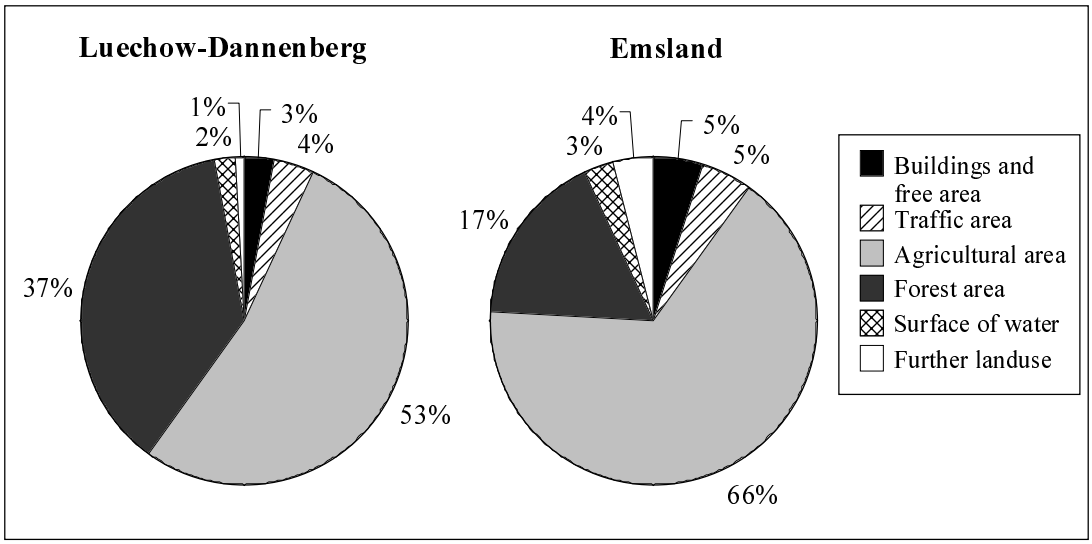
Summary

Both Emsland and Lüchow-Dannenberg have a high share of land used by agriculture. However, the overall influence of agriculture on economic development of the study areas nowadays is very limited. Rich resources of water and forests reveal the attractiveness of both study areas for recreation and tourism. However, this potential is limited by nearby regions which are even more attractive for tourism, such as the north sea coast or the lake district in Mecklenburg-Vorpommern. Natural resources like oil and gas are exploited in Emsland, and subterranean salt-stocks in Gorleben/ Lüchow-Dannenberg are an important location factor for nuclear waste disposal facilities. While the ownership of land is not a decisive factor for economic performance in both counties, protection of the environment causes a range of planning restrictions for both industrial investments and agriculture, especially in Lüchow-Dannenberg.

Availability of natural resources

Both study areas have a high share of areas with little utilisation for housing and settlements. In Lüchow-Dannenberg the share of forest is particularly high. In both Emsland and Lüchow-Dannenberg the bulk of land is used for agricultural purposes (Figure 6). As part of the ‘Emslandplan’ (see 3.2.2.), large areas of swamp and moorland were cultivated in the 1950s and 1960s. As the soil in Emsland is not particularly fertile, most of the land is used as grasslands or for cultivating potatoes and maize. The quality of agricultural soil in Lüchow-Dannenberg is diverse. Some areas show low fertility, while others, especially the alluvial soils near the river Elbe, are of better quality and used in an intensive manner (Table 4). Both areas contain lakes and rivers, and Lüchow-Dannenberg is to a large degree covered by forests. Further natural resources in Emsland are oil and gas. Their exploitation was concentrated in the 1960s and triggered the location of a refinery in Lingen. By contrast the subterranean salt-stocks in Gorleben are still important for today’s economic, and particularly social, development in the area, since in the opinion of experts these salt stocks provide the most appropriate morphological conditions for ultimate nuclear waste disposal in Germany.

Fig. 6: Land use



Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

Tab. 4: Quality of soil*

	Emsland	Lüchow-Dannenberg
Best quality of soil	32.0	46.2
Poorest quality of soil	23.5	23.0
Unweighed average of all communities	27.2	32.4
*German index "*Ackerwertzahlen*"		

Source: Oberfinanzdirektion Hannover

Land Ownership, structure and price

Today, the ownership of land is not decisive for economic development in the two study areas. However, after the Second World War many refugees were settled in Emsland by the federal government and equipped with land for agricultural use. This turned out to be a valuable precondition for investments in the following years. Since the 'new' farmers were not stuck to their soil as much as farmers in other areas, the local administration was able to buy back land cheaply, when needing extensive coherent areas to attract large investments. Compared with the German average, pri-

ces for real estate sites are low in both areas, particularly in Lüchow-Dannenberg (Table 5).

Tab. 5: Land price, 1996/1997

	Germany	Emsland	Lüchow-Dannenberg
Average price for real estate sites per m² in DEM	109	81	55

Source: BBR 1999

Environmental legislation and planning restrictions

Due to the rich natural environment and landscape in both counties, a high share of the areas are subject to special protection schemes, like reservations of landscape or preserve areas, as shown in Table 6. Particularly in Lüchow-Dannenberg, a high share of the county's area is subject to environmental protection and in many cases the planning restrictions involved conflict with the economic development of the area. This is often the case when farmers plan to expand their production or switch from cultivation of crops to livestock husbandry. Next to the environmental legislation, there are regularly environmentalist movements or single persons, such as immigrated retired people or neighbours in Lüchow-Dannenberg who restrict space consumption and agricultural intensification. As a local farmer notes: *"It doesn't matter whether it's against nuclear power, farmers' barns, the motorway or a shop floor for disabled people: civil movements are immediately founded to prevent any kind of change"* (quoted in NEUMANN 2001).

Concerning the attitudes of the administration towards environmental claims, in Lüchow-Dannenberg the environment appears to be protected more strictly, while in Emsland economic progress seems to have priority over environmental claims. There are also fewer protests against the intensive livestock husbandry in Emsland. As a local journalist puts it: *"People from Emsland are basically pragmatic about natural protection."* On the one hand, this arguably helped larger projects like the Transrapid test track, the test track of Mercedes Benz and the extensions of the Meyer shipyard in Papenburg to be realised. On the other hand, one could argue that a certain amount of natural richness and beauty has been destroyed by these projects in Emsland.

Tab. 6: Protected area

	Emsland		Lüchow-Dannenberg	
	Number of protected areas	Size of protected areas in ha	Number of protected areas	Size of protected areas in ha
Protection of landscape	19	24,978	13	51,253
Preserve areas	60	7,723	21	6,572
Protected area of the county in %	11.3%		47.4%	

Source: *Landkreis Emsland 2000*; Landkreis Lüchow-Dannenberg

3.1.2 Human Resources

Summary

Emsland and Lüchow-Dannenberg exhibit very contrasting demographic features. Population in Emsland has constantly grown in the post-war period, while the population in Lüchow-Dannenberg has been declining or stagnating. The age distribution is much 'younger' in Emsland than in Lüchow-Dannenberg, due to higher birth rates there and higher immigration of pensioners in Lüchow-Dannenberg. Accordingly, Emsland features a higher potential of human capital.

Demography

In the post-war period, Emsland experienced a pronounced population growth, while population in Lüchow-Dannenberg declined slightly (Figure 7). The main reason for the differences between the study areas is the particular high fertility rate in Emsland (Table 7). The migration pattern of the two counties is similar: Both areas experienced immigration of German refugees in the aftermath of WW II, followed by overall emigration in the 1960s and 1970s. Since the 1980s or so, a growing number of pensioners moved to the areas, in order to spend their remaining years in a sound and healthy environment. Also, families who chose to live in the countryside immigrated. This recent immigration counterbalanced to some extent the loss of young people who emigrated in order to find employment or for further education. Today,

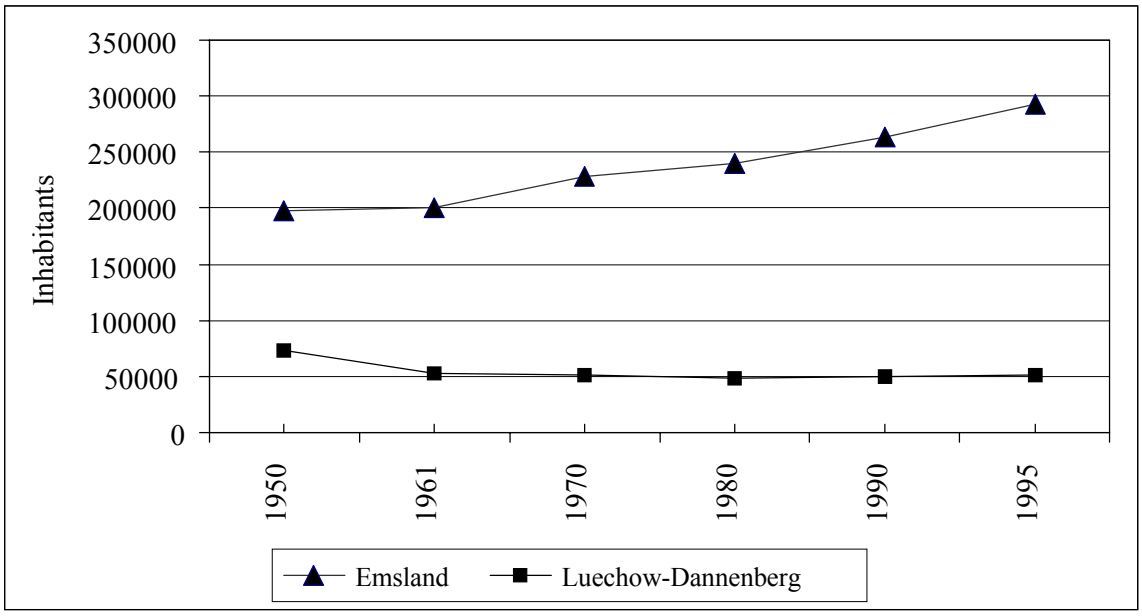
both study areas experience an overall immigration. The immigration of pensioners was however more pronounced in Lüchow-Dannenberg than in Emsland. By contrast, emigration of youth was less pronounced in Emsland in the last decades than in Lüchow-Dannenberg. Additionally, formerly more young people who e-migrated could return to Emsland due to better prospects of employment (Figures 8 and 10). The resulting age distribution is a very 'young' local population in Emsland compared to a relatively 'old' population in Lüchow-Dannenberg (Figure 9).

Tab. 7: Fertility rate, 1997

	West German rural areas	Emsland	Lüchow-Dannenberg
Fertility rate	1.47	1.68	1.47

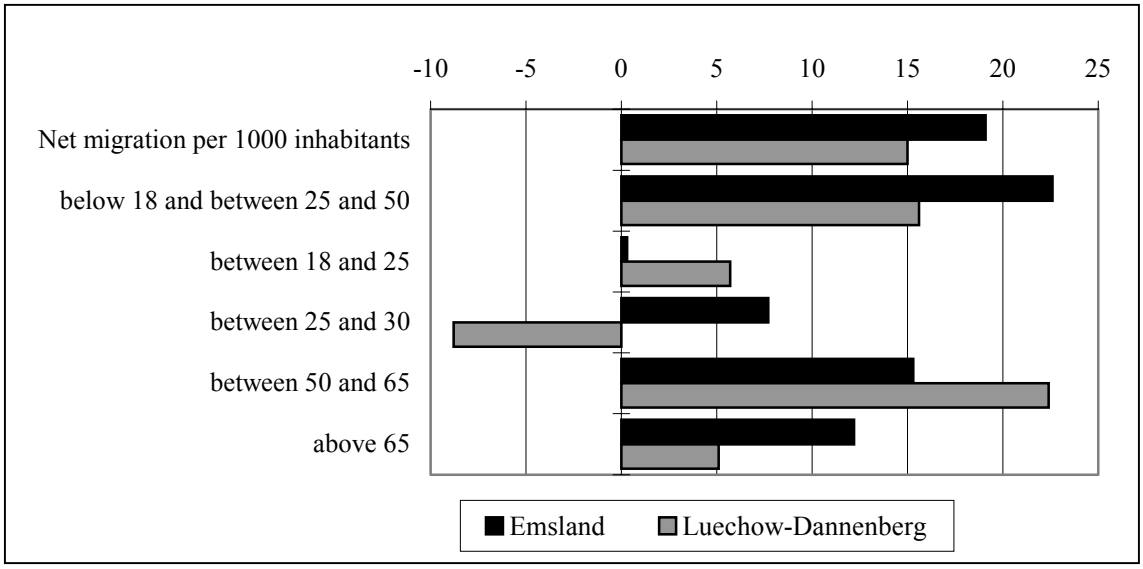
Source: BBR 1999

Fig. 7: Population growth



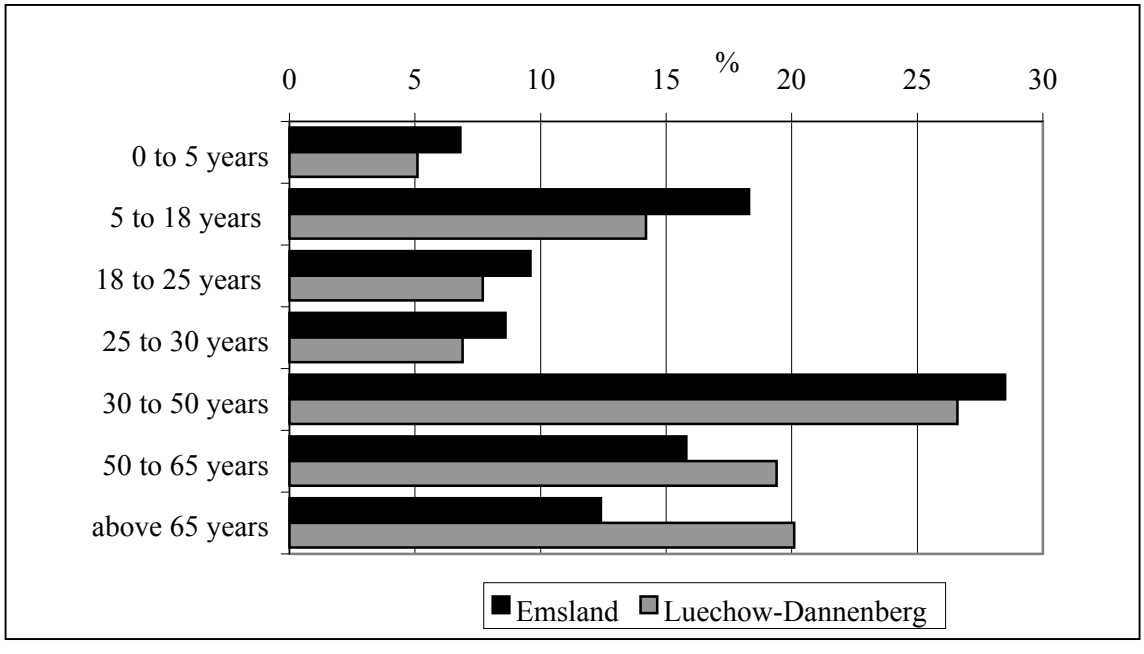
Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

Fig. 8: Migration per 1000 inhabitants per age group, 1995



Source: BBR 1999

Fig. 9: Share of age groups, 1997



Source: BBR 1999

Labour force characteristics

Despite marked population growth in Emsland, unemployment rates in the past have been much lower than in Lüchow-Dannenberg (Table 9), in particular youth unemployment (Table 10). To some extent, this may be caused by less women entering the work force in Emsland (Table 8), due to more traditional values and lifestyle. Another reason is the good supply of training on the job. The main reason however is a remarkable overall employment growth (Figure 10). Lüchow-Dannenberg also witnessed employment growth in the last twenty years (which was partly due to a boom following the reunification in the early 1990s). However, this employment growth was not sufficient to reduce unemployment to similar levels as in Emsland.

Tab. 8: Labour market figures

	Emsland	Lüchow-Dannenberg
Share of population between 15 and 65 years, 1997	66.3	63.5
Development of employment in this age group between 1990 and 1997 in %	+9.7	+4.0
Share of female employees in %, 1998	35.7	44
Supply of training on the job per 100 applicants in %, 1998	104	94.5

Source: BBR 1999

Tab. 9: Unemployment rates

	Niedersachsen*	Emsland**	Lüchow-Dannenberg*
1980	4.0	n.a.	8.1
...			
1985	12.3	n.a.	20.1
1986	11.5	n.a.	19.1
1987	11.4	n.a.	18.7
1988	11.2	n.a.	19.1
1989	10.0	8.5	14.5
1990	9.4	7,2	15.3
1991	8.1	6.6	14.4
1992	8.1	7.4	14.1
1993	9.7	9.8	15.7
1994	10.7	9.5	15.6
1995	10.9	10.2	15.9
1996	11.4	11.6	17.7
1997	n.a.	12.0	16.2
1998	11.7	10.6	15.9
1999	11.5	10.1	16.0
* Annual average; ** 30th of June			

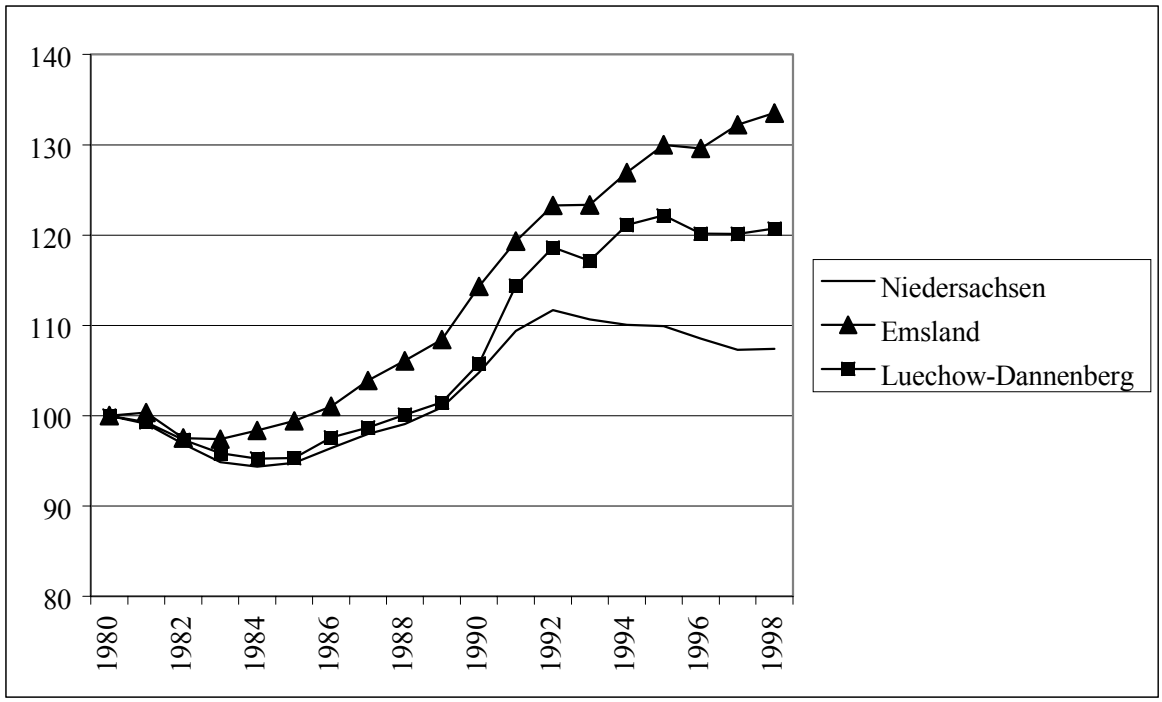
Source: BBR 1999; Landkreis Lüchow-Dannenberg 1997; Landkreis Emsland, Amt für Wirtschaftsförderung

Tab. 10: Structure of unemployment, 1998

	Niedersachsen	Emsland	Lüchow-Dannenberg
Share of female unemployment in %	45.1	50.9	50.9
Long-term unemployment in %*	40.4	38.8	44.2
Share of unemployed <25 years per 1000 inh.<25 years	47	35	77
Share of unemployed >55 years per 1000 inh. >55 years	85	58	79
* unemployed for more than one year			

Source: BBR 1999

Fig. 10: Employment (1980 = 100)



Source: NLS 1999

Human capital

As a result of the different demographic patterns and better employment opportunities, human capital is higher in Emsland than in Lüchow-Dannenberg (Table 12). Accordingly, less entrepreneurs in Emsland seem to have difficulties filling job vacancies than in Lüchow-Dannenberg, particularly positions for those with higher education (Table 13).

Tab. 11: Educational level of population, 1996

	Emsland	Lüchow-Dannenberg
Secondary school (in %)	50.1	48.1
Comprehensive School (in %)	28.8	32.0
Grammar School (in %)	18.1	16.8

Source: BBR 1999

Tab. 12: Qualification of workforce, 1997

	Emsland	Lüchow-Dannenberg
Lower qualification*	24.9	31.5
High qualification (academics)	4.2	3.3
*Share of secondary school degree holder or employees trained on the job		

Source: BBR 1999

Tab. 13: Business survey: Vacancies and qualification

"*Do you have difficulties to fill vacancies?*"	Emsland	Lüchow-Dannenberg
"*Yes*"	54%	63%
"*If 'Yes', which kind of qualification*?"		
Unskilled	2%	0%
Low and medium qualifications	10%	5%
Skilled workers	88%	65%
Academics	29%	45%
Management	19%	10%

Source: Own survey

3.1.3 Infrastructure

Summary

Emsland seems to be somewhat better equipped with interregional transport infrastructure, due to better access to motorways and the rail network. This applies especially for the time before the German reunification, when Lüchow-Dannenberg was an intra-German border region. As for business-related infrastructure, both counties are able to offer low-priced land to investors. Based on the rich landscape and intact nature, both counties have potential for tourism. Emsland however promotes this potential centrally, while in Lüchow-Dannenberg tourism promotion might be hampered to some extent by fragmented structures.

Transport infrastructure

Both study areas are relatively remote in terms of travel distances to agglomerations, as Table 14 indicates. However, the table refers to the situation after the German reunification. Before, Lüchow-Dannenberg, being surrounded on three sides from the intra-German border, was more remote than the table indicates. Furthermore, today Emsland has better access to the German motorway and railtrack networks. By contrast, Lüchow-Dannenberg lacks access to a motorway, and has only poor access to the railway system (Table 15). Accordingly, entrepreneurs in Emsland appear to be more content with transport infrastructure than in Lüchow-Dannenberg (Table 16).

In terms of transport infrastructure, Lüchow-Dannenberg has traditionally been one of the most peripheral areas in Western Germany. During the cold war, the 'iron curtain' cut the area off from neighbouring regions. Until 1990 only two interstates linked the area with the rest of West Germany. The only rail track of the area which comes from the West still ends in the town of Dannenberg. Decision-makers in Lüchow-Dannenberg have not reached agreement on whether improved rail or road connections are desirable to foster the county's economic performance. Concerning waterways, Lüchow-Dannenberg borders the river Elbe for 60 km and has three ports of minor importance.

In contrast, in Emsland there are three stops of the 'Interregio' train which runs from the Ruhr Area to Emden, the A 31 motorway, which links the county to the north, and a loading station for merchandise traffic (GVZ) in Dörpen. A further improvement of the situation is expected by the construction of the A 31 motorway, which

forms the missing link of the existing motorway to economic centres in the south (see 3.2.2). The river Ems and the Dortmund-Ems-Kanal, which connect the area with the Ruhr Area, are the major waterways, with one port in Papenburg.

According to the interviewees, bus lines in both study areas are inadequate. In Lüchow-Dannenberg, school children lose a considerable amount of time on their way to school, which is also due to the scattered settlement pattern in the area. In Emsland, the bus lines are also insufficient, but the situation is less problematic than in Lüchow-Dannenberg, because of an overall higher population density.

Tab. 14: Accessibility

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Accessibility of the next three agglomerations by car in min.	85	85	104	95
Accessibility of the next three agglomerations by train in min.	105	94	138	131
Accessibility of all European agglomerations by car/ train split in min.	271	285	310	311
Accessibility of the next inter-national airport in min.	63	60	74	115
Accessibility of the next „Inter-city“- railway station in min.	30	36	61	56

Source: BBR 1999

Tab. 15: Quantitative indicators for transport infrastructure

	Emsland	Lüchow-Dannenberg
Railway tracks in kilometres	273	73
motorways in kilometres	74	0
interstates in kilometres	255	135
Density of motorways and interstates in km in relation to the area of the county in km² *	0.11	0.11
Loading station for merchandise traffic (GVZ)	1 (Dörpen)	/
Ports	1 (Papenburg)	3 (Schnackenburg/ Thiemesland/ Tießau)
Capacity of ports in tons	62,400	61,500
* Germany = 0.15/ Niedersachsen = 0.13		

Source: BBR 1999; Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

Tab. 16: Business survey: satisfaction with transport infrastructure

„very content" or *„content"* with the following location factors in the county	Emsland	Lüchow-Dannenberg
Interregional transport infrastructure (in %)	27	14
Intraregional transport infrastructure (in %)	81	55

Source: Own survey

Business-related infrastructure

In both areas there are no bottlenecks concerning the short-term availability of land in industrial estates. However, conditions in Emsland seem to be somewhat more attractive, as more than 160 ha of business parks are located close to the motorway. Furthermore, there is a greater variety of conditions in the various locations, and overall, land prices seem to be slightly lower than in Lüchow-Dannenberg. Prices for electricity are similar in both areas. Emsland has a slight cost advantage concerning the price of water, although water is relatively cheap in both areas (Table 18).

Tab. 17: Availability of land

	Emsland	Lüchow-Dannenberg
Availability of land in business districts in ha	1,500	more than 120
Business districts in ha per km²	0.52	0.1
Average price per m² in developed business districts in DEM	12.5	10-20

Source: Landkreis Emsland 2000; www.emsland.de/; Interview with GWBF Lüchow-Dannenberg

Tab. 18: Electricity and water costs, 1997

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Costs of electricity per kilo-watt hour in DEM	0.19	0.18	0.19	0.17
Costs of water per m³ in DEM	3.26	2.47	1.78	1.83

Source: BBR 1999

Consumer-oriented infrastructure

The quantitative supply of health services in both areas is somewhat below the regional and national average (Table 19). Emsland has a better supply of beds in hospitals, while Lüchow-Dannenberg is better equipped with doctors per persons. For further indicators concerning consumer-oriented infrastructure see 3.1.10.

Tab. 19: Health infrastructure, 1997

	Germany	Niedersachsen	Emsland	Lüchow-Dannenberg
Doctors per 100,000 inhabitants	134	121	103	121
Beds in hospital per 10,000 inhabitants	70	66	60	44

Source: BBR 1999

Tourist infrastructure

Both Emsland and Lüchow-Dannenberg have a high potential for tourism and are especially attractive for short trips and cycling holidays on the basis of rich natural and cultural resources (Table 21). Taking into account the smaller size of Lüchow-Dannenberg, there are more cultural activities which attract tourism than in Emsland. Unfortunately no data is available to account for short-break tourists in the two counties. According to interviewees however, day-trip tourism contributes substantially to local income. While the number of accommodations per capita is considerably higher in Lüchow-Dannenberg than in Emsland, the number of overnight stays per inhabitants in 1998 was lower in Lüchow-Dannenberg. This results in considerable over-capacity in the tourist sector of Lüchow-Dannenberg (Table 20). These over-capacities might partly be caused by the fact that an even more beautiful natural environment can be found in the Mecklenburg-Vorpommern lake district, which became accessible for West German tourists after 1989. Furthermore, an advantage of Emsland in promoting tourism is the centralised marketing office in the county administration. In Lüchow-Dannenberg this is carried out by the five communities in the counties.

Tab. 20: Tourism capacities and overnight stays

	Emsland	Lüchow-Dannenberg
Accommodation facilities, offering more than 9 beds (1998)		
Hotels per 1000 inhabitants	0.18	0.46
Guesthouses per 1000 inhabitants	0.13	0.44
Bed and Breakfast per 1000 inhabitants	0.09	0.28
Recreation homes per 1000 inhabitants	0.03	0.06
Holiday apartments per 1000 inhabitants	0.12	0.48
Hostels per 1000 inhabitants	0.01	0.07
Overall number of overnight stays	2,200,000	329,185
Number of yearly overnight stays per inhabitants	7.3	6.3
Overall number of tourist beds	14,000	approx. 4,400
Number of overnight stays per tourist bed capacities	157 (in 1999)	115 (in 1994)

Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997; NLS 1998; www.emsland.de/ Niedersächsisches Ministerium für Wirtschaft, Technologie und Verkehr und Niedersächsisches Umweltministerium 2000a

Tab. 21: Interviews: Potential for tourism

Emsland	Lüchow-Dannenberg
Nature The "*Huemmling*" area Extensive moorlands Hiking Cycling Boat tours	Nature Natural Park "*Elbufer-Drawehn*" The "*Nemitzer Heide*" Hiking Cycling Skating Alternative agriculture
Culture Museums Castle Clemensworth Music-festival "*KULTOURsommer*"	Culture Museums Old slavic villages ("*Rundlinge*") Music-festival "Musikwoche Hitzacker"
Technical facilities Meyer shipyard Transrapid test track	
Promotion One central promotion agency for the area ("*Emsland Touristik*")	Promotion Promotion offices in each of the five communities of Lüchow-Dannenberg

Regional Policy

see 3.1.4.: Investments

3.1.4 Investment

Summary

There is only poor data available on the amount of past investment. Recent data suggests a higher amount of investment per employee in Emsland than in Lüchow-Dannenberg. Transformation of GRW investment incentives per capita into investments has been higher in Emsland than in Lüchow-Dannenberg. To some extent, this might indicate a higher capacity of the private economy in Emsland to exploit public grants and incentives more efficiently. According to the interviewees however, Lüchow-Dannenberg suffers also from less funding than towards neighbouring areas of East Germany.

Past investments

The only data available on the amount of investments relates to the time period between 1994 and 1997. In this period, investment per employee in the manufacturing and construction sector was higher in Emsland than in Lüchow-Dannenberg (Table 22). The number of insolvencies per capita appear to be below the regional average in both counties (Table 23).

In both areas, only a small share of enterprises stated that they have employees in R&D. While in Emsland there are more surveyed enterprises which assign between 0.5 and 10% of employees to R&D activities, in Lüchow-Dannenberg there appear to be more enterprises with more than 10% of employees in R&D, but also more enterprises with no R&D employment at all (Figure 11). While the share of surveyed enterprises which are autonomous or a branch in both areas is about the same (Table 24), the picture might be different with a view to the number of jobs. It seems that in Lüchow-Dannenberg more jobs are found in branch firms of parent companies than in autonomous enterprises.

Tab. 22: Average yearly investment in the producing sector between 1994 and 1997

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannen-berg
Investment in manufacturing and construction sector per employee in 1,000 DEM	13.2	11.8	21.0	13.1

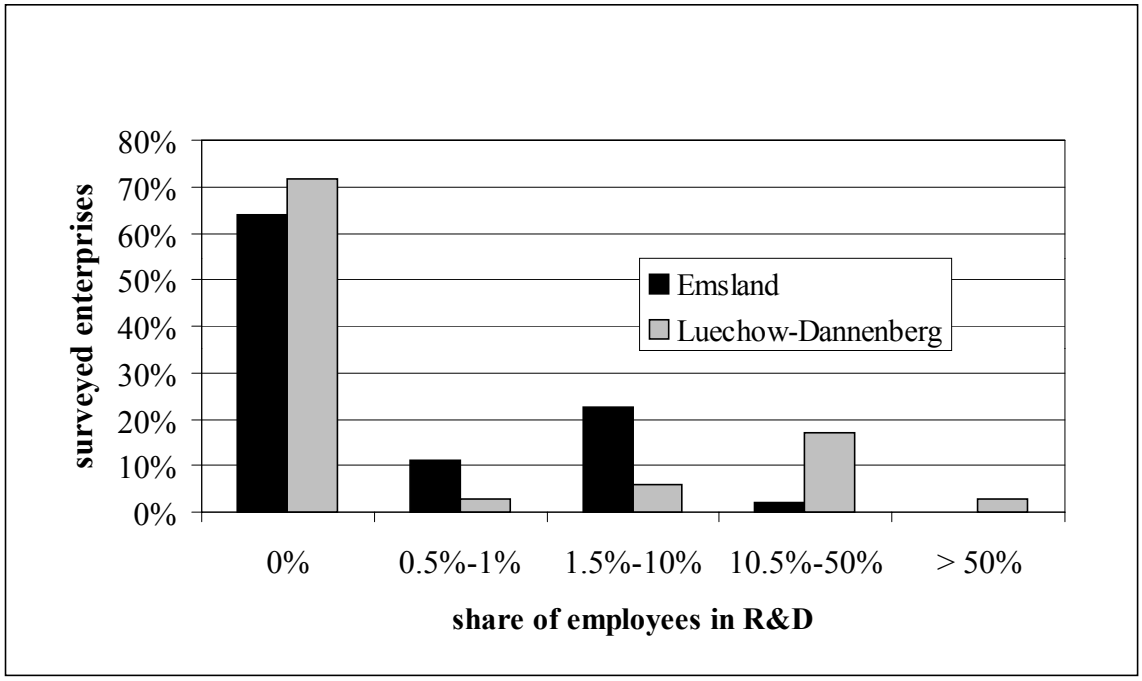
Source: BBR 1999

Tab. 23: Close-downs and insolvencies, 1998

	Nieder-sachsen	Emsland	Lüchow-Dannen-berg
Insolvencies per 10,000 people	0.34	0.22	0.17
Estimated claims per insolvency in 1000 DEM	1,037	929	1,479

Source: NLS 2000b, BBR 1999

Fig. 11: Business survey: Proportion of employees in R&D



Source: Own survey

Tab. 24: Business survey: Ownership of enterprises

	Emsland	Lüchow-Dannenberg
Autonomous	85 %	84%
branch	15 %	16 %

Source: Own survey

Costs of capital and regional policy

Concerning interest rates, there are no noteworthy differences between the study areas. However, more of the enterprises surveyed in Lüchow-Dannenberg stated that investment incentives were a decisive factor for their investment decisions in the area compared to enterprises in Emsland (Figure 12). Local actors in Emsland valued regional policy funds as especially important for initialising the local development process in the 1950s, but also for the years to follow. In Lüchow-Dannenberg, the importance of regional policy funds was emphasised as compensation for the low tax revenues of the communities.

Between 1990 and 2000, much more GRW funds per capita were authorised for Emsland than for Lüchow-Dannenberg (Table 25 and 26). The marked difference in GRW funds granted for infrastructure are caused by the fact that in Lüchow-Dannenberg, funding for infrastructure investments originated predominantly from other sources, such as Objective 5b funding of the EU. On the whole, however, Emsland appears to have managed to direct considerably more regional policy funds from the federal government into their county than Lüchow-Dannenberg. A former county director attributes this partly to the extraordinary local development dynamics: *"Emsland was the draught horse for exemplary regional development. Something happened here, and that's why people in Hannover and Bonn were glad to support it financially."*

Since German reunification, Lüchow-Dannenberg has faced additional problems concerning investment incentives. Firstly, the regional policy funds of the federal budget since 1990 have been distributed also among east German regions, so that the share of West German lagging areas like Lüchow-Dannenberg decreased. Secondly, the competitiveness of the area in terms of investment incentives is directly decreased by the priority given to funding of the neighbouring east German regions.

Tab. 25: Granted investments by GRW funds in infrastructure, 1.10.1990 – 30.9.2000

	Emsland		Lüchow-Dannenberg	
	Investment volume	GRW funds	Investment volume	GRW funds
Total in MDEM	124.49	67.56	0.41	0.23
Per capita in DEM	417.8	226.7	7.9	4.4

Source: Deutscher Bundestag 2000b

Tab. 26: Granted investments by GRW funds in private sector, 1.10.1990 - 30.9.2000

	Emsland		Lüchow-Dannenberg	
	Investment volume	GRW funds	Investment volume	GRW funds
Total in MDEM	1,382.44	117.19	166.74	19.15
Per capita in DEM	4639	393.3	3206.5	368.3

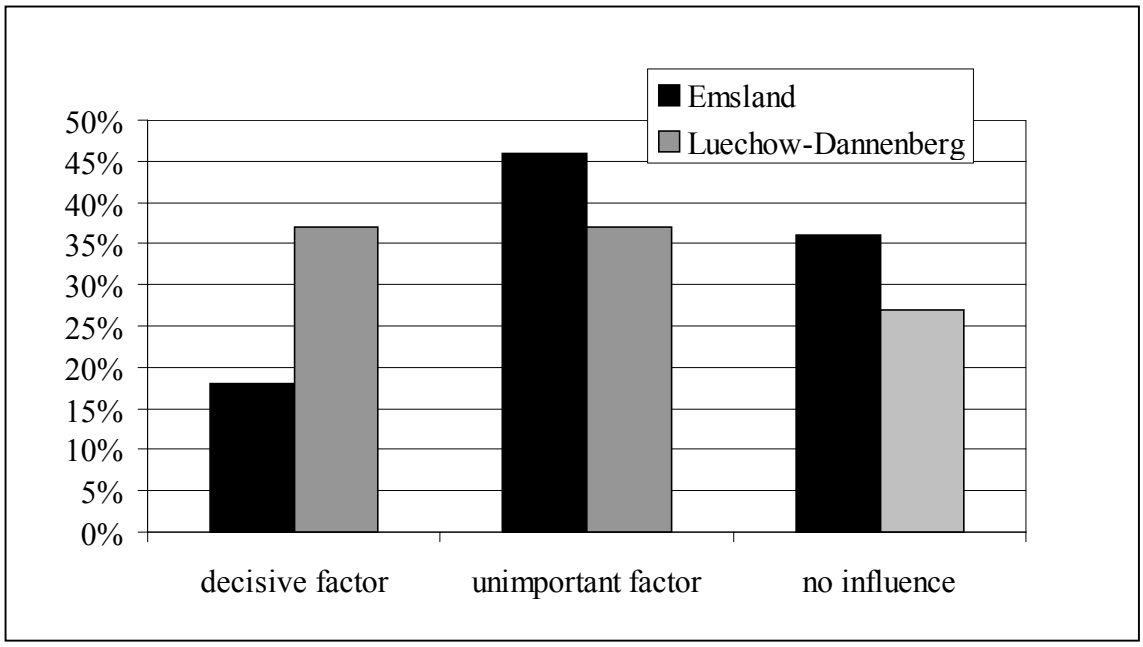
Source: Deutscher Bundestag 2000b

Tab. 27: Interviews: Role of public funds for development of the area

Emsland	Lüchow-Dannenberg
- Important for infrastructure and industrial and agricultural developments - Crucial as catalyst to initiate development	- External funds important as increasing difficulties to raise money in communities - Decisive factor for some large enterprises, for others only positive side effect of location

Source: Own survey

Fig. 12: Business survey: "How important have public funds been for investment decisions of your enterprise in the last two decades?"

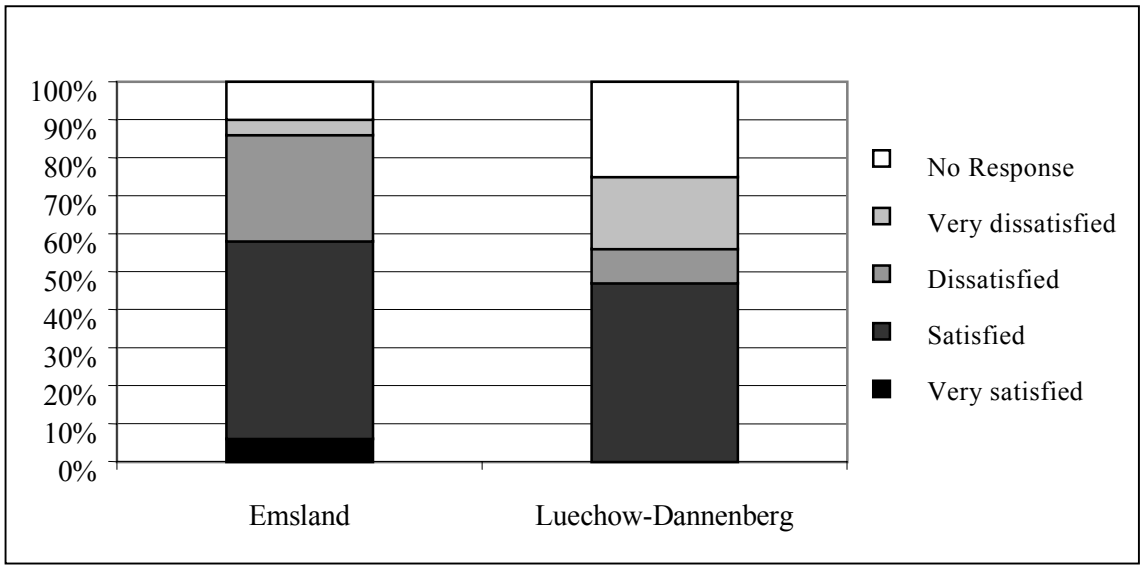


Source: Own survey

Capital availability

More surveyed enterprises in Emsland were satisfied with the capital availability from banks and their preparedness to take risks than in Lüchow-Dannenberg (Figure 13, see also 3.1.8.). However, according to surveyed entrepreneurs, the overall impact of this variable appears to be limited.

Fig. 13: Business survey: "How satisfied are you with the capital availability and risk taking of banks?"



Source: Own survey

3.1.5 Economic Structures and Organisation

Summary

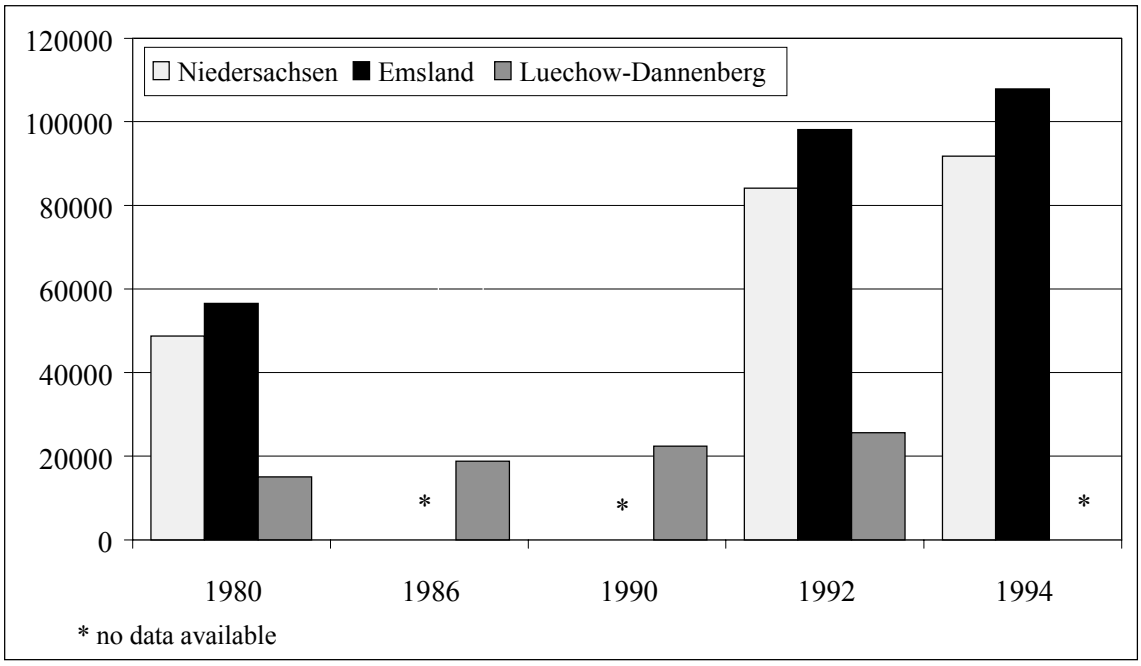
Both study areas feature a rather unfortunate sectoral structure, with high shares of sectors which are in decline at the state level. However, Emsland still features a higher growth of employment and much higher productivity levels than Lüchow-Dannenberg. To some extent, this could be the result of the 'healthy' mix of industrial structure in Emsland, be it in terms of size, ownership or branch. Furthermore, the local economy of Emsland appears to be more export-oriented. In Lüchow-Dannenberg, the size and ownership structure of the local economy appears more unbalanced.

Structure and evolution of employment by sector and social formation of production

Over the last decade, the relative importance of services sector grew significantly in both areas (Table 27). Furthermore, Emsland experienced relative employment growth in the secondary sector, while in Lüchow-Dannenberg employment in this sector experienced stagnation in the last decade. Over the last 20 years, both Emsland and Lüchow-Dannenberg experienced employment growth above the average of Niedersachsen as a whole. Emsland has a high share of economic branches which have generally suffered from stagnation, like 'construction', 'wood, paper, printing' or 'textile and clothing' (Figure 18). Accordingly, the shift-share analysis of employment resulted in a negative net proportionality shift (Table 29). With an overall growth of employment, the resulting differential shift is strongly positive. Lüchow-Dannenberg also exhibits a positive differential shift, however less marked than in Emsland.

Strikingly different is the performance of both areas in terms of productivity. The gross value added per capita in Emsland is four times higher than in Lüchow-Dannenberg and clearly above the average of Niedersachsen (Figure 14).

Fig. 14: Gross value added per capita (in DEM)



Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

Tab. 28: Employment in economic sectors 1998 (in %)

	West German rural areas		Emsland		Lüchow-Dannenberg	
	1998	change 90–98	1998	change 90–98	1998	change 90–98
Primary sector	1.3	-16.3	1.9	+2.5	3.6	+35.3*
Secondary sector	45.3	-9.1	49.2	+8.8	41.1	+/-0
Service sector	53.4	+15.3	49.0	+26.9	55.4	+26.1
* The data refers to employees in the agricultural sector, not to farmers. This explains the extraordinary growth of agricultural employment in this period in Lüchow-Dannenberg						

Source: BBR 1999; NLS 1999

Tab. 29: Shift-share analysis of employment changes between 1980 and 1998*

	Emsland	Lüchow-Dannenberg
Actual (Total Net Shift)	19.56	11.04
Predicted (Net Proportionality Shift)	-4.7	-0.51
Differential (Net Differential Shift)	24.26	11.55
*Calculations referring to Niedersachsen, based on 32 sectors		

Source: Own calculation

Structural characteristics and evolution of enterprises

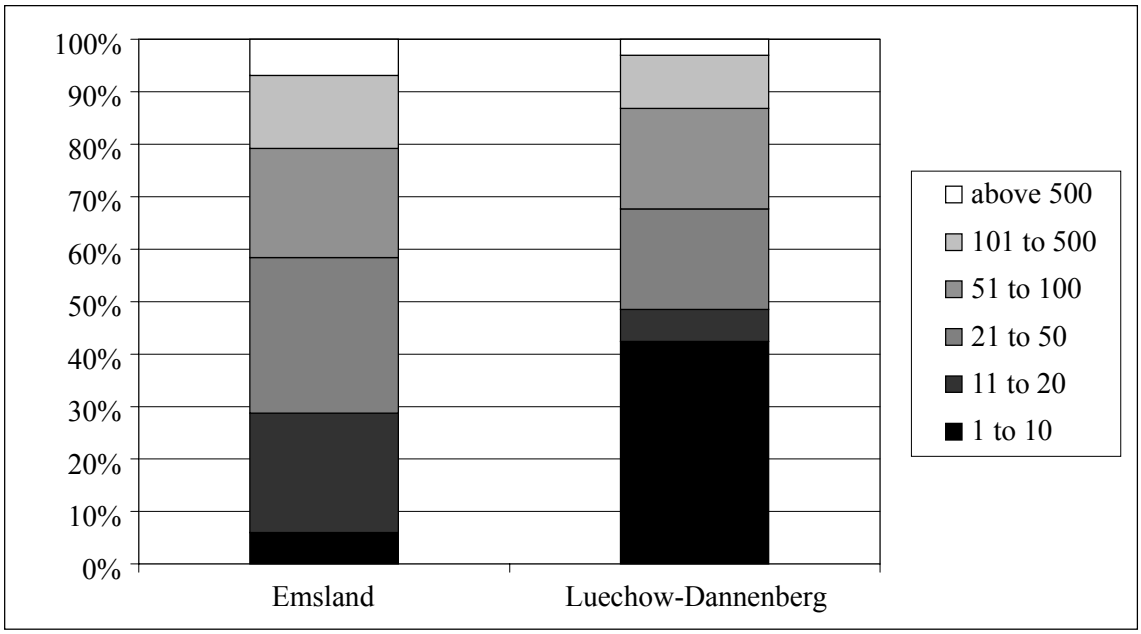
Despite being a rural area, today Emsland is ranked third among counties in Niedersachsen in offering manufacturing jobs (DANIELZYK/WIEGAND 1999). The business survey in the manufacturing and construction sector provides insights into the structure of enterprises in the study areas. In Lüchow-Dannenberg the share of small companies appears to be very high (Figure 15). Additionally, there is a high share of relatively young enterprises (Figure 16). In contrast, many firms in Emsland are more than 50 years old, and the size structure is more balanced. The share of international supplies in the surveyed enterprises is higher in Lüchow-Dannenberg, while Emsland has a higher share of international sales. The primary sector has a higher share of employment in Lüchow-Dannenberg than in Emsland. In both counties the number of farms decreased drastically over the last few years, while employment grew (Figure 17 and Table 31).

Tab. 30: Business survey: Integration of enterprises into markets

	Emsland	Lüchow-Dannenberg
	"Origin of supplies" (in %)	
County	28	13
Germany	61	72
International	11	15
	"Sales" (in %)	
County	37	34
Germany	47	56
International	16	10
	Outsourcing	
Share of enterprises which sourced-out certain business activities over the last 20 years (in %)	23	29

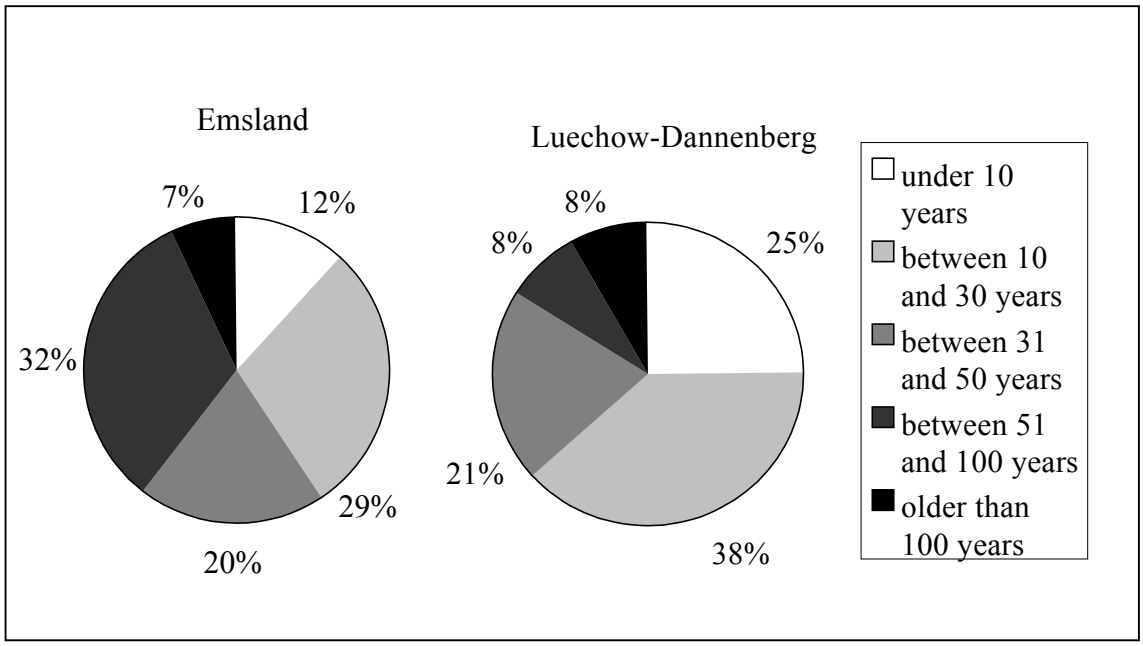
Source: Own survey

Fig. 15: Business survey: Size of enterprises by number of employees



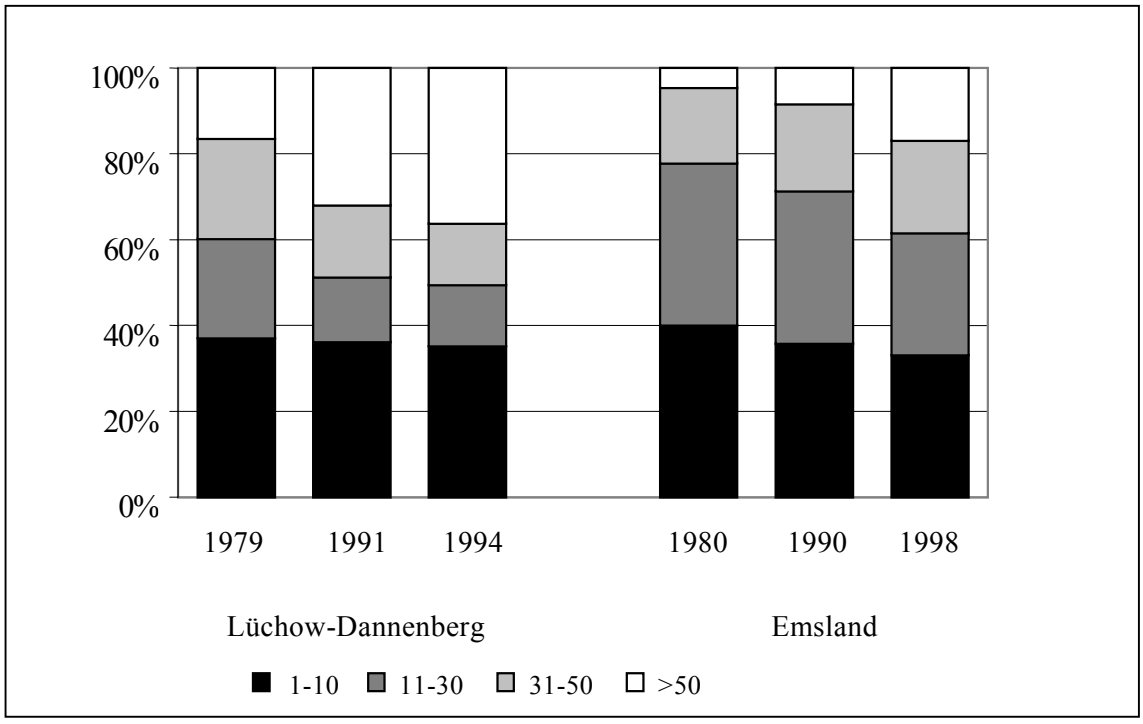
Source: Own survey

Fig. 16: Business survey: Age classes of enterprises (in %)



Source: Own survey

Fig. 17: Evolution of farm size in ha



Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

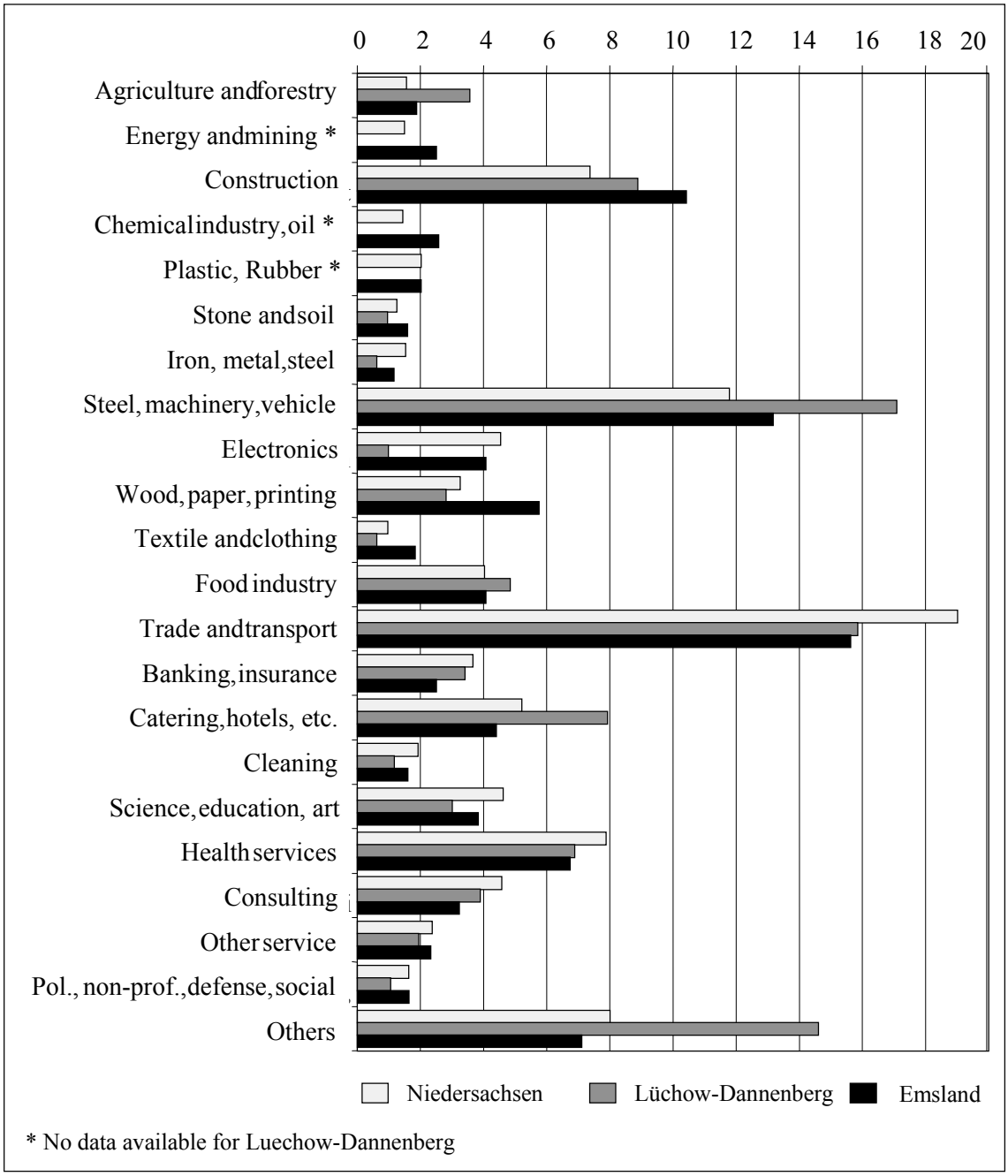
Tab. 31: Number of farms per 1.000 inhabitants

	Emsland	Lüchow-Dannenberg
1980	40.4	n.a.
1983	n.a.	44.9
1987	n.a.	41.0
1990	29.5	n.a.
1991	n.a.	30.6
1994	n.a.	26.7
1998	20.2	n.a.

Source: Landkreis Emsland 2000; Landkreis Lüchow-Dannenberg 1997

Branches of economic activity, diversification & linkages

Fig. 18: Economic branches by employment in 1998 (in %)



Source: NLS 1998

3.1.6 Community

Summary

This factor is made up of a variety of both objective and subjective components, and reveals fundamental differences between the two study areas. According to the interviews, the population in Emsland appears to be very homogeneous in terms of values, attitudes, politics, religious faith and lifestyle. By contrast, Lüchow-Dannenberg is more diverse in socio-economic terms, with different social groups, mentalities and identities. Furthermore, the community in Lüchow-Dannenberg has been seriously disrupted by the conflict about nuclear waste storage in Gorleben.

Forms of community and identity

Overall, the community in Emsland appears to be composed homogeneously, despite a relatively high share of Russian-Germans and foreigners. People generally share similar values, beliefs, norms and political attitudes. As a main employer in Emsland notes: *„The positivistic and conservative attitude is the root of social cohesion."* In contrast, in Lüchow-Dannenberg parochial thinking, the local selfishness of the communities and a certain north-south divide segment the county. An ideological fragmentation around nuclear waste storage dominates public life, the political process and community affairs.

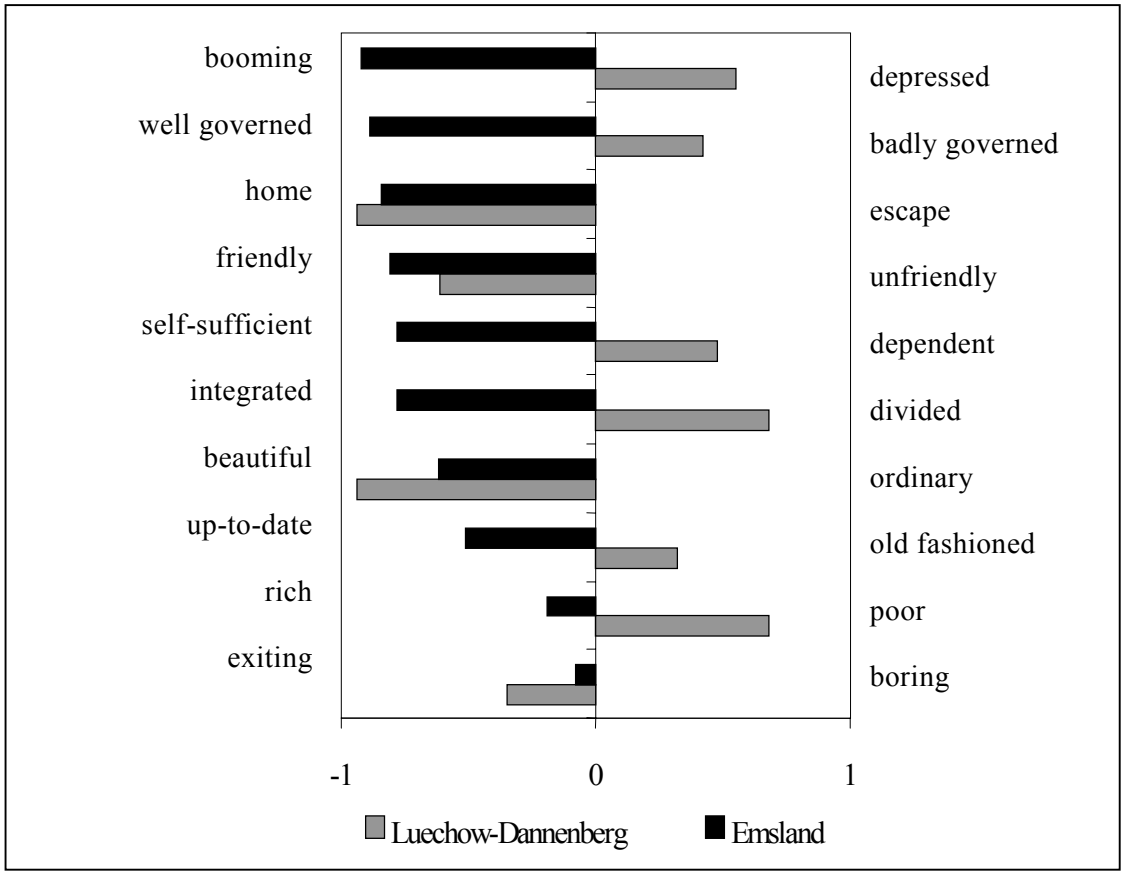
In the interview questionnaire, slightly more interviewees from Lüchow-Dannenberg than from Emsland describe their county as *"home"* and *"beautiful"*. Overall however, interviewees from Emsland valued their county clearly more positively than interviewees from Lüchow-Dannenberg. The local actors in Emsland particularly labelled their area as *"booming", "well-governed", "friendly", "integrated"* and *"up-to-date"* (Figure 19).

Tab. 32: Interviews: Forms of community and identity

	Emsland	Lüchow-Dannenberg
Local identity	- Homogenous local identity - Awareness of common poverty in the past and pride on economic catch-up process - German immigrants after World War II	- Heterogeneous identities - Nuclear power opponents moved into area - North-south dualism of the county
Mentality	- down to earth, modest, calm - hard working, thrifty - stubborn, ambitious, reliable	- scepticism towards modernisation - insubordinate - lethargic, observant, stubborn
Organisation of community	- Hierarchical local actor network - Political stability	- Ideological division of local actor network, groupings alongside political frontlines - Political instability
Social capital	- Strong family ties - Uniform religious confession - public support for decision makers - "Weak ties" within local actor network - Modernisation and industrialisation as a common development goal	- Segmented social capital - Relatively high degree of individualisation - "Strong ties" within ideological camps (see 3.1.9) - Conflicting development goals
Groupings	- Mainly "classical" northern German clubs, associations etc., e.g. sport clubs, shooting clubs - Strong neighbourhood networks (i.e. neighbours have duties at certain occasions) - Homeland associations - Catholic Church	- diverse citizen initiatives and 'bottom-up' people movements, e.g. in relation to the Gorleben conflict - Variety of "classical" northern German clubs and associations - Cultural and political initiatives
Local media	- three local newspapers, each covering mainly one of the former three counties	- One local newspaper for whole county - described by most interviewees as "biased" - fuels Gorleben conflict

Source: Own survey

Fig. 19: Interviews: Perception of county by local actors (mean values)



Source: Own survey

Tab. 33: Share of foreigners in local population, 1997

	Germany	German rural areas	Niedersachsen	Emsland	Lüchow-Dannenberg
Foreigners in %	9	4.3	7.2	4.7	3.5

Source: BBR 1999

Local traditions and history

Tab. 34: Interviews: Local traditions and history

	Emsland	Lüchow-Dannenberg
History	- Formerly three counties - Border area with the Netherlands - Awareness of economic catch-up from being the "poorhouse" to above-average productivity	- Formerly two counties - Particularly remote border area with former GDR - Awareness of historically determined collective poverty
Local heritage	- Local dialect - Ancient stone tombs - Different tourist sights, e.g. historic buildings - Liquor as typical local product	- "*Rundlinge*", a distinct structure of villages - Typical farm houses - '*Organic*' produce, sustainable energy production, alternative farming

Source: Own survey

Religion

Tab. 35: Interviews: Religion

	Emsland	Lüchow-Dannenberg
Religion	- Predominantly catholic - Common faith strengthens local identity	- While mainly protestant, religion does not play an important role

Source: Own survey

Values, beliefs and attitudes

The political situation in Emsland is characterised by a remarkable stability over time and strong support for the local decision-makers (Figure 20). The Catholic faith serves as another means of local identity and distinctness in relation to neighbouring regions. According to the interviews, in Emsland there are particularly strong ties within neighbourhoods and families. The area features relatively large family size, a

very high fertility rate and a high number of marriages (Table 36). In Lüchow-Dannenberg, there is a higher degree of individualisation in the local population, with relatively more single households and weaker ties within neighbourhoods. Engagement in public and politic life is particularly strong through environmentalist movements.

Tab. 36: Family values and lifestyle

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Average number of persons per household, 1996	2.2	2.24	2.91	2.26
Share of single households in %, 1996	35.4	34.9	24.5	29
Marriages per 10,000 people, 1997	n.a.	59.3	59.5	50.7

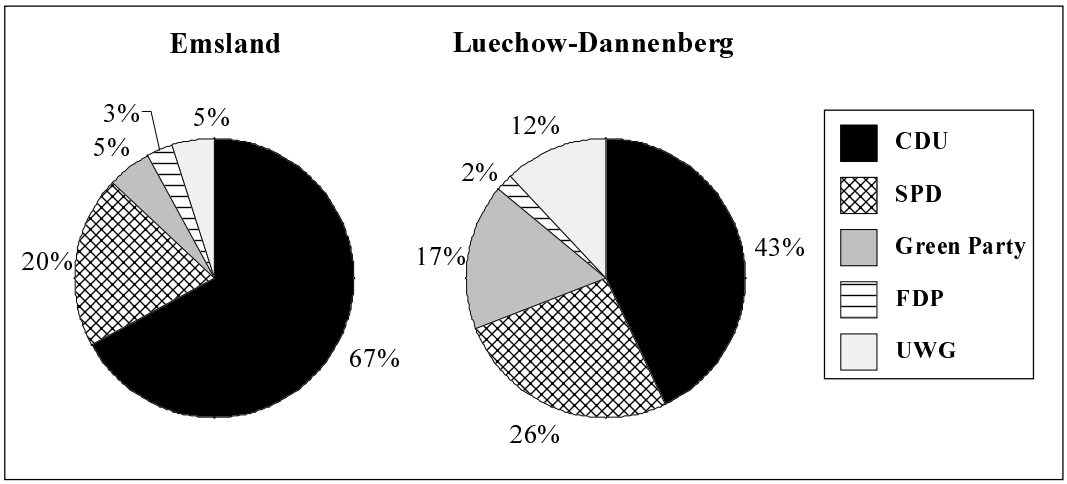
Source: BBR 1999; NLS 1998

Tab. 37: Turnout at elections in %

	Niedersachsen	Emsland	Lüchow-Dannenberg
Federal elections, 1998	83.9	84.2	83.1
County elections, 1996	64.5	68.7	65

Source: NLS1998, Interview Wahlbüro Landkreis Emsland

Fig. 20: Proportion of political parties in county parliaments 1996-2001



Source: www.emsland.de; www.Lüchow-Dannenberg.de/

Tab. 38: Interviews: External image of the county

Emsland	Lüchow-Dannenberg
- Neighbouring counties: mixture of jealousy and admiration - Still a poor region in the 'back of beyond' - Remote, but hard working	- Community in constant dispute - Frequent media coverage of nuclear waste disposal - "Psycho-Pannenberg" as an humorous nickname for the area, used by local people to describe impeded local development as a result of local mentality

Source: Own survey

3.1.7 Institutions

Summary

The county and community administrations in the two study areas face very different opportunities and constraints. According to the interviewees, an actively stimulating county administration in Lüchow-Dannenberg is recently obstructed by budgetary constraints in the form of a heavy debt burden in combination with low tax revenues. However, the county administration also has high personnel costs and social welfare expenditures. Institutions in Lüchow-Dannenberg generally face the antagonism of community leaders, local selfishness and political fragmentation. By contrast, the county administration in Emsland has more budgetary freedom, less personnel costs, hence can govern more actively. Local actors in Emsland appear to be pulling in the same direction; there are good relationships between institutions and entrepreneurs; and institutional co-operation is better developed than in Lüchow-Dannenberg. Furthermore, Emsland appears to exert greater influence on state and federal policies than Lüchow-Dannenberg, due to the larger population.

Institutional autonomy

In the sense of external political power towards the state and federal level, the county of Lüchow-Dannenberg arguably suffers from lower autonomy and limited lobbying power compared to Emsland. This results from the small population of the county (ca. 50,000). Emsland, by contrast, with about 300,000 inhabitants, can deploy more influence on policy making on the state and federal level.

As far as fiscal policy is concerned, federal and state laws lay down fields of responsibility for county and local governments. However, there are differences in the participation of local institutions in the financial redistribution systems which are established in Germany. More financial support per capita from higher administrative levels (federal and state) is allocated to Lüchow-Dannenberg than to Emsland (Table 39 and 40). Emsland has generally higher tax revenues, apart from income tax (Table 41). Business profit tax is remarkably low in Lüchow-Dannenberg (Table 44). Total expenditure of the county administration per capita in Lüchow-Dannenberg is considerably above those of Emsland and Niedersachsen, and personal expenditure per inhabitant is almost twice the amount of that in Emsland (Table 42). Social benefits expenditures per capita in Lüchow-Dannenberg are also higher than those in Emsland, despite the fact that both areas feature similar numbers of

social benefits recipients. Recently, interviewees reported a heavy debt crisis of the county administration, reflecting the tense financial situation of the county.

Tab. 39: Tax revenues and allocation of finance from state and country level per capita, 1998

	Niedersachsen	Emsland	Lüchow-Dannenberg
Total budget revenue in DEM	4,237	4,233	4,223
Net tax revenue in DEM	1,181	958	778
Allocation of finance from state and federal level in DEM	779	830	1,148

Source: NLS 2000b

Tab. 40: "Kommunaler Finanzausgleich" (regional redistribution scheme), 1994

	Emsland	Lüchow-Dannenberg
Allocation of funds per capita in DEM	308	367

Source: BBR 1999, NLS 1998

Tab. 41: Local tax revenues per capita, 1997

	Germany	Niedersachsen	Emsland	Lüchow-Dannenberg
Impersonal tax in DEM	493	507	529	306
Business profit tax in DEM	484	440	405	171
Income tax in DEM	482	524	334	354

Source: BBR 1999

Tab. 42: County administration finance, 1998

	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Total expenditure of county administration per capita in DEM	4,174	4,001	4,653
Personnel expenditure per capita in DEM	914	660	1,282
Social benefits expenditure per capita in DEM	810	690	811
Unemployment rate in %	11.6	10.6	17.8
Recipients of social benefits per 1000 inh.*	43	37	37.2
Debt repayments per capita in DEM	295	193	185
* 1997			

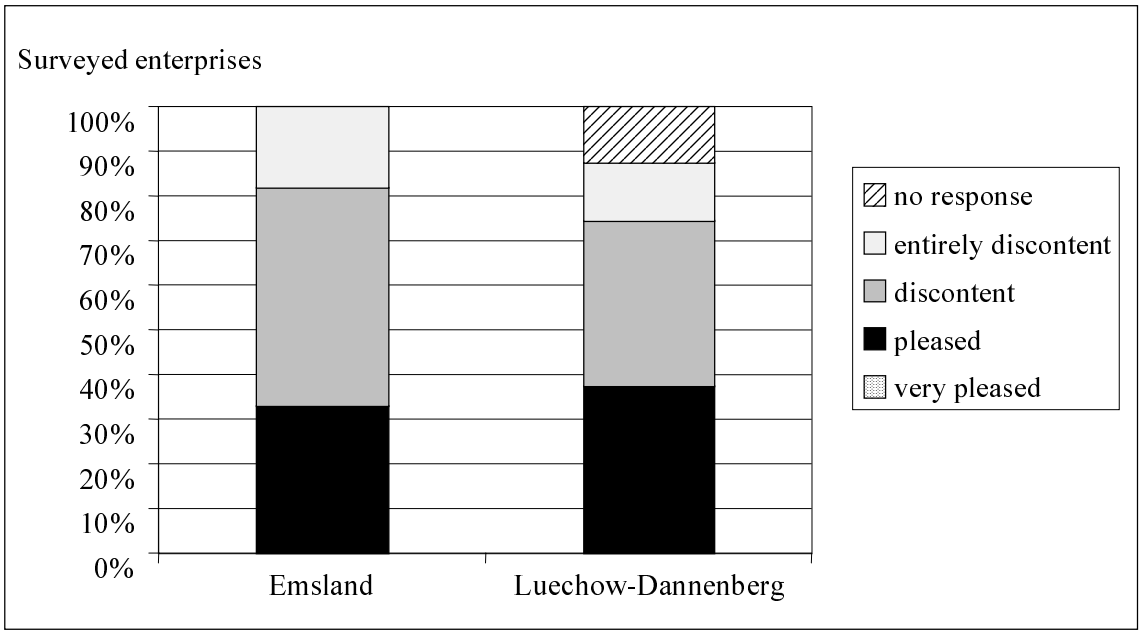
Source: NLS 2000b, BBR 1999

Tab. 43: Incurred debts per capita, 1998

	Niedersachsen	Emsland	Lüchow-Dannenberg
Incurred debts in DEM	263	210	117

Source: NLS 2000b

Fig. 21: Business survey: "How pleased are you with local taxes, duties and costs?"



Source: Own survey

Tab. 44: Business tax factors and property tax, 1997

	Niedersachsen	Emsland	Lüchow-Dannenberg
Municipal factor for business profit tax	364	325	n.a.
Real property tax A rate	306	278	ca. 325
Real property tax B rate	350	288	ca. 320
Business profit tax rate	n.a.	325	ca. 305

Source: www.regis-online.de

Institutional co-operation

Both counties co-operate with adjacent areas (Table 45). On the local level, there seems to be a lack of co-operation between communities in Lüchow-Dannenberg, due to pronounced parochial thinking. By contrast, communities in Emsland appear

to be held together by a high amount of social capital generated by links between the community leaders, and a strong county administration. As a local politician notes: *"The decision-makers involved are often in agreement with each other despite opposed political party membership. The County Director is an extraordinary character."* Interviewees in Emsland often described the communities as *'led with a golden leash'* by the county, which means that the county grants financial support for the different communities as long as they follow their development goals. Citizens of both counties were described as being reluctant to participate in politics, unless an issue directly affects them personally or is ideologically stamped (the latter applies to the Gorleben conflict in Lüchow-Dannenberg).

Tab. 45: Interviews: Institutional co-operation

	Emsland	Lüchow-Dannenberg
Cross-border co-operation	- "EDR" (Ems-Dollart-Region), association of diverse institutions of Emsland and adjacent areas - "OBE-Initiative" (Osnabrück, Bentheim, Emsland)	- "REK" (Regional Development Concept), trilateral planning co-operation between Lüchow-Dannenberg and two adjacent areas
Co-operation at county and community level	- Strong guidance by county director - Financial support of county for the communities if the latter are acting in line with county objectives - Constructive competition between communities, where *"investors are referred to the town-hall of the neighbouring community, if the own community does not meet his needs"*	- County director is member of different political party than most of administration staff, therefore conflict potential - Pronounced selfishness of communities, constant dispute over financial issues - ideological and political fragmentation - Institutional dualism between north and south of county
Citizen involvement	- Relatively little engagement in people movements - Rather unemotional political engagement	- Strong engagement in ideologically and politically motivated initiatives and movements

Source: Own survey, www.hamburg.de, EDR 1999

Institutional responsiveness and effectiveness

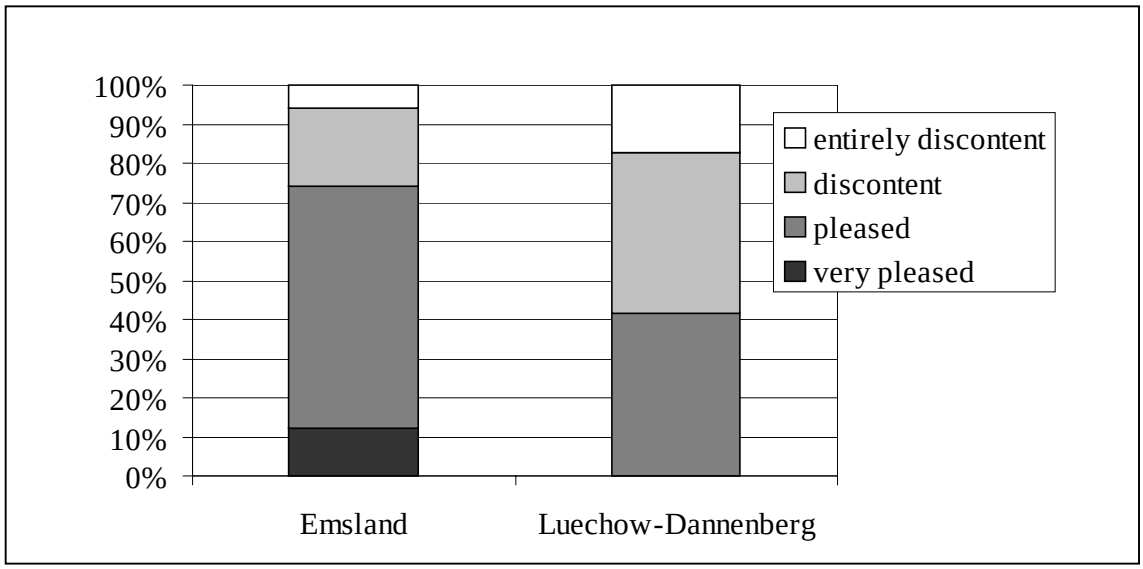
A wide majority of surveyed enterprises in Emsland stated that they were *'satisfied'* or *'very satisfied'* with the county administration's openness towards business needs, whereas most of Lüchow-Dannenberg's surveyed enterprises were *"dissatisfied"* (Figure 22). The relationship of the surveyed enterprises with the different institutions was generally rated more positively in Emsland than in Lüchow-Dannenberg (Figure 23 and 24). Only the relationship with the community was characterised similarly by entrepreneurs in both areas (Figure 25). According to the interviewees, public spending seems to be conducted more efficiently in Emsland than in Lüchow-Dannenberg. In the latter area, parochial thinking and competition between communities often lead to inefficient use of financial resources. Overall, interviewees in Emsland described their county as "*well-governed"*, while those in Lüchow-Dannenberg characterised their county rather as *"badly-governed"* (see 3.1.6.).

Tab. 46: Interviews: Institutional responsiveness and efficiency

	Emsland	Lüchow-Dannenberg
Transparency of local government structures	- limited interest of people in public affairs - locally divided press coverage	- transparency differs between communities - local press controversial and politically biased
Application of rules and regulations in connection with enterprises	- public bodies give first priority to business needs - efficient and effective support of enterprises, e.g. provision of sites - relatively flexible interpretation of regulations	- politicians and community administrations generally open towards business needs - county administration not as efficient as in Emsland - relatively strict interpretation of regulations

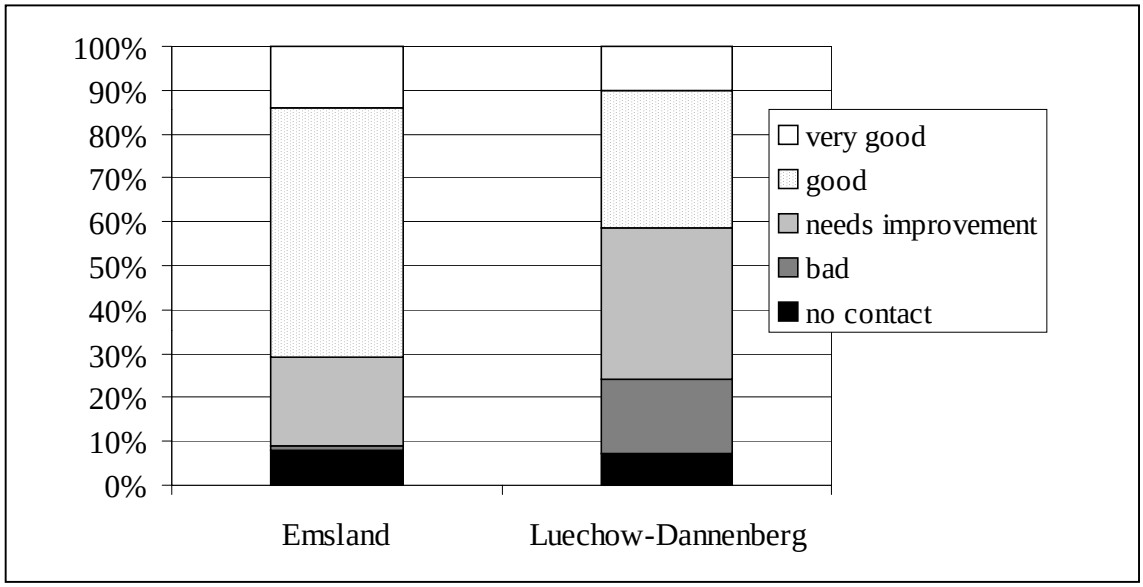
Source: Own survey

Fig. 22: Business survey: "How pleased are you with the openness of the county administration towards business needs?"



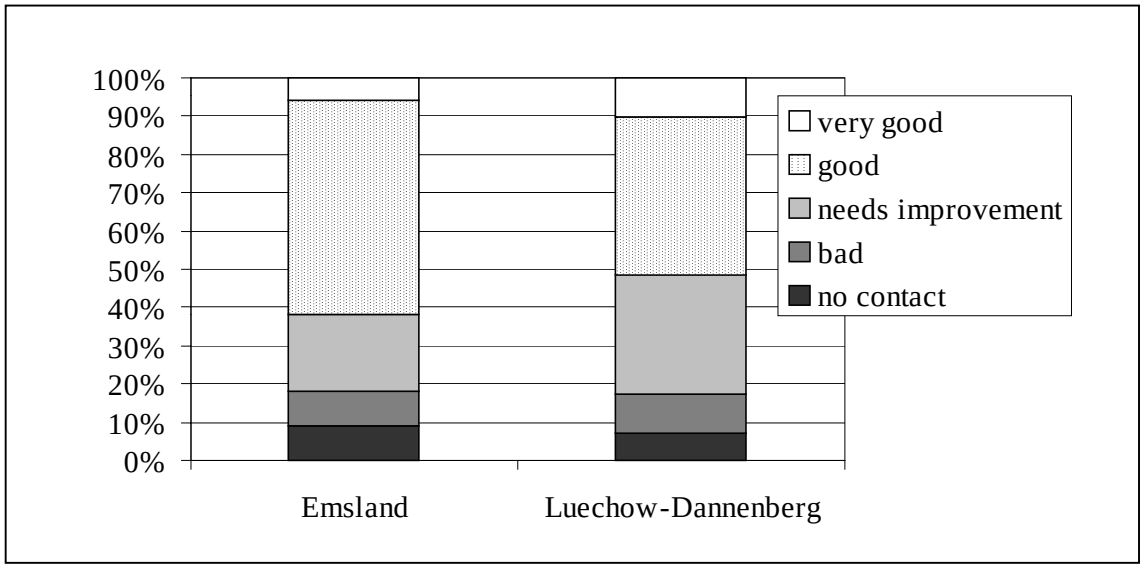
Source: Own survey

Fig. 23: Business survey: "How would you characterise your relationship to the county administration?"



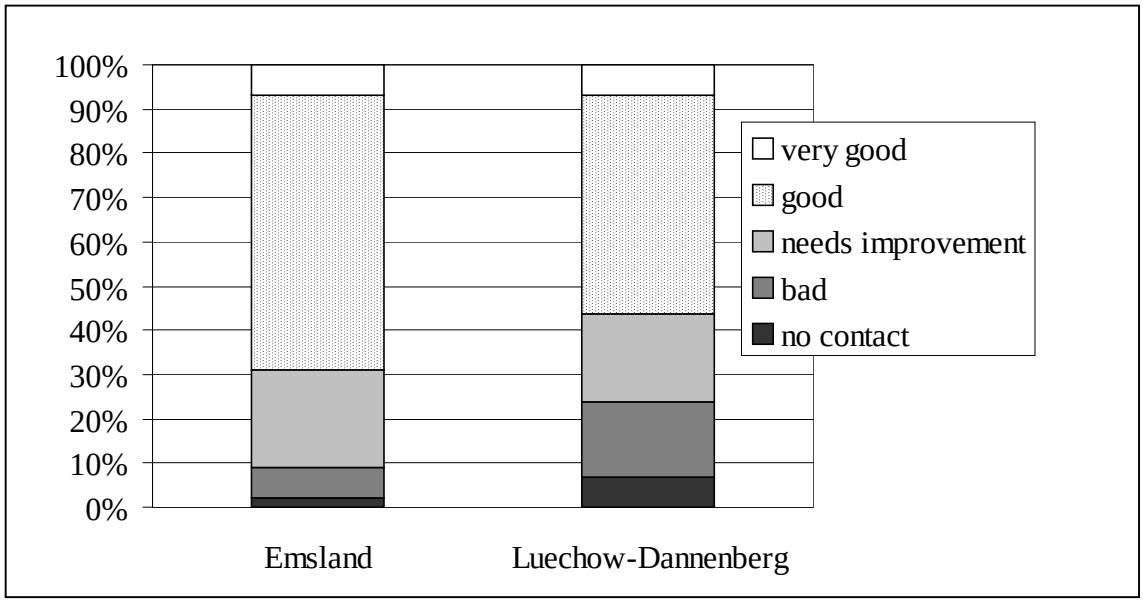
Source: Own survey

Fig. 24: Business survey: "How would you characterise your relationship to the employment office?"



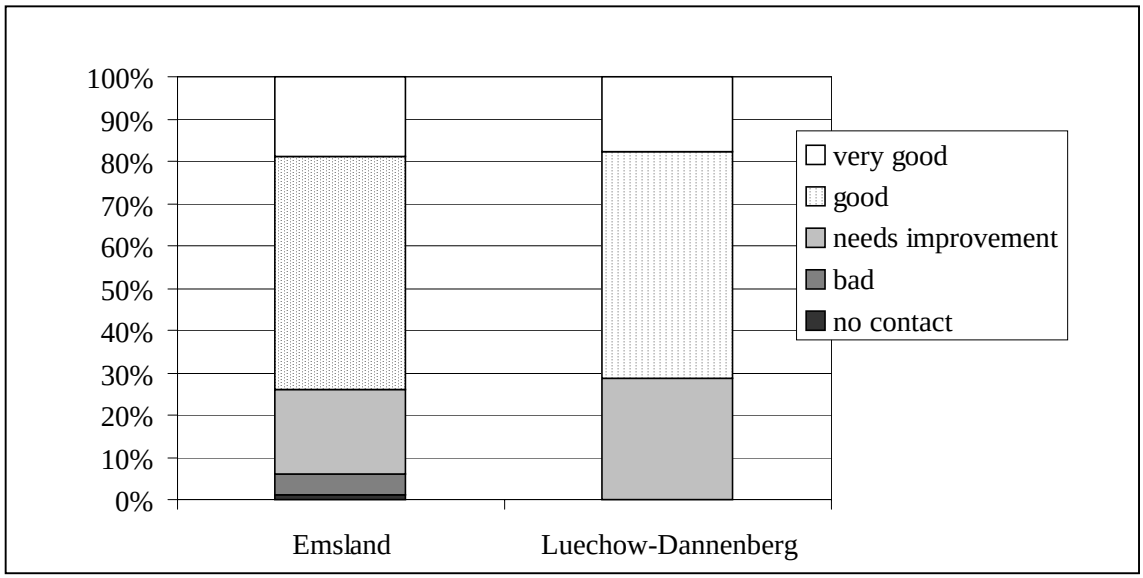
Source: Own survey

Fig. 25: Business survey: "How would you characterise your relationship to the chamber of commerce?"



Source: Own survey

Fig. 26: Business survey: "How would you characterise your relationship to the local community administration?"



Source: Own survey

3.1.8 Market Performance

Summary

Major differences between the two study areas emerge from looking at labour markets. In Lüchow-Dannenberg, the labour market appears more unbalanced (see also 3.1.2.), concerning both real unit wage costs and mismatch. Prices for development land are generally higher in Emsland than in Lüchow-Dannenberg, while land prices in business sites are similar (3.1.1.). Capital availability from banks is similar in both areas. The share of local sales appears to be particularly high in Lüchow-Dannenberg, while the local economy of Emsland is more export-oriented.

Labour market

As minimum wage regulations are not set at county level but at national level, there are no differences between the two study areas. However, there are differences in the actual level of wages in the two areas (Table 47). The average wage in the manufacturing and construction enterprises of both counties is below the national average.

Average wages in Emsland are close to the regional average, while wages in Lüchow-Dannenberg are much lower. To some extent, this corresponds with productivity levels: Productivity in Emsland is clearly higher than in Lüchow-Dannenberg. Lacking comparable statistics, it is still striking that despite wage levels in manufacturing and construction industries in Emsland being *below* regional levels, the overall productivity in this area is well *above* the regional average, which indicates particularly low real unit wage costs. Furthermore, unemployment rates in Emsland are considerably lower than in Lüchow-Dannenberg, despite higher demographic pressure (see 3.1.2.).

In the business survey of the manufacturing and construction sector, more enterprises in Lüchow-Dannenberg than in Emsland reported having difficulties filling job vacancies (Table 48). Enterprises in both areas particularly demand skilled labour, while there are few vacancies for unskilled, low- and medium- skilled workers (Figure 27). In comparison, surveyed enterprises in Lüchow-Dannenberg have more difficulty filling vacancies for unskilled or higher skilled employees (academics), while enterprises in Emsland have a particular demand for skilled workers ('Facharbeiter'). JUNG et al. (1993) characterise the situation in Lüchow-Dannenberg as follows: 'There is a concentration on few traditional business sectors, which leads to a low spectrum of qualifications and a deficit of high-skilled jobs. A result of this development is a low wage level.'

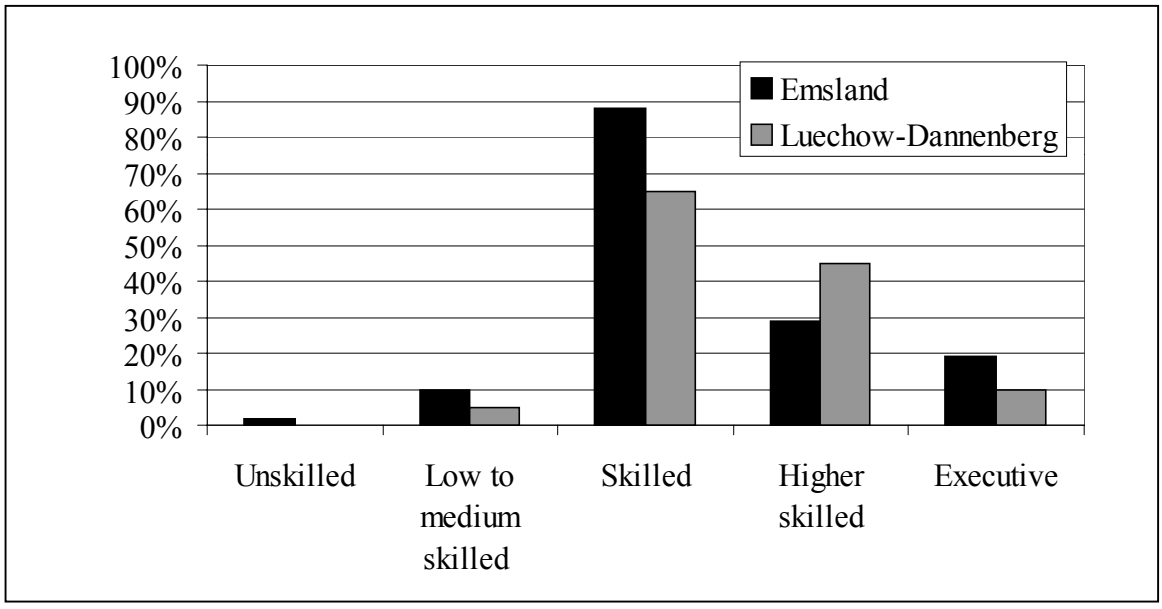
The share of both outward and inward commuters for the two study areas is well below the national and regional average (Table 49). Both areas have a negative balance of commuters, however, this pattern is more pronounced in Lüchow-Dannenberg. This can partly be explained by the size and structure of the counties, as Emsland is larger and there are more medium-sized towns offering work opportunities than in Lüchow-Dannenberg. Another cause should be the higher unemployment rate in Lüchow-Dannenberg. Emsland has a remarkably high number of apprenticeship-placements to offer compared to the demand for such training opportunities. This situation is not matched in Lüchow-Dannenberg, where the number of placements does not meet the demand (Table 50).

Tab. 47: Wages and productivity levels

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Monthly wages/salary per employee in manufacturing and construction sector in DEM, 1998	5,724	5,494	5,480	4,554
Gross value added at market prices per inhabitant in DEM, 1996	n.a.	38,144	45,464	29,902

Source: BBR 1999

Fig. 27: Business survey: Demand for workforce



Source: Own survey

Tab. 48: Business survey: Difficulties to fill job vacancies

Share of enterprises with difficulties to fill job vacancies	Emsland	Lüchow-Dannenberg
	54 %	63 %

Source: Own survey

Tab. 49: Commuting patterns, 1997

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Share of in-commuters in % of employees in the area	32.6	31.2	16.6	20.9
Share of out-commuters in % of employees in residential area	32.2	34.9	18.2	24.4
Balance of commuters per 1000 employees	4	-57	-20	-46

Source: BBR 1999

Tab. 50: Availability of apprenticeship placements per 100 people seeking a placement, 1998

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Apprenticeship placements per 100 people seeking training	98.1	98.4	104.5	94.5

Source: BBR 1999

Marketing of natural resource-based assets

Due to the lower population density and share of built-up areas, there is more free space and recreational area per capita in Lüchow-Dannenberg than in Emsland (see 3.1.1.). It remains an open question to what extent differences in the handling of planning permission for industrial sites and investments between the two counties, as set out in chapter 3.1.3., has influenced patterns of land use. While land prices in general are lower in Lüchow-Dannenberg than in Emsland, land prices in industrial estates are similar in both areas (see 3.1.1. and 3.1.3).

Tab. 51: Built-up, recreational and protected area, 1996

	Germany	Nieder-sachsen	Emsland	Lüchow-Dannenberg
Share of built-up areas (incl. settlements and transport infrastructure areas) in % of total area	11.8	12.1	10.6	7.4
Total area excluding built-up area per inh. in m^2	3,874	5,401	8,755	21,834
Recreational area per inh. in m^2	29	43	39	56

Source: BBR 1999, NLS 1998

Capital supply to enterprises

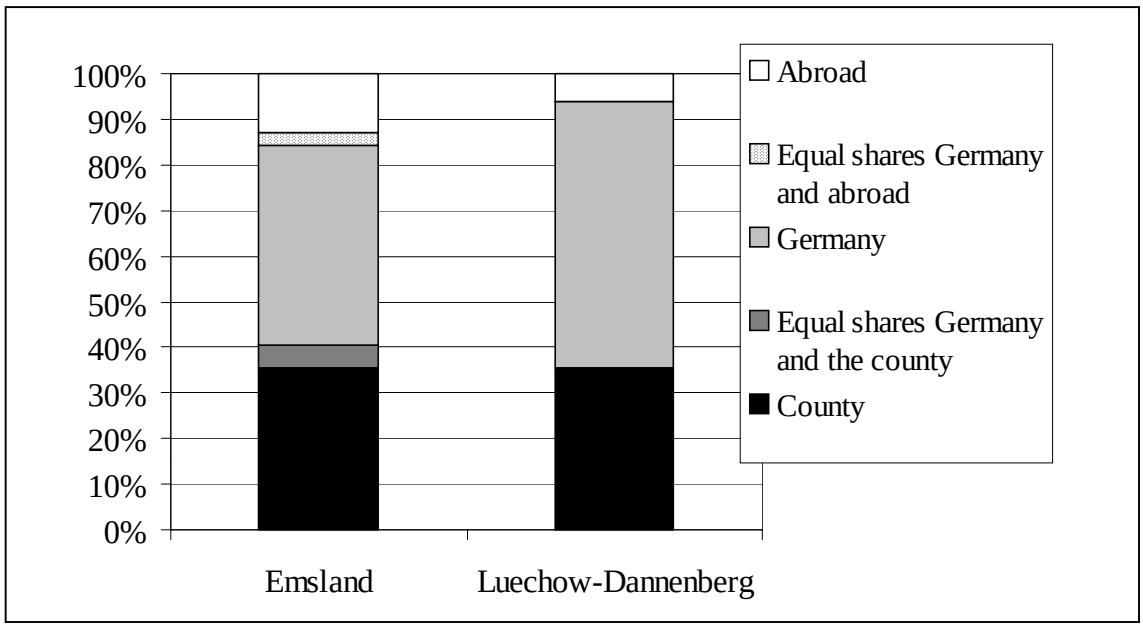
The interest rates in the two study areas differ only marginally, and arguably do not indicate noteworthy differences in capital availability. In the interviews the readiness of banks to fund investments was described in a similar way in both study areas, although minor differences emerge. Interviewees in both study areas stated that SMEs generally have no major problems concerning capital availability, while start-ups often face difficulties with funding their investments. In particular in Lüchow-Dannenberg some interviewees described the local saving banks as being not very co-operative in funding start-ups. However, other interviewees in this area stated that for potential start-ups a lack of entrepreneurial expertise is the bigger problem compared to the availability of venture capital.

Distribution of goods and services

More of the surveyed manufacturing and construction enterprises in Emsland named markets abroad as the main destination for their produce than in Lüchow-Dannenberg. This indicates a higher export orientation of manufacturing industries in Emsland (Figure 28). In contrast, more of the surveyed enterprises in Lüchow-Dannenberg described their main market to be the whole of Germany. The share of surveyed enterprises which supply goods for the own county is similar in both study areas. This comes as a surprise, taking into account the considerably larger size of the county Emsland. It follows that the share of local and national sales appears to be considerably larger in Lüchow-Dannenberg than in Emsland.

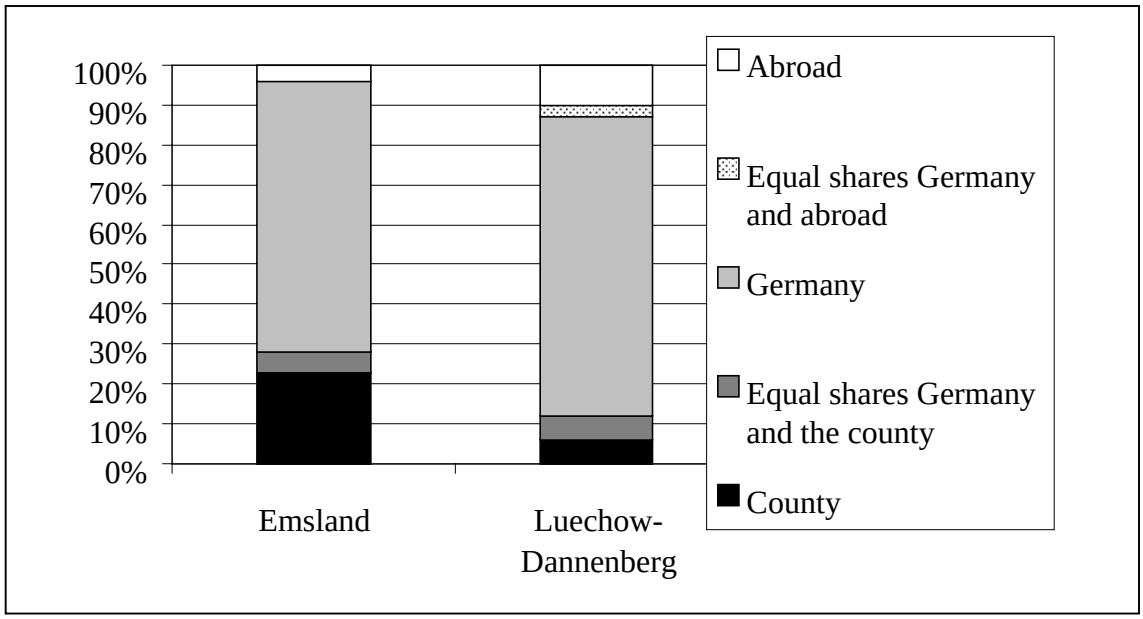
Arguably due to the different size of the study areas, more surveyed enterprises are supplied predominantly locally in Emsland than in Lüchow-Dannenberg (Figure 29). Accordingly, the share of national sourcing is higher in Lüchow-Dannenberg. The degree of international sourcing, being independent from the size of the county, is larger in Lüchow-Dannenberg.

Fig. 28: Business survey: Main markets for products



Source: Own survey

Fig. 29: Business survey: Main source of supplies



Source: Own survey

3.1.9 Networks

Summary

Both the form of local networks and their quality differ considerably between the two study areas. In Lüchow-Dannenberg, there is a dense sub-network of actors based on their common rejection of nuclear energy. However, this network is segmented from other local actors. On contrast, in Emsland there is a broader network of local actors based on their profession, which seems to contain a considerable amount of social capital, and which arguably fosters local development processes (see 3.2.2). As a public official notes: *"They are all "Emsländer" and know each other. The relationship* [between the community leaders] *is marked with rationality and trust"*. Furthermore, the atmosphere and degree of co-operation in the local business world appears to be better in Emsland (Table 51 and 52), and so is the relationship between the business sector and institutions. The local networks of entrepreneurs could have particular relevance for the creation and easy flow of innovations and new ideas, as well as for local value chains inside the area (CAMAGNI 1991).

Local embeddedness and global communication

The network analysis, conducted by the German team as a supplement to the interviews with local actors, provides detailed information about the networks, the degree of collaboration and the amount of social capital between local actors. The three indicators 'degree', 'closeness' and 'between-ness' help to visualise the amount of contacts and the networking power of individuals or groups. The amount of direct contacts in a network is revealed by the indicator 'degree' (number of direct contacts, divided by the number of possible contacts). 'Closeness' gives evidence for the 'distance' between actors of a network. While direct contacts are the shortest distances (value 1), contacts which need an intermediary, e.g. are valued 2 (number of actors minus 1, divided by sum of distances in the network). An actor's status as intermediary, which allows to govern communication in a network is pointed out by 'between-ness' (sum of all possible contacts minus 1, multiplied with the sum of all possible contacts minus 2, divided by 2). Table 57 to 59 show the values for the different indicators for four kinds of contacts: "professional", "private", "via associations and clubs" and "kurzer Draht". The latter category, which could be translated as "short link", describes a certain quality of the contact, where people are able to access each other directly and can discuss professional or private matters openly. The names of the interviewees in the tables are assigned to groups of local actors or professions, in order to secure anonymity.

Overall, the average values for the indicators are higher in Lüchow-Dannenberg than in Emsland. This indicates a higher density of local actor networks in Lüchow-Dannenberg. Especially relevant for the analysis of social capital (PUTNAM 1993; COLEMAN 1988) is the category "private contact". In Emsland, we find three actors with particularly high degree and between-ness values, two from the county administration and one entrepreneur. In Lüchow-Dannenberg, only two local actors have comparable high values, one policy maker and one from 'institutions etc.'. This indicates that the most important actors in Emsland can be found in the county administration, while in Lüchow-Dannenberg the most central actors are not part of the county administration.

Finally, interviewees were asked to name initiatives, workshops, themes or projects where they collaborate and network with other local actors (Table 60). It is striking that in Emsland many local actors engage in inter-regional projects (e.g. EXPO 2000, INTERREG, OBE), whereas most of the networking in Lüchow-Dannenberg takes place in local initiatives.

Figures 30 to 32 provide some clues about the structures of the local actor networks, as they illustrate the symmetric 'private contacts' and symmetric 'contacts via clubs, associations and political parties'. (The networks for 'professional contacts' and 'kurzer Draht' are too extensive to allow for a graphic illustration.) 'Symmetric' contacts are those contacts which were confirmed by both sides (see also 3.2.2.). 'Assumed symmetric' contacts are shown in those cases, where a certain local actor could not be interviewed personally, but where the researchers could conclude from interviews that in fact certain contacts to this actor should be symmetric. Unfortunately, there is no graphic illustration for 'contacts via clubs, associations and political parties' in Emsland, because results would be misleading. Since almost all local actors in Emsland belonged to the same political party, many interviewees decided that it would not make sense to tick all contacts via 'political parties'.

The figures show that in Lüchow-Dannenberg the network structures are more horizontal and segmented, whereas in Emsland the local actor network is hierarchical, with one central circle around central actors from the county administration. For a more detailed analysis of the network structures in the study areas, see 3.2.2.

Tab. 52: Business survey: Atmosphere in local business world

„How would you characterise the relationship between entrepreneurs in the area?“ (in %)	Emsland	Lüchow-Dannenberg
“Trusting”	3 %	3 %
“Good”	51 %	33 %
“unemotional”	40 %	47 %
“People hardly know each other”	24 %	17 %

Source: Own survey

Tab. 53: Business survey: Local embeddedness of enterprises

	Emsland	Lüchow-Dannenberg
“*Engagement in inter-firm co-operation inside the county*” (in %)	24 %	17 %

Source: Own survey

Tab. 54: Interviews: Context of professional contacts

“Which share of your professional contacts exist inside your county and which share outside” (mean values)	Inside the county	Outside the county
Emsland	66.3 %	33.7 %
Lüchow-Dannenberg	61.4 %	38.6 %

Source: Own survey

Tab. 55: Interviews: Context of private contacts

"Which share of your private contacts exist inside your county and which share outside" (mean values)	Inside the county	Outside the county
Emsland	57.5 %	42.5 %
Lüchow-Dannenberg	59.4 %	40.6 %

Source: Own survey

Tab. 56: Interviews: "Which share of your overall contacts are international contacts" (mean values)

Emsland	12.3 %
Lüchow-Dannenberg	6.6 %

Source: Own survey

See also 3.1.8.: "Distribution of goods and services"

Tab. 57: Degree in %

	profes-sional	private	via clubs and asso-ciations	"kurzer Draht"		profes-sional	private	via clubs and asso-ciations	"kurzer Draht"
Emsland					Lüchow-Dannenberg				
Average degree	50.4	8.6	8.5	35.0	Average degree	52.8	9.3	8.6	36.0
County 1	95.3	27.9	14.0	41.9	County 1	97.0	15.2	15.2	60.6
County 2	88.4	32.6	23.3	81.4	County 2	75.8	12.1	9.1	57.6
County 3	14.0	0.0	0.0	7.0	County 3	78.8	12.1	3.0	48.5
County 4	37.2	0.0	4.7	27.9	County 4	54.5	9.1	0.0	48.5
County 5	67.4	4.7	2.3	34.9	County 5	93.9	9.1	15.2	78.8
County 6	65.1	2.3	0.0	44.2	County 6	21.2	9.1	0.0	12.1
County 7	86.0	16.3	4.7	79.1	Community 1	57.6	9.1	6.1	60.6
Community 1	67.4	14.0	37.2	48.8	Community 2	57.6	0.0	9.1	33.3
Community 2	51.2	0.0	4.7	34.9	Community 3	42.4	6.1	6.1	36.4
Community 3	74.4	23.3	14.0	72.1	Community 4	63.6	9.1	6.1	45.5
Community 4	81.4	20.9	32.6	69.8	Community 5	72.7	6.1	6.1	57.6
Community 5	65.1	16.3	16.3	39.5	Community 6	27.3	0.0	9.1	3.0
Community 6	58.1	7.0	9.3	37.2	Policy maker 1	60.6	33.3	27.3	45.5
Community 7	53.5	9.3	7.0	53.5	Policy maker 2	84.8	12.1	15.2	69.7
Community 8	58.1	7.0	44.2	30.2	Policy maker 3	45.5	15.2	6.1	30.3
Community 9	48.8	4.7	9.3	44.2	Policy maker 4	51.5	6.1	6.1	30.3
Community 10	74.4	4.7	7.0	74.4	Institution etc. 1 *	21.2	0.0	0.0	9.1
Community 11	55.8	2.3	9.3	39.5	Institution etc. 2 *	21.2	0.0	3.0	9.1
Community 12	62.8	11.6	14.0	41.9	Institution etc. 3 *	72.7	6.1	9.1	42.4
Policy maker 1	88.4	11.6	20.9	81.4	Institution etc. 4 *	48.5	18.2	6.1	39.4
Policy maker 2	74.4	0.0	0.0	27.9	Institution etc. 5 *	30.3	0.0	0.0	12.1
Policy maker 3	25.6	0.0	0.0	9.3	Institution etc. 6 *	57.6	0.0	0.0	30.3
Institution etc. 1 *	32.6	2.3	0.0	14.0	Institution etc. 7 *	45.5	9.1	12.1	36.4
Institution etc. 2 *	37.2	0.0	0.0	30.2	Institution etc. 8 *	27.3	24.2	24.2	21.2
Institution etc. 3 *	69.8	7.0	0.0	69.8	Business 1	60.6	15.2	18.2	36.4
Institution etc. 4 *	39.5	0.0	0.0	27.9	Business 2	39.4	12.1	0.0	18.2
Institution etc. 5 *	55.8	2.3	4.7	20.9	Business 3	81.8	12.1	15.2	78.8
Institution etc. 6 *	44.2	0.0	0.0	25.6	Business 4	42.4	6.1	6.1	21.2
Business 1	48.8	9.3	9.3	30.2	Business 5	30.3	9.1	6.1	24.2
Business 2	30.2	14.0	0.0	30.2	Business 6	51.5	12.1	15.2	30.3
Business 3	37.2	32.6	14.0	20.9	Business 7	27.3	6.1	0.0	3.0
Business 4	62.8	2.3	2.3	39.5	Business 8	33.3	3.0	12.1	24.2
Business 5	30.2	0.0	0.0	11.6	Media	75.8	9.1	3.0	42.4
Business 6	39.5	4.7	7.0	11.6	Story Teller	42.4	9.1	21.2	27.3
Business 7	11.6	4.7	7.0	11.6					
Business 8	20.9	0.0	0.0	11.6					
Media 1	76.7	9.3	4.7	37.2					
Media 2	58.1	9.3	4.7	30.2					
Story Teller 1	37.2	4.7	2.3	20.9					
Story Teller 2	16.3	14.0	11.6	11.6					
Story Teller 3	23.3	11.6	11.6	18.6					
Story Teller 4	30.2	14.0	9.3	14.0					
Story Teller 5	20.9	11.6	7.0	16.3					
Story Teller 6	20.9	7.0	2.3	13.6					
* including chambers, labour offices and other institutions, clubs, associations and movements									

Source: Own survey

Tab. 58: Between-ness in %

	professional	private	via clubs and associations	kurzer Draht"		professional	private	via clubs and associations	kurzer Draht"
Emsland					Lüchow-Dannenberg				
Average between-ness	0.7	0.7	0.8	1.0	Average between-ness	1.3	0.8	1.3	1.9
County 1	4.3	4.6	0.9	0.9	County 1	8.1	1.2	3.1	4.4
County 2	4.7	3.8	9.2	14.7	County 2	2.6	0.5	10.4	2.4
County 3	0.0	0.0	0.0	0.0	County 3	3.2	2.4	0.0	1.5
County 4	0.0	0.0	0.0	0.0	County 4	0.6	1.5	0.0	2.4
County 5	0.9	0.0	0.0	0.1	County 5	6.9	0.0	1.9	13.5
County 6	1.0	0.0	0.0	0.5	County 6	0.0	0.0	0.0	0.0
County 7	4.3	1.5	0.0	5.3	Community 1	0.7	0.0	2.0	4.6
Community 1	0.6	1.0	0.7	0.4	Community 2	0.5	0.0	1.7	0.3
Community 2	0.0	0.0	0.0	0.0	Community 3	0.0	0.0	0.4	1.4
Community 3	1.2	3.4	1.7	3.6	Community 4	1.3	0.0	2.1	2.3
Community 4	1.9	3.4	6.2	3.4	Community 5	2.5	0.0	0.0	2.7
Community 5	1.1	3.0	3.0	2.7	Community 6	0.0	0.0	0.0	0.0
Community 6	0.0	0.0	0.0	0.0	Policy maker 1	0.7	1.7	6.7	1.8
Community 7	0.3	0.0	0.0	0.5	Policy maker 2	3.3	1.3	1.7	5.3
Community 8	0.5	2.2	9.4	0.2	Policy maker 3	0.0	0.0	0.0	0.0
Community 9	0.1	0.0	0.0	0.5	Policy maker 4	0.0	0.0	0.0	0.0
Community 10	1.0	0.0	0.7	2.4	Institution etc. 1 *	0.0	0.0	0.0	0.1
Community 11	0.3	0.0	0.0	0.2	Institution etc. 2 *	0.0	0.0	0.0	0.0
Community 12	0.0	0.0	0.0	0.0	Institution etc. 3 *	3.7	0.2	1.3	2.5
Policy maker 1	2.7	2.0	1.8	5.1	Institution etc. 4 *	0.7	0.6	0.0	0.5
Policy maker 2	1.3	0.0	0.0	0.3	Institution etc. 5 *	0.2	0.0	0.0	0.1
Policy maker 3	0.0	0.0	0.0	0.0	Institution etc. 6 *	1.2	0.0	0.0	1.7
Institution etc. 1 *	0.0	0.0	0.0	0.0	Institution etc. 7 *	0.4	1.5	0.5	0.4
Institution etc. 2 *	0.1	0.0	0.0	0.4	Institution etc. 8 *	0.2	9.2	4.9	1.0
Institution etc. 3 *	1.0	0.5	0.0	2.9	Business 1	0.0	0.0	0.0	0.0
Institution etc. 4 *	0.1	0.0	0.0	0.1	Business 2	0.3	0.0	0.0	2.7
Institution etc. 5 *	0.3	0.0	0.0	0.0	Business 3	1.9	0.0	0.6	9.6
Institution etc. 6 *	0.0	0.0	0.0	0.0	Business 4	0.4	0.0	0.0	0.5
Business 1	0.4	0.3	1.5	0.2	Business 5	0.1	0.1	0.0	0.7
Business 2	0.0	0.0	0.0	0.5	Business 6	0.7	3.4	2.1	0.4
Business 3	0.0	6.3	1.1	0.0	Business 7	0.0	0.0	0.0	0.0
Business 4	0.8	0.0	0.0	0.3	Business 8	0.0	0.0	0.0	0.0
Business 5	0.0	0.0	0.0	0.0	Media	1.9	0.0	0.0	0.0
Business 6	0.1	0.0	0.2	0.0	Story Teller	0.6	5.2	5.6	0.7
Business 7	0.0	0.0	0.0	0.0					
Business 8	0.0	0.0	0.0	0.0					
Media 1	2.2	0.3	0.2	0.9					
Media 2	0.0	0.0	0.0	0.0					
Story Teller 1	0.0	0.0	0.0	0.0					
Story Teller 2	0.0	0.0	0.0	0.0					
Story Teller 3	0.0	0.0	0.0	0.0					
Story Teller 4	0.0	0.0	0.0	0.0					
Story Teller 5	0.0	0.0	0.0	0.0					
Story Teller 6	0.0	0.0	0.0	0.0					
* including chambers, labour offices and other institutions, clubs, associations and movements									

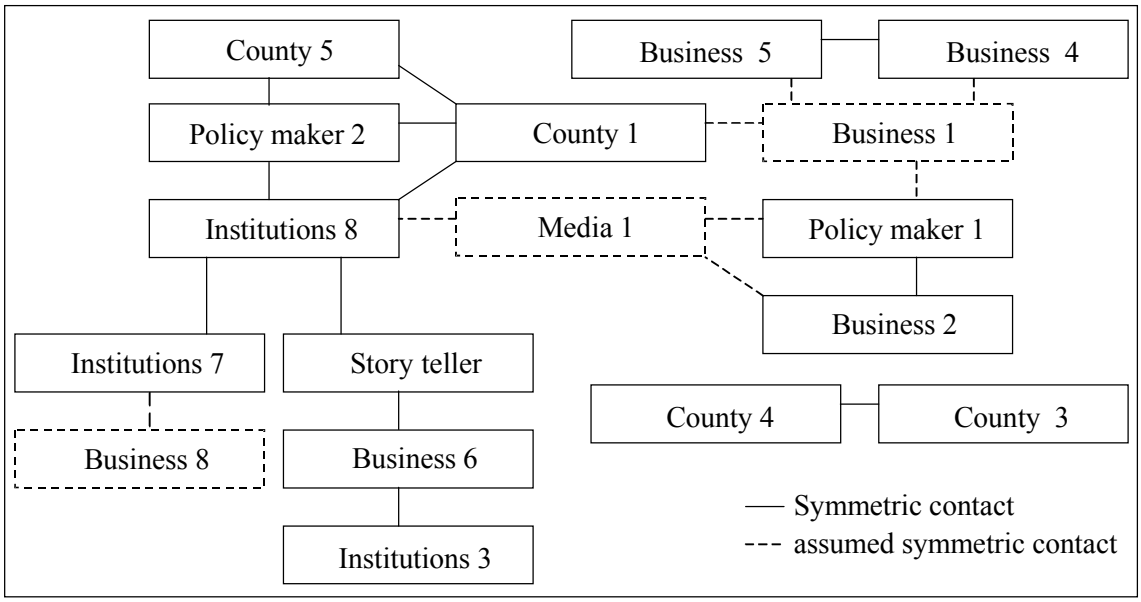
Source: Own survey

Tab. 59: Closeness

	professional	private	via clubs and associations	"kurzer Draht"		professional	private	via clubs and associations	"kurzer Draht"
Emsland					Lüchow-Dannenberg				
Average closeness	4.5	2.4	2.3	4.0	Average closeness	8.5	3.1	3.2	7.6
County 1	5.9	2.7	2.3	5.1	County 1	11.0	3.7	3.7	9.4
County 2	5.9	2.7	2.3	5.2	County 2	10.8	2.9	3.7	9.4
County 3	2.3	2.3	2.3	2.3	County 3	10.8	3.0	2.9	9.3
County 4	2.3	2.3	2.3	2.3	County 4	10.5	3.0	2.9	9.5
County 5	5.8	2.3	2.3	5.1	County 5	10.9	3.7	3.7	9.7
County 6	5.8	2.3	2.3	5.1	County 6	2.9	2.9	2.9	2.9
County 7	5.9	2.3	2.3	5.2	Community 1	10.5	2.9	3.3	9.6
Community 1	5.8	2.3	2.3	5.2	Community 2	10.6	2.9	2.9	9.4
Community 2	2.3	2.3	2.3	2.3	Community 3	9.9	2.9	2.9	9.4
Community 3	5.8	2.3	2.3	5.2	Community 4	10.7	2.9	3.3	9.3
Community 4	5.8	2.7	2.4	5.2	Community 5	10.7	2.9	2.9	9.4
Community 5	5.8	2.7	2.3	5.1	Community 6	2.9	2.9	2.9	2.9
Community 6	2.3	2.3	2.3	2.3	Policy maker 1	10.6	3.0	3.3	9.5
Community 7	5.8	2.3	2.3	5.2	Policy maker 2	10.8	3.7	3.7	9.6
Community 8	5.8	2.3	2.3	5.1	Policy maker 3	2.9	2.9	2.9	2.9
Community 9	5.8	2.3	2.3	5.2	Policy maker 4	2.9	2.9	2.9	2.9
Community 10	5.8	2.3	2.3	5.2	Institution etc. 1 *	10.2	2.9	2.9	9.1
Community 11	5.8	2.3	2.3	5.1	Institution etc. 2 *	2.9	2.9	2.9	2.9
Community 12	2.3	2.3	2.3	2.3	Institution etc. 3 *	10.7	3.6	3.0	9.4
Policy maker 1	5.8	2.7	2.3	5.2	Institution etc. 4 *	10.2	2.9	3.3	9.0
Policy maker 2	5.8	2.3	2.3	5.1	Institution etc. 5 *	10.3	2.9	2.9	9.1
Policy maker 3	5.7	2.3	2.3	5.1	Institution etc. 6 *	10.4	2.9	2.9	9.3
Institution etc. 1 *	2.3	2.3	2.3	2.3	Institution etc. 7 *	10.3	3.7	3.7	8.8
Institution etc. 2 *	5.7	2.3	2.3	5.1	Institution etc. 8 *	10.3	3.7	3.7	9.3
Institution etc. 3 *	5.8	2.3	2.3	5.2	Business 1	2.9	2.9	2.9	2.9
Institution etc. 4 *	5.7	2.3	2.3	5.1	Business 2	10.4	3.0	2.9	9.0
Institution etc. 5 *	5.8	2.3	2.3	5.1	Business 3	10.6	2.9	3.7	9.5
Institution etc. 6 *	2.3	2.3	2.3	2.3	Business 4	10.5	3.0	3.0	9.0
Business 1	5.7	2.7	2.4	5.1	Business 5	10.3	3.0	3.0	9.3
Business 2	5.7	2.3	2.3	5.1	Business 6	10.5	3.7	3.0	9.2
Business 3	5.7	2.7	2.4	2.3	Business 7	2.9	2.9	2.9	2.9
Business 4	5.7	2.3	2.3	5.1	Business 8	2.9	2.9	2.9	2.9
Business 5	5.7	2.3	2.3	5.1	Media	10.7	2.9	2.9	2.9
Business 6	5.7	2.3	2.4	2.3	Story Teller	10.4	3.7	3.7	9.1
Business 7	2.3	2.3	2.3	2.3					
Business 8	2.3	2.3	2.3	2.3					
Media 1	5.8	2.7	2.3	5.1					
Media 2	2.3	2.3	2.3	2.3					
Story Teller 1	2.3	2.3	2.3	2.3					
Story Teller 2	2.3	2.3	2.3	2.3					
Story Teller 3	2.3	2.3	2.3	2.3					
Story Teller 4	2.3	2.3	2.3	2.3					
Story Teller 5	2.3	2.3	2.3	2.3					
Story Teller 6	2.3	2.3	2.3	2.3					
* including chambers, labour offices and other institutions, clubs, associations and movements									

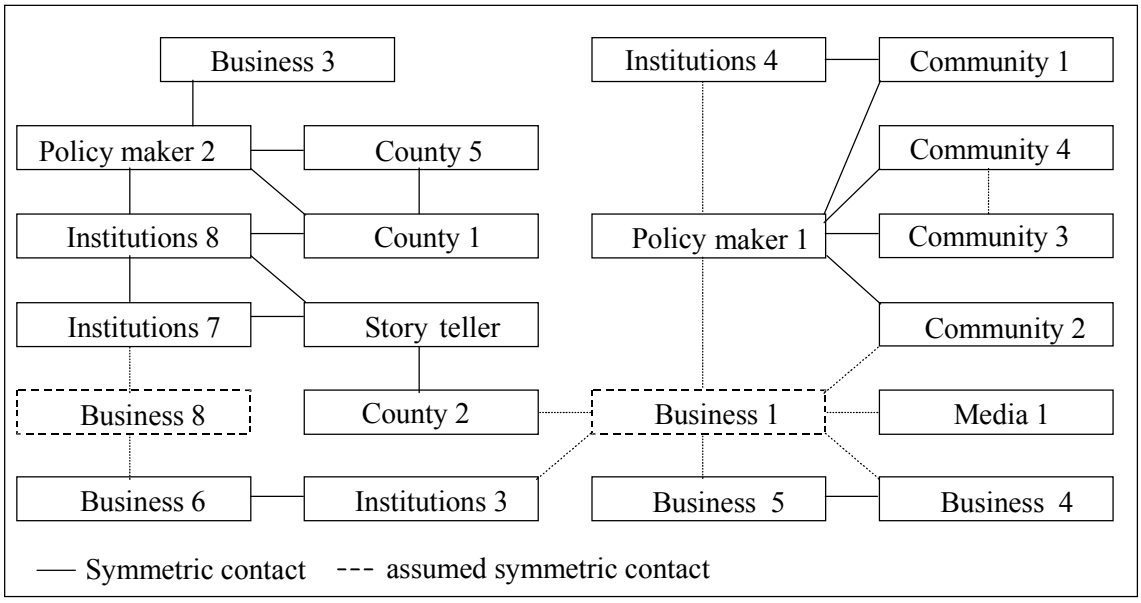
Source: Own survey

Fig. 30: Symmetric private contacts between local actors in Lüchow-Dannenberg



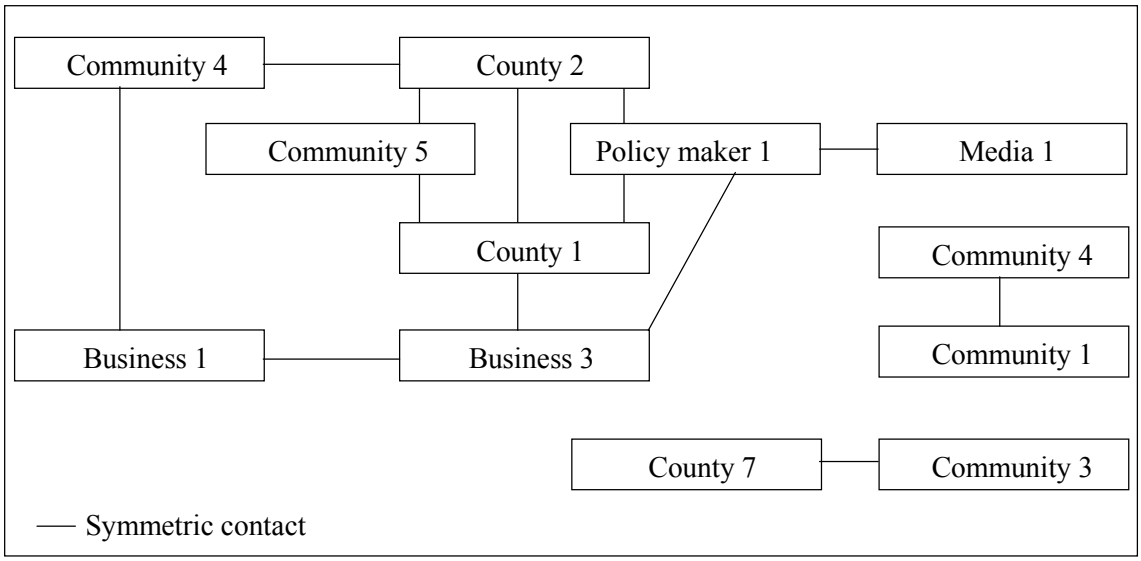
Source: Own survey

Fig. 31: Symmetric contacts via clubs, associations etc. between local actors in Lüchow-Dannenberg



Source: Own survey

Fig. 32: Symmetric private contacts between local actors in Emsland



Source: Own survey

Tab. 60: Themes, on which more than 3 local actors collaborate

Emsland	Lüchow-Dannenberg
'Osnabrück-Bentheim-Emsland Initiative'	'Kraeuterkunst e.V.'
EXPO 2000	'AG Biosphaerenreservat'
INTERREG	'Agrarstrukturelle Entwicklungsplanung'
Labour market conference	Tourism
Transrapid	
Business start-up initiative	
Tourism	

Source: Own survey

The non-contractual elements of contracts

In both study areas, there appear to be no noteworthy difference in the non-contractual elements embodied in inter-firm contracts. However, certain differences exist in the quality and extent of informal networking between local actors in general (see above, see also 3.2.2.).

Information technology and innovation

There appear to be little differences between the study areas in the extent of IT application. In both study areas respondents report that the take-up of IT in the business sector is varied.

3.1.10 Quality of life

Summary

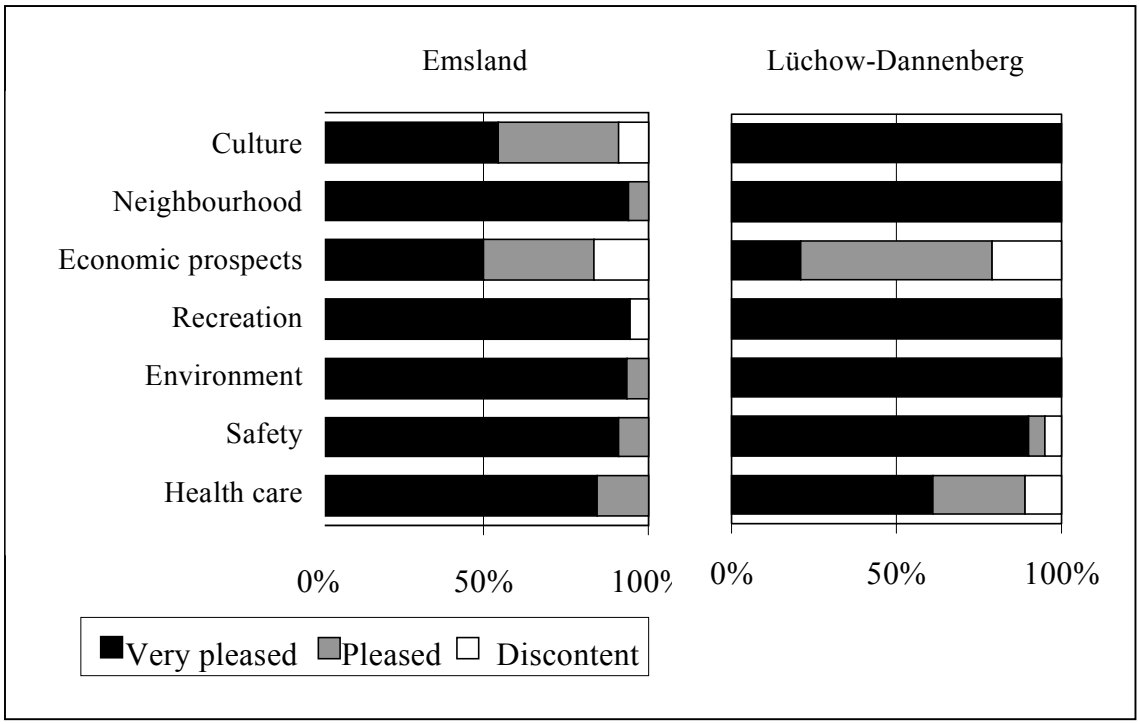
In both study areas, there is arguably quite a good quality of life. This applies for both the perception of the local actors and objective indicators. Interviewees in both areas stated that they were very pleased with the quality of life, and expect the majority of the area's population to share this view. In comparison, interviewees in Lüchow-Dannenberg were slightly more content with most aspects of quality of life. However, interviewees in Emsland were more content with 'economic prospects' and 'health care' (Figure 33). The natural environment in both areas is healthy, and consumer-oriented infrastructure is on the average for rural areas. The social environment was described by interviewees in both areas as sound, although the statistics on crime suggest a higher degree of safety from homicide in Emsland than in Lüchow-Dannenberg (Table 64).

Tab. 61: Business survey: Satisfaction with the location factor "Quality of life" (in %)

	Emsland	Lüchow-Dannenberg
"*Very content*" or "*content*"	92 %	90 %

Source: Own survey

Fig. 33: Interviews: Statements on aspects of quality of life



Source: Own survey

Living standards and safety

Tab. 62: Life expectancy, 1997

	Emsland	Lüchow-Dannenberg
Life expectancy of men in years	73.8	72.7
Life expectancy of women in years	80.6	79.0

Source: BBR 1999

Tab. 63: Safety in traffic, 1997

	Emsland		Lüchow-Dannenberg	
	number	Classification *	number	Classification *
Traffic accidents per 100,000 inh.	784	3	664	2
Killed persons in traffic accidents per 100,000 inh.	19.5	4	15.3	3
* classification 1 – 5 = "very good" – "unsatisfactory", compared to other German counties				

Source: BBR 1999, Korczak 1995

Tab. 64: Crimes per 10,000 inhabitants, 1993

	Emsland		Lüchow-Dannenberg	
	victims	Classification *	victims	Classification *
Homicide	0.31-0.47	2	0.95-4.9	5
Sexual crimes	< 13	5	< 13	5
Coercion, menace for life, kidnapping etc.	35.11-44.4	2	35.11-44.4	2
* classification 1 – 5 = "very good" – "unsatisfactory", compared to other German counties				

Source: Korczak 1995

Tab. 65: Prosperity

	Emsland	Lüchow-Dannenberg
Social benefit recipients per 1000 inhabitants, 1997	37	37.2
monthly gross income per employee in mfg., 1998 *	5,480	4,554
* mining and manufacturing industries with more than 20 employees		

Source: BBR 1999; NLS 1998

Tab. 66: Sport facilities

	Emsland	Lüchow-Dannenberg
Sport facilities per 1,000 inhabitants, 1989	2.6	2.7

Source: Landkreis Emsland 2000; NLS 1998

Multiculturalism

Tab. 67: Multiculturalism, 1997

	Emsland	Lüchow-Dannenberg
Asylum seekers per 1,000 inhabitants	9	7
Foreigners in %	4.7	3.5

Source: BBR 1999; NLS 1998

Environment and recreation

Tab. 68: Environmental indicators, 1995

	Emsland		Lüchow-Dannenberg	
	(in µ/g)	Classification *	(in µ/g)	Classification *
SO_2	2-11	1	13-16	3
NO_2	18-26	2	18-26	2
Ozon	38-44	3	45-51	4
Aerosol	12-36	1	37	2
* classification 1-5 = "*very good*" – "*unsatisfactory*", compared to other German counties				

Source: Korczak 1995

(For more indicators on recreation see 3.1.1. and 3.1.3.)

3.2 Themes and Dynamics

3.2.1 Mentality, Readiness to Industrialise and Social Coherence

The history and mentality of both study areas differ considerably, and as a result, acceptance of industrialisation, vibrancy and social coherence differ. Most interviewees indicated that people in Emsland generally appear to be more forward-looking and entrepreneurial than people in Lüchow-Dannenberg. Furthermore, attitudes towards industrialisation and environmental concerns are different in both areas, as expressed in the interviews. Therefore it seems reasonable to investigate issues like history, mentality and social settings in both areas in more depth, in order to achieve a deeper understanding of how these 'intangibles' affect differential economic performance.

Identity and industrialisation

Lüchow-Dannenberg has always been a remote and poor area with meagre soils, governed by sovereigns who resided in other regions. In the middle ages, the Slavic tribe of the "Wenden" moved into the area and coexisted peacefully with the indigenous Franks. Most of the area is still called "Wendland", and the characteristic round-shaped villages of the Wenden constitute an important historical heritage.

Despite these unique historical features, the county lacks a pronounced local identity for the whole area. The term "Wendland" serves only to some extent as a means of collective identification, because Wendland is geographically not congruent with today's county. Before German reunification there had been a certain local identity due to the county's formerly isolated location near the former intra-German border. However, based on cultural heterogeneity and the division into two counties until the 1970's, 'county-identity' is weak and instead, for some people, two local identities still exist, one for the north and one for the south of the county. As a result, there is still a certain dualism between the former counties Lüchow and Dannenberg in local politics. Also, the mentality of the population of Lüchow-Dannenberg as described by the interviewees is heterogeneous. On the one hand the mentality of the population was described as *"watchful, lethargic, obstinate"* and *"backward"*. On the other hand, terms like *"obstreperous, intolerant"* and *"offensive"* were used.

Since the 1970's, another factor has disturbed social coherence in Lüchow-Dannenberg; and this is still the dominant social and political issue in the area: In 1977, the conservative state government of Niedersachsen decided to investigate

conditions for final storage of nuclear waste in a salt mine in Gorleben, a village in Lüchow-Dannenberg. In the early 1980's, an interim storage facility was build nearby, and since then, Gorleben has been the main target of the German protest movement against nuclear power. Today, pronounced social friction within the local community is rooted undoubtedly in the conflict over nuclear waste disposal in the area and the resulting political struggle. As interviewees note: *"the Gorleben-dispute is a far reaching conflict, which is a political, economic and social restraint"* Repeatedly, interviewees pointed out how the conflict "*divided even neighbours and families"*. Obviously this dispute over nuclear waste in the area destroys to a certain extent social capital and social coherence in the area.

Partly as a direct effect of the Gorleben conflict, partly through immigration, the population in Lüchow-Dannenberg is composed of distinct social and political groupings. On the one hand, there is a large share of conservative, rural and agriculturally-minded people. On the other hand, there is the group of ecologically-oriented people (partly immigrants) who follow a more modern lifestyle and engage in cultural and political activities. Finally, there is a group of retired immigrants from larger cities like Hamburg or Berlin, who chose the region to spend their remaining years. The first group of old-established conservative people is generally in favour of nuclear energy and supports the expansion of nuclear waste facilities in Gorleben. The 'environmentalist' group however strongly opposes nuclear energy and engages in protests against nuclear waste transports ('Castor-transports') to Gorleben. The 'pensioners' finally want an unspoiled landscape and rural idyll and oppose modernisation to some extent.

This social context has a decisive impact on the economic performance of the area, because it determines local attitudes towards industrialisation. The high share of nuclear power protest activists and immigrant pensioners are generally very sceptical of industrialisation and the improvement of transport infrastructure. This part of the local population obstructs for example improvement of access to the railway system, or access to the national motorway network. Probably this social force would also oppose environmentally sensitive investments which are typical for Emsland, like nuclear power plants, space-consuming test tracks or petro-chemical industry. Instead, these people aim at a situation where the area retains its unspoiled landscape, its quietness and its remoteness. In fact, Lüchow-Dannenberg has successfully retained a remarkable landscape and intact nature, which fosters tourism and a certain amount of immigration. However, since the local income effects of immigration of pensioners, and the economic potential for soft tourism and ecologically-oriented business are limited, one can expect the mere *economic* net effect of this attitude to be negative.

Emsland too has a history of poverty. Compared to Lüchow-Dannenberg, however, this poverty had been far more pronounced. The interviewees pointed out that Emsland was known as the 'poorhouse of Germany' until the mid 20th century. The local proverb *"for the first* [settler] *death, for the second misery, for the third bread"* illustrates the rough living conditions for the farmers in this area with its poor sandy soils, swamps and moorland. As a result, the people developed a strong determination to free themselves and the area from this poverty. A pronounced work ethic in the area has been passed on to the younger generation, which is based on the insight of their forebears, that 'poor soils' can be compensated for by particularly hard work.

After WW II, many refugees from the east of the German Reich were located in Emsland, and the government was urged to provide an economic base for these people, that is, to cultivate the moorland. This idea was enhanced by territorial claims made by the Netherlands, who almost convinced the occupying nations to hand over the area, so that it could be cultivated by the Dutch. As a result in the 1950s the 'Emsland-Plan', a comprehensive, integrated development plan, was set up by the federal government. The plan provided considerable support for the cultivation and amelioration of the moorland and for the development of the region. Especially elderly interviewees expressed the effects of this plan as facilitating their 'escape from the poorhouse'. The combination of financial help, immigration and local work ethic, followed by an awareness of the need for common improvement of living conditions, proved not only vital for successful economic development, but also for stimulating the togetherness of the population.

Another factor which fostered local identity in Emsland appeared to be the common mentality. Interviewees described this phenomenon with terms such as *"down-to-earth", "hard-working", "stubborn", "conservative", "humorous", "moderate"* and *"value-oriented"*. Also, the catholic confession of the people of Emsland is important as it provides common values and works as a cultural boundary with the neighbouring predominantly protestant regions such as Bentheim, Ostfriesland or the Netherlands, thus strengthening local identity. The latter helps to explain the political situation in the county, which is characterised by large majorities for the Christian Democrats (CDU) over the past decades. In contrast to Lüchow-Dannenberg, there is a uniform local identity in Emsland despite the fact that today's county consists of three former counties. The mentality and attitudes of the people are homogenous and there is a feeling within the people that they have the same roots.

Awareness of the marked poverty of the past and the catch-up process in the last 50 years has resulted in a remarkably positive attitude towards modernisation and industrialisation in Emsland. As a public official notes: *"The people want to get out of*

the poorhouse, that's why they also support large [industrialisation-] *projects".* Accordingly, people generally value the creation of employment higher than potential environmental hazards. This argument is supported by the numerous ecologically sensitive investments in the past, which provoked no noteworthy protests from the local population. Examples of such investments are the two nuclear power plants and the petrochemical and nuclear industry in Lingen (in the 1950s and 1980s), the Transrapid hover train near Dörpen (in the 1970s) the Mercedes test track (in the 1990s), and recent measures by the Meyer-shipyard in Papenburg which make a heavy impact on the natural environment (enlargement of the shop floor, enlargement of the basin, construction of the Ems-dam and watergate).

DANIELZYK&WIEGAND (1999) name further factors responsible for the welcoming attitude towards industrialisation in Emsland: The lack of an intellectual bourgeoisie and the low share of young academics limit the potential for environmentalist protests. Furthermore, facing local unemployment levels that are still considerable and the prevalent work ethic of the local social system, employees are primarily concerned to keep their job (or to find one), rather than prevent the creation of new employment. Finally, a high amount of trust in the decision-makers prevails in the quite homogeneously conservative population, which helps to push industrial development. DANIELZYK (1997, p. 109) describes the community in Emsland as follows: *"... a mental openness for industrial development and employment as well as a good work ethic and a high openness to industrialisation combined with contentment with ones own living conditions and framed by a political-cultural situation, which is characterised by great homogeneity in this clearly catholic area. These circumstances are partly responsible for the situation, in which the local population accepts local authorities and their decisions."*

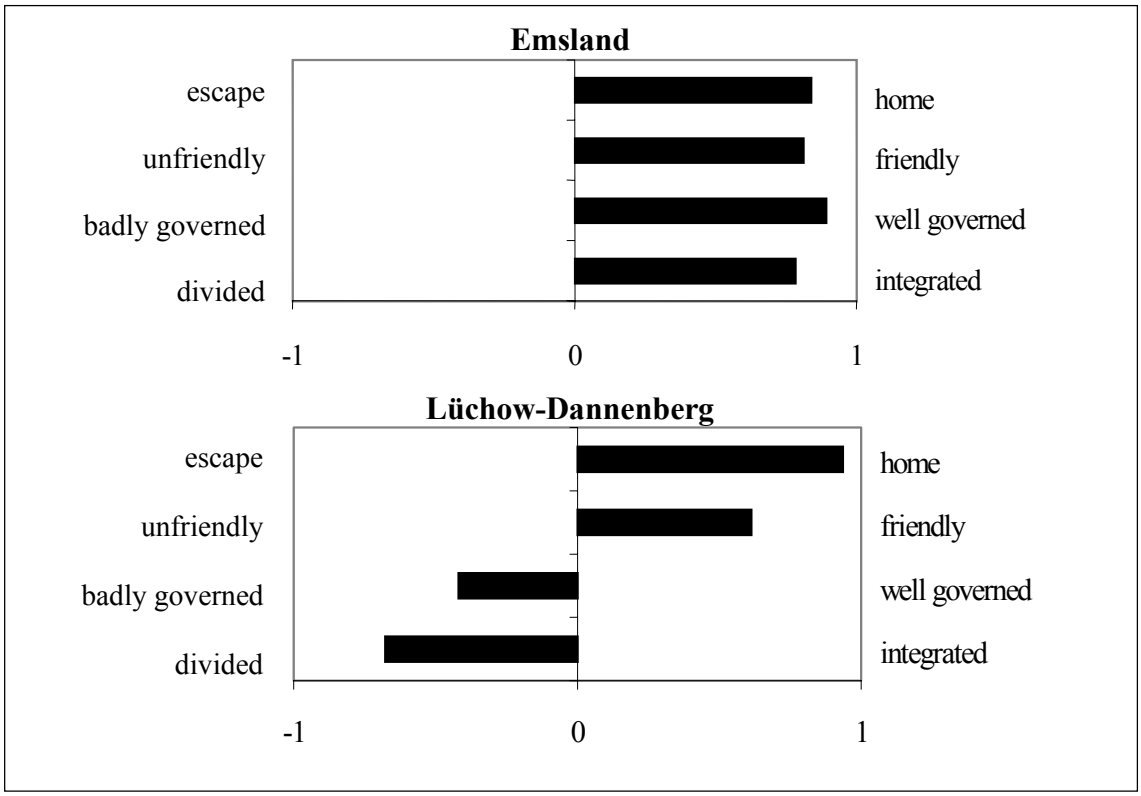
Social capital

The socio-cultural setting in the two study areas have a bearing on the amount of local 'social capital'. Social capital in an area can influence economic performance via smoothing economic transactions, speeding up bureaucracy, making co-operative action easier and preventing free-rider problems. Finally, a high degree of social capital arguably helps to develop social coherence in an area. A survey based on a sample of the population to analyse the amount of social capital in the study areas (i.e. by measuring the amount of trust in the society) was beyond the financial capabilities of the DORA-project. Therefore, the following relies primarily on the analysis of interviews, analysis of local development processes in the past, and certain statistical information.

In the standardised part of the interviews, local actors were asked to spontaneously tick one of two opposed attributes which apply in their view to their county. Although these ratings are not based on a statistical sample of the population, but on the expertise of local actors, they can still provide valuable information concerning social capital, because most of the interviewees are local people themselves and should be representative their county. Figure 34 shows the results for those pairs of attributes with relevance for social capital. A tick on the positively attributed term has been coded with one, a cross on the negatively attributed term with minus one, and a tick in between with zero.

A great majority of interviewees in both regions chose the term 'home' between the pairs *'home'* and *'escape'*. Also, between *'friendly'* and *'unfriendly'* the majority of the interviewees in both areas decided for the positively attributed term, with the interviewees in Emsland valuing this aspect positive more than in Lüchow-Dannenberg. However, the assessment of the two areas regarding the terms *'well-governed'* and *'badly governed'* were entirely adverse. The great majority of interviewees in Emsland chose the term *'well-governed'*, while the majority of interviewees in Lüchow-Dannenberg characterised their county as *'badly governed'*. This result is surprising as many of the interviewees themselves were part of the county administration or at least a member of the governing political party. The differences were even more pronounced for the last pair of attributes. A clear majority in Emsland described their county as *'integrated'* as opposed to a large majority in Lüchow-Dannenberg who characterised their county as *'divided'*. The latter indicates the deep social friction in the population of Lüchow-Dannenberg. Here, social coherence at local level appears not to be in good order. In contrast, research results suggest that there is a higher degree of social coherence in Emsland.

Fig. 34: Interviews: „Which of the following descriptions in your view apply to your area?“ (average)



Source: Own survey

Beside the statements of the experts, statistical indices for social capital can be used in order to measure it (MEIER 1996). However, such indicators pose problems regarding their reliability. Therefore, indicators such as ‘turnout at elections’ and ‘number of marriages’, used by PUTNAM (1993) were not considered. The indicators ‘household size’ and ‘voluntary membership in clubs and associations’ (for social capital at the micro level) appear to be less problematic. However, they should not be used uncritically (HAUG 1997, LEVI 1996).

The average household size can be used to characterise family structures, which in turn provide indices about the amount of social capital at the micro level. The stronger the family bonds the lower is the tendency for individualisation. Large families where there are a large number of children, or more than two generations of the family living together show a willingness to sacrifice a certain amount of personal freedom for family bonds. In Emsland the average household size is 2.92 persons. This figure is clearly above the average household size of 2.24 persons in Nieder-

sachsen and 2.36 persons in rural areas in Germany. In contrast, the average household size in Lüchow-Dannenberg is just 2.26 persons. The interviewees suggested that religion and traditional lifestyle and values were reasons for large family size in Emsland.

Another indicator of social capital is voluntary membership in associations and organisations (PUTNAM 1993). Membership in clubs shows to what extend spare-time is spent individually or in groups. While there are no exact numbers for average membership in the areas, it appears to be of high importance in Emsland. 'Shooting clubs' and sport clubs are predominant. Moreover, the Catholic Church and homeland associations (i.e. "Heimatverbände") play an important role. Also of significance are neighbourhood formations, which may not be organised in associations, but whose variety of customs and strong cohesion form an important part of social capital. Club membership is a less important social factor for the people in Lüchow-Dannenberg than for the people in Emsland. The reason for this is the different nature of groups in Lüchow-Dannenberg. While the 'classical' northern German rural club patterns (shooting association, sport clubs and voluntary fire brigade) are most important, also citizen initiatives as well as cultural and political movements receive strong support. Especially two initiatives of the anti-nuclear-movement bind many people into structures. There are no such associations on the side of the nuclear power supporters. Probably for the latter political parties are at least a partial substitute.

The two indicators, household size and membership in associations, indicate a lower degree of individualisation in Emsland than in Lüchow-Dannenberg. Furthermore, associations in Lüchow-Dannenberg often have a specific goal and seem to be rooted ideologically. In contrast, associations in Emsland, though based on common values, appear to be less ideological.

Politics

Besides the assumed direct positive link between social coherence and local development success there is an indirect influence via the political sector. Emsland (or the former three counties, respectively) has been led by the same political party since the foundation of the Federal Republic of Germany. Today, this party has still a great majority in the county parliament and the communities (see 3.1.6.). Interviewees stated that a basic consensus covers almost the whole population of the county, which is based on common values, awareness of a common history and a strong local identity. This results in strong trust in the decision-makers. There are two im-

portant consequences for the local political process. The county directors were greatly empowered by the people and this enabled them to operate with a large variety of options. In negotiations with institutions or actors outside the county (e.g. federal and state politics, or investors) the county directors could speak in the name of their county, since they could rely on support for their decisions and ideas from the political institutions. Because there was never a real battle for political power in the county, arguments based on party positions were avoided and instead it was possible for the politicians to concentrate on pragmatic politics relevant for local development.

The high stability of the political situation over time further allowed the area consequently to follow one development path without major turnarounds, which might have resulted from changes of the governing party. Here as well, social capital plays its role as the local political situation, being to a certain extent based on the people's trust in their political leaders, which is founded on common values and norms that are shared by the political decision-makers and the people.

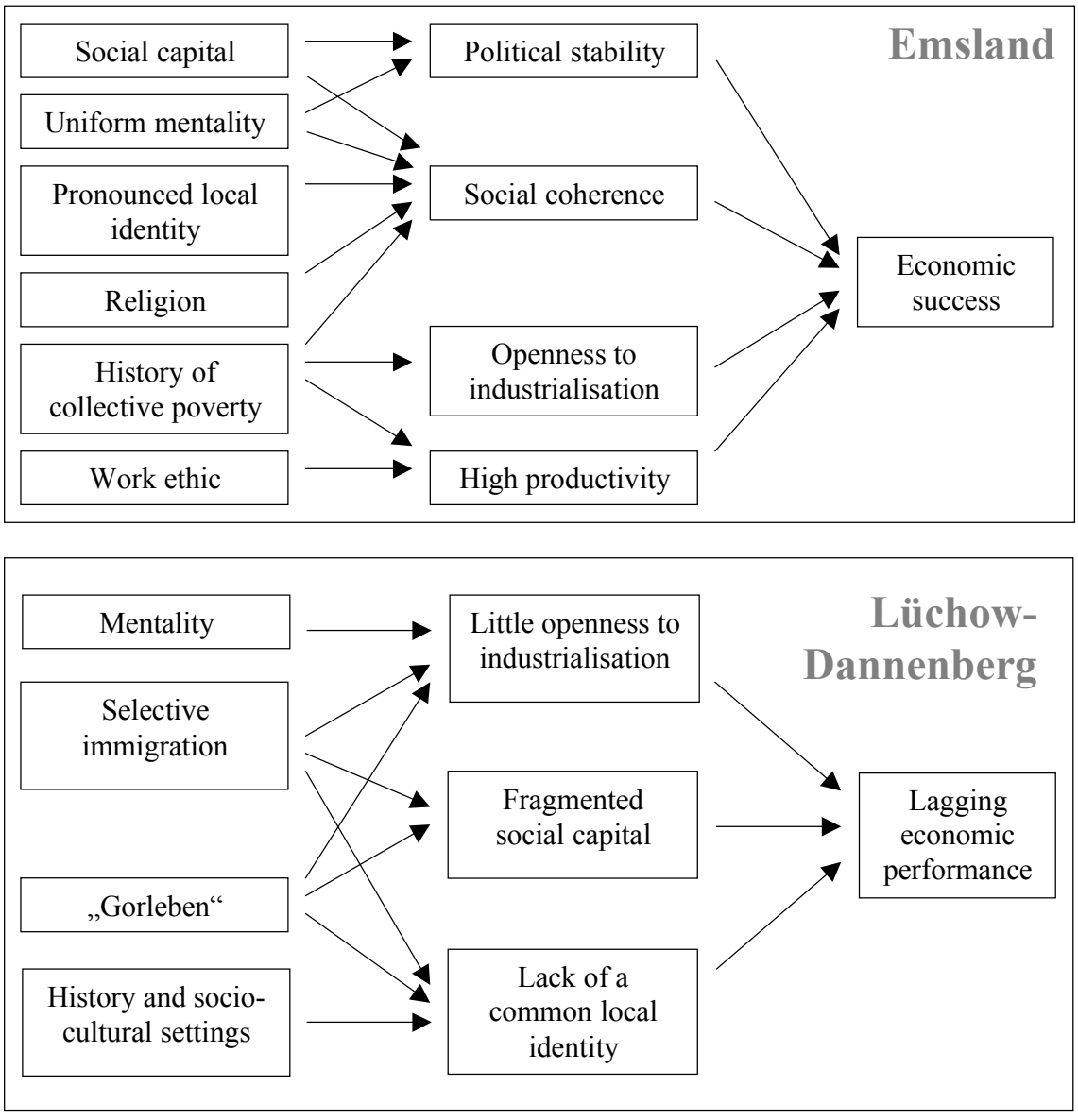
Both factors, the great political majority of one party and stability over time, were not present in Lüchow-Dannenberg. Here, the two ideological 'camps' have similar political power. Especially during the past two decades the opposition had considerable veto power and party positions were more important than pragmatic politics. Party coalitions did not last and the county director never received the same support as in Emsland. As a public official from Lüchow-Dannenberg notes: *"It is due to Gorleben that political diversity has turned to political polarity"*

Since the decision in the 1970s to locate a nuclear waste disposal facility in Lüchow-Dannenberg, one can argue rightly that the potential for social conflicts in this county was far greater than in Emsland. If this conflict had not been brought to Lüchow-Dannenberg, surely the social coherence of this area would not have been disrupted to such an extent. However, it does not seem justifiable to make the nuclear waste site *solely* responsible for poor social coherence. Many interviewees in Lüchow-Dannenberg stated their belief that the region would have been divided even in the absence of the nuclear waste disposal facility. On the other side, most of the interviewees from Emsland assumed that such a nuclear waste disposal facility in their area would not have fragmented their community as much as it did in Lüchow-Dannenberg. (However, the latter statement might also rely on the higher willingness of the people in Emsland to industrialise, analysed earlier.)

A basic difference between the two study areas is that the local population in Emsland is unanimous in supporting one common goal, the creation of employment in

their county. Social cohesion is both cause and effect of this development path. By contrast, Lüchow-Dannenberg is lacking such a common goal. Instead, there is a social conflict between ecological and economical development goals. Moreover, the mentality of the people obstructs a solution to this conflict.

Fig. 35: Impact of readiness to industrialise and social coherence on economic performance



3.2.2 Social Capital in the Local Actors Network and Institutional Collaboration

Characterisation of the social capital between local actors has been part of the investigation, as interviewees in the Niedersachsen study areas stressed the special relevance of this issue for local development. The higher the degree of trust and co-operation between the decision-makers, the better arguably is the functioning of institutions and local decision-making processes, thus local development. The analysis of interviews with local actors and examination of their network structures allow quite an intensive analysis of this issue.

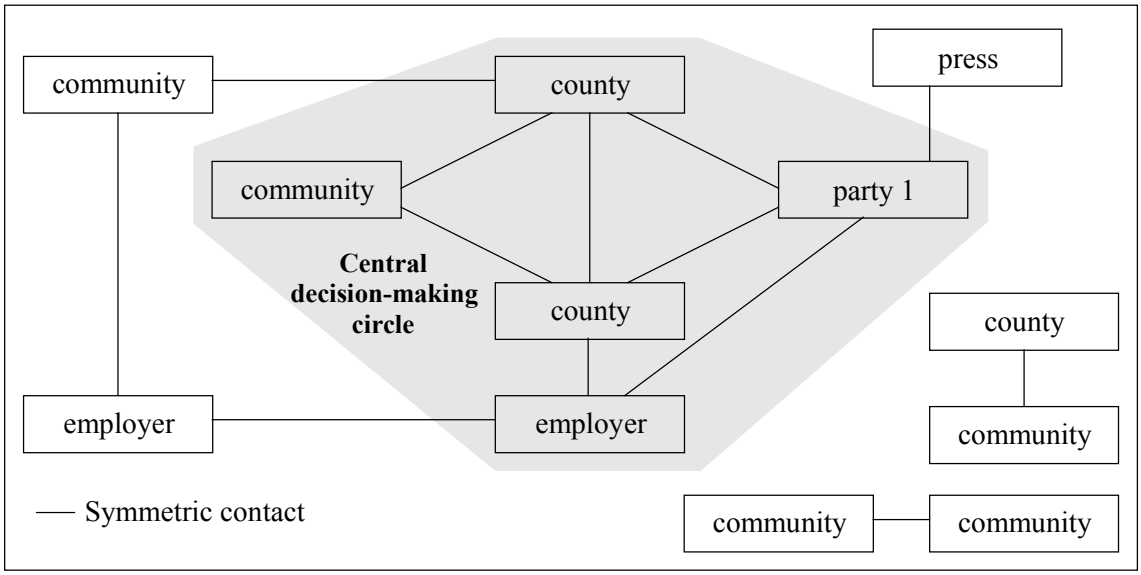
Network structures

Many of the interviewees were believed to have considerable influence on the development of their county. Though one must acknowledge that some important actors in the county were left out of the network study, those cases are not expected to greatly influence the overall result. The data from the network study (see 3.1.9.) provides information about the structure and density of the local network connecting these actors. In addition, valuable information was collected in the interviews about the quality of the networks, the values and basic attitudes of local actors, and their relationship to one another. This information allowed an insight into general social capital in the study areas, and is vital to correct interpretation of the data. The following does not put the egocentric network analysis first, i.e. how individual actors can use social capital in their own interest. Instead, we examine how social capital exists between local actors as a commonly available resource.

Professional contacts are often predetermined by the actors' position in institutions, which limits our interpretation concerning social capital. The analysis of contacts formed through membership in groups appeared to be problematic, as some but not all interviewees understood this to be the same as contacts made through political parties. In the county of Emsland, where the majority of actors are members of the same political party, many interviewees rated it unnecessary to state their party contacts in the questionnaire. Other kinds of contacts are more useful in order to access social capital between local actors. Contacts via 'kurzer Draht' can indicate easy information flow in the sense of 'weak ties' (see 3.1.9.). Unfortunately, this network is in both areas too large and complex to allow for a handy illustration. The network structures formed by 'private contacts' however are not too complex and can be illustrated. These contacts have particular relevance compared to others as

these are probably some sort of friendly relationships, which get close to a form of social capital.

Fig. 36: Symmetric private contacts between local actors in Emsland



Source: Own survey

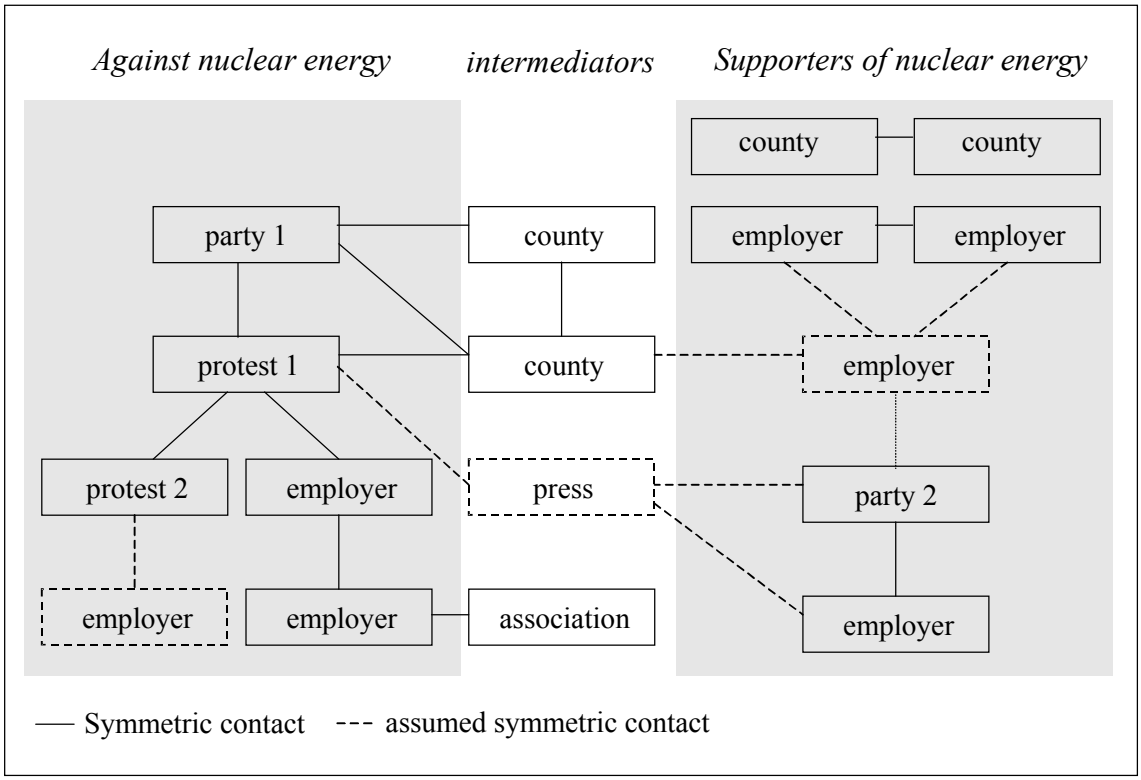
Figures 36 and 37 show the symmetric private contacts of the interviewees in both counties. Symmetric means that the private contact had to be confirmed from both sides. (If one interviewee stated a contact with another interviewee who, however, did not state such a contact, this relation is not shown in the figure.) There is an exception to this in Figure 37 where two cases with non-symmetric contacts are shown (interrupted line). In these cases certain actors could not be interviewed personally, but because of interview statements of others the existence of symmetric contacts was assumed.

The private contact network in Emsland shows clearly a central circle, which consists of the main actors from the county, the communities and politics. This circle is surrounded by ‘satellite contacts’, which are either connected with the central circle or isolated. The network appears as a unity with a hierarchical structure. Since there were 41 participants in this network study, the low number of private symmetric contacts between local actors in Emsland is surprising.

In the expert interviews, most actors in both counties stated the positive influence that the networking of actors in politics, business and institutions has on the deve-

lopment success of the area. While a number of interviewees in Lüchow-Dannenberg described the network in their county as insufficient, the majority of interviewees in Emsland emphasised the high quality of professional contacts between local actors, often calling each other by their first names. Trusting co-operation at professional level seems to be unique to the decision- makers in Emsland. The situation is characterised by great openness, 'kurzer Draht', and a high amount of trust between the actors without the contacts becoming 'private contacts': When asked, the actors from Emsland stated that their close professional contacts generally did not lead to private contacts or meetings. Instead, private contacts of this kind exist for the majority of actors in the neighbourhood, in clubs or through family relations. There appear to be so called 'weak ties' between the actors. Such 'weak ties' are static, generally disused connections, which can easily be activated when demanded (GRANOVETTER 1973). In theory, they have a high exchange potential, are flexible and adaptive, and facilitate information and innovation flows between the actors (GENOSKO 1999, p.33;). GRABHER (1993, p.751) characterises weak ties as a kind of 'cultural insurance', which the local actors can rely on in troubled times, and which reduce the 'risk of cumulative wrong decisions' and produce learning effects via 'positive feedback loops'.

Fig. 37: Symmetric private contacts between local actors in Lüchow-Dannenberg



Source: Own survey

A look at the actors' private contact network in Lüchow-Dannenberg (Figure 37) shows a higher total number of symmetric contacts compared to Emsland, as well as the greater complexity of the network. Because the interviews generally touched the topic of 'Gorleben', it is possible to divide the interviewees into three groups: nuclear power supporters, nuclear power opponents and 'mediators'. The opinion of the mediators about nuclear power either remains unknown or differs from the opinion of their institution or political party. The division of the actors into these groups makes sense as Gorleben is the central political and social issue in the area. The knowledge of the actors' view regarding this topic is vital for the interpretation of the network structures. A clear break in the private contacts becomes obvious, dividing the actors in ideological 'camps' concerning their attitude towards Gorleben and nuclear energy. Both sides (the supporters and the opponents of nuclear power) have a relatively strong network within their group. Also, there are several links between some nuclear power opponents and mediators. In comparison, there are only very few contacts between the mediators and the supporters of nuclear power. It is striking that virtually no direct contacts connect the two opposed camps. In Lüchow-

Dannenberg there is also a circle of actors. However, this circle is not located in the centre of the whole network as seen in Emsland. Furthermore, actors from the communities are not part of the private contacts network.

In the remaining three networks which are not shown here (professional contacts, within associations, 'kurzer Draht'), there is more evidence for the existence of the central circle seen in Emsland. In all, the communities are relatively well integrated in the networks and the networks are relatively compact and centralised. The density of the network 'kurzer Draht' is especially high in Emsland. In Lüchow-Dannenberg analysis of the other kinds of networks supports the division of the actors into two ideological camps. However, there are some contacts between the nuclear power supporters and their opponents via associations. But overall it appears to be a clearly segmented network. In contrast to Emsland, in Lüchow-Dannenberg the contacts at professional level and at private level are relatively congruent. Furthermore, there is a strong conformity on each side regarding political viewpoints. This situation as well as the great density of private contacts suggests the existence of so-called 'strong ties' between the local actors in Lüchow-Dannenberg. In contrast to the static 'weak ties', such 'strong ties' are intensively used and maintained. Those strong ties could hinder the dissemination of new ideas and innovations and arguably impede the entry of external ideas and impulses (e.g. from opposed ideological camps) into the actors' network (GENOSKO 1999, p. 33).

Network indicators

The density of a network can be measured with 'degree' and 'closeness' (see 3.1.9.). 'Degree' describes the sum of all direct contacts of one actor. 'Closeness' describes the proximity to one another and also includes indirect relationships, i.e. relationships via other actors in the network. 'Between-ness' is the value used to describe the capacity of a actor to disturb or to mediate (FUERST et al. 1999).

A comparison of the indicators 'degree' between all actors in both counties (3.1.9.) shows in Emsland that one person at the top of the county administration stands out. This position is followed by some actors with also relatively high 'degree' values. The remainder have relatively low 'degree' values. This leads to the situation where the average of the total 'degree' values is lower in Emsland than in the actors network in Lüchow-Dannenberg. Yet the value for contacts via clubs or associations cannot be used to their full extent as the contacts via political parties are not included by interviewees in Emsland. In Lüchow-Dannenberg the 'degree' values are higher for all kinds of contacts without a particular person standing out. Similar re-

sult are obtained from the analysis of the 'between-ness' values. These mark the relative large capacity of the central actor in Emsland to mediate and disturb through all four forms of contacts. Actors in Lüchow-Dannenberg showed similar values for 'between-ness' and varying top positions depending on the kind of contact. Again, the values are higher than in Emsland. These results underline the hierarchical structure of the actors' network in Emsland where most strings meet at one point. In Lüchow-Dannenberg there is no such central actor and the network is horizontally structured.

Also, the 'closeness' values (indirect contacts) are overall lower in Emsland compared to Lüchow-Dannenberg. The actors in Emsland are more dependant on other actors to use certain contacts. This again indicates 'weak ties' between the actors in Emsland with the expected positive effects on development processes as pointed out earlier. The greater density of direct contacts in Lüchow-Dannenberg support the assumption that here, 'strong ties' prevail.

In Lüchow-Dannenberg, the high 'degree' values, the assumed dominance of 'strong ties' and the network structure suggest that social capital at the micro level is relatively strong and direct private contacts can be used to reach individual and group goals. In Emsland, the overall lower number of contacts and the centralised network structure suggest social capital at the macro level. Here, one forms the impression that contacts have the purpose of reaching goals beneficial for the whole county.

Another aspect of networks is the particular relationship between external and local contacts of the actors. During the network study the interviewees were asked to estimate their share of local compared to external contacts for both their professional and private contacts. The two study areas differ greatly in size, which made the interpretation of the results to this question more complicated. The population of the county Emsland is six times higher and the area considerably larger compared to Lüchow-Dannenberg. Therefore, the share of local contacts in Emsland is expected to be higher. In fact, this is the case for the professional contacts of the local actors (3.1.9.). Interestingly however, regarding private contacts the actors in Emsland show a *higher* percentage of external contacts than the actors in Lüchow-Dannenberg (see 3.1.9.). This can be taken as another indices for 'weak ties' between actors in Emsland, which leave more room for external contacts. The surprisingly low share of external private contacts of the actors in Lüchow-Dannenberg indicates a higher 'inward orientation' and a certain isolation of the network. This observation is confirmed by the kind of themes in which collaboration of local actors takes place (see 3.1.9, Table 60). The interviewees in Emsland collaborated much

more on inter-regional projects compared to Lüchow-Dannenberg, where collaboration concerned solely local initiatives.

So far, social capital between the local actors of the two study areas can be summarised as follows: In Lüchow-Dannenberg social capital at local level is characterised by ideological, political and geographical fragmentation. Social capital is well-developed at the micro level, i.e. contacts are strong within a group and support individual or group goals. The actors network is horizontally structured, based mainly on intensive networks of civil and political commitment, and divided along ideological lines. Each actor faces an opponent from the other ideological camp with great suspicion and generally disagrees with their viewpoint. This makes it impossible to find a solution to local conflict of development goals (industrialisation vs. ecology). The actors are expected to co-operate within their own camp, but oppose the other camp.

In Emsland social capital at the macro level is well developed. Generally, it is based on common identity, mentality, values and norms. Here, local actors take the others to be as catholic, conservative and believing in progress as themselves. Because they have so much in common, the actors basically trust each other. Therefore, the actors are more likely to contribute constructively to the decision-making processes, which serves the common development goal (i.e. development of the area). Professional contacts are barely congruent with private contacts and form a relatively loose static network, which can easily be activated and which efficiently supports the flow of information (see HAUG 1997, p. 7).

Institutional collaboration

Results of the interviews with the local actors suggest that the different forms of social capital in the two study areas have a decisive influence on the functioning and on the co-operation of local institutions. The actors in Lüchow-Dannenberg pointed out the blocked local governance and the difficult relationship between the county administration and communities, which suffers from ‘fights for money’, communication difficulties and contrasting ideological and political viewpoints of the actors. Between the communities local selfishness, parochial thinking, jealousy and rivalry are predominant and there is a lack of community spirit of many politicians in the county. The reasons for this are e.g. the dualism between the northern and southern part of the county, arguments between different political parties and disputes about financial resources, as well as discrepancies regarding Gorleben.

The statements of the local actors in the Emsland are completely different. Here, the relationships between communities and the county are described throughout as positive and efficient. The people collaborate towards the same development goal, the relationships are described as pragmatic, friendly and constructive. While the communities are in competition with one another, this is a fair and co-operative process. It was said that interested investors would be referred to a neighbouring community if the own community proved not suitable for the investment. The relationship between county administration and communities is hierarchical, but most interviewees felt that this structure is positive. As a community leader reports: *"The County Director is very dominating, but he does get things done"*. The mayors of the communities described themselves as *'led with a golden leash'* by the county director, indicating that the communities are to some extent financially dependent on the county administration. However, the mayors value this structure positively because it suppresses selfish thinking by the communities. The good relations between local actors were generally attributed to the strong local identity of the actors and their cultural and political homogeneity.

These structures reflect also on political and economic developments in the past. This is highlighted by a number of processes in Emsland, which are mainly based on the good relations between the actors.

– The 'Emsland-Plan': The interviewees pointed out that the close network between the managers of the 'Emsland GmbH', representatives of the county in the federal and state parliaments, and the different county directors and community representatives was especially responsible for the overall success of the plan. 'Distribution fights' between communities or departments of the administration were successfully prevented and instead integrated and holistic concepts were developed.
– Investments: A number of large investments (e.g. Transrapid, Nordland Paper, Mercedes-Benz test route) are supposed to be partly a result of the good co-operation between the people, politicians and actors of the county and communities. This helped to offer potential investors within a relatively short time a package of a large industrial site, financial support and acceptance of the population.
– The 'apprenticeship initiative': This initiative from the 1970s successfully guaranteed every unemployed adolescent a placement for an apprenticeship. A commission was formed consisting of representatives of the chamber of commerce, chamber of handicrafts, trade unions, schools, administration and county parliament, chaired by the political representative of the county. According to the interviewees, co-operation in the commission and the development of strate-

gies and programs initiated an important psychological 'community-building' process.

– Construction of the A 31 motorway interface: The filling in of an approximately 40 km gap in the A 31 motorway through joint local finance was initiated by the head of the Emsland county administration. The business sector of Emsland as well as adjacent counties, the chamber of commerce, neighbouring county administrations and the Netherlands were involved in co-financing this project. The local share of the costs of 135 million DM stands in comparison to the expected local benefits of approximately 500 million DM. This kind of local pre-financing of the construction of a motorway is unprecedented in Germany.

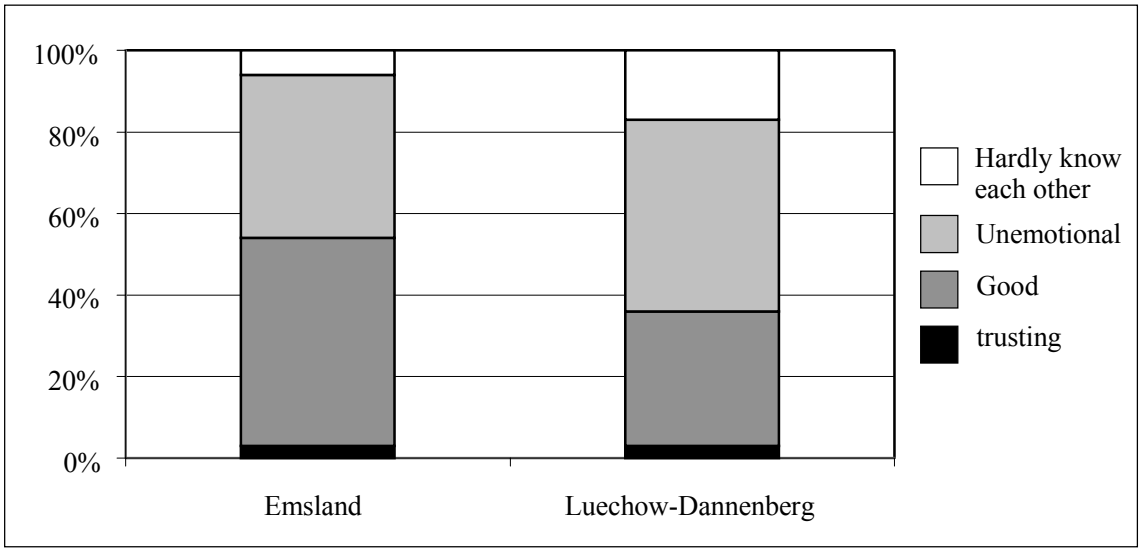
For these and other processes of local development in Emsland the social capital existing between the actors has been at least a very important if not the most important basis for their success. In Lüchow-Dannenberg local development in the post-war period lacks comparable processes. The former subsidies which the county received before 1989 as a border region were used in less creative and effective ways to develop the area. The interviewees stated that there was a somewhat passive attitude and a certain dependence on financial support from the county. A co-ordinated and integrated use of regional policy funds often did not work out because of the parochial and selfish policy of the communities. The strong parochial thinking of the community politicians led to an abundance of open air bathes, but no consensus could be reached concerning the location of a common night club in the county. The major investments like ContiTech, SKF, the nuclear waste disposal facility and the salt mine in Gorleben were mainly initiated by external actors and were not the result of joint action by local actors. Far from initiating the construction of a motorway or the improvement of the train system, the local decision-makers do not even agree on whether they favour the improvement of the infrastructure in their county anyway. Beside their inability to co-operate within the actors network and institutions in the county, also the absence of a consensus about a common development goal inhibits economic development in the area. The evolution of a common goal is impeded, amongst other factors, by the shattered social capital in the county.

Economic impact

With regard to the influence of local social capital on economic development, three different levels of impact can be identified. First, informal networks between entrepreneurs influence the diffusion of innovation and know how, and can lead to vertical and horizontal forms of co-operation. Such informal networks are more likely to

develop, the higher the social capital between the entrepreneurs. The theories known as "innovative milieu" (CAMAGNI et al. 1991) and "worlds of production" (STORPER&SALAIS 1997) recognise and develop this relationship. Second, social capital between entrepreneurs and institutional or political decision makers can contribute to economic development, when the needs of the business sector can more easily enter local decision-making processes, and synergy effects between the public and private sector can be more readily used. Third, social capital can indirectly foster local development by facilitating the quick provision of business infrastructure.

Fig. 38: Business survey: „How would you characterise the relationship between entrepreneurs in the area?"



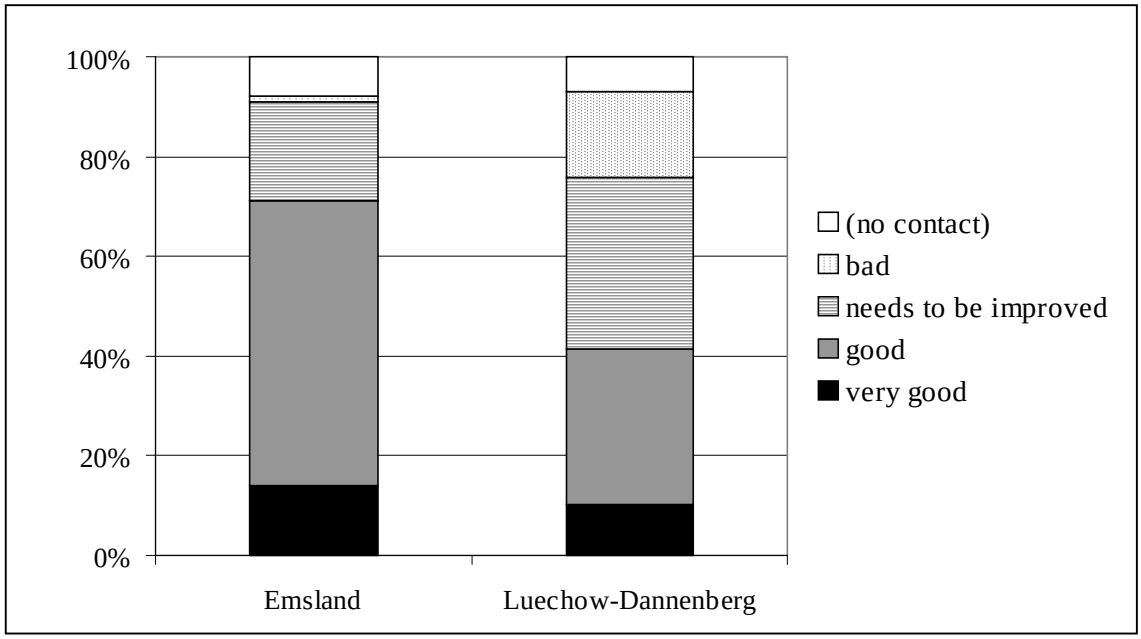
Source: Own survey

In the postal business survey of the producing sector, participants were asked to characterise the relationship between entrepreneurs in their county on a scale from '*trusting'* to *'hardly know each another'*. The results show marked differences between the two study areas (Figure 38). While 51% of the entrepreneurs in Emsland characterised the relationship as *'good'* this share was only 33% in Lüchow-Dannenberg. Compared to Emsland, far more entrepreneurs in Lüchow-Dannenberg valued the relationships as *'restrained'* or *'hardly know each other'*.

The results of the business interviews give further indications about the relationship between the business sector and local institutions. Figure 39 shows the relationship of the surveyed enterprises of the producing sector of both counties with the county administration. More than 70% of the enterprises in Emsland rate the relationship as

'good' or *'very good'*, while this percentage in Lüchow-Dannenberg is only 40%. Here, the majority valued the relationship as *'needs to be improved'* or *'bad'*.

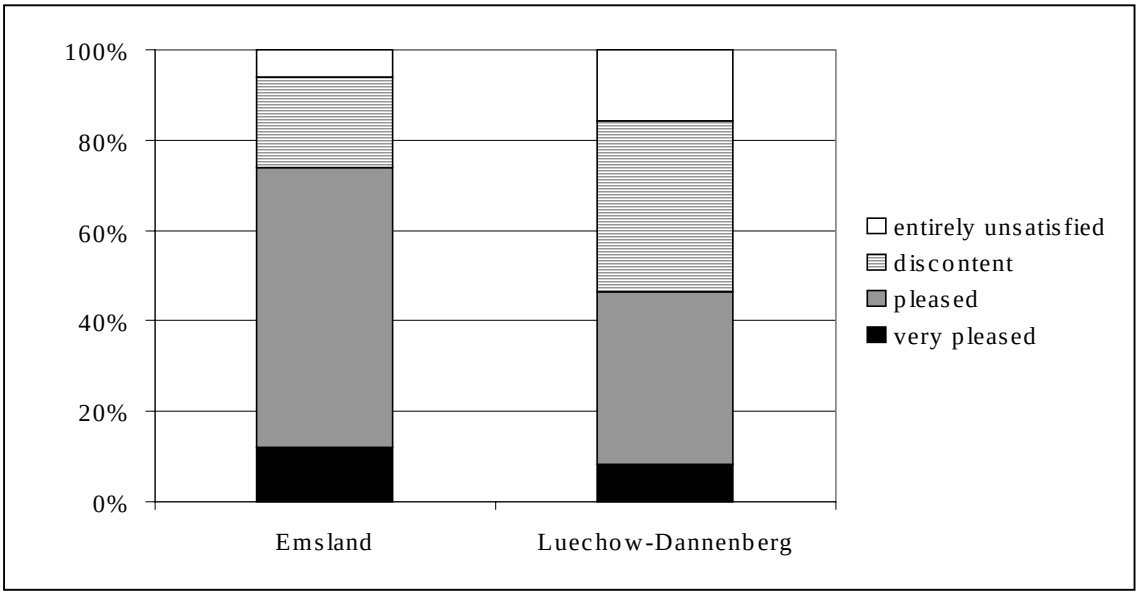
Fig. 39: Business survey: „How would you characterise your relationship to the county administration?"



Source: Own survey

A great majority of the entrepreneurs in Emsland were *'pleased'* or *'very pleased'* with the openness of the community administration towards business needs, while the majority in Lüchow-Dannenberg expressed that they were *'discontent'* (Figure 40). Overall, the relationship between firms and the administration seems to be better in Emsland than in Lüchow-Dannenberg. This result does not come as a surprise, having analysed the degree of social capital (3.2.1) networks in the two areas.

Fig. 40: Business survey: „How pleased are you with the openness of your community's administration towards business needs?“



Source: Own survey

In Emsland high social capital within local decision-maker networks as well as between decision-makers and the population has acted as a catalyst when attracting new investments as well as developing the infrastructure. Proof of this inter-relation can be found only in the examples given above (the Emsland-Plan, investments, construction of the motorway interface). It is difficult to calculate exactly the percentage of the economic benefits for Emsland which has been caused by a high level of social capital. Equally, since the lack of social capital has influenced economic dynamics in Lüchow-Dannenberg, it is impossible to determine exactly how the area would have developed if there had been a higher level of social capital.

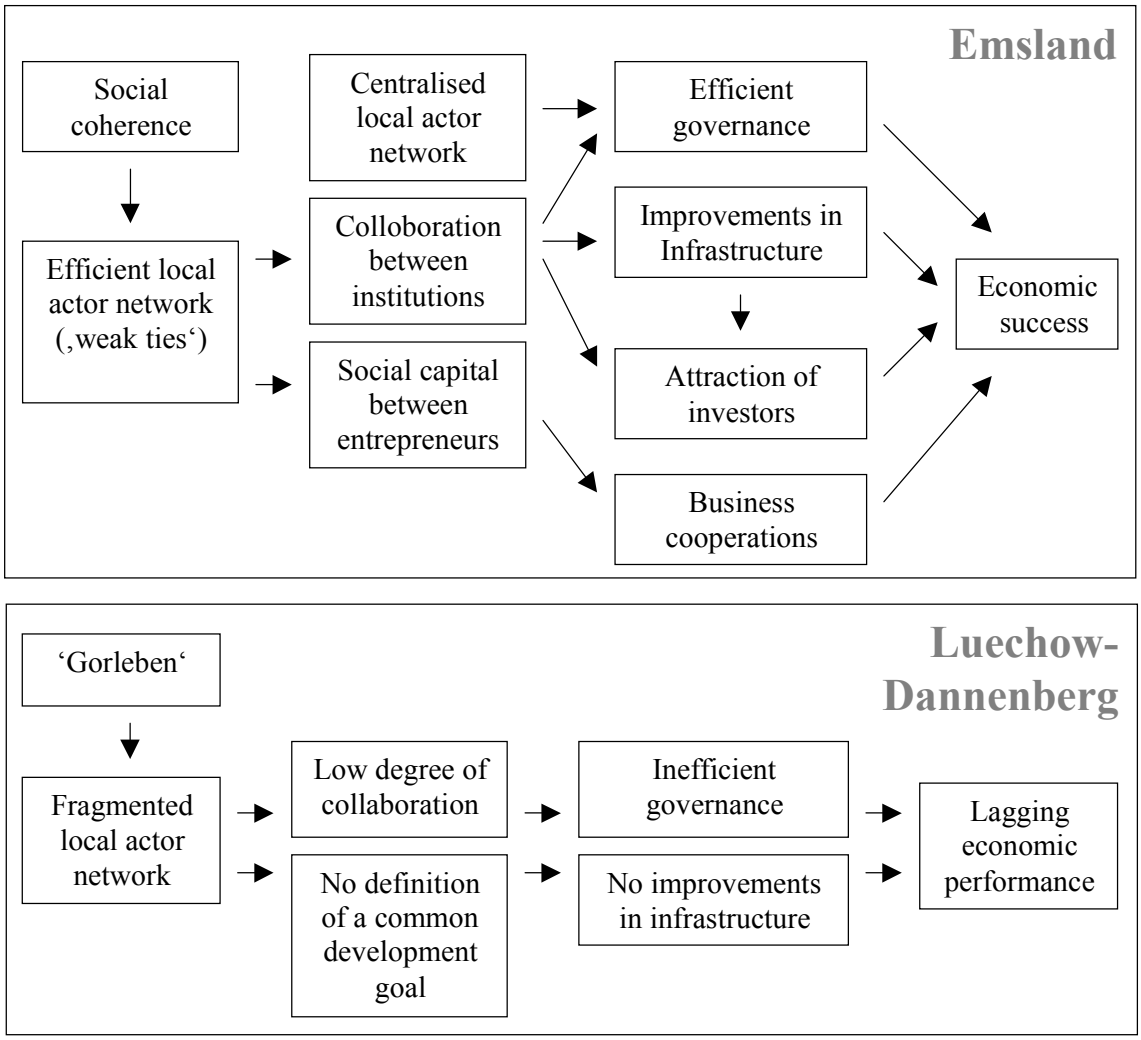
However, the results of the expert interviews showed that the influence of social capital on the economic development was indeed quite considerable. When asked to name the most important factors that had an influence on the area’s economic development over the past 20 years, most interviewees from Emsland named factors which can be summarised under the term mentality (16 answers). Among secondary factors more or less interrelated with social capital, the following were named (14 answers): the importance of ‘kurzer Draht’ between the actors, decision-makers *“working towards one common aim”*, the pragmatic politics of the county, political stability, the homogeneity and strong local identity of the people in Emsland, the public spirit, as well as the high identification of the people with local enterprises.

Many interviewees combined aspects of mentality and social capital in their answers. Other factors named included 'the Emsland-Plan' (11 answers), the former poverty of the county, infrastructure and so on.

When interviewees in Lüchow-Dannenberg were asked for the most important factors which had an influence on local economic performance, they named first the peripheral location of the county and its bad infrastructure (21 answers). Second-most important was the factor "Gorleben" and its wider problematic (9 answers). Furthermore, the unfavourable economic structure, which suits the passive mentality of the people in Lüchow-Dannenberg, as well as "parochial politics" between the communities were frequently named. Obviously the local actors place the Gorleben conflict in the population not as the sole, but as a very important cause for the lagging economic performance of the area.

However, the statements of the interviewees have to be seen in relation to their backgrounds. In Emsland, as the economically successful study area, there is a tendency of the actors to relate their economic development success to factors which they influenced or participate in (e.g. good co-operation between actors or the mentality). In contrast, it is not surprising that the majority of interviewees in Lüchow-Dannenberg, the lagging study area, make outside factors responsible for their economic stagnation (e.g. the peripheral location of the county or "Gorleben"). While this influence limits the reliability of the answers, they should not be rejected completely. Considering the order of the statements and their relative frequency, one can conclude that high social capital in Emsland and low and divided social capital in Lüchow-Dannenberg are significant factors for the differential performance of the two counties.

Fig. 41: Impact of social capital in the local actors' network and institutional collaboration on economic performance



3.2.3 Dedication and Initiatives of Local Actors

Although it was not explicitly part of the ten-factor model of the DORA project, the dedication and the initiative of local actors turned out to be an important variable explaining differential economic performance of the two study areas. This results from the interview analysis and the in-depths analysis of development processes in the study areas. In the recent history of Emsland several development processes originated from the ideas and initiatives of single persons and could be attributed to their personal dedication. In Lüchow-Dannenberg, by contrast, development processes originated more often from decisions outside the area, i.e. from foreign parent-companies or regional policy at the federal or state level, but not from the initiatives of local actors.

The realisation of the A 31 motorway interface in Emsland for example is, next to the good co-operation of local actors, also due to personal initiative. The project evolved basically from an idea of the county director, Hermann Bröring. It was arguably based on his uncommon way of thinking not to rely on the federal government to build the motorway in the far future, but to build it now and with regional finance, a process unprecedented in German history (and not intended in German legislation). Secondly, it was the county director who started bringing together the different local actors to finance the project (neighbouring Dutch and German regions, regional enterprises, chambers of commerce, state and federal government).

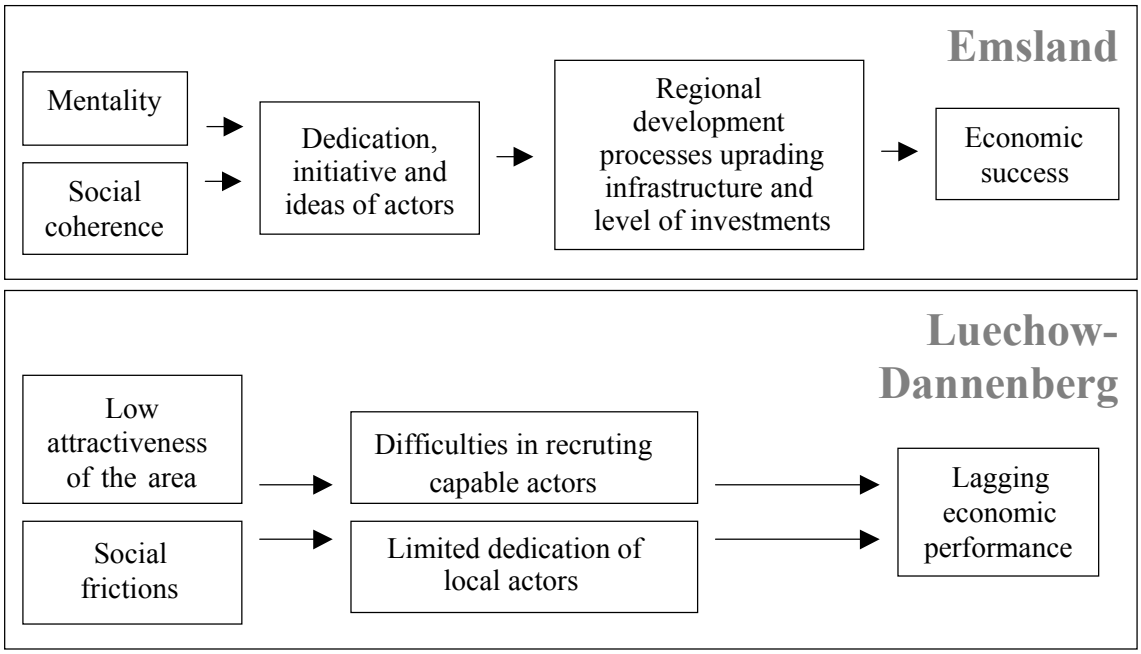
There are several similar examples in the post-war history of Emsland. The 'Emsland-Plan' to develop the area was begun in the 1950s largely as the initiative of Heinrich Eckstein, who used his say in the federal parliament to support this costly development program. The construction of the test track for the 'Transrapid' magnetic hover-train in the early 1980s was largely due to the dedication of Gerd Hugenberg, then head of the 'Emsland GmbH' who convinced the investor to bring the project to Emsland and provided suitable conditions for the project in the area (after plans had been shipwrecked in Bavaria). The realisation of the Mercedes test track in the early 1990s was, according to interviews, mainly due to the personal initiative of Heinrich Hövelmann, then major of Papenburg. Several other examples of personal initiatives from local actors came out of the interviews.

Since some of these 'initiators', as we may call them, were not born in Emsland, the reasons for the numerous cases of extraordinary initiative should to some extent stem from the area's societal and political situation, and not solely from the local mentality. A possible explanation is that socio-cultural circumstances in Emsland, where modernisation and industrialisation are generally welcomed by the populati-

on, embody an implicit 'reward-system' for dedication on the part of local actors. Those actors who managed to attract an investor, regional policy-funding or other sources of employment growth into the region, were backed and appreciated by the local population.

In Lüchow-Dannenberg, the situation should arguably have been the reverse: Because of social and political fragmentation, and because of the high share of pensioners and environmentalist protesters in the area, investments were looked at more critically, and those actors who tried to attract investments for the area were not rewarded by such a high degree of social recognition. In fact, economic development processes rooted in the initiatives of single local actors are hard to find in Lüchow-Dannenberg. Substantial investment decisions in the recent history of the area were based on decision-making elsewhere, namely the state capital Hanover (which took the decision to locate the nuclear storage facilities in Gorleben and the ContiTech production plant) or the headquarters of foreign parent companies which built production plants in Lüchow-Dannenberg (e.g. SKF). Initiatives of local actors however focussed mainly on political or cultural activities, often in connection with the environmentalist movement against "Gorleben". The interviewees named a variety of reasons for the lack of economic initiative of local actors. First, the watchful and lethargic mentality in the area might reflect on some local actors. Second, many of the actors who came to Lüchow-Dannenberg from other areas were described as having a "leisure attitude", that is they would not show any particular effort in their remaining years in office before spending their retirement in the area. Finally, the high degree of local selfishness between the communities and the fragile political situation discourage personal initiative by limiting the prospects for the successful realisation of ideas.

Fig. 42: Impact of dedication and initiative of local actors on economic performance



3.2.4 Demography and Human Resources

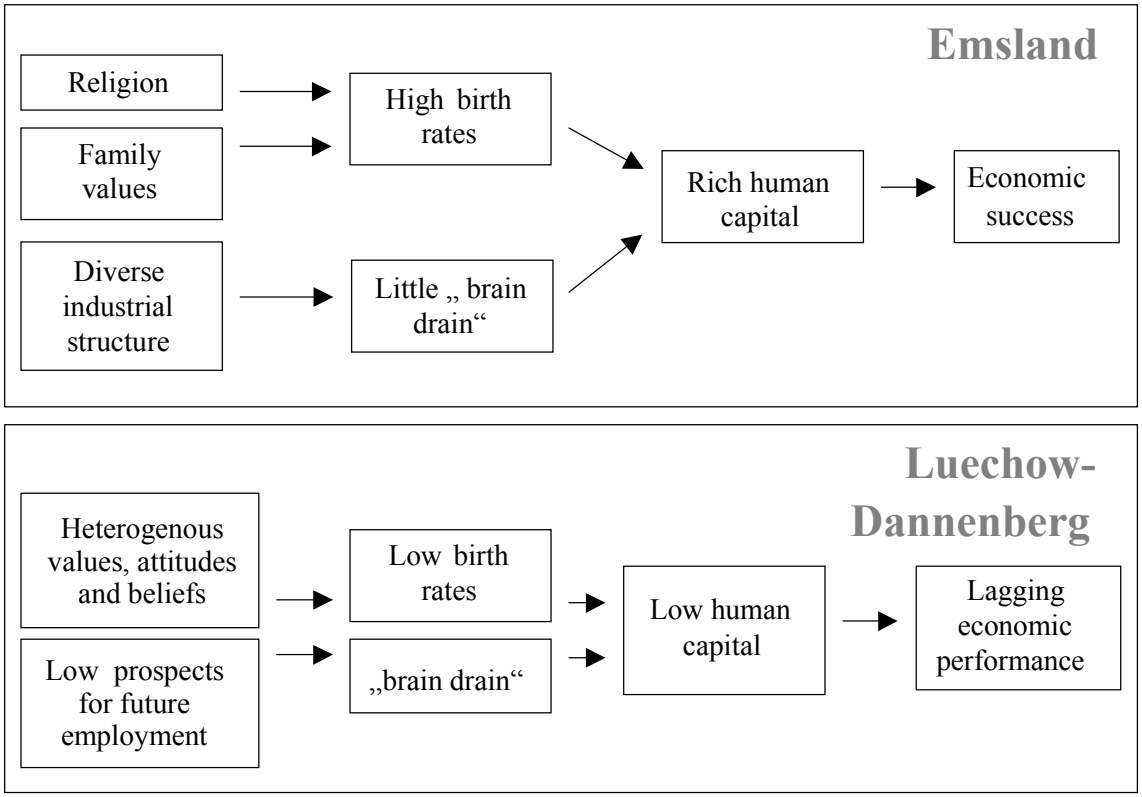
Both study areas are sparsely populated and suffer from emigration of young people, while pensioners move into the areas. However, the situation concerning demography and human capital in Emsland is still considerably better than in Lüchow-Dannenberg. First of all, natural population growth in Emsland has traditionally been very high. Today's fertility rate in Emsland is 1.68, which is among the highest in Germany. In Lüchow-Dannenberg, by contrast, this rate is 1.47, which is the average of rural regions in Germany. As a result, Lüchow-Dannenberg faces an ageing problem. Differences in recreational behaviour are caused by religious and social patterns. The population in Emsland is predominantly Catholic, with strong family values and large average household size, traditional lifestyle and conservative attitudes. In Lüchow-Dannenberg, by contrast, birth rates have been traditionally low, religion never played a crucial role in daily life, family values are less pronounced, and lifestyles are quite heterogeneous, with a high share of single households.

Secondly, migration patterns are different. Both areas have experienced overall immigration over the last few decades. However, in Emsland, the bulk of immigrants were Russian-German families, while in Lüchow-Dannenberg many people from the environmentalist movement moved into the area, next to 'city-refugees' from Hamburg or Berlin who spend their retirement in the area. These different patterns have considerable impact on economic performance in both study areas: The pensioners and environmentalist immigrants in Lüchow-Dannenberg show little appreciation for industrialisation and infrastructural improvements in the area, have overall little entrepreneurial spirit, and have partly a different work attitude than for example the Russian-Germans in Emsland.

Thirdly, *human capital* in Emsland is higher than in Lüchow-Dannenberg. This is to some extent caused by the higher quality of life in Emsland, which makes it easier for employers to recruit skilled employees. Furthermore, many interviewees stressed the good quality of school education in Emsland. The high number of private and catholic schools in a sound social environment, fuelled by large numbers of children, provide the county with a large stock of high-potential school-leavers. In Lingen a co-operative education facility, a small offshoot of the technical high-school in Osnabrück, offers the opportunity for some school-leavers to graduate in Emsland. Finally, the diverse industrial structure of the county with many pockets of skill and technology intensive enterprises offers an opportunity for some of those who left the area for further education to come back and find employment in their home county. In Lüchow-Dannenberg, by contrast, there is no such opportunity, and the few se-

condary school degree holders leave the area for good, without prospects of future employment in their home county.

Fig. 43: Impact of demography and human resources on economic performance



3.2.5 Industrial Structure and Clustering

The two study areas differ significantly in terms of industrial structure. In Emsland, the industrial structure is quite diverse. The size of enterprises is relatively balanced, with a particularly high share of middle-sized firms. The share of enterprises with more than 1000 employees is clearly below the national and state levels. The sectoral structure is diverse, with the emphasis on the manufacturing sector, in particular energy, chemicals, metal and vehicle production. Several investments which are space-consuming or which were rejected in other areas because of environmental concerns were located in Emsland (especially in the south of the area). Examples are the Mercedes test track, the Transrapid, the military test institution in Meppen, the Baerlocher factory for bleach agents, a large refinery, the Exxon factory for nuclear fuel and the nuclear power station in Lingen. The availability of large and inexpensive business sites, and a local population which is open to industrialisation and modernisation and which welcomes the creation of employment, provided suitable conditions for such investments.

The enterprises are predominantly owned locally, and the area's most famous companies, Meyer (shipyard), Berentzen (distilleries), and Krone (commercial and agricultural vehicles) are local enterprises too. Such enterprises show a particular high constancy in regard to place. Next to this sound stock of domestic enterprises, there are large investments from other regions or countries, most important of which are Nordland Paper in Dörpen, and the chemical and petroleum industries in Lingen. Overall, the area's economy has a relatively high share of exporting enterprises, which provides additional income and economic stability. The mix of small- and medium-sized local and external enterprises in different, partly skill-intensive, branches produces substantial spread-effects throughout the region, both in terms of outsourcing as well as through the improvement of human capital.

In Lüchow-Dannenberg the structure in terms of sectoral mix, size and ownership of enterprises appears more unbalanced. While the high share of certain branches might be ascribed to the small size of the area (so that single enterprises dominate branch statistics), the size and ownership of the enterprises are a cause for concern. We find three major employers with more than 500 employees in the area: ContiTech (an automotive supplier plant), SKF (a ball-bearings plant) and the interim and final storage facilities for nuclear waste in Gorleben. All three are investments from other regions or countries, and came to the area because of (regional) policy considerations and investment incentives. Next to these major employers, there is a high share of small local enterprises with no more than 20 employees. The size class in between

however (middle-sized enterprises) is clearly underdeveloped, both compared to Niedersachsen and to the average of rural areas in Germany in general.

The fact that local investments provide so little employment in Lüchow-Dannenberg is clearly disadvantageous, since at least two of the three large enterprises can be expected to be less tied to the area than local investment would be. (The nuclear waste storage facilities are somewhat 'stuck' in the area because of special geological conditions). In times of economic crunch or shifts in the regional policy regime, the foreign companies are more likely to leave the area. Furthermore, the SKF and ContiTech plants use low-skilled labour and produce few spread-effects in the area. Finally, although these two companies participate somewhat in export activities (via the automotive industry), the produce of the area as a whole is predominantly directed to the national or regional market.

Despite the fact that the industrial structure in Emsland is generally more balanced, looking at the *kind* of branches, the industrial structure in Emsland would lead us to expect a negative impact on economic performance (Table 69). The shift-share analysis has resulted in a negative net proportionality shift for Emsland, because branches which are declining in Niedersachsen, like agriculture, construction, paper, mining and textile are over-represented. On the other hand, certain growth sectors like banking, consulting, and science and education, are underdeveloped. The net differential shift for Emsland was nevertheless strongly positive, so that the structural disadvantage was more than outweighed by the good overall economic performance.

Tab. 69: Shift-share analysis of employment by study area*

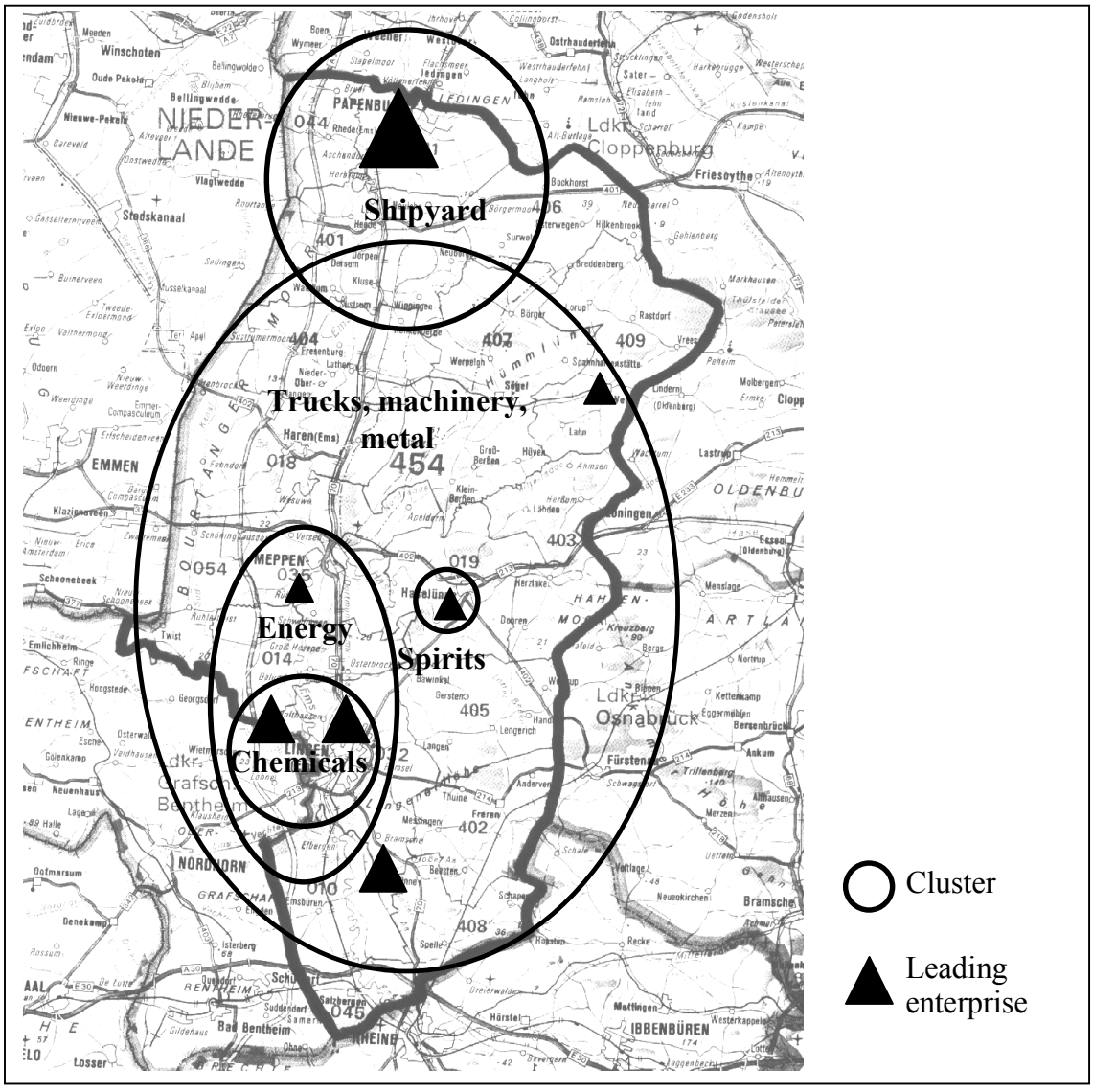
% change	Actual (Total Net Shift)	Predicted (Net Proportionality Shift)	Differential (Net Differential Shift)
Lüchow-Dannenberg	11.04	-0.51	11.55
Emsland	19.56	-4.7	24.26
*based on local employment in 32 branches, 1980-1998. Reference: Niedersachsen			

Source: Own calculation

As a result of diversified manufacturing industry in Emsland, with certain sectoral strongholds, several industrial clusters can be spotted in the area (Figure 44). As an important 'vertical' cluster (clustering along one production chain) we find a cluster of shipbuilding suppliers around the Meyer shipyard in Papenburg (2000 employees)

in the north of the county. According to WITZENBURG et al. (1995 p. 96, quoted in DANIELZYK/WIEGAND 1999), the linkages of this shipyard in the area are particularly high. In the east and the south of the area, vertical clusters around the two production sites of Krone in Spelle (agricultural machinery, 650 Employees) and Werlte (lorry trailers, 400 Employees) can be identified. In interviews with both companies the management stressed the importance of economies of scale for their operational success.

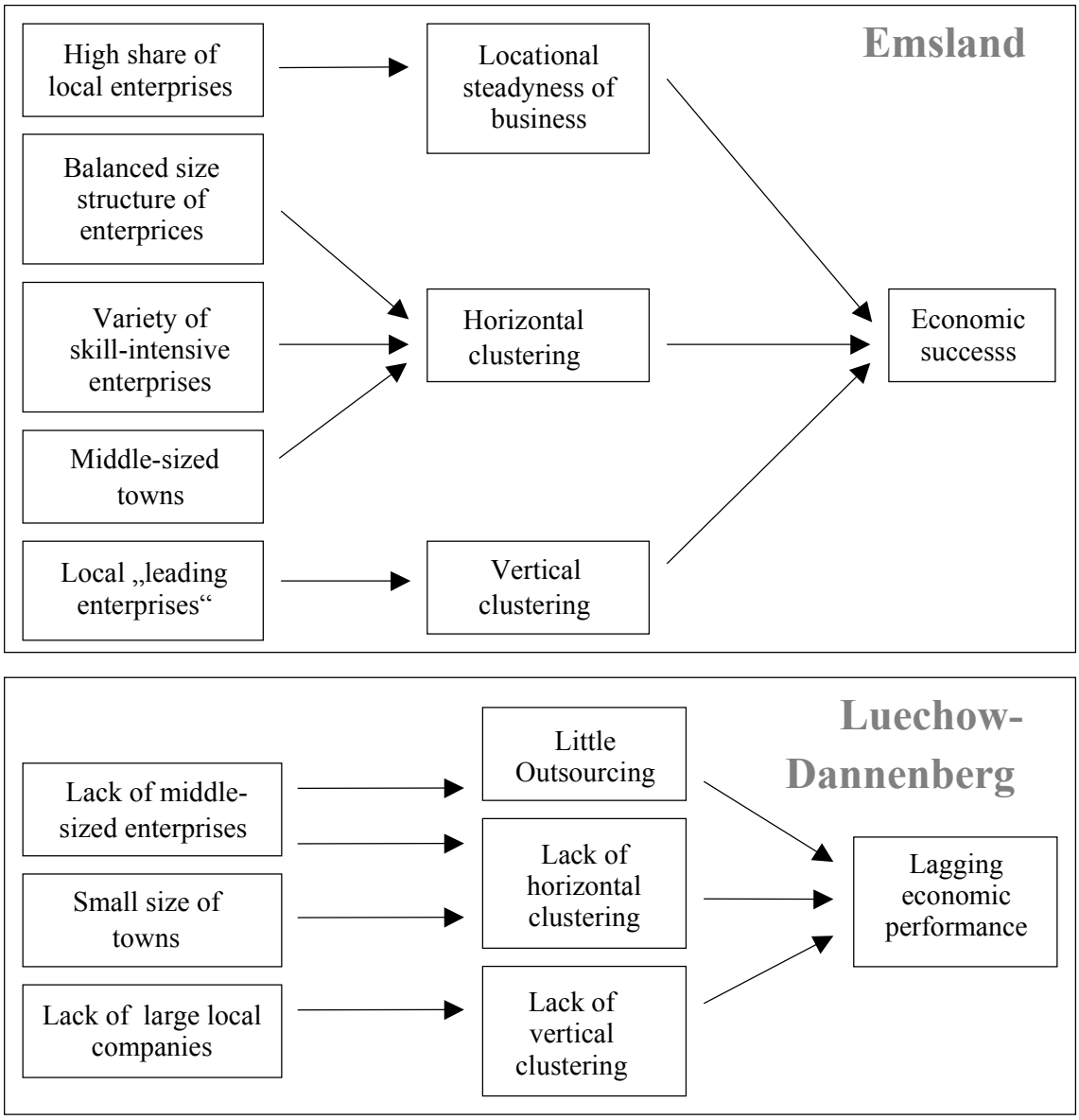
Fig. 44: Industrial clusters in Emsland



In addition to these vertical clusters, we can identify horizontal clusters in the county too. In the south of Emsland, a large energy cluster has developed around the towns of Lingen and Meppen, with two nuclear power stations and one gas-driven power plant. Linked to this cluster there is a chemical industry cluster, led by an oil refinery in Lingen. A horizontal cluster of five distilleries can be found in the small town of Haselünne. Furthermore, there are loose clusters of plastic and metal processing spread over the whole area.

In Lüchow-Dannenberg, by contrast, no noteworthy industrial clusters can be spotted. This might partly be attributed to the small size of the county and the lack of larger towns as crystallisation points for economic activities. But a more important cause is the industrial structure of the area, providing poor preconditions for spill-overs, spin-offs and horizontal or vertical co-operation. The only sector where a certain clustering could be identified is ecologically-oriented manufacturing. There are a number of ecologically-oriented enterprises with a high innovative potential, like ecological housing, solar-cell production, textile production based on renewable primary products and others. (Recently, the county of Lüchow-Dannenberg won the EU-award for best rural area from the General Directive for Transport and Energy of the EU-Commission. This decision was based on good marketing, citizen participation, and the county's development goal to substitute its energy consumption by 100% with renewable energy.) So far however, the ecological-oriented enterprises and their employment are too small to influence local economic performance in a similar way to the clusters in Emsland.

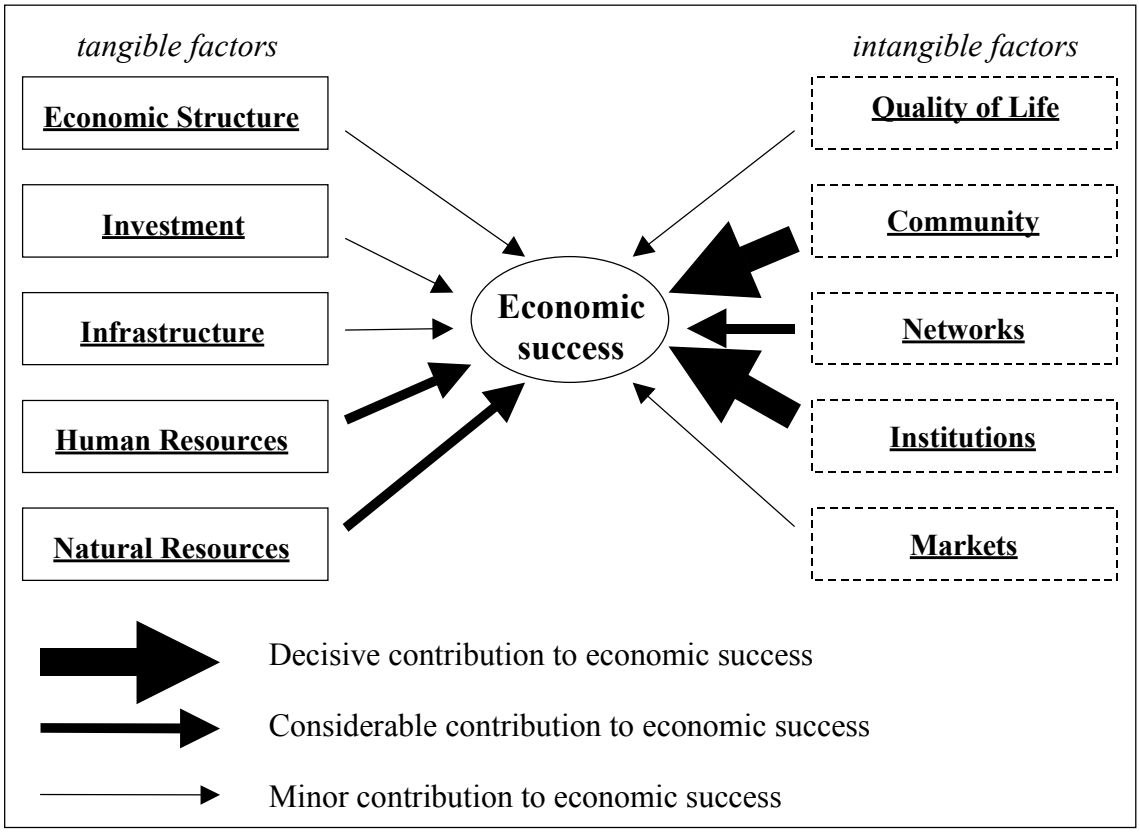
Fig. 45: Impact of economic structure and clustering on economic performance



3.3 Conclusions

The two case study areas in Niedersachsen differ considerably in their economic development. The analysis has indicated the different explanatory power of the ten tangible and less tangible factors for the contrasting performance between the areas. Overall, the less tangible factors seem more important in both case study areas compared to the tangibles. Figure 46 illustrates the impact of the different factors on economic development success in Emsland. The widths of the arrows indicate the strength of the impact.

Fig. 46: Contribution of factors to economic success in Emsland



In particular the factors "Community" and "Institutions" seem to contain decisive causes for the good economic performance of Emsland compared to Lüchow-Dannenberg. Emsland is characterised by strong social coherence and a high level of social capital in the local population as well as in the local actors network (see "Networks"). This results in a high degree of institutional and industrial co-operation, which in turn allows for efficient local governance, rapid infrastructure

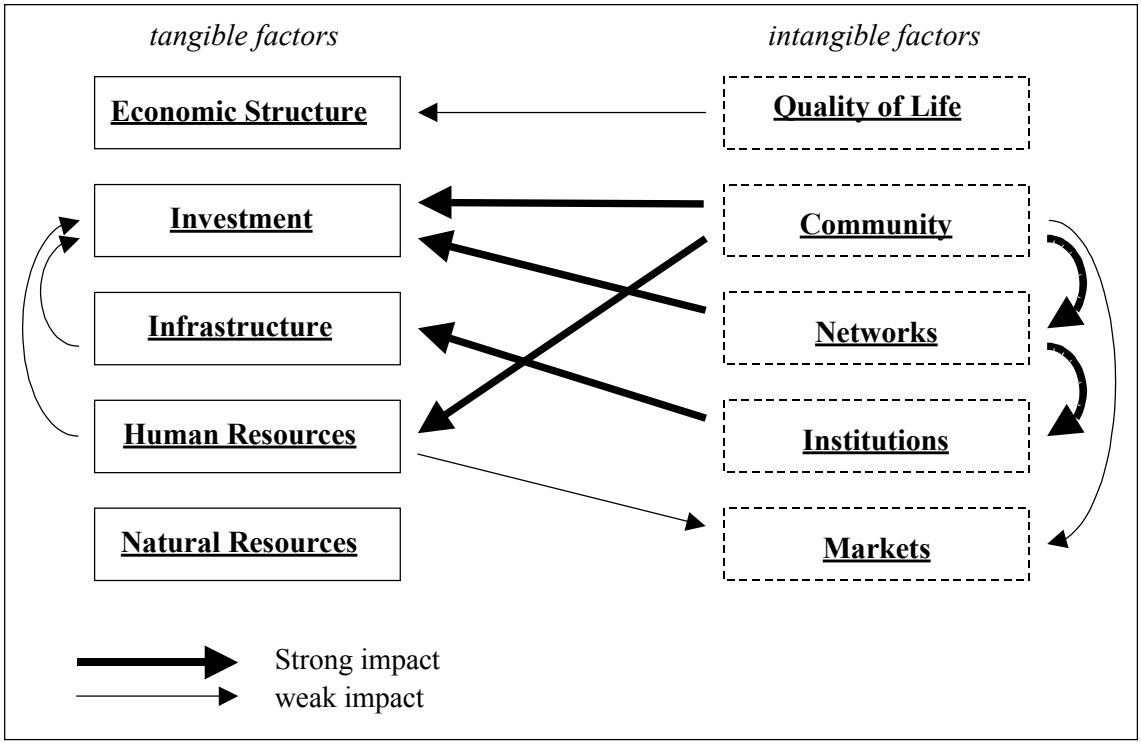
improvement, innovative milieus, and endogenous development. Based on its history of collective poverty, the population shows extraordinary openness to modernisation and industrialisation and welcomes new investments, even in those cases where environmental considerations could give rise to concerns. The political situation in the county is characterised by large majorities of the ruling Christian Democrats with remarkable stability over time. This underlines the social homogeneity of the people in the county, and has the effect of accelerating political decision-making processes and providing substantial backing for the decision-makers. The remaining less tangible factors, "Quality of Life" and "Market Performance" also contribute to the economic success of the area, although less decisively. The high quality of life, based on a sound social and natural environment, makes it easier to attract business and skilled workers, and capable local actors. The functioning of the labour market is facilitated by the high work ethic among the local population.

Next to these less tangible factors, there are two tangible factors which contribute substantially to the economic success of Emsland. Firstly, the factor "Human Resources" matters in various ways. Human capital in the area is high compared to other rural areas in Germany, based on traditionally high birth rates in combination with high quality of school education, social capital, local identity and prospects of employment in the future. Secondly, the people seem to have a pronounced work ethic and show a remarkable loyalty to their employers. For certain space-consuming investments in the past, the factor "Natural Resources" has played an important role: The sparsely populated county could offer relatively large areas for investments like for example the Transrapid and the Mercedes test track.

The other tangible factors also make a positive net impact on economic performance in the area, but to a lesser extent. The balanced "Economic Structure" makes the local economy relatively robust against business cycles, and the different economic clusters provide economies of scale which offer a clear advantage against other rural areas. The factors "Investment" and "Infrastructure" contain issues which can be looked at as either a result or a cause of economic success. In this context, the local communities benefit from relatively sound tax revenues accruing from the various enterprises in the area. In turn, these tax revenues have been used to improve conditions for further investments. The area also benefited from regional policy in the past, particularly from funding by the 'Emsland-Plan'. However, this item is only of minor relevance for explaining differential performance compared to Lüchow-Dannenberg, because the latter area received substantial regional policy funding too. Instead, the success of regional policy in Emsland can partly be attributed to the local people and decision-makers, who used the grants and investment incentives more creatively and effectively than in Lüchow-Dannenberg. This greater efficiency

in the use of financial resources in Emsland accounts to some extent also for the better infrastructural situation of the area. The current local and regional finance of the motorway interface is a good example, showing how a rural area manages to solve impediments to local development by itself.

Fig. 47: Interrelations between factors in Emsland

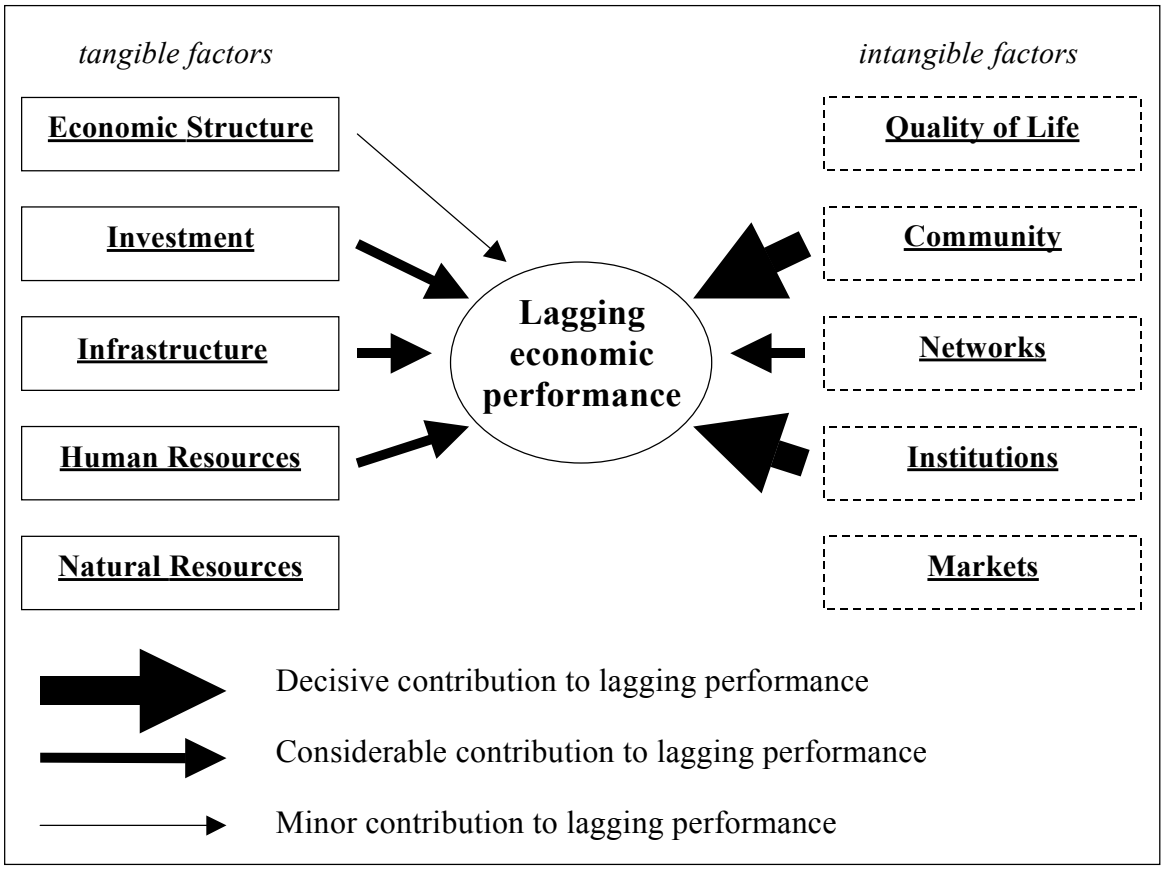


Most of the explanatory factors identified by the DORA project are linked with others and should not be looked at as independent variables. Accordingly, many of the issues explained above effect each other in Emsland. The most important interrelations are shown in Figure 47. Local history and mentality ("Community") have a decisive impact on the factor "Investment", facilitating the preconditions for external investments through a pronounced openness for industrialisation. Furthermore, the mentality, religion and socio-cultural norms of Emsland influenced the work ethic, the birth rate and the good school facilities ("Human Resources"). Furthermore, the work ethic influences the functioning of the labour market ("Market performance"), and the pronounced loyalty of the workers towards their employers has been named by entrepreneurs as an influence on their operational success ("Investment"). The strong social coherence of the area reflects on the high amount of social capital linking the decision-makers and entrepreneurs ("Networks"), which in turn

facilitates collective action on the part of local “Institutions”, actors, and enterprises. This situation, marked by efficient governance, dedication of local actors and collaboration of decision-makers provides the preconditions for improvements in the factors “Investments” and “Infrastructure”.

In many ways, the situation in Lüchow-Dannenberg seems like the opposite of Emsland (Figure 48). Again, less tangible factors play the decisive role for economic development, but here, the impact is negative. Like in Emsland, the factors “Community” and “Institutions” can be singled out as bearing the most explanatory power for the lagging economic performance of the area. The lack of local identity, sociocultural heterogeneity, poor acceptance of industrialisation and infrastructural improvements, and in particular the ideological conflict around Gorleben (“Community”) are decisive impediments for economic growth in Lüchow-Dannenberg. The parochial and selfish thinking of the communities, the political instability, and the pronounced ideological conflicts (“Institutions”) lead to the inappropriate outcomes of the local decision-making process. The Gorleben conflict not only works as a social barrier which divides families and neighbours, but also prevails in the local actor network (“Networks”). Collective action by decision-makers is therefore obstructed and local development goals cannot be developed consistently.

Fig. 48: Contribution of factors to lagging economic performance in Lüchow-Dannenberg

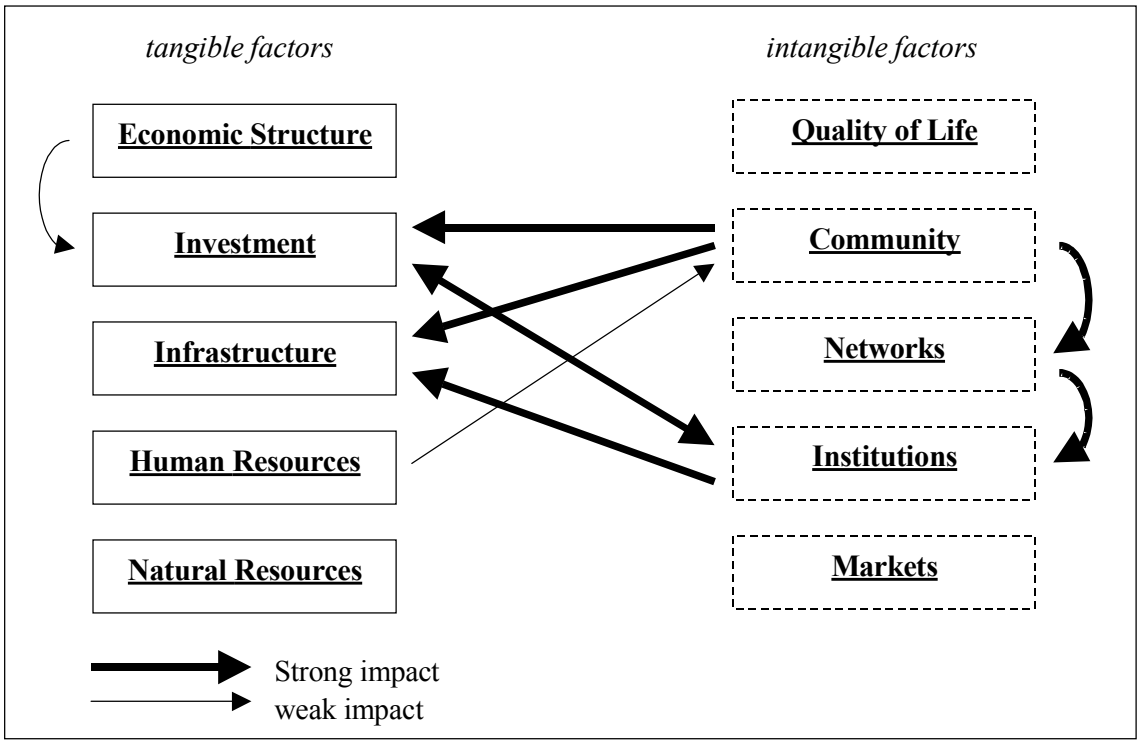


Next to these less tangible factors, some tangibles help to explain weak performance, too. “Human Resources” are depleted by the emigration of young people (without prospects of future employment in the area), low birth rates, and the immigration of people who are economically inactive, such as pensioners. The inter-regional transport infrastructure is poor, with no motorway connection and only one rail track, ending in Dannenberg. The weak “Economic Structure”, with a high dependence on two production plants of external parent companies, and a lack of local medium-sized enterprises, also adds to the overall poor economic performance of the area.

One further reason for lagging economic performance, not mentioned so far, concerns the factor of “Investment”. Lüchow-Dannenberg borders East German regions, which are provided with higher investment incentives from both national and European regional policy schemes than in West Germany. This bias in funding reduces the attractiveness of the area compared to a location in the new Laender only a few miles further East. Finally, certain location advantages of the study area concerning the factors “Quality of Life” and “Natural Resources” have so far not been able to outweigh the negative impact of the other factors on economic performance.

Again however, the factors analysed above can not be looked at as independent variables, but are highly interrelated (Figure 49). The social frictions and regular protests caused by the Gorleben conflict (“Community”) spoils the image of the area for potential external investors. The social frictions and inability to reach compromise on a common development goal are reinforced by the immigration of protesters and pensioners (“Human Resources”). Poor acceptance of industrialisation substantially impedes improvements of the factor “Infrastructure”, particularly concerning rail and roads. The ideological divisions of the people are reflected in a fragmented local actors’ network, which in turn fuels political blockades and obstructs collective action by decision-makers (“Institutions”). This situation again inhibits the already difficult improvement of transport infrastructure.

Fig. 49: Interrelations between factors in Lüchow-Dannenberg



Chapter 4 Region Mecklenburg-Vorpommern

4.1 Analysis of Factors

4.1.1 Natural Resources

Summary

Both areas have a similar potential in regard to natural resources, with relatively poor soils, a large proportion of wood, no noteworthy mineral resources, intact nature and a beautiful landscape. Particularly Uecker-Randow exhibits relatively good conditions for tourism, due to its coastline to the “Stettiner Haff”. However, the area can not compete with other tourist destinations in the region, such as the coastline along the Baltic Sea or the lake district.

Availability of natural resources

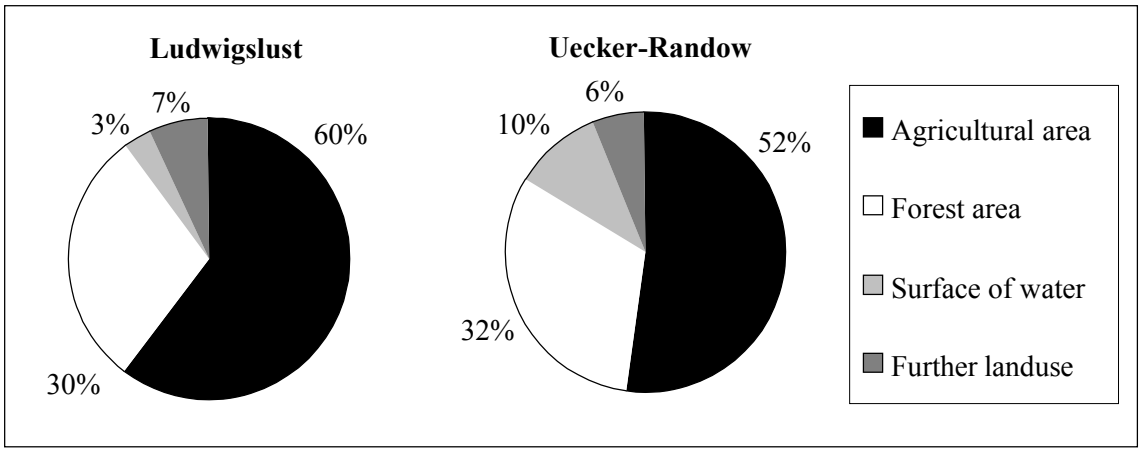
As a result of the low population density, both counties have a high share of unspoiled landscape. While most of the land is used for agriculture, both areas have particularly high shares of forest (Figure 50). The share of lakes and rivers is higher in Uecker-Randow than in Ludwigslust. Both areas feature low to medium qualities of soil (Table 70).

Tab. 70: Quality of soil* in counties before 1994**

Ludwigslust	Uecker-Randow
Hagenow: 34	Ueckermünde: 20
Ludwigslust: 27	Pasewalk: 35
Schwerin: 46	Strassburg: 42
*German index “Ackerwertzahlen”	
** Due to a reform of county boundaries in 1994, values are available for the former counties only. The county of Ludwigslust today is composed mainly of the two former counties ‘Ludwigslust’ and ‘Hagenow’, and only a small friction of ‘Schwerin’. Today’s county of Uecker-Randow is mainly composed of the two former counties ‘Ueckermünde’ and ‘Pasewalk’, and about half of the former county ‘Strassburg’.	

Source: Oberfinanzdirektion Schwerin

Fig. 50: Land use



Source: Landkreis Uecker-Randow 1997; www.ludwigslust.de/

Land ownership structure and price

While the ownership of land plays arguably no significant role in the development of the two areas, the price structure differs to some extent. The price for undeveloped land is more or less similar, but prices for real estate sites are far higher in Ludwigslust than in Uecker-Randow (Table 71).

Tab. 71: Land price, 1998

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Average price for undeveloped land per m² in DEM	19.5	16.6	15.9
Average price for real estate sites per m² in DEM	95.2	60.9	23.8

Source: SLMV 1999

Environmental legislation and planning restrictions

Tab. 72: Business survey: Environmental restrictions

Satisfaction with the location factor "*environmental restrictions*" (in %)	Ludwigslust	Uecker-Randow
Very satisfied	0	0
satisfied	57	56
dissatisfied	16	18
Very dissatisfied	6	12
No statement	22	14

Source: Own survey

Tab. 73: Protected area

	Ludwigslust	Uecker-Randow
County's share of protected area	20 %	30 %

Source: Landkreis Uecker-Randow 1997; www.ludwigslust.de/

4.1.2 Human Resources

Summary

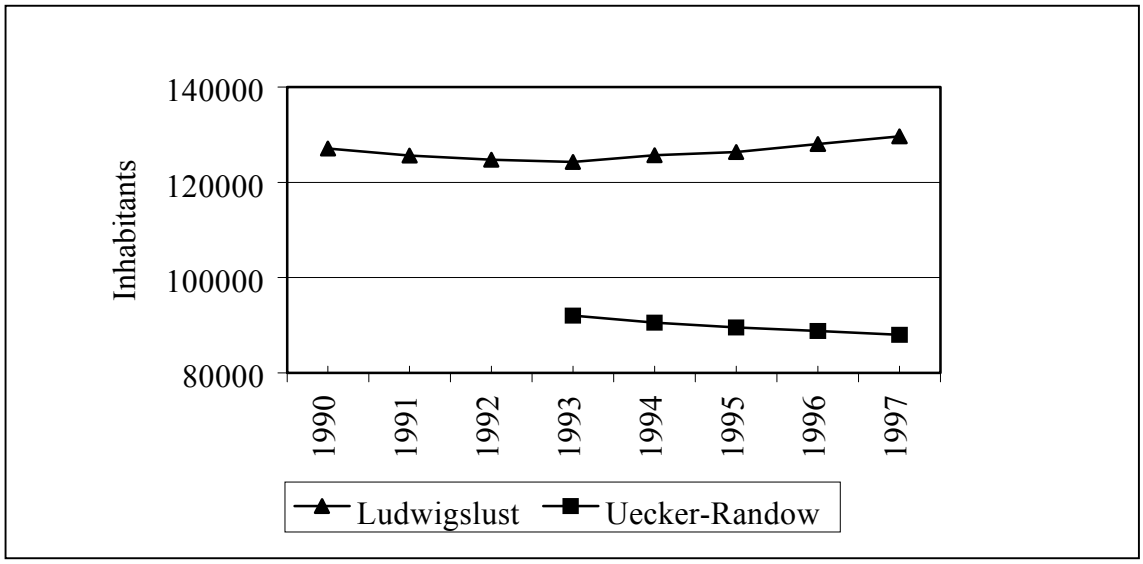
Since German reunification, Ludwigslust witnessed net population growth, while population in Uecker-Randow has been declining steadily as a result of emigration and low birth rates. The underlying cause however is the relatively low unemployment rate in Ludwigslust and massive unemployment and economic decline in Uecker-Randow.

Demography

Population in Ludwigslust declined in the early 1990s, and has grown since then. By contrast, population in Uecker-Randow declined drastically in this period. This contrasting pattern has largely been caused by emigration in Uecker-Randow, while in Ludwigslust emigration to West Germany in the aftermath of reunification came to a

halt, and turned into immigration at a low rate (see 4.2.3.). The reasons were mainly the improving employment conditions in the county through investments from West German parent companies, and the possibility to commute to nearby labour markets, i.e. Hamburg. Additionally, the fertility rate in Ludwigslust has been slightly higher than in Uecker-Randow (Table 74).

Fig. 51: Population growth



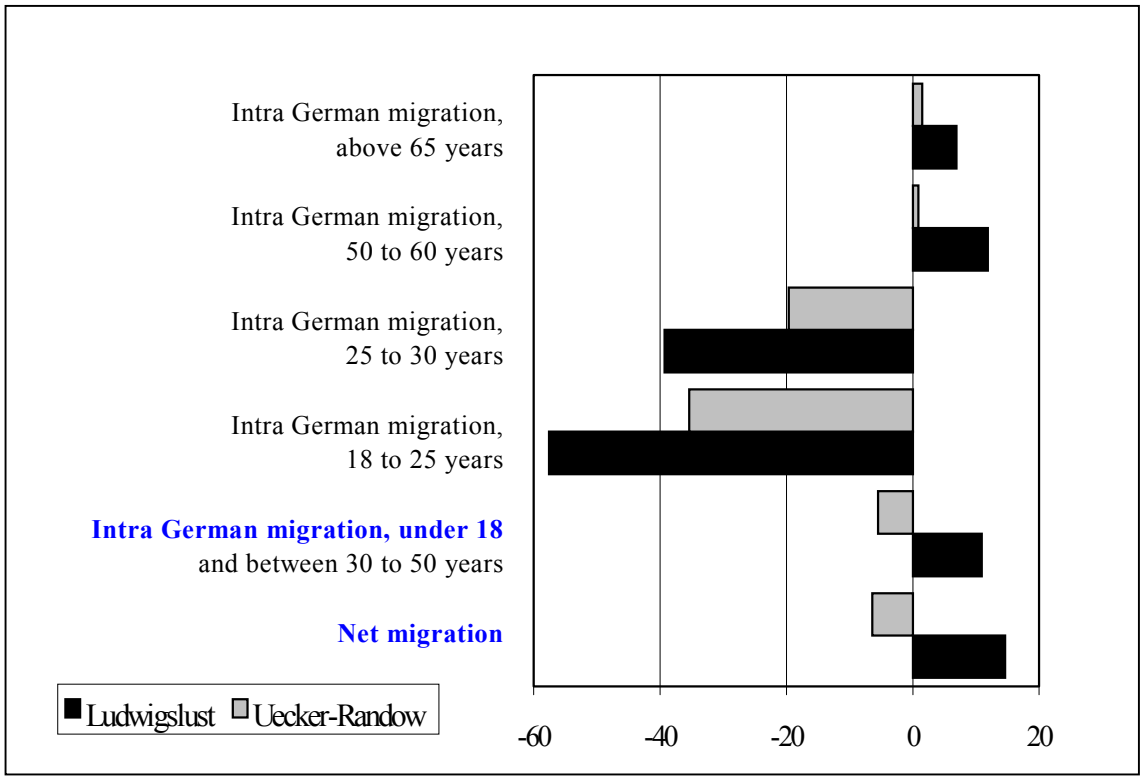
Source: Landkreis Ludwigslust 1999; Landkreis Uecker-Randow 1998

Tab. 74: Fertility rate

East German rural areas	Ludwigslust	Uecker-Randow
0.97	1.02	0.92

Source: BBR 1999

Fig. 52: Migration per 1000 inhabitants per age groups, 1997



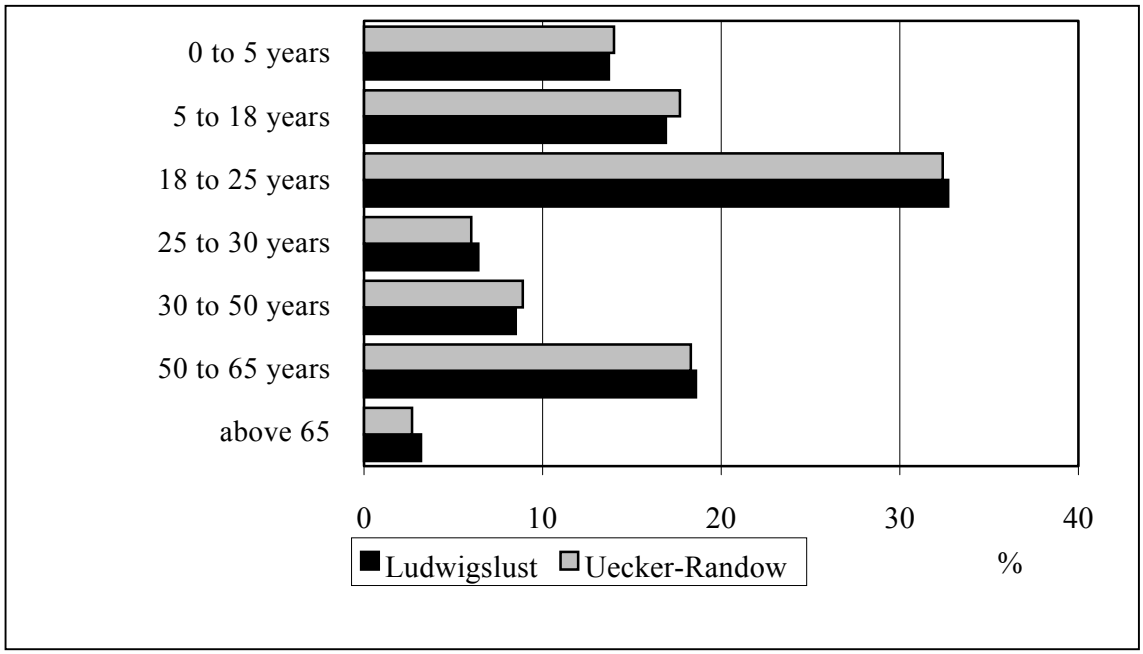
Source: BBR 1999

Tab. 75: Overall net migration per 1000 inhabitants

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
1997	-2	+15	-7
1998	-2	+12	-8

Source: BBR 1999; SLMV 1999

Fig. 53: Population: Share of age groups

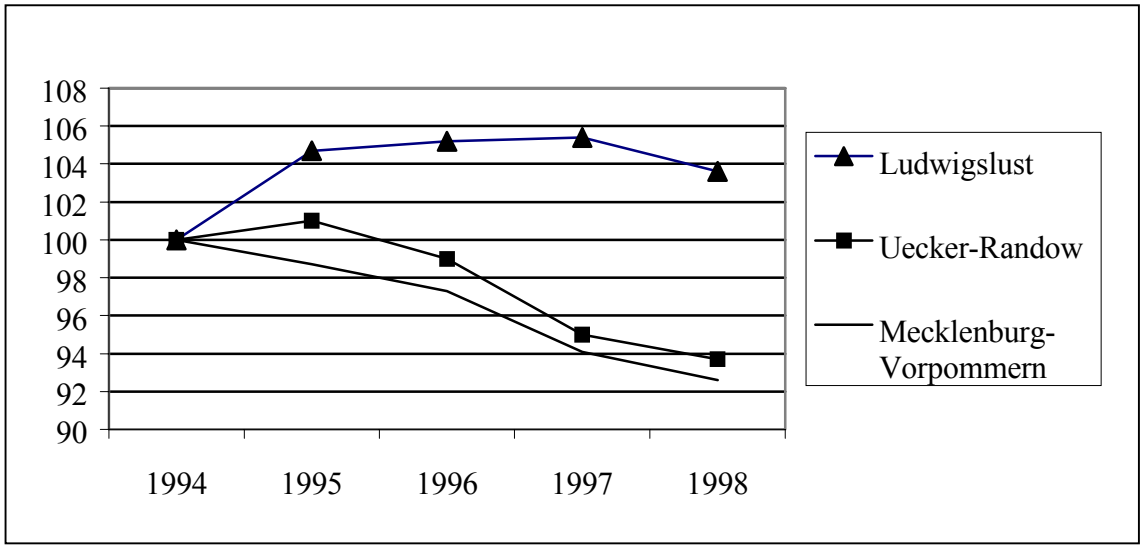


Source: BBR 1999

Labour force characteristics

In Ludwigslust, unemployment rates are quite low, compared to the regional average (Figure 74). This is to a large extent caused by the high degree of commuting to Hamburg or Schwerin (see 4.1.8.). However, the low unemployment rate is also the result of employment growth (Figure 55). In Uecker-Randow, official unemployment rates in the late 1990s have been among the highest in Germany and the EU, with an official rate around 24%. However, this figure is artificially held down by substantial public employment schemes, so-called "Arbeitsbeschaffungsmassnahmen" ("ABM"). According to our interviews, the 'real' unemployment rate would be above 40%. Youth unemployment is particularly high (Table 78).

Fig. 54: Relative development of employment since 1994 (1994 = 100)



Source: SLMV 1999

Tab. 76: Labour markets figures

	Ludwigslust	Uecker-Randow
Share of population between 18 and 65 years, 1997	62.5	65.0
Share of female employees in %, 1998	45.3	47.2
Supply of training on the job per 100 applicants in %, 1998	95.5	93.2

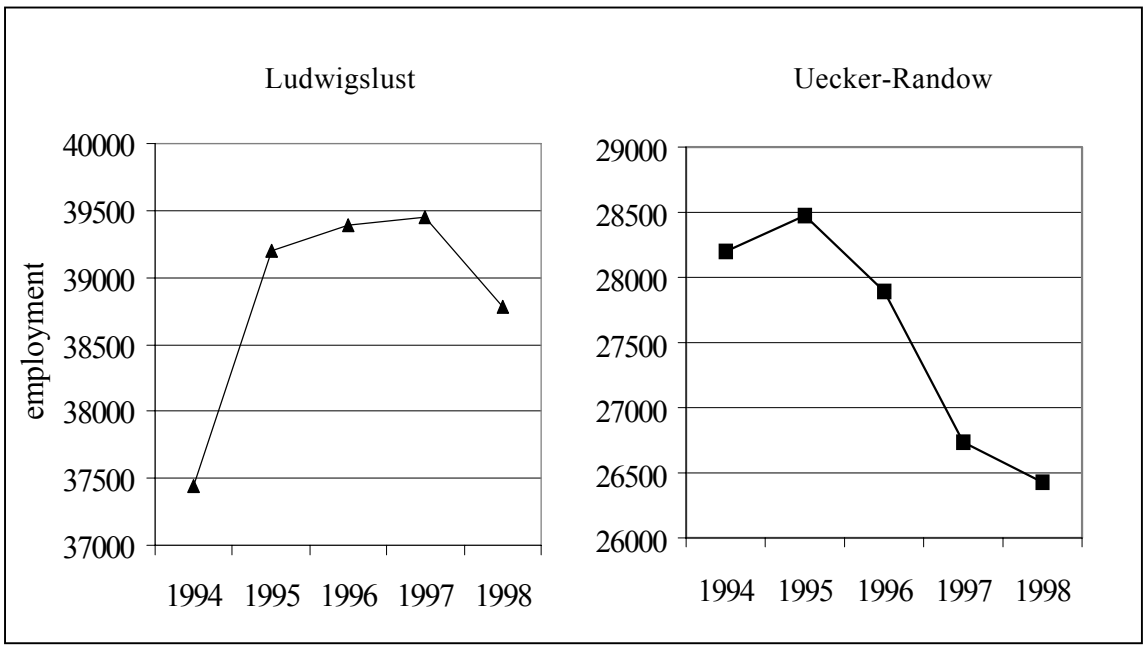
Source: BBR 1999

Tab. 77: Unemployment rates, annual average

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
1993	17.5	13.6	26.0
1994	17.0	13.6	17.9
1995	16.1	12.9	20.9
1996	18.0	13.9	22.1
1997	20.3	15.9	25.5
1998	20.5	16.4	24.1
1999	n.a.	14.9	n.a.
2000	n.a.	13.8 *	n.a.
* July			

Source: IHK Schwerin 2000a; SLMV 1999; Landkreis Uecker-Randow 1997

Fig. 55: Absolute development of employment since 1994



Source: SLMV 1999

Tab. 78: Structure of unemployment, 1998

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Share of female unemployment in %	53.6	56.4	55.0
Long-term unemployment in % *	33.4	34.1	34.2
Share of unemployed <25 years per 1000 inh.<25 years	72	63	78
Share of people >55 years per 1000 inh. >55 years	116	107	111
* unemployed for more than one year			

Source: BBR 1999

Human capital

At first sight, the figures concerning human capital in the study areas appear somewhat contradictory. Uecker-Randow, the lagging study area which suffers from emigration, has a workforce with higher qualifications than Ludwigslust (Table 79). This pattern is caused by the specific industrial structure in Ludwigslust. Most of the West German investments in the early 1990s were characterised by low-skill assembly lines rather than skill-intensive activities. Higher qualified employees in Ludwigslust often commute to workplaces with higher demand for a skilled and educated workforce.

However, these circumstances do not indicate that Ludwigslust really has a lower level of human capital than Uecker-Randow. Many highly-qualified commuters still live in Ludwigslust and are available for the local labour market. If a suitable employer entered the area, or if wages adjusted to West German levels, these employees would arguably prefer to work in their home county, Ludwigslust, rather than commute. In Uecker-Randow there are few possibilities to commute to other areas, and instead, many of the higher-skilled have left the area for good. Furthermore, Uecker-Randow has a high share of long-term unemployment. These long-term unemployed are particularly difficult to put back into employment, as they often demand too high wages, or have lost a certain amount of their accumulated human

capital in the course of their unemployment. As a result, human capital available for potential investors in Uecker-Randow is in fact lower than Figure 77 indicates, while human capital in Ludwigslust is in fact better than it looks.

Tab. 79: Educational level, 1996

Followers of...	Ludwigslust	Uecker-Randow
Primary and basic secondary school in %	41.3	41.6
Grammar School in %	20.8	21.0
Other Secondary Schools and Comprehensive School (partly including basic secondary and grammar school education) in %	53.5	53.2

Source: BBR 1999

Tab. 80: Qualifications of workforce, 1998

	Ludwigslust	Uecker-Randow
Lower qualifications*	26.3	19.4
High qualifications	5.4	6.2
*Share of School degree holder or employees trained on the job		

Source: BBR 1999

4.1.3 Infrastructure

Summary

The infrastructural conditions in the two study areas are very different. By all modes of transport, Ludwigslust is much better accessible than Uecker-Randow. This comes about as a result of both the geographic location of the areas and different access to inter-regional transport infrastructure. Due to industrial sites which are located along the motorway and within easy reach of Hamburg, Ludwigslust is also better equipped with business-related infrastructure, although land prices in Uecker-Randow are lower. Concerning tourist infrastructure, both areas feature more or less similar capacities and conditions.

Transport infrastructure

Ludwigslust is better equipped with inter-regional transport infrastructure (Table 81 and 82), and features very good road and rail connections to agglomerations like Hamburg and Berlin, and the state capital Schwerin. Uecker-Randow is, ten years after reunification, still a very remote area at the periphery of German and the European Union, with poor access to the national rail and road network. Accordingly, the degree of business satisfaction with infrastructure settings in the two areas is very different (Table 83).

Tab. 81: Accessibility

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Accessibility of the next three agglomerations by car in min.	85	135	101	114
Accessibility of the next three agglomerations by train in min.	105	157	94	128
Accessibility of all European agglomerations by car/ train split in min.	271	316	292	316
Accessibility of the next international airport in min.	63	153	83	130
Accessibility of the next „*Intercity*“ railway station in min.	30	35	56	89

Source: BBR 1999

Tab. 82: Quantitative indicators for transport infrastructure

	Ludwigslust	Uecker-Randow
Railway tracks in kilometres	412	170
motorways in kilometres	71	20
interstates in kilometres	228	99
Density of motorways and interstates in kilometres in relation to the area of the county in km²	0.12	0.07
Ports	Boizenburg, Dömitz	Ueckermünde

Source: BBR 1999; Landkreis Uecker-Randow 1997

Tab. 83: Business survey: satisfaction with transport infrastructure

„*very content*“ or „*content*“ with the following location factors in the county (in %)	Ludwigslust	Uecker-Randow
Interregional transport infrastructure	74	25
Intraregional transport infrastructure	64	58

Source: Own survey

Business-related infrastructure

While Uecker-Randow has a cost advantage for land in industrial sites, Ludwigslust has clear advantages in terms of the availability and location of industrial sites (Table 84). Business satisfaction concerning the costs of energy, water, etc. and business-related services is higher in Ludwigslust too (Table 85).

Tab. 84: Business-related infrastructure

	Ludwigslust	Uecker-Randow
Availability of land in business districts in ha, 1997	340	55
Business districts in ha per km²	0.34	0.1
Average price per m² in developed business districts in DEM	10-45	>5
Costs of electricity per kilowatt hour in DEM, 1998	0.20	0.19
Costs of water per m³ in DEM	1.78	1.83

Source: BBR 1999; Landkreis Ludwigslust; Landkreis Uecker-Randow

Tab. 85: Business survey: Satisfaction with electricity and water costs

"*very content*" *or* "*content*" with the following location factors in the county (in %)	Ludwigslust	Uecker-Randow
Gas, water, electricity, sewage and waste treatment	45	36
Availability of business-oriented services	55	48

Source: Own survey

Consumer-oriented infrastructure

Concerning health infrastructure, Uecker-Randow has a larger capacity per capita than Ludwigslust (Table 86). This should basically be the outcome of pronounced emigration from Uecker-Randow in the past decade. For more information about consumer-oriented infrastructure, see 4.1.10.

Tab. 86: Health infrastructure, 1997

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Doctors per 100,000 inhabitants	134	110	117
Beds in hospital per 10,000 inhabitants	69	48	109

Source: BBR 1999

Tourist infrastructure

Both study areas feature a relatively high potential for tourism, due to beautiful landscape, low population density and some cultural sites (Table 87). Particularly Uecker-Randow, with its low degree of industrialisation and the beautiful coastline along the "Stettiner Haff" provides good conditions for tourism. However, even in Uecker-Randow potential for tourism is still not comparable to strongholds for tourism in the same region along the coastline of the Baltic Sea or the 'Mecklenburg lake district'.

Both areas share similar capacities for tourism (Table 88). However, in Uecker-Randow the average length of the stays and the capacity utilisation of accommodations is somewhat more favourable than in Ludwigslust.

Tab. 87: Interviews: Potential for tourism

Ludwigslust	Uecker-Randow
Nature	Nature
Beautiful landscape Biosphere-reservation "*Schaalsee*" Elde-Müritz-waterway Cycling Boat tours	Beautiful landscape "*Stettiner Haff*" Preserve area "*Radewitzer Heide*" Hiking Cycling
Culture	Culture
Baroque castle of Ludwigslust with various cultural events Castle in Neustadt Glewe Horse-ranch Redefin Traditional market in Glaisin Music-festival of Mecklenburg-Vorpommern	Zoo in Ueckermünde Botanical garden in Luckow "*Ukranenland*" (historical site) in Torgelow
Promotion Association for tourism in Mecklenburg-Vorpommern	
Regional tourism agency (Westmecklenburg – Schweriner Land)	1 sub-regional tourism agency (Vorpommern) 1 local tourism agency (Stettiner Haff)

Source: IHK Schwerin 2000b; Landkreis Uecker-Randow 1997; www.Ludwigslust.de/; www.Uecker-Randow-online.de/

Tab. 88: Tourism capacity and utilisation, 1998

	Ludwigslust	Uecker-Randow
Hotels per 1000 inhabitants	0.13	0.14
Bed and Breakfast and guesthouses per 1000 inhabitants	0.2	0.16
Recreation homes per 1000 inhabitants	0.03	0.01
Holiday apartments and hostels per 1000 inhabitants	0.04	0.15
Overall number of overnight stays	114,215	117,083
Number of yearly overnight stays per inhabitant	0.9	1.3
Overall number of tourist beds	1,759	1,484
Number of overnight stays per tourist bed capacities	65	79
Average length of stay in days, 1999	1.9	3.2

Source: IHK Schwerin 2000b; *SLMV* 1999; Tourismusverband Greifswald

Regional policy

see 4.1.4.: “Costs of capital”

4.1.4 Investment

Summary

The total amount of past investment has been higher in Ludwigslust than in Uecker-Randow. However, the typical feature of investment in Ludwigslust has been low-skill assembly lines by West German parent companies seeking to reap investment incentives available for East Germany, and to take advantage of the lower wages there. By contrast, Uecker-Randow attracted only little external investment, due to the remote geographic location and problems with co-financing regional policy funds.

Past investment

Unfortunately, data about the total amount of investment at NUTS level 3 is poor. For the period 1994 to 1996 however, the data indicates higher investments in the producing sector in Ludwigslust than in Uecker-Randow (Table 89). The number of business start-ups per capita as well as the number of close-downs appear to be somewhat higher in Ludwigslust than in Uecker-Randow, again this observation relies on poor data (Table 90). Employment in R&D activities also seems to be higher in Ludwigslust (Table 91). More of the surveyed enterprises in Uecker-Randow are autonomous, compared to a higher share of branch plants in Ludwigslust (Table 92, see also 4.1.5.).

Tab. 89: Average investment in producing industry between 1994 and 1996

	East Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Investment in manufacturing and construction sector per employee in 1,000 DEM	23.4	28.6	24.5	9.5

Source: BBR 1999

Tab. 90: Start-ups, close-downs and insolvencies

	Mecklenburg-Vorpommern		Ludwigslust		Uecker-Randow	
	1995	1998	1995	1998	1995	1998
Start-ups per 1000 inhabitants	9.6	9.3	11.5	8.7	6.9	7.1
Close-downs per 1000 inhabitants	6.8	7.5	7.1	7.1	6.2	6.0
Insolvencies per 1000 inhabitants, 1998	0.6		0.7		0.5	
Estimated claims per insolvency in DEM, 1998	994,775		991,088		1,045.363	

Source: SLMV 1999

Tab. 91: Business survey: R&D employment

	Ludwigslust	Uecker-Randow
Share of enterprises with employees engaged in R&D	24	12

Source: Own survey

Tab. 92: Business survey: Ownership

	Ludwigslust	Uecker-Randow
Share of autonomous enterprises	84	95
Share of branch plants	16	5

Source: Own survey

Costs of capital and regional policy

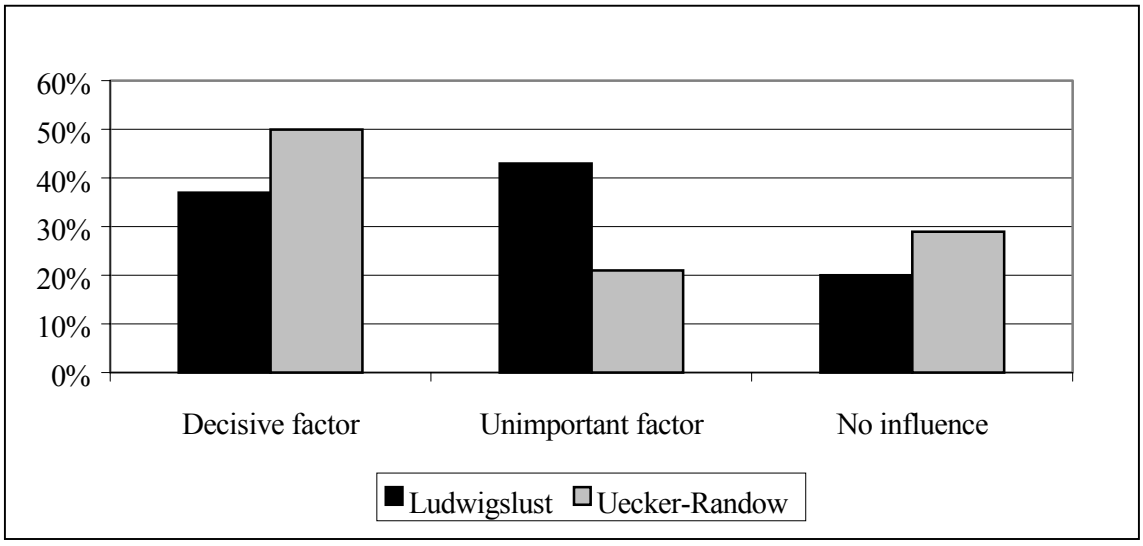
The level of interest rates appear to be similar in both study areas. However, this does not apply for investment incentives. Ludwigslust features a higher capacity to transform regional policy funds into inward investment than Uecker-Randow. Despite the fact that both areas have been in a similar category for GRW funding, Ludwigslust has attracted much more investment supported by GRW funds than Uecker-Randow (Table 93). This should arguably be caused largely by the favourable geographic location of Ludwigslust, which made the area very attractive for investors seeking to take advantage of the investment incentives available in East Germany, without loosing proximity to West German markets (see also 4.2.1.). By contrast, Uecker-Randow has arguably been too remote an area for investment despite the investment incentives offered. Furthermore, the communities in the area reported that they have often lacked the financial resources necessary to co-finance GRW-investments.

Tab. 93: GRW funds between 1990 and 1999

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Investments supported by GRW funds per 1000 inhabitants *	3.1	3.3	2.5
Investment volume per inhabitants in DEM *	12,071	14,579	4,610
GRW funds per inhabitants in DEM *	2,644	2,919	1,112
Jobs created per 1000 inhabitants *	27.9	46.8	23.0
Jobs secured per 1000 inhabitants *	34.2	23.5	23.4
* Inhabitants 1998			

Source: Deutscher Bundestag 2000b

Fig. 56: Business survey: *"How important have public funds been for investment decisions of your enterprise in the last decade?"*



Source: Own survey

Tab. 94: Interviews: Role of public funds for economic development of the area

Ludwigslust	Uecker-Randow
- Important factor for economic development success - Often looked at as '*positive side effects*' - No longer highest category of public funding as result of development success	- Important for the area, although insufficiently fetched - Problems with local co-financing of GRW funds by communities

Source: Own survey

Capital availability

Tab. 95 Business survey: capital availability

"*How pleased are you with the capital availability and risk taking attitude of banks in your area as a location factor*?" (in %)	Ludwigslust	Uecker-Randow
Very satisfied	0	2
Satisfied	23	29
Unsatisfied	39	37
Very unsatisfied	19	32
No response	17	0

Source: Own survey

4.1.5 Economic Structures and Organisation

Summary

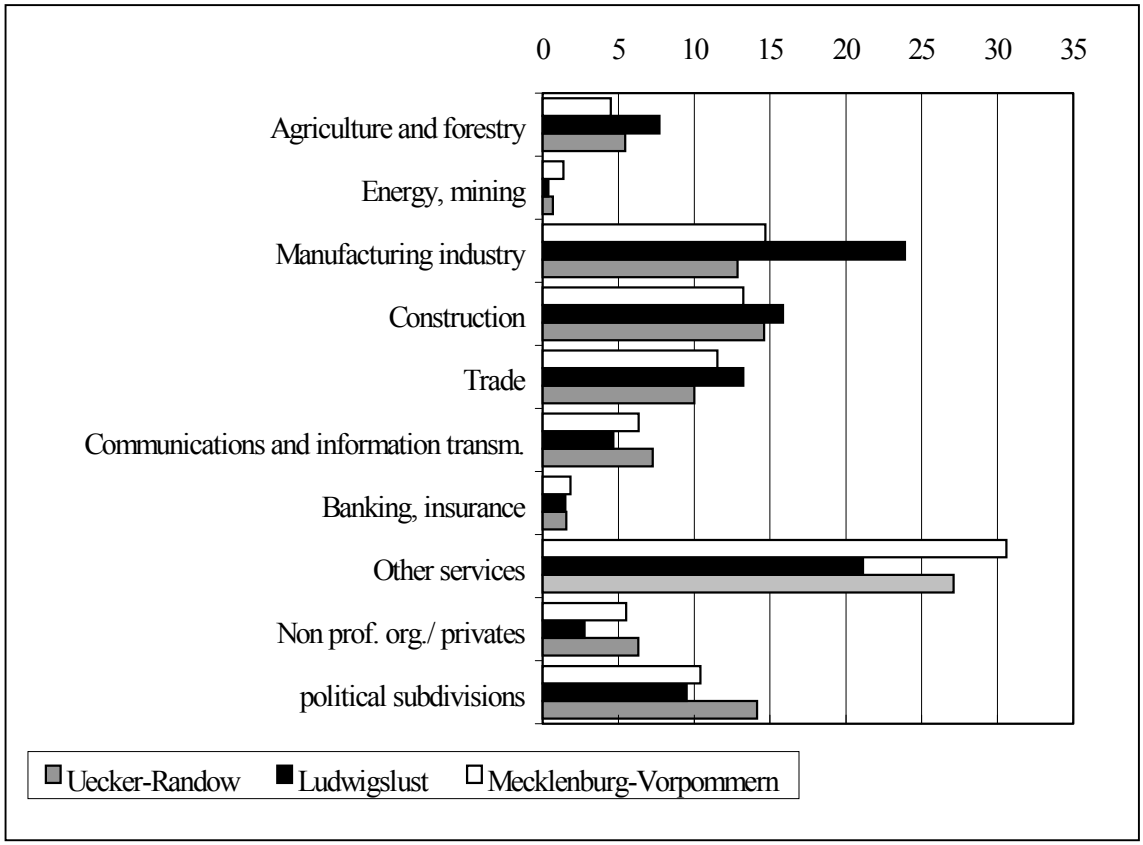
Economic structure in Ludwigslust is dominated by employment in the manufacturing sector. Uecker-Randow, in contrast, has a high share of employment in the public sector. The average size of enterprises appears to be greater in Ludwigslust than in Uecker-Randow. Differences in the qualitative structure of the local economies became apparent as a result of fieldwork in the study areas. Employment in Ludwigslust depends to a large degree on investments from West German parent com-

panies which chose the area as a location for low-skill assembly lines. On the other hand, in Uecker-Randow employment relies to a larger extent on local investment. Productivity in the services sector appears to be higher in Ludwigslust, whereas the large farm sizes in Uecker-Randow result in higher productivity levels in agriculture.

Structure and evolution of employment by sectors and social formation of production

Both study areas feature a high share of agricultural employment, especially Ludwigslust. The manufacturing sector is particularly large in Ludwigslust, while the services sector is remarkably small. In Uecker-Randow, the public sector is the main employer, in particular the army (Figure 57). According to our shift analysis (Table 97), Ludwigslust appears to have particular location advantages. The total net shift is strongly positive despite a negative proportionality shift, resulting in a clearly positive differential shift. Remarkably, even Uecker-Randow exhibits a positive differential shift, however to a much lesser degree than Ludwigslust. The data used for the shift analysis here is less reliable than for the study areas in Niedersachsen, because it is based on less industrial sectors and a shorter time period.

Fig. 57: Economic branches by employment, 1998 (in %)



Source: SLMV 1999

Tab. 96: Employment in economic sectors, 1998 (in %)

	Germany	Mecklenburg-Vorpommern	East German rural areas	Ludwigslust	Uecker-Randow
Primary sector	1.4	4.5	5.0	7.1	5.4
Secondary sector	38.8	29.3	34.6	40.1	28.1
Service sector	59.8	66.2	60.4	52.8	66.4

Source: BBR 1999; *SLMV* 1999

Tab. 97: Shift-share analysis of employment changes between 1994 and 1998 *

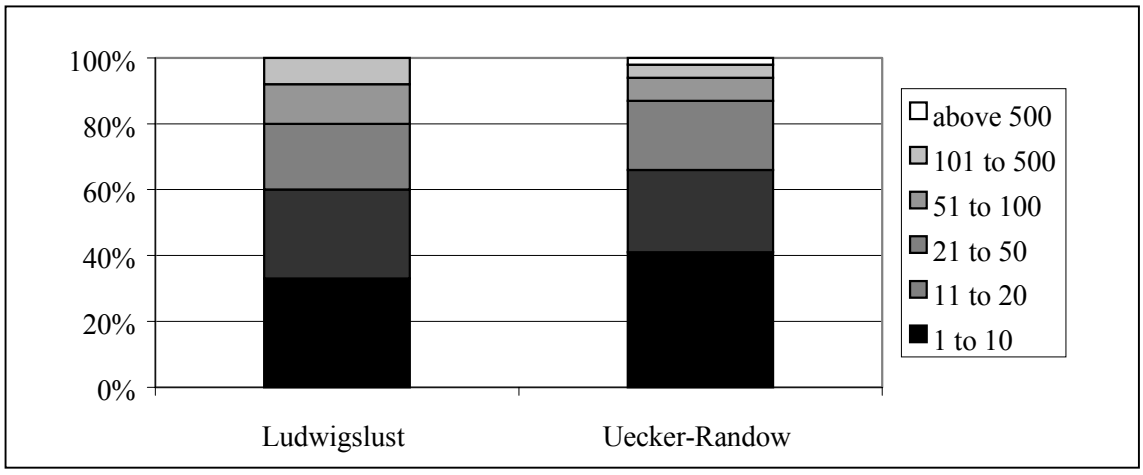
	Ludwigslust	Uecker-Randow
Actual (Total Net Shift)	10.56	1.16
Predicted (Net Proportionality Shift)	-1.18	-0.63
Differential (Net Differential Shift)	11.74	1.79
*Calculations referring to Mecklenburg-Vorpommern, including 8 sectors		

Source: Own calculation

Structural characteristics and evolution of enterprises

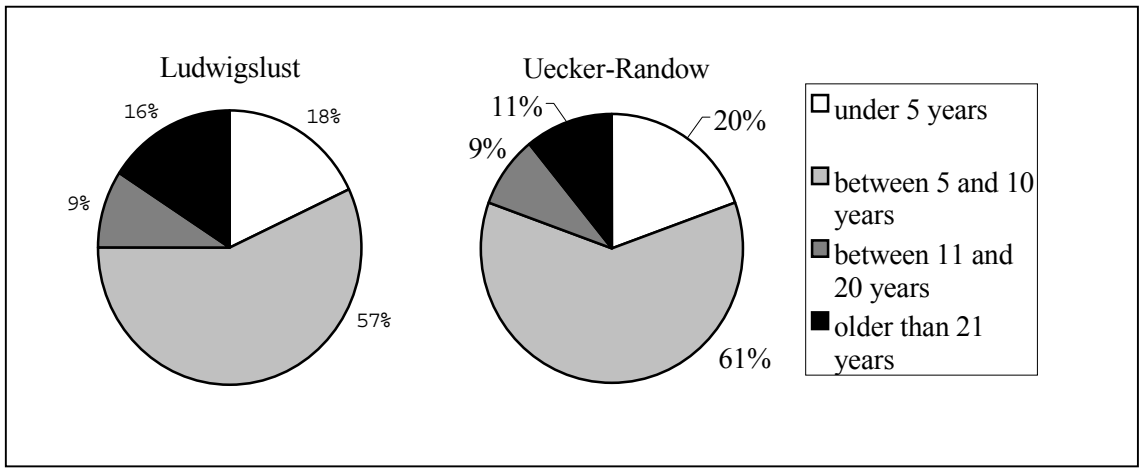
Ludwigslust appears to be better equipped with large enterprises (more than 50 employees) than Uecker-Randow (Figure 58). In the latter area, the share of small enterprises seems to be higher. Figure 59 shows that in Ludwigslust there is a higher share of surveyed enterprises older than 20 years, indicating that more formerly socialist enterprises have survived the collapse of the GDR here than in Uecker-Randow. In the agricultural sector, we clearly find larger farm sizes in Uecker-Randow than in Ludwigslust (Figure 60 and Table 95).

Fig. 58: Business survey: Size of enterprises by number of employees



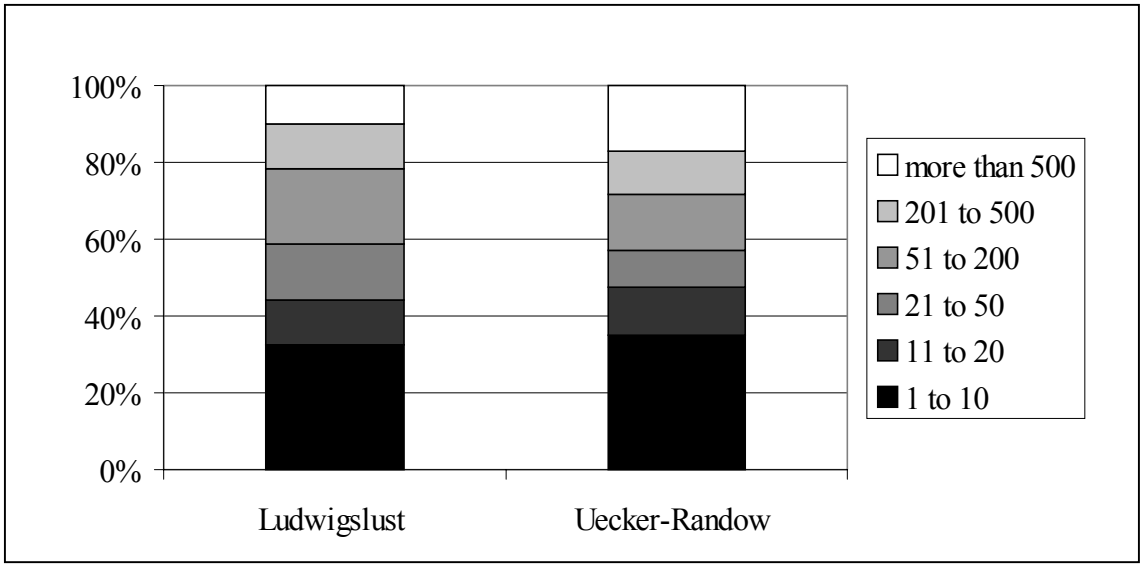
Source: Own survey

Fig. 59: Business survey: Age classes of enterprises (in %)



Source: Own source

Fig. 60: Farm size in ha, 1998



Source: SLMV 1999

Tab. 98 Farms per 1000 inhabitants

	Ludwigslust	Uecker-Randow
Number of farms per 1000 inhabitants, 1998	6.1	3.4

Source: *SLMV* 1999

Branches of economic activity, diversification & linkages

In Ludwigslust, the local economy, at least the manufacturing sector, appears to be more integrated into world markets than in Uecker-Randow. In the latter area, the shares of local sales and supplies appear to be higher (Table 99). Furthermore, surveyed enterprises in Ludwigslust feature a higher share of outsourcing.

In agriculture, Uecker-Randow shows particularly high productivity levels due to the higher share of large farms, mentioned earlier. In the other economic sectors, particularly in trade and transport and services, the gross value added per capita is much higher in Ludwigslust (Table 100). In the manufacturing sector, both areas feature productivity levels clearly below the regional average. However, productivity data was only available as value added per inhabitant, not per employee. As Ludwigslust features a high share of outward commuting, the real productivity levels for the area could be somewhat higher than indicated in the table.

Tab. 99: Business survey: Integration of enterprises into markets

	Ludwigslust	Uecker-Randow
	"*Origin of supplies*" (in %)	
County	10	6
Germany	76	92
International	8	2
	"*Sales*" (in %)	
County	31	44
Germany	55	51
International	6	0
	Outsourcing	
Share of enterprises which sourced-out certain business activities over the last 10 years (in %)	16	7

Source: Own survey

Tab. 100: Productivity, 1996

Gross value added per capita in sectors (in DEM)	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Agriculture and forestry	32,150	28,00 l	32,222
Manufacturing	64,532	56,201	54,946
Trade and transport	54,850	55,866	49,600
Services	81,163	91,944	90,000
Political and non profit org.	60,458	55,631	46,734

Source: *SLMV* 1999, own calculation

4.1.6 Community

Summary

Many variables of this factor are similar in both areas, as concerns identity, mentality, and religion. However, there are marked differences concerning the sentiments in the two areas. Due to low unemployment, people in Ludwigslust are generally content with their own economic situation. By contrast, many interviewees in Ue-

cker-Randow stressed that social conditions in the area are overshadowed by massive unemployment and emigration, which results in widespread dejection, neo-fascist adolescents, and a high rate of alcoholism.

Forms of community and identity

Interviewees' perceptions of the county appear to differ considerably (Figure 61). Overall, interviewees in Ludwigslust associated their county with more positive terms used in the interview questionnaire to describe their area. Local actors in Ludwigslust were well aware of the economic dynamism of their county and tended to tick the terms 'booming', 'well governed' and 'self sufficient'. By contrast, the majority of interviewees in Uecker-Randow ticked the terms 'depressed', 'badly governed' and 'dependent'. Furthermore, many interviewees in Uecker-Randow ticked the term 'divided', while interviewees in Ludwigslust were indecisive. Unanimously, interviewees in both areas described their county as 'home', 'beautiful' and 'friendly'. The structure of groupings is similar in both study areas, the share of foreigners is low, and people are generally little engaged in politics. The local actor network appears to be more dense and centralised in Ludwigslust than in Uecker-Randow (see 4.1.9.).

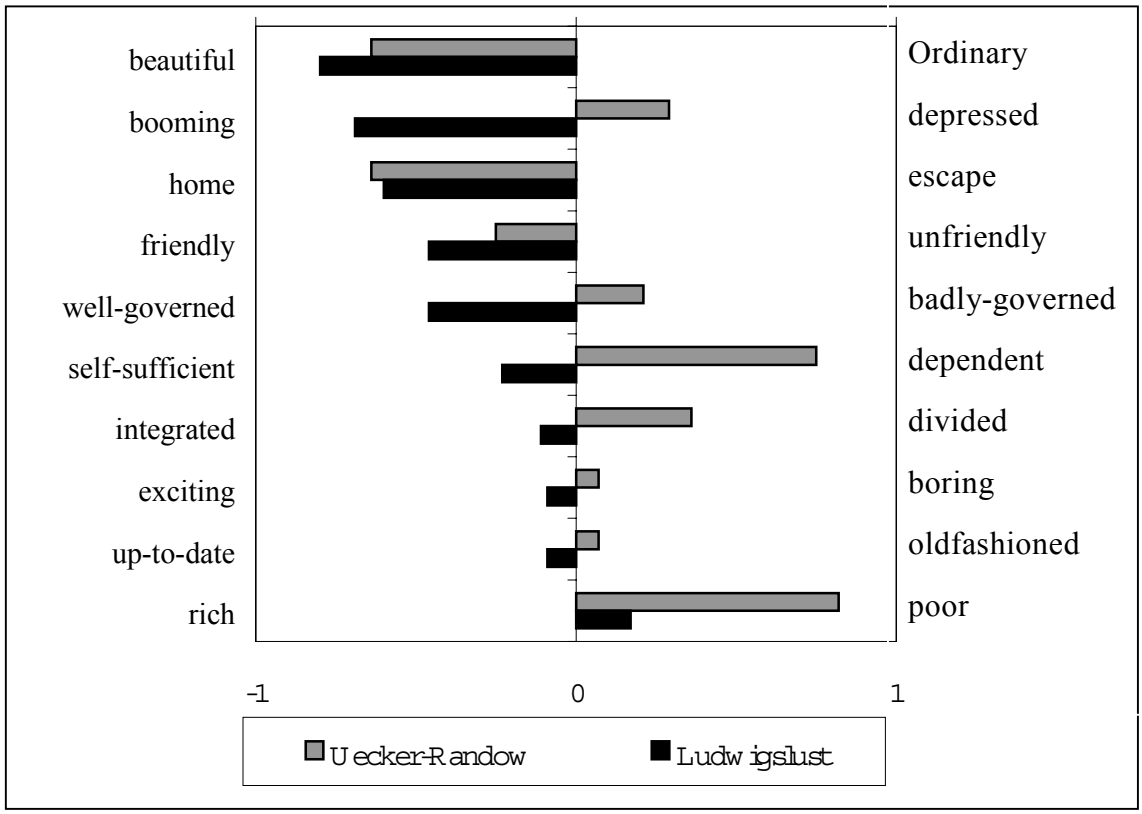
Both counties are composed of different regional entities and therefore lack a pronounced common identity. In particular in Ludwigslust, there is a pronounced rivalry between the former county of 'Hagenow' in the West and the former county of 'Ludwigslust' in the East. The people in 'Hagenow' are said to be envious on the location of the county administration in Ludwigslust, while people in Ludwigslust are jealous on the massive investment and greater economic success in the western parts of the county. Furthermore, history and mentality differ between the two old counties: Ludwigslust had been the residency of dukes, and the inhabitants still are said to be somewhat snobbish and secretive. In contrast, people from the former county of 'Hagenow' are said to be more pragmatic and open.

Tab. 101: Interviews: Forms of community and identity

	Ludwigslust	Uecker-Randow
Local identity	- pronounced dualism between the two former counties 'Hagenow' and 'Ludwigslust' - segmented local identity - common identity based on the sub-region "*Mecklenburg*"	- heterogeneous identities, as county is composed of three former counties - jealousy of the sub-region "*Vorpommern*" on the economic success of "*Mecklenburg*"
Mentality	- '*North German mentality*' - stubborn - down to earth - reliable - calm, observant	- '*North German mentality*' - down to earth, conservative - stubborn, closed-mouthed - honest - observant, reluctant, passive
Organisation of community	- Horizontal local actor network with relatively high density. One central actor from county administration stands out - Policy of "*transparency of county administration*"	- Local actor network with lower density. Central actor not from county administration
Groupings	- Mainly "*classical*" northern German clubs, associations etc., e.g. sport clubs, shooting clubs	- Mainly "*classical*" northern German clubs, associations etc., e.g. sport clubs, shooting clubs

Source: Own survey

Fig. 61: Interviews: Perception of county by local actors (mean values)



Source: Own survey

Tab. 102: Turnout at elections in % of population, 1999

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Elections for county parliament	50.5	55.0	54.0
Elections for European Parliament	50.8	55.3	54.4

Source: *SLMV* 1999

Tab. 103: Share of foreigners, 1997

	Germany	East Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Share of foreigners in %	9.0	4.0	1.6	1.3	1.7

Source: BBR 1999

Tab. 104: Household size, single households and marriages

	East Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Average number of persons per household, 1996	2.2	2.4	2.4	2.3
Share of single households in %, 1996	33.5	28.5	26.0	27.2
Marriages per 1,000 people, 1997	n.a.	3.8	3.7	3.2

Source: BBR 1999; *SLMV* 1999

Local traditions and history

Tab. 105: Interviews: Local traditions and history

	Ludwigslust	Uecker-Randow
History	- Formerly three counties (1990-1994), pronounced dualism and rivalry since then - Before WW II economic ties to Hamburg	- Formerly three counties (1990-1994) - Awareness of historically determined collective poverty - Before WW II hinterland of Stettin
Local heritage	- Historical buildings, e.g. castle of Neustadt-Glewe - Sweets, juices and meat as typical local products	- People feel loss of local heritage - Historically, the area belongs rather to “Pommern” (now Polish), than to Mecklenburg

Source: Own survey

Religion

Tab. 106: Interviews: Religion

	Ludwigslust	Uecker-Randow
Religion	- mainly protestant or atheist, little relevance of religion in general	- mainly protestant or atheist, little relevance of religion in general - Catholic faith in some villages strengthens parish identity

Source: Own survey

Values, beliefs and attitudes

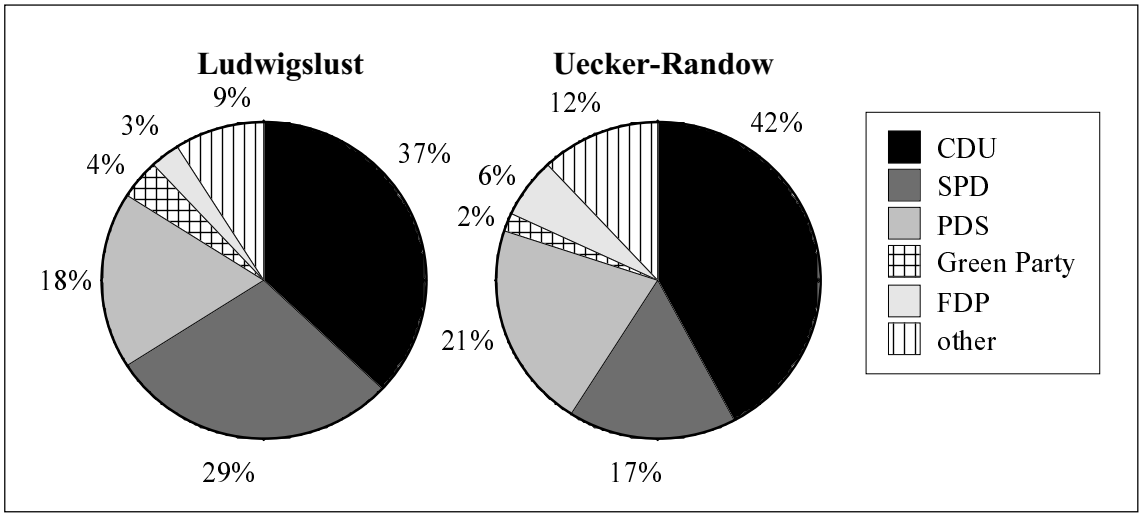
The values and attitudes in both areas, as well as the mentality, appear to be roughly similar. Social capital seems to be similar in both study areas, although social coherence in Uecker-Randow is increasingly shattered by massive emigration and economic decline. Politically, attitudes differ somewhat between the two areas (Figure 62). This pattern however is arguably caused by historical factors rather than by different values today.

Tab. 107: Interviews: Values, beliefs and attitudes

	Ludwigslust	Uecker-Randow
Social capital	- Stable social capital	- Declining social capital as a result of emigration, unemployment and dejection
Political attitudes	- Predominantly social-democrat	- Predominantly conservative
External image	- County still unknown to most west Germans - Positive image because of natural and cultural resources	- County unknown to most German people - Regarded as being the "*poor-house*" of Germany - Negative image because of military base - Negative image because of youth neo-fascism - Positive image because of natural endowments

Source: Own survey

Fig. 62: Proportion of political parties in county parliaments, 1996-2001



Source: SLMV 1999

Tab. 108: Business survey: Image

Satisfaction with the location factor "*image of the county*" (in %)	Ludwigslust	Uecker-Randow
Very satisfied	4	0
Satisfied	31	25
Unsatisfied	37	50
Very unsatisfied	6	25
No response	22	0

Source: Own survey

4.1.7 Institutions

Summary

Due to little investment in the past, Uecker-Randow has less tax revenues and hence faces a more tense financial situation than Ludwigslust. Institutional co-operation in general appears to be slightly better in Ludwigslust, due to the greater openness and efficiency of the county administration. At the community level however, there seems to be little co-operation in both study areas.

Institutional autonomy

Business tax rates and profit tax rates in Uecker-Randow are higher than those in Ludwigslust. (Table 110). Accordingly, the surveyed entrepreneurs are slightly less content with local taxes and duties in Uecker-Randow (Table 113). However, the overall tax revenues are still higher in Ludwigslust (Table 109 and 110). Furthermore, the county administration of Uecker-Randow faces higher expenditures because of a very high share of social benefits recipients (Table112, see also 4.1.10.). As a result, the overall financial situation in Uecker-Randow is more tense than in Ludwigslust.

Tab. 109: Overall tax revenues per capita, 1999

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Tax revenue per inh. in DEM	1,155*	513	513	400
* 1995				

Source: IHK Schwerin 2000a; BBR 1999

Tab. 110: Local tax revenues per capita, 1997

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Impersonal tax in DEM	493	201	193	121
Business profit tax in DEM	484	156	118	76
Income tax in DEM	482	160	147	132

Source: BBR 1999

Tab. 111: Weight average tax rate for property tax and business tax, 1998 (in %)

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Real property tax A rate	231	211	234
Real property tax B rate	339	299	340
Business profit tax rate	324	287	366

Source: *SLMV* 1999

Tab. 112: County administration finances, 1997

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Total expenditure of county administration per capita in DEM*	3,984	3,548	3,698
Total revenues of county administration per capita in DEM	3,856	3,460	3,856
Personnel expenditure per capita in DEM	775	928	905
Social benefits expenditure per capita in DEM	585	432	642
* 1998			

Source: *SLMV* 1999

Tab. 113: Business survey: Satisfaction with local taxes and duties

"*How pleased are you with local taxes, duties and costs*?" (in %)	Ludwigslust	Uecker-Randow
Very satisfied	2	0
Satisfied	18	19
Unsatisfied	45	55
Entirely unsatisfied	22	26
No response	14	0

Source: Own survey

Institutional co-operation

According to the interviews, in Ludwigslust there appears to be a high level of institutional co-operation as far as the county administration is concerned. Most of the local actors interviewed commended the efficient county administration and good contacts in the county between community leaders and local institutions. At the community level however widespread parochial thinking and local selfishness prevail. Furthermore, there is a pronounced dualism between the eastern and the western part of the county, and between the towns and rural communities.

In Uecker-Randow there is also marked selfishness and little co-operation among the communities. Contrary to Ludwigslust, however, the county administration has not

managed to counteract this local rivalry, and the relationship between communities and the county appears to be not as good as in Ludwigslust.

The overall relationship of the business sector to local institutions seems to be similar in both study areas (Table 115). The entrepreneurs surveyed in Ludwigslust appear to have a better relationship to the county and community administrations, while in Uecker-Randow the business sector has a better relationship to the chamber of commerce.

Tab. 114: Interviews: Institutional co-operation

	Ludwigslust	Uecker-Randow
Cross-border co-operation	- Consortium of seven counties along the natural reservation of the river Elbe - Co-operation in regional marketing for western Mecklenburg	- First steps in planning co-operation of the counties Uecker-Randow and Ostvorpommern for sustainable development of the area - Set-up of planning co-operation with polish border areas
Co-operation at county and community level	- "REK" planning co-operation (Regional Development Concept) - Consortium for a sustainable development of settlement structures in the Schwerin area - Development concept for the lake-district of Schaalsee	

Source: Own survey

Institutional responsiveness and effectiveness

Tab. 115: Business survey: Relationship to institutions

"*How would you characterise your relationship to...?*" (%)	Very good	Good	Needs improvement	Bad	No contact
... the local community					
Ludwigslust	8	49	22	10	10
Uecker-Randow	9	44	27	18	2
... county administration					
Ludwigslust	8	49	22	10	10
Uecker-Randow	9	44	27	18	2
... the employment office					
Ludwigslust	14	57	10	6	14
Uecker-Randow	9	63	18	5	5
... the chamber of commerce					
Ludwigslust	2	56	22	12	8
Uecker-Randow	2	62	18	15	4

Source: Own survey

4.1.8 Market Performance

Summary

Ludwigslust's labour market is relieved by its proximity to Hamburg and Schwerin, which offer the opportunity for many to commute on a daily basis. By contrast, Uecker-Randow lacks a similar opportunity for commuting. Furthermore, the labour market in Uecker-Randow suffers from pronounced mismatch. Due to its geographic location and the better equipment with interregional transport infrastructure, Ludwigslust is also much closer to markets for goods and services, as well as to supplies for local enterprises.

Labour market

Wage levels as well as productivity are considerably lower in Uecker-Randow than in Ludwigslust (Table 114). Despite massive unemployment (4.1.2.), enterprises surveyed in Uecker-Randow reported greater difficulty in filling job vacancies than in Ludwigslust (Table 119). This indicates a pronounced mismatch in Uecker-Randow's labour market. According to the interviews, many of the unemployed in Uecker-Randow are either not willing to work or lack the necessary qualifications. Furthermore, many of the unemployed prefer to wait for access to the next employment schemes ('ABM'), instead of looking for a long-term employment. The labour market in Ludwigslust is relieved by substantial outward commuting, in particular to Hamburg (Table 120).

Tab. 116: Unemployment rates, annual average

	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
1995	16.1	12.9	20.9
1996	18.0	13.9	22.1
1997	20.3	15.9	25.5
1998	20.5	16.4	24.1

Source: IHK Schwerin 2000a; SLMV 1999; Landkreis Uecker-Randow 1997

Tab. 117: Wages and productivity levels

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Monthly wages/Salary per employee in manufacturing and construction sector in DEM, 1998	5,724	3,844	3,380	2,677
Gross value added at market prices per inhabitant in DEM, 1995	n.a.	24,753	22,322	21,599
Gross value added at market prices per employee in DEM, 1995	n.a.	59,644	58,622	51,214

Source: BBR 1999, SLMV 1999

Tab. 118: Productivity levels and employment compared to regional levels, 1995

	Ludwigslust	Uecker-Randow
Share of gross value added at market prices on total of Mecklenburg-Vorpommern	6.2	4.2
Share of employees on total of Mecklenburg-Vorpommern	6.3	5.1

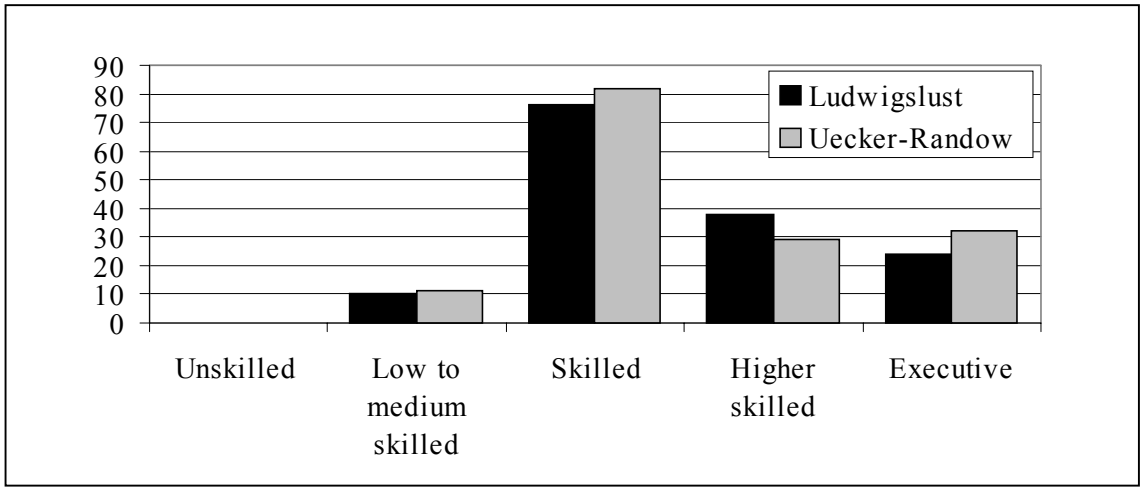
Source: SLMV 1999

Tab. 119: Business survey: Difficulties to fill job vacancies

Share of surveyed enterprises with difficulties to fill job vacancies	Ludwigslust	Uecker-Randow
	42	50

Source: Own survey

Fig. 63: Business survey: Demand for Workforce



Source: Own survey

Tab. 120: Commuting patterns, 1997

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Share of in-commuters in % of employees in the area	32.6	26.2	19.9	13.0
Share of out-commuters in % of employees in residential area	32.2	29.9	36.2	17.9
Balance of commuters per 1000 employees	4	-53	-261	-60

Source: BBR 1999

Tab. 121: Availability of apprenticeship placements, 1998

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Apprenticeship placements per 100 people seeking training	98.1	94.9	95.5	93.2

Source: BBR 1999

Marketing of natural resource-based assets

Tab. 122: Built-up and recreational area, 1996

	Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Share of built-up areas (incl. settlements and traffic/ transport infrastructure areas) of total area in %	11.8	6.2	6.2	5.1
Total area excluding built-up area per inh. in m²	3,874	11,994	18,469	17,069
Recreational area per inh. in m²	29	28	32	33

Source: BBR 1999

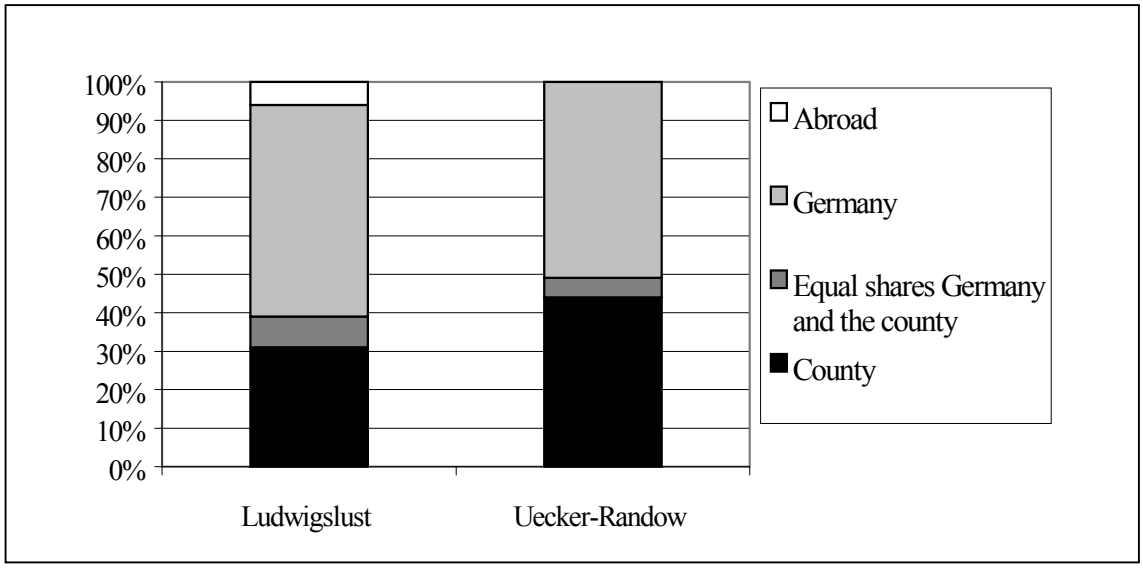
Capital supply for enterprises

The research did not reveal any noteworthy differences in the availability capital to enterprises as far as banks are concerned. However, due to financial constraints on the communities, there are differences in access to investment incentives from regional policy funds, as stated in 4.1.4.

Distribution of goods and services

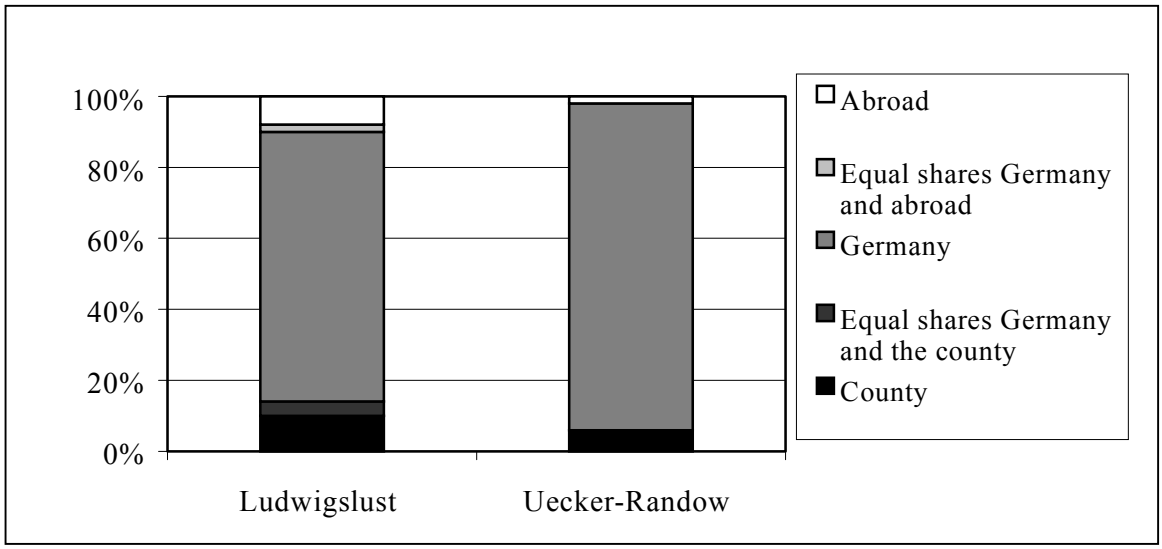
Due to the favourable geographic location of Ludwigslust, the area has clear advantages compared to Uecker-Randow. Ludwigslust is located much closer to markets for both sales and supplies, be it national or international markets. The enterprises surveyed in Ludwigslust appear to be somewhat more export-oriented than in Uecker-Randow (Figure 64). Similarly, a larger share of the supplies for the enterprises surveyed in Ludwigslust originates from abroad, compared to Uecker-Randow (Figure 65).

Fig. 64: Business survey: Main markets for products



Source: Own survey

Fig. 65: Business survey: Main source of supplies



Source: Own survey

4.1.9 Networks

Summary

The local actor network structures of the two areas differ to some extent. Networks in Ludwigslust generally feature a higher density than in Uecker-Randow. Furthermore, one actor from the county administration of Ludwigslust appears to be very central in all networks, whereas in Uecker-Randow there is no such central actor. According to the interviews, networking and collaboration between policy-makers and community leaders in both counties is obstructed by dualism between parts of the county, or rivalry between communities. The relationship between entrepreneurs seems to be roughly similar in both areas.

Local embeddedness and global communications

As in the case of Niedersachsen (3.1.9.), the network study allows for an in-depth analysis of the local actor network of the two areas in Mecklenburg-Vorpommern. Table 128 to 130 show the 'degree', 'between-ness' and 'closeness' values for four kinds of contacts: "professional", "private", "via associations and clubs" and "kurzer Draht".

In Ludwigslust, the 'professional' networks ('professional contacts' and 'kurzer Draht') have a particularly high density. Furthermore, there is one central actor who has the highest values in all kinds of networks ('county 1' in Figure 68). Most of the local actor networks in Ludwigslust are predominantly horizontally structured, except the centre of the networks, which is hierarchically structured.

Contrary to Ludwigslust, there is no single person who has a particularly dominant position in Uecker-Randow's local actor networks. Rather, different actors are the most central in different networks. Overall, the density of the networks is lower than in Ludwigslust, especially the 'between-ness' values. The structure is neither clearly horizontal nor clearly hierarchical.

Tab. 123: Business survey: Atmosphere in local business world

„*How would you characterise the relationship between entrepreneurs in the area*?“ (in %)	Ludwigslust	Uecker-Randow
“Trusting”	2	0
“Good”	22	24
“unemotional”	59	64
“People hardly know each other”	16	13

Source: Own survey

Tab. 124: Business survey: Local embeddedness of enterprises

	Ludwigslust	Uecker-Randow
“*Engagement in inter-firm co-operation inside the county*” (in %)	20	22

Source: Own survey

Tab. 125: Interviews: Context of professional contacts

“Which share of your professional contacts exist inside your county and which share outside” (mean values)	Inside the county	Outside the county
Ludwigslust	57.7 %	42.3 %
Uecker-Randow	64.2 %	35.8 %

Source: Own survey

Tab. 126: Interviews: Context of private contacts

“Which share of your private contacts exist inside your county and which share outside” (mean values)	Inside the county	Outside the county
Ludwigslust	52.8 %	47.2 %
Uecker-Randow	51.7 %	48.3 %

Source: Own survey

Tab. 127: Interviews: "Which share of your overall contacts are international contacts" (mean values)

Ludwigslust	5.9 %
Uecker-Randow	7.4 %

Source: Own survey

See also 3.1.8.: "Distribution of goods and services"

Tab. 128: Degree in %

	professional	private	via clubs and associa-tions	"kurzer Draht"		professional	private	via clubs and associa-tions	"kurzer Draht"
Ludwigslust					Uecker-Randow				
Average de-	62.2	7.0	9.5	44.1	Average de-	56.5	7.2	10.3	35.2
County 1	100.0	40,0	42,9	91,4	County 1	94,9	23,1	30,8	64,1
County 2	88.6	2.9	2.9	45.7	County 2	76.9	7.7	17.9	56.4
County 3	88.6	5.7	5.7	31.4	County 3	61.5	15.4	7.7	46.2
County 4	82.9	5.7	14.3	42.9	County 4	94.9	0.0	0.0	28.2
County 5	82.9	2.9	0.0	48.6	County 5	59.0	2.6	0.0	30.8
County 6	80.0	31.4	31.4	74.3	Community 1	48.7	5.1	5.1	28.2
County 7	80.0	0.0	0.0	77.1	Community 2	76,.9	17.9	23.1	51.3
Community 1	77.1	5.7	20.0	45.7	Community 3	82.1	17.9	25.6	0.0
Community 2	77.1	11.4	2.9	51.4	Community 4	89.7	33.3	25.6	69.2
Community 3	77.1	8.6	8.6	68.6	Community 5	64.1	5.1	7.7	28.2
Community 4	74.3	2.9	8.6	57.1	Community 6	76.9	20.5	20.5	71.8
Community 5	74.3	2.9	5.7	40.0	Community 7	56.4	0.0	20.5	33.3
Community 6	71.4	0.0	0.0	37.1	Community 8	48.7	5.1	15.4	35.9
Community 7	71.4	5.7	8.6	40.0	Community 9	56.4	5.1	12.8	38.5
Community 8	71.4	2.9	5.7	57.1	Community	0.0	2.6	10.3	25.6
Policy maker	68.6	22.9	14.3	42.9	Policy maker	69.2	20.5	23.1	43.6
Policy maker	68.6	8.6	14.3	28.6	Policy maker	46.2	0.0	12.8	17.9
Policy maker	65.7	0.0	0.0	57.1	Policy maker	59.0	0.0	0.0	0.0
Policy maker	54.3	11.4	5.7	45.7	Institution 1 *	100.0	7.7	10.3	87.2
Institution 1 *	65.7	2.9	17.1	57.1	Institution 2 *	35.9	0.0	0.0	17.9
Institution 2 *	60.0	0.0	22.9	51.4	Institution 3 *	48.7	0.0	5.1	17.9
Institution 3 *	60.0	5.7	8.6	22.9	Institution 4 *	51.3	0.0	0.0	15.4
Institution 4 *	57.1	5.7	5.7	17.1	Institution 5 *	33.3	0.0	2.6	15.4
Institution 5 *	57.1	8.6	5.7	57.1	Institution 6 *	43.6	0.0	0.0	30.8
Institution 6 *	54.3	2.9	0.0	48.6	Institution 7 *	66.7	7.7	10.3	28.2
Institution 7 *	54.3	0.0	0.0	5.7	Institution 8 *	43.6	0.0	2.6	10.3
Institution 8 *	51.4	0.0	5.7	22.9	Institution 9 *	46.2	2.6	5.1	25.6
Institution 9 *	51,4	8.6	11.4	60.0	Institution 10	51.3	2.6	2.6	20.5
Institution 10	51.4	11.4	11.4	48.6	Institution 11	59.0	17.9	17.9	43.6
Business 1	48.6	5.7	14.3	22.9	Institution 12	53.8	0.0	10.3	74.4
Business 2	34.3	20.0	17.1	48.6	Institution 13	59.0	5.1	5.1	59.0
Business 3	28.6	0.0	14.3	17.1	Business 1	97.4	17.9	20.5	64.1
Business 4	22.9	0.0	5.7	11.4	Business 2	38.5	12.8	15.4	20.5
Business 5	22.9	8.6	5.7	25.7	Business 3	0.0	5.1	5.1	10.3
Business 6	22.9	0.0	5.7	40.0	Business 4	33.3	10.3	17.9	28.2
Media	42.9	0.0	0.0	48.6	Business 5	33.3	10.3	15.4	17.9
					Business 6	28.2	5.1	5.1	15.4
					Business 7	59.0	0.0	0.0	35.9
					Media 1	35.9	0.0	0.0	15.4
					Media 2	82.1	0.0	0.0	84.6
* including chambers, labour offices and other institutions, clubs, associations and movements									

Source: Own survey

Tab. 129: Betweenness in %

	professional	private	via clubs and associa-tions	"kurzer Draht"		professional	private	via clubs and associa-tions	"kurzer Draht"
Ludwigslust					Uecker-Randow				
Average be-	1.1	1.1	1.3	1.7	Average be-	0.7	0.6	0.8	1.4
County 1	6,8	14,1	15,2	12,0	County 1	4.0	1.2	5.5	8.3
County 2	2.6	0.0	0.0	1.5	County 2	1.0	1.1	2.9	1.0
County 3	0.0	0.0	0.0	0.0	County 3	0.0	0.0	0.0	0.0
County 4	0.5	0.1	7.5	1.9	County 4	2.0	0.0	0.0	0.8
County 5	0.7	0.0	0.0	1.7	County 5	0.4	0.0	0.0	0.2
County 6	2.5	9.9	2.1	6.5	Community 1	0.0	0.0	0.0	0.0
County 7	0.4	0.0	0.0	2.9	Community 2	1.4	6.2	2.5	1.2
Community 1	0.3	0.0	0.0	0.3	Community 3	2.0	0.6	7.0	3.6
Community 2	0.9	0.0	2.5	1.1	Community 4	2.8	6.9	3.8	4.2
Community 3	1.1	0.1	0.0	5.6	Community 5	0.0	0.0	0.0	0.0
Community 4	2.2	0.0	0.0	0.9	Community 6	1.3	4.0	3.5	6.4
Community 5	0.7	0.0	0.0	2.3	Community 7	0.2	0.0	0.0	0.5
Community 6	0.1	0.0	0.0	0.3	Community 8	0.0	0.0	0.0	0.0
Community 7	1.3	0.0	0.1	1.2	Community 9	0.3	0.0	0.0	1.0
Community 8	0.7	0.0	0.0	1.6	Community	0.3	0.0	0.2	0.1
Policy maker	0.4	3.2	4.2	0.3	Policy maker	0.6	4.3	3.8	1.6
Policy maker	0.7	2.3	0.4	0.0	Policy maker	0.1	0.0	1.5	0.0
Policy maker	0.8	0.0	0.0	1.0	Policy maker	0.2	0.0	0.0	0.4
Policy maker	0.3	0.6	0.0	0.8	Institution 1 *	5.8	0.0	0.0	13.7
Institution 1 *	1.3	0.0	3.6	1.5	Institution 2 *	0.4	0.0	0.0	0.6
Institution 2 *	1.5	0.0	3.6	2.6	Institution 3 *	0.1	0.0	0.0	0.1
Institution 3 *	0.2	0.0	1.0	0.4	Institution 4 *	0.1	0.0	0.0	0.0
Institution 4 *	0.9	0.0	0.0	0.0	Institution 5 *	0.0	0.0	0.0	0.0
Institution 5 *	1.9	3.4	0.1	3.5	Institution 6 *	0.0	0.0	0.0	0.0
Institution 6 *	2.5	0.0	0.0	4.2	Institution 7 *	0.7	0.0	0.5	0.0
Institution 7 *	0.0	0.0	0.0	0.0	Institution 8 *	0.0	0.0	0.0	0.0
Institution 8 *	0.0	0.0	0.0	0.0	Institution 9 *	0.4	0.0	0.0	0.6
Institution 9 *	1.6	1.1	0.0	1.9	Institution 10	0.6	0.0	0.0	0.9
Institution 10	0.0	0.0	0.0	0.0	Institution 11	0.0	0.0	0.0	0.0
Business 1	0.0	0.0	0.0	0.0	Institution 12	0.3	0.0	0.0	3.0
Business 2	2.1	1.1	0.6	1.0	Institution 13	0.0	0.0	0.0	0.0
Business 3	0.1	0.0	4.1	0.1	Business 1	2.9	0.5	0.5	2.5
Business 4	0.1	0.0	0.0	0.1	Business 2	0.0	0.0	0.0	0.0
Business 5	1.1	5.3	0.0	0.3	Business 3	0.0	0.0	0.0	0.0
Business 6	0.8	0.0	0.0	2.2	Business 4	0.1	0.4	1.4	0.3
Media	2.3	0.0	0.0	2.3	Business 5	0.1	0.5	0.2	0.0
					Business 6	0.0	0.0	0.0	0.0
					Business 7	0.0	0.0	0.0	0.0
					Media 1	0.0	0.0	0.0	0.0
					Media 2	1.4	0.0	0.0	4.9
* including chambers, labour offices and other institutions, clubs, associations and movements									

Source: Own survey

Tab. 130: Closeness

	professional	private	via clubs and associa-tions	"kurzer Draht"		professional	private	via clubs and associations	"kurzer Draht"
Ludwigslust					Uecker-Randow				
Average close-	13.7	2.9	3.0	11.2	Average	5.1	2.6	2.8	4.2
County 1	16.7	3.2	3.6	13.5	County 1	6.6	2.5	3.5	5.5
County 2	16.1	2.8	2.8	13.1	County 2	6.6	3.0	3.5	5.4
County 3	2.8	2.8	2.8	2.8	County 3	2.5	2.5	2.5	2.5
County 4	15.6	3.2	3.6	13.0	County 4	6.5	2.5	2.5	5.4
County 5	15.4	2.8	2.8	12.8	County 5	6.5	2.5	2.5	2.5
County 6	16.2	3.0	2.9	13.6	Community 1	2.5	2.5	2.5	2.5
County 7	15.2	2.8	2.8	13.0	Community 2	6.5	3.0	3.5	5.4
Community 1	15.4	2.8	2.8	12.9	Community 3	6.6	3.0	3.5	5.4
Community 2	15.6	2.8	2.8	13.0	Community 4	6.6	3.0	3.5	5.4
Community 3	15.6	3.2	2.8	13.4	Community 5	2.5	2.5	2.5	2.5
Community 4	16.1	2.8	2.8	12.9	Community 6	6.6	3.0	3.5	5.4
Community 5	15.4	2.8	2.8	13.0	Community 7	6.5	2.5	2.5	5.4
Community 6	15.2	2.8	2.8	12.7	Community 8	2.5	2.5	2.5	2.5
Community 7	15.6	2.9	3.5	13.0	Community 9	6.5	2.5	3.5	5.4
Community 8	15.6	2.8	2.9	13.0	Community	6.5	2.5	2.5	5.3
Policy maker 1	15.4	2.9	3.5	12.4	Policy maker	6.5	3.0	3.5	5.5
Policy maker 2	15.5	3.2	3.5	12.3	Policy maker	6.4	2.5	3.5	5.3
Policy maker 3	15.4	2.8	2.8	12.1	Policy maker	6.5	2.5	2.5	5.5
Policy maker 4	15.4	3.2	2.8	12.9	Institution 1 *	6.6	2.5	2.5	5.4
Institution 1 *	15.4	2.8	3.6	13.0	Institution 2 *	6.5	2.5	2.5	5.3
Institution 2 *	15.3	2.8	2.8	13.0	Institution 3 *	6.5	2.5	2.5	5.3
Institution 3 *	15.2	2.8	3.5	13.0	Institution 4 *	6.4	2.5	2.5	2.5
Institution 4 *	15.0	2.8	2.8	2.8	Institution 5 *	2.5	2.5	2.5	2.5
Institution 5 *	15.6	3.0	3.5	13.2	Institution 6 *	2.5	2.5	2.5	2.5
Institution 6 *	15.8	3.0	2.8	13.3	Institution 7 *	6.5	2.5	3.5	5.3
Institution 7 *	2.8	2.8	2.8	2.8	Institution 8 *	2.5	2.5	2.5	2.5
Institution 8 *	2.8	2.8	2.8	2.8	Institution 9 *	6.5	2.5	2.5	5.3
Institution 9 *	15.7	2.8	2.8	13.1	Institution 10	6.5	2.5	2.5	5.3
Institution 10 *	2.8	2.8	2.8	2.8	Institution 11	2.5	2.5	2.5	2.5
Business 1	2.8	2.8	2.8	2.8	Institution 12	6.4	2.5	2.5	5.4
Business 2	15.6	3.2	3.5	12.7	Institution 13	2.5	2.5	2.5	2.5
Business 3	14.9	2.8	2.8	12.0	Business 1	6.6	3.0	3.5	5.4
Business 4	14.9	2.8	2.8	11.9	Business 2	2.5	2.5	2.5	2.5
Business 5	15.4	3.0	2.8	12.8	Business 3	2.5	2.5	2.5	2.5
Business 6	15.2	2.8	2.8	12.6	Business 4	6.5	3.0	3.5	5.4
Media	15.9	2.8	2.8	12.8	Business 5	6.4	2.5	3.5	2.5
					Business 6	2.5	2.5	2.5	2.5
					Business 7	2.5	2.5	2.5	2.5
					Media 1	2.5	2.5	2.5	2.5
					Media 2	6.6	2.5	2.5	5.4
* including chambers, labour offices and other institutions, clubs, associations and movements									

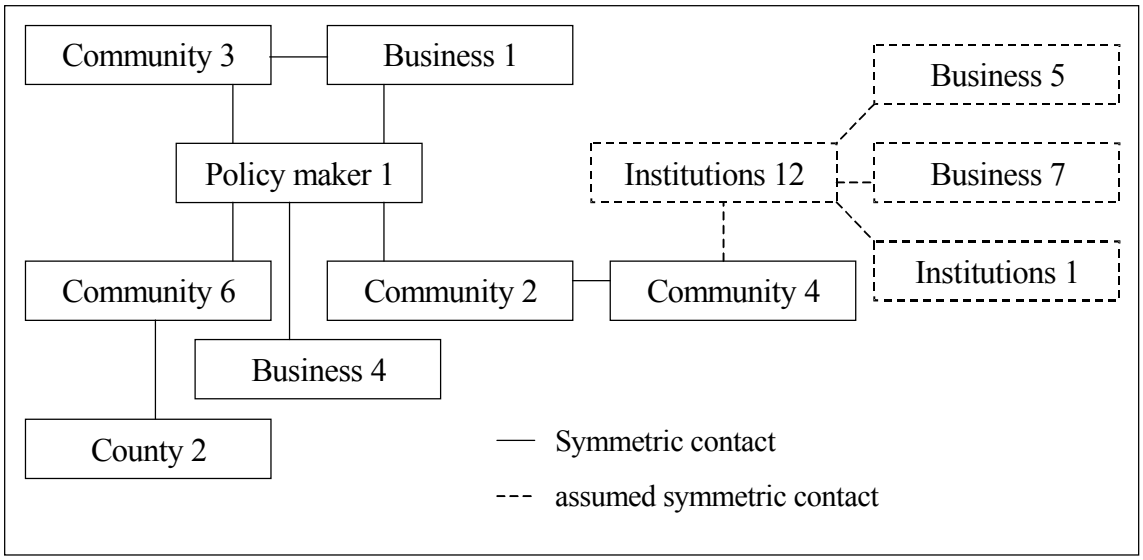
Source: Own survey

Tab. 131: Themes, on which more than three local actors collaborate

Ludwigslust	Uecker-Randow
EXPO 2000-project 'Village Glaisin'	Business start-up initiative
Marketing of the region	INTERREG
Naturpark 'Mecklenburgisches Elbtal'	
Tourism	

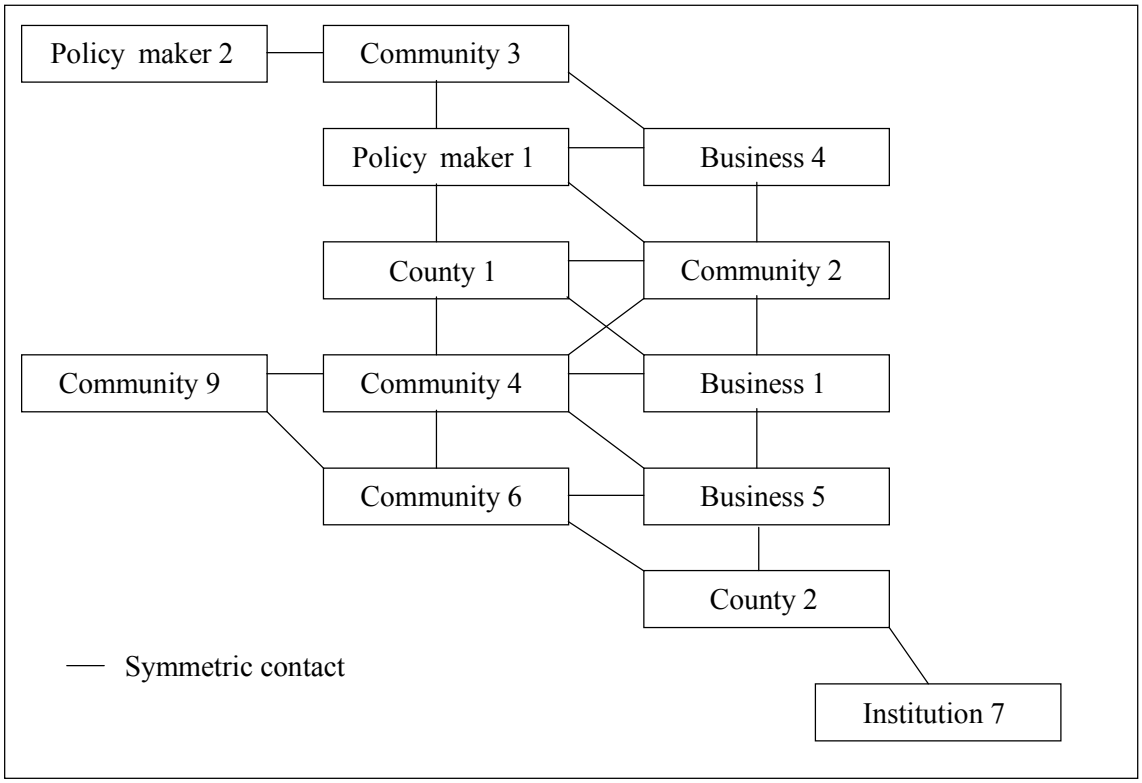
Source: Own survey

Fig. 66: Symmetric private contacts between local actors in Uecker-Randow



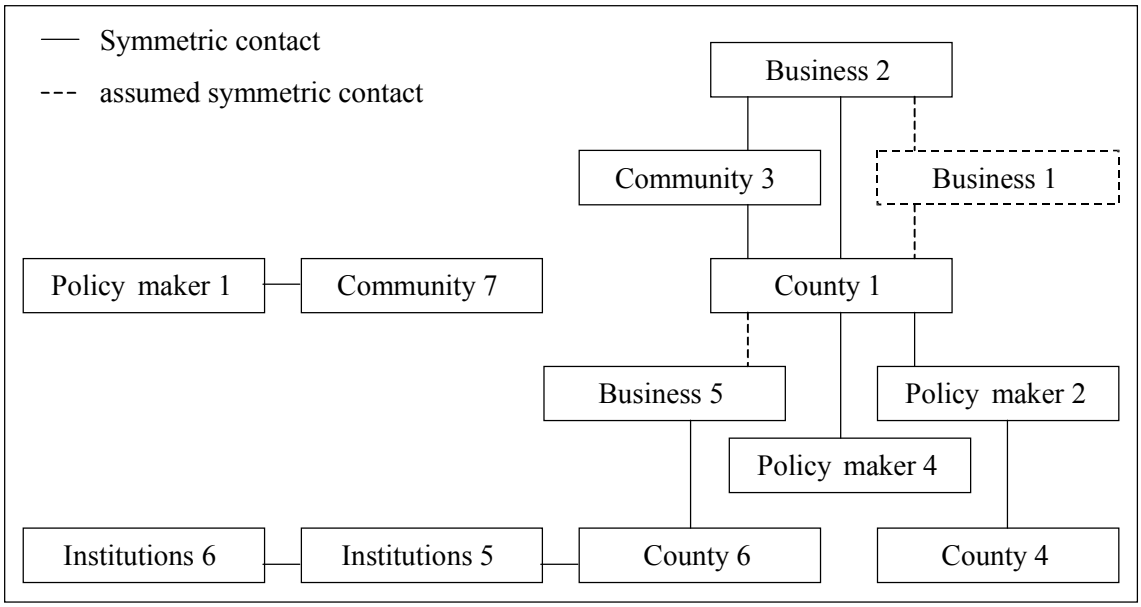
Source: own survey

Fig. 67: Symmetric contacts via clubs, associations etc. between local actors in Uecker-Randow



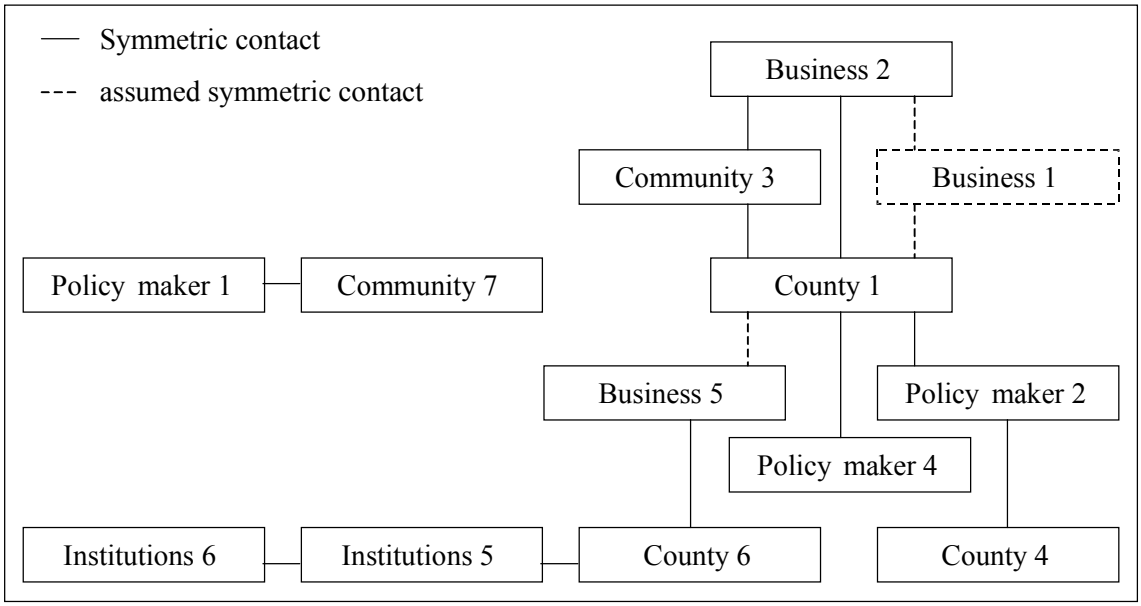
Source: Own survey

Fig. 68: Symmetric private contacts between local actors in Ludwigslust



Source: Own survey

Fig. 69: Symmetric contacts via clubs, associations etc. between local actors in Ludwigslust



Source: Own survey

The non-contractual elements of contracts

In both study areas, there appear to be no noteworthy difference in the non-contractual elements embodied in inter-firm contracts.

Information technology and innovation

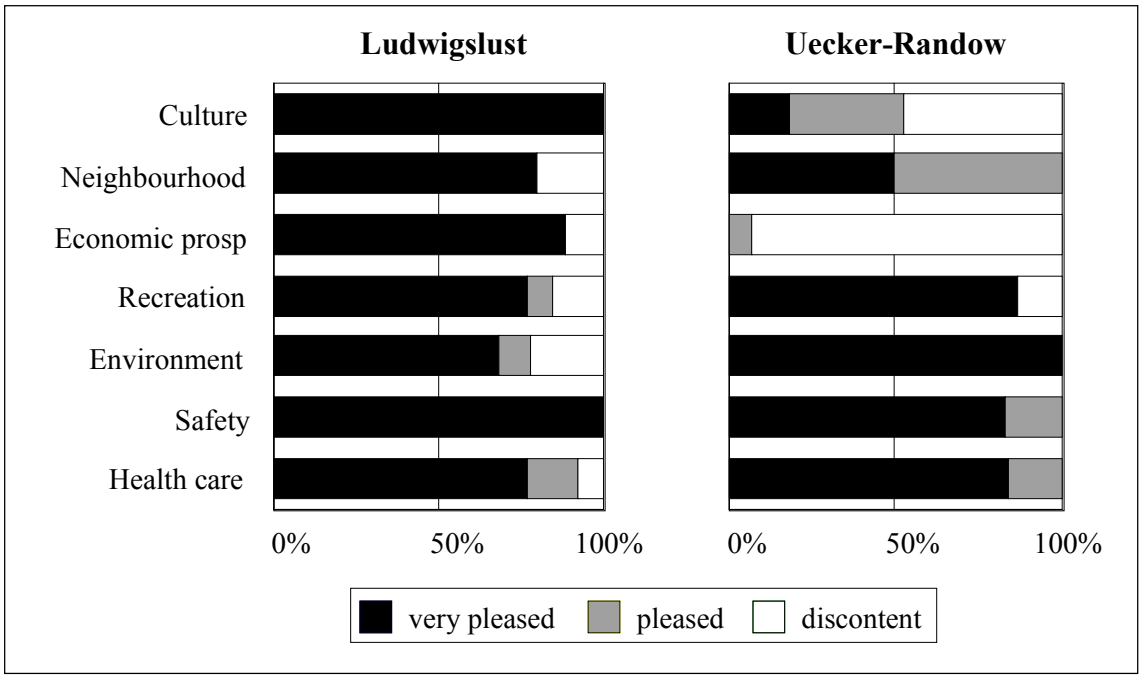
There appear to be little differences between the study areas in the extent of IT application. In both study areas respondents report that the take-up of IT in the business sector is varied.

4.1.10 Quality of life

Summary

As far as objective measures are concerned, both areas share overall similar features concerning quality of life, such as a sound natural environment and a sufficient health infrastructure. There are fewer crimes in Uecker-Randow than in Ludwigslust, while prosperity is higher in the latter area. Subjectively however, the overall quality of life for the majority of people should be far lower in Uecker-Randow, due to poor accessibility of services, pronounced unemployment, low morale and widespread personal depression.

Fig. 70: Interviews: Statements concerning aspects of quality of life



Source: Own survey

Tab. 132: Business survey: Satisfaction with the location factor "Quality of life" (in %)

	Ludwigslust	Uecker-Randow
"*Very content or content*"	61	60

Source: Own survey

Tab. 133: Life expectancy, 1997

	Ludwigslust	Uecker-Randow
Life expectancy of men in years	70.1	69.2
Life expectancy of women in years	78.7	78.4

Source: BBR 1999

Living standards and safety

Tab. 134: Safety in traffic, 1997

	Ludwigslust		Uecker-Randow	
	casualties	classification *	casualties	classification *
Traffic accidents per 100,000 inhabitants	1,044	5	931	5
Killed persons in traffic accidents per 100,000 inhabitants	32.4	5	21.5	5
* classification 1 – 5 = best - worst				

Source: BBR 1999, Korczak 1995

Tab. 135: Crimes per 10,000 inhabitants, 1993

	Ludwigslust		Uecker-Randow	
	victims	classification *	victims	classification *
Homicide	0.95-4.9	5	0.0-0.3	1
Sexual crimes	4.91-6.9	4	3.11-4.0	2
Coercion, menace for life, kidnapping	74.2-386.4	5	74.2-386.4	5
* classification 1 – 5 = best - worst				

Source: Korczak 1995

Tab. 136: Prosperity

	Ludwigslust	Uecker-Randow
Welfare recipients per 1,000 inhabitants, 1997	21.3	27.3
Gross income per industrial employee a month in DEM, 1998 *	3,380	2,677
Share of new built family houses, 1997	83.3	92.8
* mining and manufacturing enterprises with more than 20 employees		

Source: BBR 1999; SLMV 1999

Multiculturalism

Tab. 137: Foreign population, 1997

	Germany	East Germany	Mecklenburg-Vorpommern	Ludwigslust	Uecker-Randow
Share of foreigners in %	9.0	4.0	1.6	1.3	1.7

Source: BBR 1999

Environment and recreation

Tab. 138: Environmental impacts, 1995

	Ludwigslust		Uecker-Randow	
	(in µ/g)	classification *	(in µ/g)	classification *
SO2	13-16	3	12	2
NO2	27-30	3	2-17	1
Ozone	37	2	45-51	4
Aerosol	37	2	38-47	3
* classification 1-5 = best - worst				

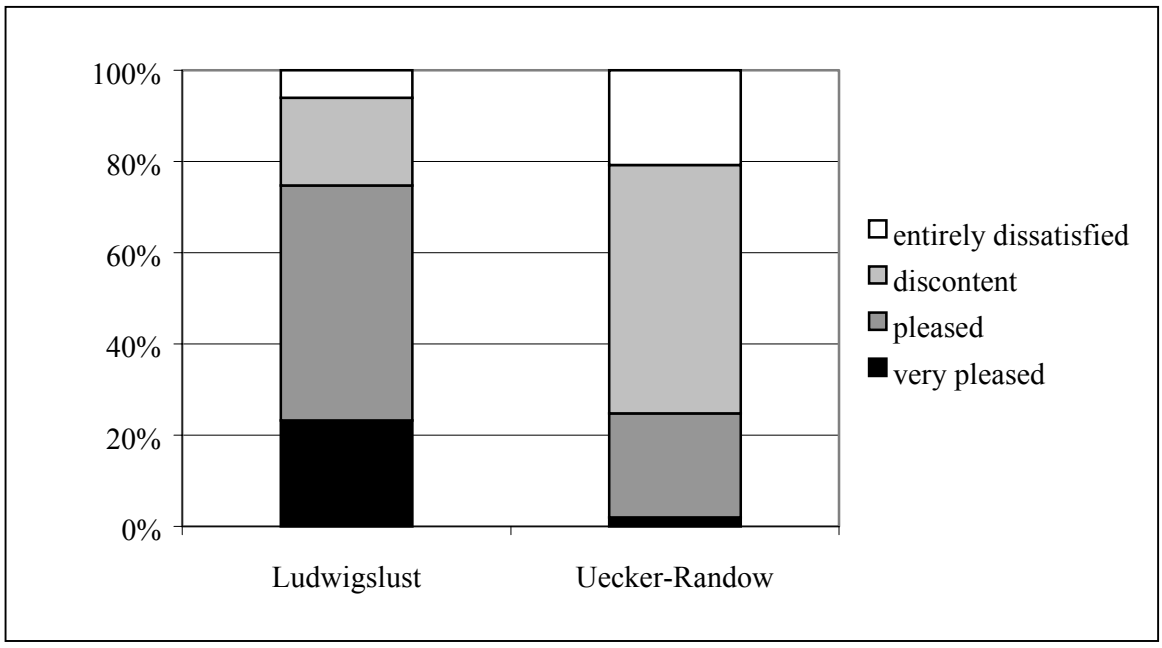
Source: Korczak 1995

4.2 Themes and Dynamics

4.2.1 Infrastructure and Spatial Location

The analysis of the interviews suggests that for both study areas in Mecklenburg-Vorpommern, geographical location has been the most decisive factor for economic performance in the post-socialist period. To some extent, this was expected when the study areas were chosen. The importance of this issue however came as a surprise. Some 90% of the interviewees in Ludwigslust named issues like spatial location, accessibility, or transport infrastructure as the most decisive factors to improve economic performance of the areas over the last ten-year period, while about 80% in Uecker-Randow made these issues responsible for their lagging economic performance. Similarly, the business survey showed very different levels of satisfaction with access to inter-regional transport infrastructure (Figure 71). A large majority of entrepreneurs in Ludwigslust are "pleased" or "very pleased" with this location factor, while the majority in Uecker-Randow were "discontented" or "entirely dissatisfied".

Fig. 71: Business survey: "How pleased are you with the access of your area to interregional transport infrastructure?"



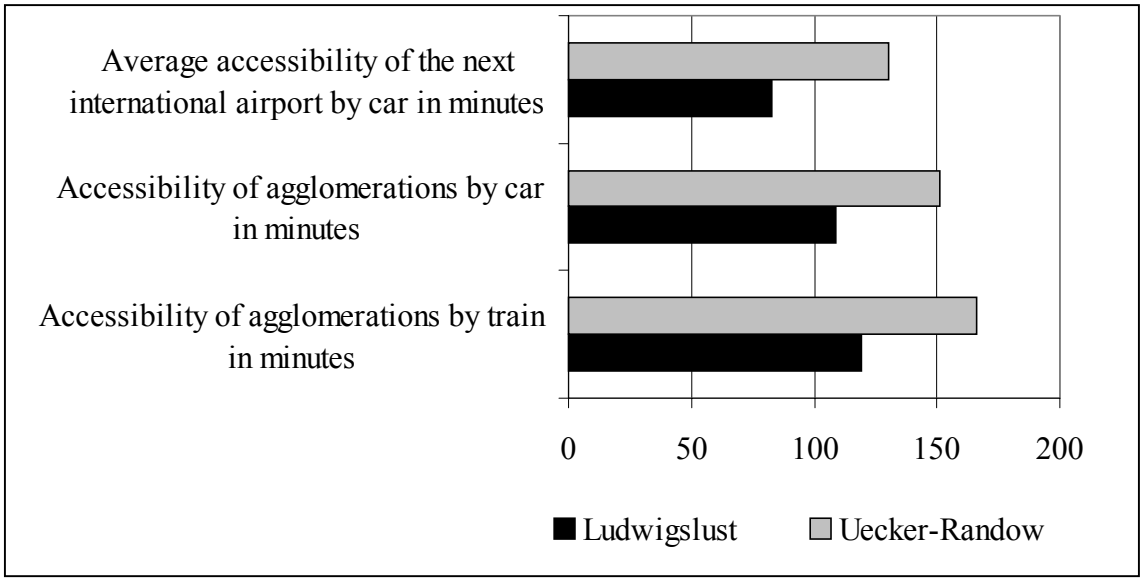
Source: Own survey

In fact, the two study areas show quite extreme geographical features within the state Mecklenburg-Vorpommern. Uecker-Randow is located at the border to Poland, at the Eastern periphery of both Germany and the EU at present. Before WW II, the area constituted the hinterland of Stettin, which is a Polish city today. Therefore, the weak structure of the area has been to some extent caused historically by its having been cut off from its former centre of economic activity.

The weak inter-regional infrastructure adds to its geographical marginality: Access to the railway system is poor, and only the very south of the county is touched by a motorway (A 11), which is in a bad condition. Accordingly, the time needed to get to agglomerations and airports is still considerable (Figure 72). In the interviews, entrepreneurs in Uecker-Randow stressed the operational problems, concerning both supply and sales, caused by the great distance to markets. An executive of a manufacturing plant for example reports: "*When I need some special tool for my production process, I order an engineer from, say, the Ruhr area to bring and install it. It takes him seven hours to come here, he needs to stay overnight, and it takes seven hours to drive back. Apart from the mere costs for transport and accommodation, the production process pauses for a very long period. Such operations are very costly for my enterprise. A competitor located in the centre of Germany would bear only a small fraction of such costs*".

Mayors of the communities lamented the poor interest of potential investors because of the geographical remoteness of the area. A major problem for the population is the lack of larger cities or agglomerations nearby. This limits the quality of life because of poor access to services, and adds to the high unemployment as it does not allow for commuting on a daily basis.

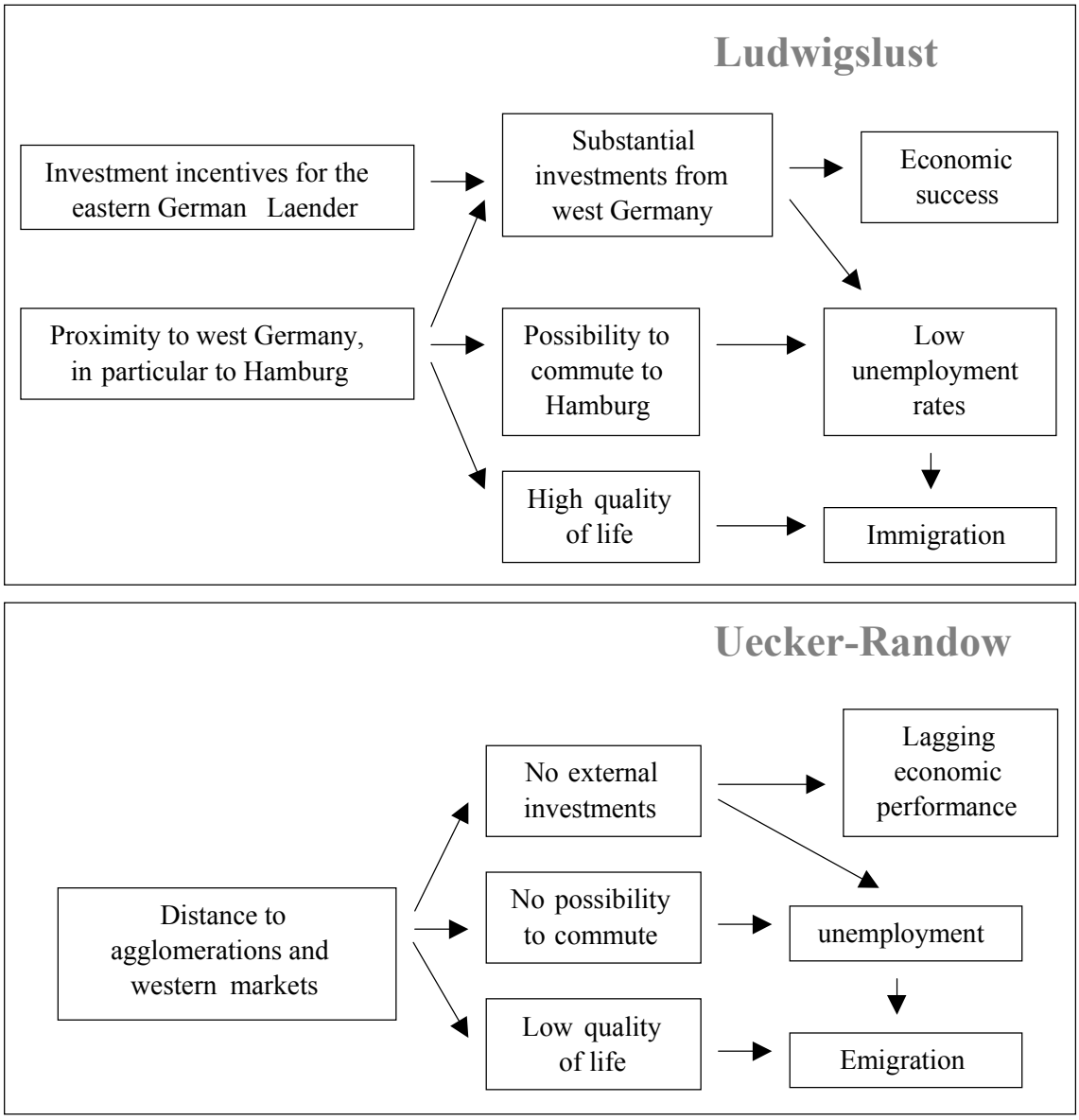
Fig. 72: Accessibility of the two study areas



Source: BBR 1999

In contrast, Ludwigslust has a very advantageous geographical location and good access to inter-regional infrastructure. The A 24 motorway from Hamburg to Berlin intersects the area, and the western rim of the county is only 45 km away from Hamburg. Additionally, the area borders the state capital, Schwerin. Both cities provide ample jobs and services for the local population. In particular, Hamburg attracts a large number of daily commuters which reduces unemployment in Ludwigslust significantly. Its location along the former border to West Germany made the area very attractive for West German investment in the early 1990s. Numerous branches of western parent companies were established just inside the former border. This was done in order to reap the benefits of investment incentives available in East Germany, without losing proximity to Western European markets, particularly Hamburg. In many cases, entrepreneurs from the outskirts of Hamburg relocated their firm to Ludwigslust with the help of investment incentives, without having to move their homes.

Fig. 73: Impact of Infrastructure and spatial location on economic performance



4.2.2 Industrial Structure and Structural Change

Interviewees named the industrial structure in the areas, both before and after the German reunification, as the second most important issue for economic development. Under socialist rule in the former GDR, quite different industrial structures evolved in the two study areas. In Ludwigslust, the branch structure had generally been quite diverse. The so-called 'industrialisation of the North' in the GDR helped

to develop a strong manufacturing base, especially in the West of the area. The most important enterprises were food-processing, a shipyard (in Boizenburg at the river Elbe), tile-manufacturing, a paper factory, and factories for metals, textiles and radio-equipment. Many of these, in particular the shipyard, were predominantly export-oriented. A large fruit juice factory even exported to Western Europe; i.e. production after reunification proceeded with the same management staff, already familiar with production under market conditions. As the executive manager from Ludwigslust notes: *"In times of the GDR many exported goods were produced in this area. Therefore, already then we had contacts and knowledge about the market in the West. This plant was a foreign currency importer. Therefore, we could buy machinery from the West and were able to 'think' market oriented"*. Other local production sites in the food sector, processing milk and potatoes, could successfully proceed under new management or after management-buy-outs. Overall, the transformation to a market economy after reunification went relatively smoothly, compared to other East German areas. Many state-owned plants could successfully be transformed into private companies, and the loss of employment through privatisation was partly counterbalanced by new investments from West German companies and the possibility to commute to Hamburg. Today, Ludwigslust has a relatively strong and diverse manufacturing sector, with emphasis on food-processing, metal-processing and paper production. Other important sectors are logistics and construction, attracted by the motorway as well as by large commercial sites alongside.

There is however a bias towards large, low-skill assembly plants of Western parent companies, in particular in the food-processing sector of Ludwigslust (i.e. Dr. Oetker in Wittenburg). As Table 77 shows, the share of employees with low qualifications in Ludwigslust is even higher than in the lagging study area Uecker-Randow.

Another restrictive element relevant to industrial structure is the fact that investments in the manufacturing sector are not distributed evenly in the area. The bulk of companies are located in the West of the county, in Wittenburg, Hagenow or the so-called 'Mega-Park', a large business district at the western border of the county. The East and South of the area, with the towns Ludwigslust, Neustadt-Glewe, Grabow and Dömitz, have received less investment and suffer somewhat from their greater distance to Hamburg. The economic division between the 'industrialised' Western part of the county and the 'service-based' East reflects a pronounced dualism in local politics between these sub-areas.

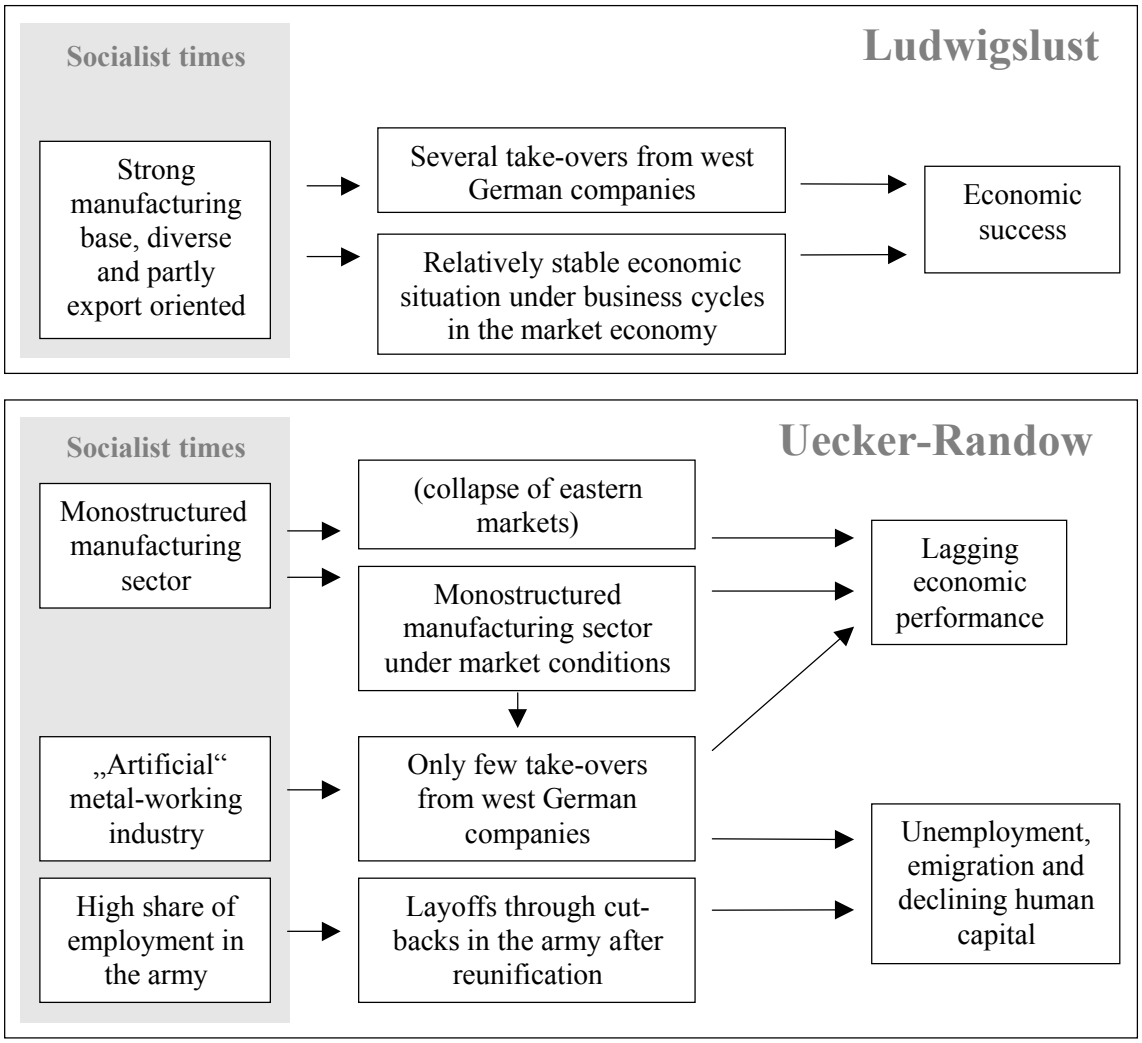
In Uecker-Randow, the industrial structure at the time of the GDR was entirely different from that in Ludwigslust. The area harboured very large military units. In order to employ the high number of women who followed their soldier husbands to the

area, the central government located metal-processing and a production plant for electric motors in the area. This decision however was not at all based on location advantages, but solely served socialist employment strategies. Other production sites erected in the area then were brickyards and food-processing plants. The local economy was less export-oriented than in Ludwigslust, and the few export branches exported entirely to COMECON markets. Finally, the area served as a popular holiday destination for the people of the GDR, due to its beautiful landscape and coastline along the “Stettiner Haff”.

This industrial structure of Uecker-Randow turned out to be an extremely difficult legacy for the time after reunification. The iron production and metal-processing factories of the area, lacking any reasonable location advantages, proved unprofitable under market conditions (especially taking into account the unfortunate geographical location of the area). Today, only the electric motor factory persists, which depends on subsidies and struggles to survive. Most of the brickyards have stopped production. Following a boom in the construction sector in East Germany in the mid-1990s, several start-ups in the construction sector evolved in the area. As a result, the grievous recession in this sector in the late 1990s hit the area particularly hard. The outright collapse of East European markets (formerly COMECON) additionally hurt the local economy, and due to its industrial structure and few Western take-overs, little local export revenues accrued through the opening-up of Western European markets. Finally, given freedom to travel abroad after 1989, the people of the former GDR preferred holiday destinations in the Mediterranean or overseas to the Baltic Sea, so that the tourism industry in Uecker-Randow declined sharply.

The collapse of various industrial branches in the 1990s led to massive unemployment and emigration. Attempts to offset such processes focused on employment in the public sector, in particular in the army and employment schemes. These kinds of employment however do not generate major economic spread effects for the local economy and hardly improve human capital in the area.

Fig. 74: Impact of the industrial structure and structural change on economic performance



4.2.3 Commuting, Migration and Human Capital

The patterns of migration and commuting in the two study areas are closely linked to their geographical location. As shown in 4.2.1, people in Ludwigslust can easily find employment within commuting distance, namely in Hamburg and Schwerin. Furthermore, some commuters work in other bordering Western areas, i.e. the counties of Lüchow-Dannenberg and Lauenburg. The reasons for this westward commuting pattern are not only the limited number of jobs in Ludwigslust, but also a higher wage level in West Germany compared to the East. To some extent, commuters from bordering Western counties who work in Ludwigslust compensate for the commuting to the West. The overall net effect of the commuting pattern on the county of Ludwigslust however is still a considerable relief for the labour market. This labour market relief in turn reduces the pressure to emigrate in order to find employment in other areas. In fact, Ludwigslust is one of the very few counties in East Germany which has experienced inter-regional net immigration over the last decade.

Tab. 139: Commuting and migration patterns 1997

	Ludwigslust	Uecker-Randow
Share of inward commuters on employment in the area	19.9	13
Share of outward commuting on employed living in the area	36.2	17.9
Intra-German net migration	1.5	-6.9

Source: BBR 1999

In contrast, in Uecker-Randow we find a reverse situation. The closest larger towns, Greifswald and Neubrandenburg, are difficult to access for commuters and suffer from high unemployment rates as well. Berlin is clearly outside daily commuting distance for the area, and only few workers take on the burden of weekly commuting to the German capital. Overall, the local labour market is hardly relieved by commuting to other areas. Instead, many people are willing to work leave the county for good and move to West Germany or Berlin. These migration patterns reduce drastically the level of human capital in Uecker-Randow, because the young, well-educated and economically active population in particular tends to emigrate.

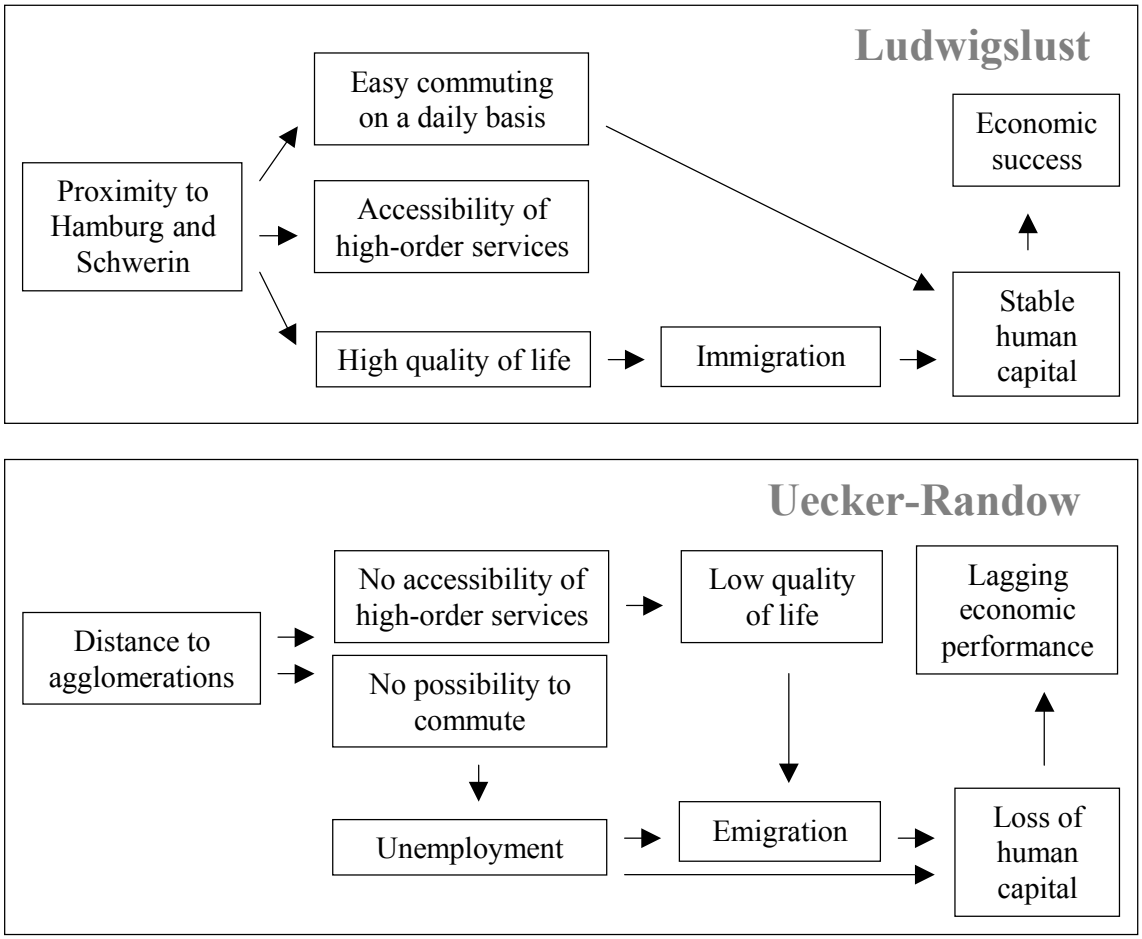
Tab. 140: Business survey: Mentality of workforce and mismatch

	Ludwigslust	Uecker-Randow
"*How pleased are you with the mentality of the local workforce?*"	71% "pleased" or "very pleased"	55% "pleased" or "very pleased"
"*Do you have difficulties to fill certain job vacancies?*"	42% "Yes"	50% "Yes"
Unemployment rate 1998	16.4 %	24.1 %

Source: Own survey, Arbeitsamt Schwerin

A certain share of the unemployed who have chosen to stay in Uecker-Randow are either poorly qualified or not willing to seek further training or to work at all. The result is a pronounced mismatch in the labour market, where employers find it difficult to fill certain vacancies despite an extremely high level of unemployment. As a local entrepreneur notes: *"It was difficult to find 350 new employees for this enterprise in the county. Many are no longer willing to work or have lost their skills. (...) I am considering relocating production to Berlin if I can not find sufficient employees here"*. This problem is highlighted by the results of the business questionnaire, shown in Table 140.

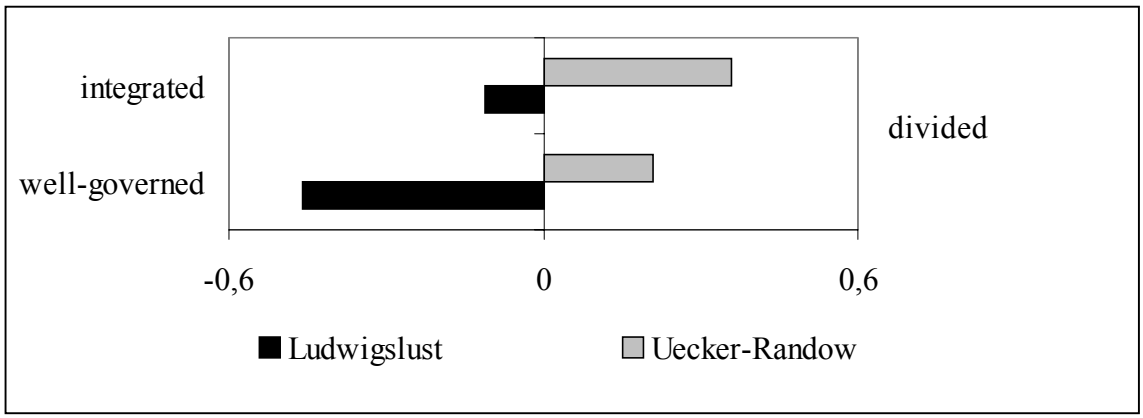
Fig. 75: Impact of Commuting, migration and human capital on economic performance



4.2.4 County Administration and Local Collaboration

Compared to geographical location and economic structure, the issue of institutional collaboration (which proved to be a decisive factor for differential performance of the study areas in Niedersachsen) is less important for the study areas in Mecklenburg-Vorpommern. When asked for the most decisive factors which influenced local development in the last decade, only a few interviewees named this issue. In fact, collaboration between communities appears to be similar. In both study areas, we found competitive and selfish attitudes among the mayors, and lack of co-operation, parochial thinking, and local selfishness among the communities. Furthermore, since the two study areas consist of different counties that were united in 1994, a pronounced dualism between former sub-counties exists in both counties, particularly in Ludwigslust. However, the interviews produced marked differences between the two study areas concerning the performance of the county administration and the relationship between the county and the communities. Answers in the interview questionnaire (Figure 76) support these observations. Most of the interviewees in Uecker-Randow described their area as "divided" and "badly governed", while most respondents in Ludwigslust associated their area with the terms "integrated" and "well governed".

Fig. 76: Interviews: „Which of the following descriptions in your view apply to your area?" (average)



Source: Own survey

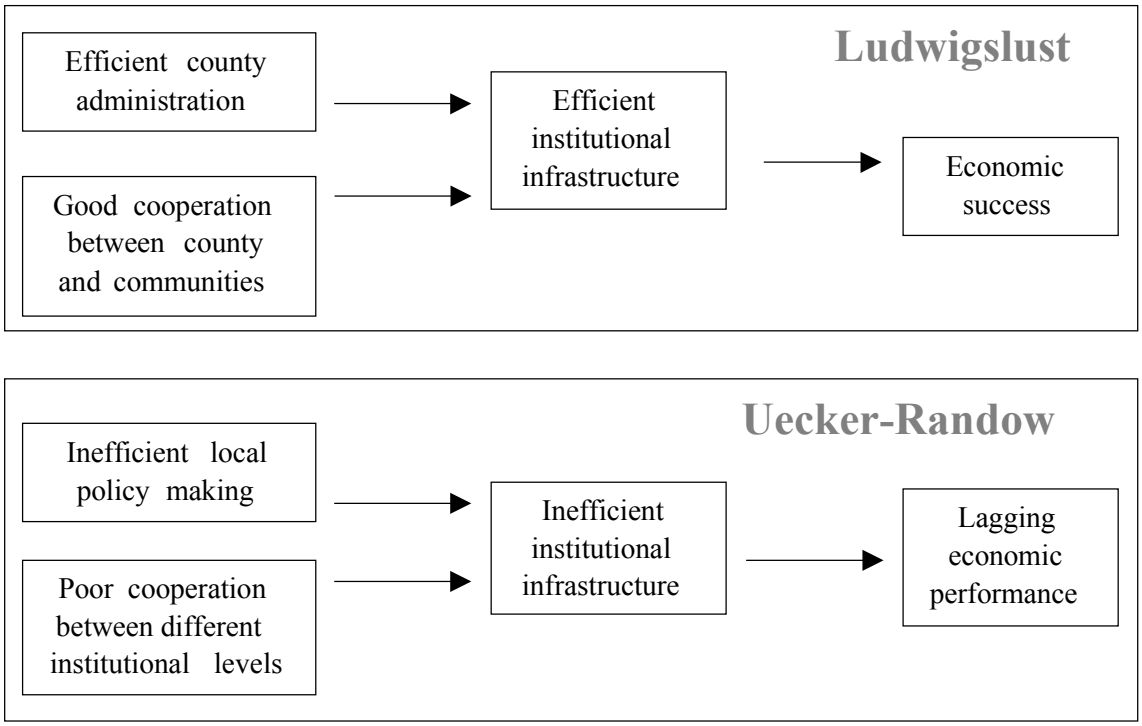
In Ludwigslust, interviewees were generally very content with the performance of the county administration. The county administration was described as lean and efficient, and as taking a co-ordinating and moderating role between the diverse local

institutions. Policy-making and decision-making processes in the county parliament were characterised as efficient and sound. When attracting investors, a business promotion company of the county negotiates first with the potential investor before the community concerned is informed. This way, local selfishness of the communities is prevented. As a direct consequence of the county administration's performance on economic development, interviewees commended the rapid provision of business districts immediately after the collapse of the GDR. Interviewees described co-operation with the county administration generally as efficient and good, and even the community leaders accepted the leading role of the county.

In contrast, the county administration in Uecker-Randow was described by some interviewees as ponderous and cumbersome. The county would take no leading or co-ordinating role on behalf of the communities. This argument is supported by the network analysis, which showed that actors from the county administration are hardly embedded in the local actors network (see 4.1.8.). Furthermore, criticism was expressed over the county administration's employing too many civil servants. In the county parliament ideological confrontations prevail, and policy-making was described as inefficient. For example, no 'county development plan' exists up to now - contrary to most other counties in the region. Co-operation between communities and county administration was generally characterised as poor. Confrontations stem partly from socialist times and are partly fuelled by current disputes, such as waste disposal. Some interviewees attributed the poor performance of certain institutions to difficulties with recruiting capable decision makers to a remote area like Uecker-Randow. As a local politician notes: *"Those who ended up here* [in Uecker-Randow] *did not make it anywhere else"*.

Overall however, the impact of these issues on the economic performance of the study areas is arguably very limited. As stated earlier, a large majority of the interviewees named the geographical location and industrial structure as the decisive factors for development in the last ten years. The business survey neither resulted in marked differences concerning co-operation with county or community administrations, nor did major differences emerge concerning the openness of the local administration towards business needs. The poor level of co-operation between communities and the county administration in Uecker-Randow further worsens the lagging economic performance of the area, but not decisively. Similarly, the obviously good performance of the county administration in Ludwigslust fosters local development processes, however not to the same extent as geographical proximity to Hamburg does.

Fig. 77: Impact of County administration and local collaboration on economic performance

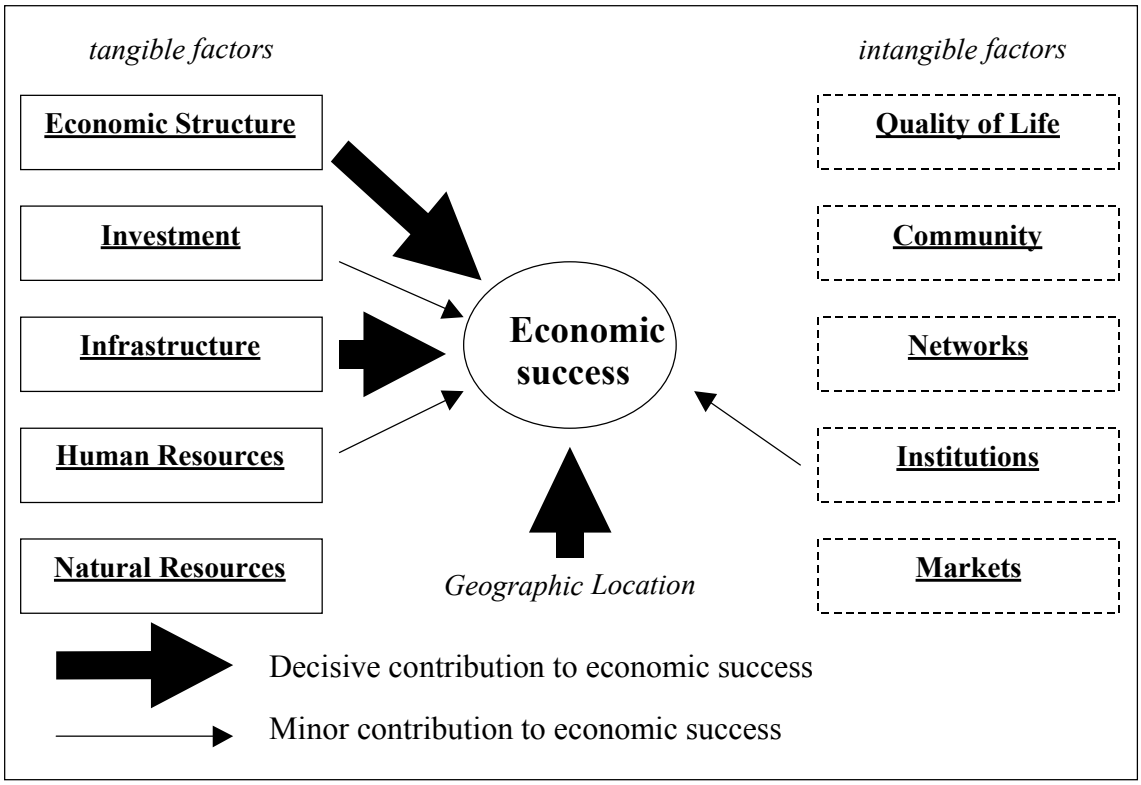


4.3 Conclusions

In the two study areas of Mecklenburg-Vorpommern, the 'tangible' factors of the DORA project clearly have the most explanatory power for differential economic performance. First, the inter-regional transport infrastructure and geographical location (not part of the ten-factor model) play a decisive role for economic performance in both areas. This is supported by the interviews, the business survey and the analysis of development paths over the last decade. In Ludwigslust, the better-performing study area, proximity to West Germany, in particular to Hamburg, and the motorway which provides good accessibility of the area, is responsible for particularly high external investments in the area during the 1990s (Figure 78). Furthermore, proximity to Hamburg provides good conditions for commuting, which significantly reduces local unemployment rates. As a result, emigration and loss of human capital, being the typical features of East German regions, has been prevented.

The second most decisive factor for the differential performance is the economic structure of the study areas, both before reunification and in its aftermath. Ludwigslust had a more diverse and more competitive industrial mix than Uecker-Randow already in socialist times. Particularly the West of today's county of Ludwigslust contained several different strongholds of manufacturing industry, some of which already exported to western Europe. As a result, the transition to the market economy was facilitated by successful management-buy-outs or take-overs from West German companies.

Fig. 78: Contribution of factors to economic success in Ludwigslust

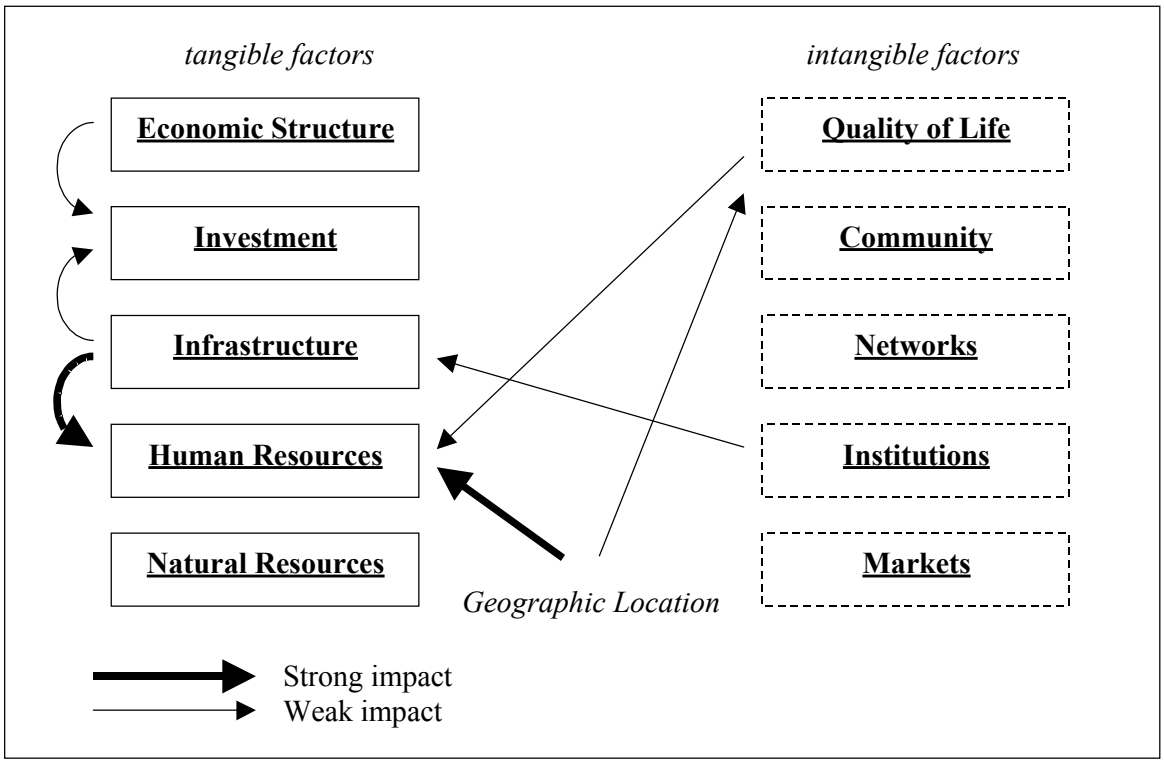


Compared to these two explanatory factors, other factors are only of minor importance. The investment incentives ("Investment") which were available for investments in east Germany, were an important precondition for the massive investment in the area over the last decade. The relatively good supply of human capital ("Human Resources") also supported economic development. (However, this factor should be looked at as a result of rather than as a cause for economic success of the area.) The area was saved from emigration and 'brain drain' as a result of massive investment and proximity to Hamburg, so that today there is a larger local workforce available than elsewhere.

From the 'less tangible' factors, "Institutions" have contributed to economic success in the last decade. Rapid availability of industrial sites in Ludwigslust after 1989 fostered investment, and its lean and efficient county administration in the second half of the 1990s contributed to pragmatic local policy-making and a good relationship between local institutions. Overall however, the less tangible factors have arguably contributed very little to the recent economic success of Ludwigslust, compared with the tangible factors.

Again, the factors described above are interrelated, but not to the same degree as in the study areas in Niedersachsen. The proximity of Ludwigslust to Schwerin and Hamburg contributed to the good quality of life, because jobs and services became relatively easily accessible. In turn, this prevented emigration ("Human Resources"). Similarly, the motorway (as part of "Infrastructure") has had a decisive impact on the factor "Human Resources", facilitating commuting, thus preventing emigration. Finally, the county administration ("Institutions") has managed to supply a relatively good business-oriented infrastructure.

Fig. 79: Inter-relations between factors in Ludwigslust



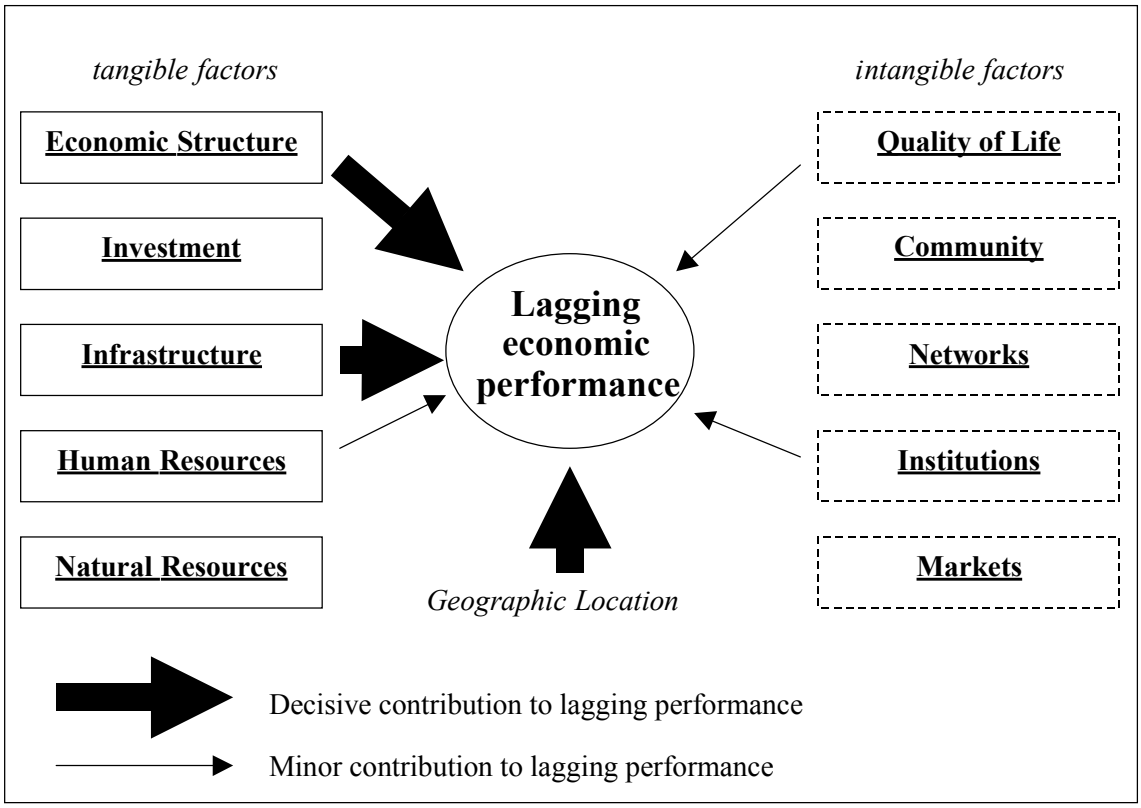
As in Ludwigslust, geographical location has also been the most decisive factor for economic performance in Uecker-Randow in the last decade, only in a negative sense (Figure 80). The remoteness and poor access of the area to inter-regional transport infrastructure turned out to be crucial for the area's lagging economic performance in various ways: Its remoteness made the area less attractive for external investments after reunification, and obstructed the operational success of already existing manufacturing plants. Furthermore, there is practically no possibility for the unemployed to commute to workplaces outside the county. These features provoked substantial emigration and thus a considerable loss of human capital. To some ex-

tent, the variable 'transport infrastructure' was expected to be important when the two counties, both in very specific geographical locations in the east German context, were chosen as study areas for the DORA project. However, the particular weight of this factor came as a surprise.

Again, the economic structure has been a very important factor for economic performance as well. The main employers in Uecker-Randow under socialist rule had been the army, next to metal production and processing, and tourism. After reunification, conditions for these sectors changed dramatically: The army significantly downsized staff, the local metal industries lacked any reasonable location factor and went bust, the former COMECON countries reduced their imports, and domestic tourism collapsed. Today's industrial mix shows a disproportionate share of the public sector, construction enterprises and employment in the army. The manufacturing sector features only a low share of export activities. Finally, a severe recent recession in the German construction sector depressed the area's situation further. As a secondary effect, the prevailing set of industries in Uecker-Randow have produced little local income effects and have not contributed to improved human capital.

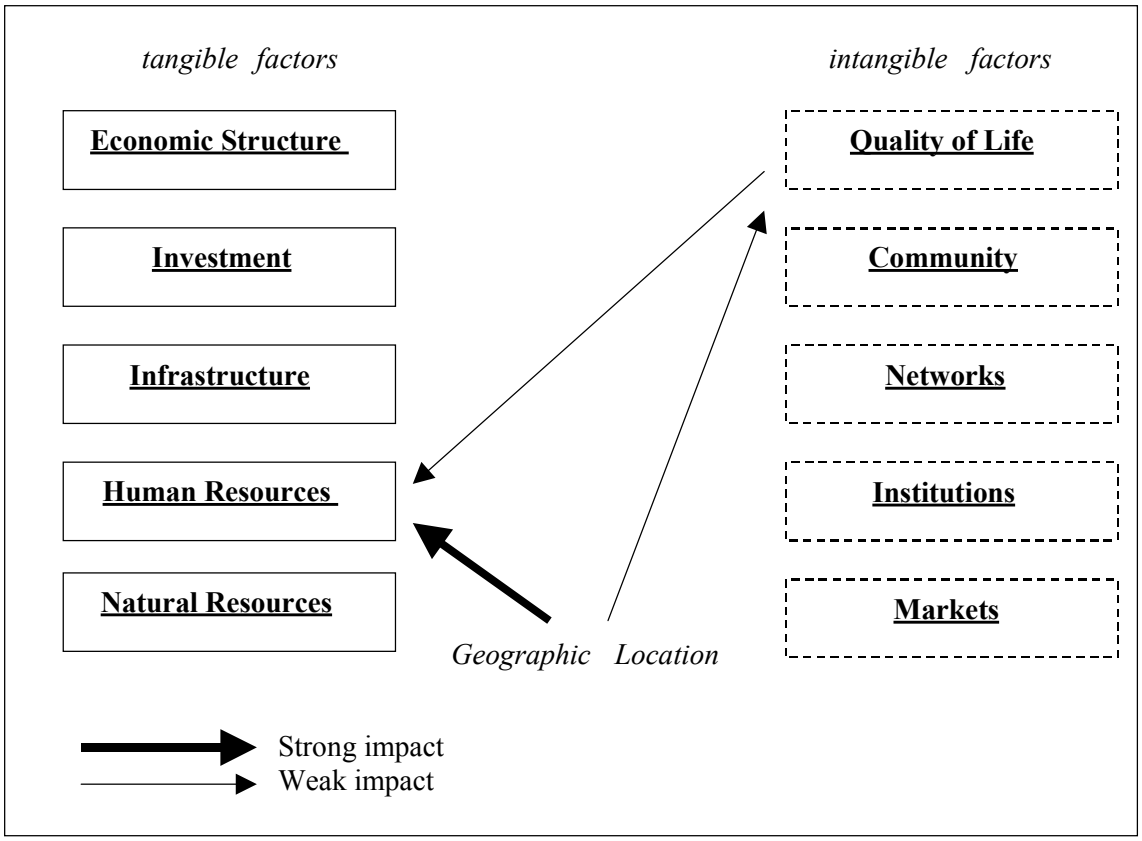
Compared to geographical location, "Infrastructure" and "Industrial Structure", and their impact on human capital, other explanatory factors take a back seat. The poor degree of local co-operation impedes local development to some extent. Furthermore, the poor accessibility of services ("Quality of Life") in the area fosters emigration.

Fig. 80: Contribution of factors to lagging economic performance in Uecker-Randow



Particularly the factor "Human resources is related to other explanatory factors (Figure 81). Poor access to services and the lack of commuting possibilities, both caused by the area's remoteness, trigger substantial emigration. This in turn brings about drastic deterioration in the human capital of the area, so that despite massive unemployment, entrepreneurs have difficulties filling vacancies.

Fig. 81: Interrelations between factors in Uecker-Randow



Chapter 5 Comparison, Synthesis and Research Implications

5.1 Regional Comparison

The set of explanations which were found to be most responsible for the 'leading' or 'lagging' performance of the study areas was almost identical within a region, but entirely different between the regions. In the Niedersachsen case studies, the 'less tangible' factors are clearly most important for explaining differential performance. The vibrancy of the local community, institutional co-operation, their cumulative reinforcement and their impact on 'tangibles' like human resources, infrastructure and labour market performance, are largely responsible for the divergent economic development of Emsland and Lüchow-Dannenberg.

Emsland exhibits a highly productive level of collaboration between local actors and institutions. This collaboration is partly based on the specific mentality, common values, and social capital in the area. These features prevent selfishness and distribution fights among the communities and lead to the efficient outcome of local decision-making processes. As a result, the local infrastructure is constantly being modernised and expanded, and conditions for further investment are improved.

In Lüchow-Dannenberg economic development is severely obstructed by various social frictions, in particular concerning the nuclear waste facilities in Gorleben. Both the population and the local actors network is divided into opposed ideological camps. This situation inhibits their ability to reach compromise and find common local development goals. As a result, funds have not been used efficiently, the area lacks access to interregional infrastructure, parochial thinking prevails between communities and policy-makers, and potential investors get a negative image of the area. This situation is further exacerbated by the emigration of young people, a negative slope in the level of investment incentives compared to neighbouring east German regions, and the sceptical attitude of parts of the population towards modernisation and industrialisation.

In the Mecklenburg-Vorpommern study areas, in contrast, the analysis resulted in greater weight to the 'tangible' factors. Geographical location, inter-regional transport infrastructure, the industrial structure, and the resulting impact on migration patterns and human capital have been the most decisive factors explaining the differential economic performance of the two areas.

Ludwigslust benefits from its favourable geographical and infrastructural settings. The area is located along the motorway A 24 and within easy reach from Hamburg

and Schwerin. This feature has been particularly attractive for west German investors who wanted to take advantage of east German investment incentives without loosing their closeness to markets, particularly Hamburg. Furthermore, good access to Hamburg and Schwerin relieved the local labour market by substantial outward commuting. The area has also profited from a fortunate industrial structure under socialist rule, which could adapt relatively smoothly to market conditions after German reunification. As a result, unemployment rates are relatively low by east German standards, and a loss of human capital through emigration could be prevented.

Uecker-Randow is in many ways the opposite of Ludwigslust. Located in the former hinterland of Stettin at the periphery of both Germany and the EU, and with only poor access to the motorway network, the area could hardly attract new investment after the reunification. Additionally, the economic structure at the time of the GDR, with most of employment being in the army or in manufacturing plants without reasonable location advantages, led to massive lay-offs in the 1990s. These pressures on the labour market and the lack of commuting possibilities fostered emigration, particularly of young people. It has proven difficult to break this vicious circle of economic and geographical marginality, with inevitable consequences for the deterioration of human resources.

While in the East German case studies in the last decade, tangibles proved more decisive for differential economic performance than the less tangibles, this does not necessarily apply for the future. In the long term, with improved access of Uecker-Randow to transport infrastructure and EU-enlargement, less tangibles such as institutional performance could experience growing importance for the economic development of the area.

Due to their completely different post-war histories, the two study regions chosen for Germany's contribution to the DORA project, Niedersachsen and Mecklenburg-Vorpommern, have been subject of different development processes. Even ten years after reunification, socio-economic conditions in both regions are still very contrasting. Accordingly, the variables which have been identified to explain differential performance between study areas in Niedersachsen and Mecklenburg-Vorpommern are strikingly distinct.

As a result of their opposed political systems in post-war history, Niedersachsen and Mecklenburg-Vorpommern have developed different economic characteristics: Niedersachsen has participated in the restructuring of the west German economy under market conditions and European integration. As a result, a mature and diversified regional economy evolved, with strongholds of manufacturing industries next to ru-

ral regions which have gradually industrialised. Mecklenburg-Vorpommern, being traditionally a rural and sparsely-populated area, has preserved its remoteness under a socialist mode of production. The main task of the region was to ensure the food supply of the GDR, and only a few pockets of manufacturing industry were located there (e.g. shipyards and food-processing).

After these economic characteristics, the social settings of the two regions are very different as well: In Niedersachsen, we find a more diverse mix of attitudes, lifestyles, beliefs and identities. In Mecklenburg-Vorpommern, mentalities, values and attitudes are quite similar, and religion is generally not relevant in daily life. Only the regional identity ('Mecklenburg' as opposed to 'Vorpommern') serves as a means of marking distinctiveness between the East German study areas.

5.2 Synthesis

Fitting the explanations for differential economic performance between study areas in Niedersachsen and Mecklenburg-Vorpommern into the ten-factor model, the most decisive factors are the same for the study areas within each region (Table 141). In both Emsland and Lüchow-Dannenberg, "Community", "Institutions", "Human Resources" and "Networks" proved to be the most decisive factors explaining differential economic performance. The factor "Infrastructure" has arguably been more important for Lüchow-Dannenberg (through a pronounced remoteness of the area during the Cold War) than for Emsland. Furthermore, the factor "Market performance" (in particular the labour market), which positively influenced development in Emsland, had only very limited impact in Lüchow-Dannenberg. On the whole however, it is striking how much the relative importance of explanatory factors overlaps between the two study areas.

Tab. 141: Importance of explanatory factors for differential economic performance between study areas in Niedersachsen*

Rank	Emsland	Lüchow-Dannenberg
1	Community (+)	Community (-)
2	Institutions (+)	Institutions (-)
3	Human Resources (+)	Infrastructure (-)
4	Networks (+)	Human Resources (-)
5	Infrastructure (+)	Networks (-)
6	Economic Structure (+)	Economic Structure (-)
7	Natural Resources (+)	Natural Resources (+)
8	Investments (+)	Investments (+/-)
9	Market performance (+)	Quality of Life (+/-)
10	Quality of Life (+)	Market performance (+/-)
* (+) = fostering economic development; (-) = constraining economic development		

Similarly, geographical location (not explicitly part of the ten-factor model), "Infrastructure", "Economic Structure" and "Human Resources" which fostered economic success in Ludwigslust were the decisive bottlenecks to development in Uecker-Randow at the same time (Table 142). Again, all factors are not necessarily as important in both study areas. The "Investment" factor was probably more responsible for economic success in Ludwigslust (through investment incentives along with favourable geographical location) than in Uecker-Randow (where investment incentives had little effect due to its geographical remoteness). Furthermore, "Quality of Life" has arguably been a more negative factor for Uecker-Randow than it has been a positive factor for Ludwigslust. Overall however, a remarkable overlap of explanatory factors exists between the east German case study areas as well.

In Mecklenburg-Vorpommern, a gradation of overall economic performance from the East of the region to the West, and from the more remote areas to the centres of economic activity, suggests a certain relevance of geography: Unemployment is lower in Mecklenburg (West) than in Vorpommern (East), and lower in the city regions around Schwerin, Rostock and Wismar than in the rural counties lacking cities of these sizes. The predominant commuting pattern is from the East to the West of the region, and from the remote areas into the city regions. Furthermore, areas which attract tourism due to their natural endowments, such as the lake district in the centre of Mecklenburg-Vorpommern and the coast line, have markedly less unemployment than other areas. However, further studies are necessary to explore this causality in more depth. Finally, only ten years after reunification, the economic history of

Mecklenburg-Vorpommern is too recent to allow full identification of the causes for successful or lagging performance in different areas.

Tab. 142: Importance of explanatory factors for differential economic performance between study areas in Mecklenburg-Vorpommern*

Rank	Ludwigslust	Uecker-Randow
	Geographical location (+)	*Geographical location (-)*
1	Infrastructure (+)	Infrastructure (-)
2	Economic Structure (+)	Economic Structure (-)
3	Human Resources (+)	Human Resources (-)
4	Investments (+)	Institutions (-)
5	Institutions (+)	Quality of Life (-)
6	Markets (+)	Community (-)
7	Quality of Life (+)	Markets (-)
8	Community (-)	Natural Resources (+)
9	Networks (-)	Networks (-)
10	Natural Resources (+)	Investments (+)
* (+) = fostering economic development; (-) = constraining economic development		

5.3 Research Implications

The aim of the DORA project has been to identify underlying causes for differential economic performance of rural areas with a case study approach. The advantage of such an approach lies clearly in the depth of the analysis, allowing for a detailed qualitative investigation of local peculiarities. However, the weakness of a case study approach is that results can not be generalised in any way.

While in both study regions, Niedersachsen and Mecklenburg-Vorpommern, it has been relatively easy to single out areas with contrasting economic performance when selecting the study areas, it proved difficult to avoid local peculiarities which can not be replicated in other areas. Emsland, for example, has profited from the "Emsland plan" funding scheme, while Lüchow-Dannenberg benefited from the "Zonenrandförderung" funding during the Cold War. Additionally, the decision in the late 1970s to locate nuclear waste facilities in the latter area had a decisive impact on its socio-economic development. However, most other areas in Niedersachsen would have exhibited local peculiarities, too. Also, in Mecklenburg-Vorpommern, charac-

teristics particular to the study areas could not completely be avoided. The geographical location, as a factor which decisively influenced the past economic performance, is very different in the two study areas. However, in any other area in Mecklenburg-Vorpommern, geography would also have exhibited a considerable impact, due to a regional East-West and core-periphery divide in economic terms.

In this context, our findings illustrate impressively how issues of economic development can be linked to particular places. The success of local development in the case studies depended to a large extent on the areas' individual development path, 'idiosyncratic' local settings, and to some extent, on historic events and chance. Future research could attempt to find matched pairs of case study areas in other regions, which show fewer local peculiarities which impact economic performance. The study regions Mecklenburg-Vorpommern and Niedersachsen proved to be a reasonable geographic scale providing similar political and historical backgrounds for comparison of counties as study areas. On the other hand, the two regions are too diverse in their socio-economic features and other contextual conditions to expect the same set of factors to explain differential performance between other areas of the regions.

Our work has shown that compared to other DORA teams' countries, there is quite an extensive statistical database available for analysis on a local and regional level in the German case. This applies in particular for data on demography and infrastructure. However, in certain fields the indicators of economic performance need to be improved. Most importantly, there is a need for better information about the amount of CAP and EU structural policy funding on the county level. Furthermore, there have been no external trade figures available on the county level. More detailed data on gross value added would also be helpful, in order to compare more accurately the productivity levels between areas.

The findings from the West German case study areas point towards the need for more in-depth analysis of social capital and its impact on local development. The question needs to be addressed whether a high degree of local social capital is the result of, or the cause for, successful economic development. Furthermore, the hierarchical structures in the local actor network and the low degree of civic engagement in Emsland despite an arguably very high degree of social capital, challenges some aspects of PUTNAM's (1993) findings. There is also a need to further develop ways to explore network structures and the quality of networks between decision makers.

Finally, the culture of decision making and the quality of negotiation processes among local actors and their impact on transaction costs require further research.

Decision making processes in Emsland, for example, proved to follow very distinct rules from decision making in Lüchow-Dannenberg. The causes for such different patterns of group behaviour need to be analysed in more detail (for example political situations, economic circumstances, mentality of the local actors or leadership structures).

In order to formulate more clear-cut hypotheses, there is a need for further investigation of the issues raised. The results of the German case studies could tempt one to pose the question of whether “Intangibles” are generally more relevant for differential economic performance between rural areas in „mature“ regional economies such as West Germany, and “Tangibles” more relevant in „developing“ regional contexts or regions in transition, such as East Germany. In order to test such a hypothesis, a larger number of study areas in different regional settings need to be analysed.

Chapter 6: Policy Implications

The policy implications to be taken from the experience of case studies at the German national level of the DORA project follow from the previously discussed results of the intra- and interregional comparisons. As DORA follows a case study approach with differing regional contexts, policy implications relating to the results of the analysis should take into account contextual differences between East and West German regions. However, the in-depth analysis of the case studies highlighted cause and effect chains of economic success or failure, which can help to optimise future regional policy design for rural areas and to set priorities for development measures.

To start with, we can review briefly recent conceptions of and priorities for rural development policy in the European Union (see EU Commission, 1997). In preparing its Agenda 2000, the Commission distinguished (in its Working Document CAP 2000 – Rural Developments) the following three essentials for a sound rural development policy:

1. **agriculture**: the aim to support ongoing development of a healthy agricultural sector and particularly to play an important, active role in complementing agricultural market policies with a diversification of farm activities;

2. **the environment and quality of life**: the aim to provide environmentally-attractive living, working and recreational spaces in rural areas and the production of quality products with a well-defined identity and traditional, cultural value;

3. **economic development and social cohesion**: the aim of maintaining or improving dynamic economic development to offset the effects of the internal market of the EU and of economic globalisation on the geographical distribution of economic activities.

The research questions and findings of the DORA project are predominantly linked to the third of these, because it aims to explore relevant factors and explain the relationships between tangible and less tangible factors in the differential economic performance of rural areas.

According to the third essential feature of rural development policy, the EU aims for rural areas, on the one hand, to mobilise their endogenous potential and, on the other, to attract external resources, with the intention of achieving sectoral diversification and job creation. Next to traditional production factors, the EU-Commission

report on Rural Development distinguishes the following as crucial factors for economic development and competitiveness: an adequate infrastructure (transport, access to information technology), education and training possibilities, proximity to services (administration, health facilities, banks), the capacity for innovation, the entrepreneurial climate, a sound legal structure, and effective institutions. These variables correlate quite closely with the explanatory factors of the DORA project.

Strikingly, the set of factors which were found to be most responsible for the 'leading' or 'lagging' performance of the study areas was almost identical within a region, but entirely different between the regions, that is, between East and West Germany. Overall, the main lesson of DORA research in the German case studies is that there is 'fertile' and 'infertile' soil for regional policy-funding to fall on. In this sense, the 'quality of soil' in the West German study areas appears to depend to a large degree on 'less tangibles', while in the East German study areas, ten years after German reunification, the 'tangible factors' seem to be most relevant. The economic and political differences resulting from the divergent historical development of East and West Germany after World War II have played a decisive role in the ranking of the most relevant factors for explaining differential performance of the study areas. Therefore, it appears reasonable to keep separate the policy implications for West Germany and East Germany.

6.1 Niedersachsen Policy Implications

In our matched pair of West German case studies the 'less tangible' factors, Community (1), Institutions (2) and Networks (3) evidently contain the most relevant explanation for differential economic performance. The high (low) degree of local identity, the pronounced (shattered) social capital in both the local actor network and the population, and the (lack of) motivation and initiative of local actors form an explanatory triangle for economic success (failure) in the case study areas. In other words, the different vibrancy of the local communities turned out to impact decisively on economic performance. Furthermore, the well-performing area appeared to have attracted more financial resources from regional support schemes in comparison to the less well-performing area.

Social conditions and vibrancy are not the only causal factors for the differential economic performance of the Niedersachsen study areas. Infrastructural conditions also help to explain differences between the two study areas. Lüchow-Dannenberg is clearly a very remote area in terms of interregional transport infrastructure. In Emsland, by contrast, interregional transport infrastructure is constantly upgraded. Ho-

wever, this 'tangible' factor has proved to depend very much on 'intangibles' in both study areas. The current construction of the much needed motorway-interface in Emsland is solely due to initiative and collaboration of local actors and institutions. The fact that people and local actors in Lüchow-Dannenberg still can not reach a compromise about whether any infrastructural improvement is desirable for the area is rooted in the prevailing social conditions in the area, such as the mentality, the heterogeneous power groups and the Gorleben conflict.

As concerns social capital, it is not yet clear whether this variable can be influenced by regional policy at all. The debate on the definition and role of social capital has become ever more popular in the social sciences and social policy since the introduction of the concept by Putnam and others in the early 1990s. One group of scientists fears that social solidarity and engagement in honorary appointments is decreasing, while others see a growing range of unused potential for co-operation in society. Social capital is not a value which can easily be accumulated. Instead, it is a side-effect of the social milieu or status of the local community, which favours measures of solidarity and social cohesion, and helps to avoid free-rider problems, hence reduces transaction costs in various ways. Its establishment is mainly based on confidence and trust between different social groups or individuals. One can distinguish three levels of social capital depending on the type of social relations (IMMERFALL 1999):

a) interpersonal relations, such as family, friends, neighbourhood (micro-level)

b) intermediate relations, for example via clubs and societies, political parties (meso-level)

c) the total society, for example in a region, state or nation (macro-level)

For an understanding of the divergent economic performance of the two West German study areas, the structure of social capital at these different levels are particularly relevant:

– In the 'leading' case study area, Emsland, the local population features strong neighbourhood networks and large family size (micro-level). Furthermore, the population is united by uniform values, beliefs, attitudes and a pronounced local identity (macro-level). Based on this 'foundation', the population backs the decisions and actions of 'their' local actors, and institutions, and entrepreneurs and community leaders are generally pulling in the same direction. The local actor network is structured hierarchically, and composed of 'weak ties' (see 3.2.2.), which can easily be activated by each local actor. As a result, these social settings initiate cumulative growth-effects and decisively foster local deve-

lopment by attracting external investments and stimulating an efficient use of regional policy funds.

– In the 'lagging' case study area, Lüchow-Dannenberg, in contrast, cohesion at the micro-level is arguably lower than in Emsland. This argument relies on smaller family size, weaker neighbourhood relations, and the greater heterogeneity of the local population. Furthermore, the struggle over the nuclear waste facilities in Gorleben was reported to disturb social capital even on the micro-level. Similarly, social capital at the macro-level is weak in Lüchow-Dannenberg, compared to Emsland. Instead, there appears to be a high amount of social capital on the meso-level, within opposed ideological camps. The local actor network is relatively dense, however, being clearly segmented along ideological lines, depending on the actors' attitudes towards nuclear energy. There is considerable antagonism between local policy-makers, the mentality and local identities are heterogeneous, and the population lacks common attitudes and values. These circumstances inhibit compromise on common development goals and co-ordinated actions by local decision-makers.

The different social conditions in the two counties are basically caused by their deep-rooted social and historical peculiarities (see 3.2.1.). Therefore, the resulting implications for policy-making on the state, federal or EU levels are arguably very limited. It appears difficult to establish social capital and social coherence 'by public order'. Initiatives (for example LEADER+ projects) with the intention of stimulating local collaboration (for example, solidarity networks, neighbourhood service centres, civil service shops, a moderating process etc.) could prove helpful for areas with shattered social capital such as Lüchow-Dannenberg. However, the prospects of such initiatives should not be overestimated, since it is not clear whether 'artificial measures' like a moderation process could exert a similar influence on human behaviour as history, tradition or religion. Instead, the analysis of the Emsland 'success story' leads us to conclude that the unique social conditions in this area have to be seen as a given, specific to this place, which can not easily be duplicated in other areas.

What does seem necessary in Lüchow-Dannenberg, however, is a different approach to the deep-rooted Gorleben conflict. The future economic development of the area will decisively depend on the ability of the local population and decision makers to find a more relaxed and pragmatic way of dealing with each other. The deconstruction of ideological barriers as a base of common action and a more realistic discussion of the Gorleben issue with a view to its economic impact would contribute substantially to set economic development on track.

Overall, the lesson of the analysis of the West German study areas is that in 'mature' rural areas, the success of regional policy can depend very much on locally prevailing social conditions, on the vibrancy of the local community and on collaboration between decision-makers. The analysis further indicated that these variables appear to be difficult to influence from the political level.

6.2 Mecklenburg-Vorpommern Policy Implications

From our findings based on the comparison of case studies in East Germany we conclude that here the 'tangible' factors Transport Infrastructure (in connection with geographical location), Economic Structure and Human Resources, in that order, are the main contributors to explaining differences in economic performance. In comparison to these factors, the less tangible factors (i.e. Community, Networks etc.) have played a minor role for the divergent development of the two case study areas.

In the 'leading' case study area Ludwigslust, good access to Hamburg, caused by both infrastructural and geographical conditions, has been mainly responsible for heavy investment by West German parent companies and for the low unemployment rates in the post-socialist period. Furthermore, a favourable industrial structure in the socialist period smoothed the adaptation of the local economy to market conditions. In turn, these circumstances prevented the loss of human capital, which today represents a further locational advantage of the area. Therefore, one might ask whether Ludwigslust requires the same amount of regional policy assistance as other, more disadvantaged east German areas in the medium and long term, given the objective of regional equality of living conditions.

However, it needs to be stressed that even in Ludwigslust, the economic situation is not entirely satisfactory: The processing plants of West German parent companies do not have a high locational safety and could, under different political or economic circumstances, be relocated. Furthermore, these plants are generally not very skill-intensive and, apart from the mere income effect, induce little secondary effects into the area, such as economies of scope or an upgrading of human capital. Finally, some commuters from Ludwigslust who work in nearby Hamburg or Schwerin today could decide to move closer to their jobs in the long term. It follows that the industrial structure should be diversified and local supply-chains should be established in order to better integrate production plants of foreign parent companies into the regional economy.

In the 'lagging' case study area Uecker-Randow, its pronounced geographical and infrastructural remoteness has proved to exert a stronger impact on economic performance than expected when the county was chosen as a study area. Even the high investment incentives could not convince investors to locate in an area so remote from markets and supplies. Additionally, the unfavourable economic structure in the area, with an oversized public sector and badly-located metal-processing industry, proved to be a difficult legacy of the GDR. The resulting massive unemployment, emigration of the productive segments of the labour force, low morale and low human capital in Uecker-Randow are today negative location factors in their own right.

The lesson from Uecker-Randow therefore is that in post-socialist rural areas economic decline in the transition to production under market conditions can depend very much on tangible factors like infrastructure and economic structure. This opens the possibility for successful regional policy at the state-, federal- or EU levels. The urgent need to support depressed rural areas like Uecker-Randow is also underlined by the vicious circles of unemployment, emigration and economic decline, in which the area is increasingly trapped. Statements of interviewees like *"We can be happy if we retain the current stagnation"* and *"Regional policy has shipwrecked in Uecker-Randow"* indicate how pessimistic local actors in this area perceive their future prospects.

For Uecker-Randow one may therefore conclude that economic development under such depressed economic conditions requires further support measures from regional policy and could best be supported by improving the conditions of 'tangible' factors, like upgrading of transport infrastructure and human capital, and diversification of the economic structure. Firstly, access to interregional transport infrastructure appears to be a much-needed improvement. The current construction of the A 20 motorway along the Mecklenburg-Vorpommern coastline to the Baltic Sea, will certainly help to improve the accessibility of the area. However, further improvements of the road and rail network are necessary to help Uecker-Randow overcome the considerable distance to markets and supplies.

Secondly, Uecker-Randow would benefit from a more pronounced gradation of funding categories. The whole state of Mecklenburg-Vorpommern is subject to national investment support schemes by 'GRW' funding. Most Western counties and the cities are in the 'normal' funding category, while the Eastern counties, including Uecker-Randow, are in the 'special' funding category, allowing for particularly high investment incentives. However, Uecker-Randow can not compete with the other areas inside the 'special' funding category when trying to attract investments, because of its particular remoteness. A more fine-tuned splitting of funding categories and

levels of subsidies could possibly stimulate growth in Uecker-Randow more effectively, without completely eliminating market forces and efficient resource allocation.

Apart from regional policy, the eastward enlargement of the EU could change the prospects of Uecker-Randow substantially. At first glance, the envisaged entry of Poland into the EU would have two positive effects on Uecker-Randow: Firstly, the area would lose its status as an external EU border region, and secondly, it would regain access to its former centre, the city of Stettin. However, local actors fear hazardous impacts of the EU-enlargement on Uecker-Randow, too: Already today there is a certain amount of commuting Polish construction workers in Uecker-Randow. This comes about through the combination of high wage differential between Poland and Germany, and relatively high social benefits for unemployed in Germany. The effect on the labour market in Uecker-Randow is a rise in unemployment in the construction sector which is in deep recession anyway. Therefore, many people in Uecker-Randow are not too enthusiastic about the increased mobility of labour created by EU-enlargement. Furthermore, interviewees reported a drain of purchasing power to Stettin, where large supermarkets opened recently, which attract consumers from Uecker-Randow with low-priced goods.

Taking a macroeconomic perspective, it is questionable whether Uecker-Randow can reap comparative advantages vis-à-vis Poland in the future. Theory suggests that the new accessing East European countries like Poland would have comparative advantages in labour intensive, and low- and medium skill intensive production, whereas countries like Germany should realise comparative advantages in capital and skill intensive production. While in general this might in fact become the overall division of labour between Germany and Poland in the medium term, this pattern does not necessarily apply for each region along the border between the two countries. Uecker-Randow, for example, lacks skill-intensive production and instead has strongholds of medium skill and labour intensive production like food processing, construction and agriculture. Therefore, for Uecker-Randow the competitive pressure from neighbouring Polish regions could in fact outweigh the advantages of open borders after the first stage of EU enlargement. Hence, the continuation of EU community initiatives for border regions of member states, such as INTERREG, in combination with objective 1 measures, appears particularly important for marginal East German areas, such as Uecker-Randow.

The East German case studies indicate that a higher level of social capital and institutional co-operation at the local level may also contribute to the improvement of economic performance and increase the efficiency of public funding for rural development. However, the ‘tangible’ factors appear to require priority in the program-

ming of regional policy schemes for the analysed East German study areas. In particular, the transport infrastructure needs to be improved to counterbalance the geographical marginality of remote rural areas like Uecker-Randow.

Finally, it needs to be stressed that economic conditions in East Germany since the reunification in 1990 have been very specific, with fast adoption of West German institutions and legal frameworks, massive transfers from West Germany, quick monetary Union under the D-Mark, hence a sudden rise in wage costs, and the collapse of East European markets in the early 1990s. These idiosyncratic conditions are hardly to be found or replicated elsewhere. Therefore, the above mentioned conclusions should not be assigned for policy implications regarding the accession of Central and East European countries to the European Union.

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Glossary of Abbreviations

ABM	'Arbeitsbeschaffungsmaßnahme' (employment scheme)
CDU	'Christlich-Demokratische Union Deutschlands' (Christian Democrats)
D	Germany
def.	defense
DEM	D-Mark
DORA	Dynamics of Rural Areas
E	Spain
FDP	'Freie Demokratische Partei Deutschlands' (Liberal Party)
FRG	Federal Republic of Germany
GAK	'Gemeinschaftsaufgabe zur Verbesserung der Agrarstrukturen und des Küstenschutzes'
GDR	German Democratic Republic
GDP	Gross domestic product
Gr	Greece
GRW	'Gemeinschaftsaufgabe zur Verbesserung der regionalen Wirtschaftsstruktur'
GVA	Gross value added
GVZ	'Güterverkehrszentrum' (loading station with rail-road interchange)
ha	hectar
ind.	industry
Inh.	Inhabitants
mach.	machinery
MDEM	Million D-Mark
MECU	Million ECU
mfg.	Manufacturing
n.a.	Not available
non prof. org.	Non-profit organisations
P	Portugal
PDS	'Partei des Demokratischen Sozialismus' (Socialist party, formerly SED)
R&D	Research and Development
SED	'Sozialistische Einheitspartei Deutschlands' (socialist party governing the GDR)
SME	Small and medium sized enterprises
SPD	'Sozialdemokratische Partei Deutschlands' (Social Democrats)
UWG	'Unabhängige Wählergemeinschaft' (independent voting union)
WW II	Second World War