The Restructuring of the Furniture Industry in the New Europe and Regional Development of the German-Polish Border Area

Research Project

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ABSTRACT: The paper examines the restructuring and internationalization of the furniture industry in Italy, Denmark, Germany, and Poland empirically using mainly secondary sources. The national industries are compared, applying an approach that combines elements from regulation theory with recent insights from regional development theories focussing on networks, learning and untraded interdependencies. Trends of spatial and organizational change in the sector are identified and used to characterize the development of the sector in the German-Polish border area. In Poland and East-Germany national transformation policies and strategies of large firms yielded quite different results for economic development and spatial integration. For firms in the border area this added to the fragmentation of the industry caused by barriers that hinder cross border exchange. Differences between firms on both sides with respect to production structure, spatial integration and cooperation with other institutions are explored through a survey and conclusions for policies to strengthen economic integration in the border area are presented.

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1. Introduction

The regional integration of border areas ranges high as an objective of subnational, national and European policies. This is also valid for the area along the German-Polish border, where regions touch that have undergone, like their whole national territory, a transformation from a state socialist system to a market economy. Transformation in Poland and Germany, however, followed quite different paths and yielded very different results. Since the mid-seventies, Western market economies also have and still are undergoing a fundamental restructuring process, moving from relatively stable fordist regulation systems with secure employment, continued growth and high welfare spending into after-fordist systems, in which none of these chararcteristics are guaranteed anymore. Manufacturing is being reorganized in that process, too, fundamentally changing the fate of regional economies. Production runs become shorter, there is a trend towards higher differentiation and quality, manufacturing systems become more flexible, and organizational forms within and between firms change, roles of large and small firms are redefined. Many large multinational firms invest in transformation economies and thereby become more internationalized, but there is also a renewed interest and hope for development potentials created by small and medium sized firms and networking approaches.

To investigate the effects of these trends on the German-Polish border area and discuss development strategies, the furniture sector was chosen for a case study. This industry was and still is an important sector in the border area and exports from Poland into Western markets are expanding rapidly. Large German firms are involved in this boom, having invested considerable amounts into aquisitions and greenfield investment in Poland. The German furniture industry is restructuring rapidly in the face of new competition from the East, changing its organizational forms and spatial linkages. This new competition from the East adds to the competition from West European industries, in particular from Italy and Denmark, which are major competitors. Since the mid seventies, the furniture industries of these two countries have been very successful in the European furniture markets. Some evidence will be presented that lends support to the hypothesis that this success is related to their specific organizational and spatial structure. An important question then is: What are the prospects of the furniture industry in the border area in this process of restructuring and internationalization? To answer this question, an approach is used that applies regulation theory in a regional context.

Regulation theory, although first developed by authors such as Aglietta (1979), Boyer (1990) and Leborgne & Lipietz (1991) mainly for explaining changes and differences in the economic, social and political systems at the level of national states, has recently been applied to regional development as well e.g. Peck & Tickel (1994), DiGiovanna (1996), Krätke *et al.* (1997).

Combining a regulationist approach with regional development concepts, Smith (1995) analyzes the specific conditions for regional restructuring in post-socialist countries. Briefly, regulation theory holds that different periods of capitalist development can be discerned (like the fordist period and an emerging post-fordist model) and chararacterized by their regime of accumulation, their mode of social regulation and instititutional forms. Regimes of accumulation are meant to describe a relatively stable pattern of growth. These regimes are dependent on the regulation by institutional forms that are the result of compromises between various societal groups (like capital and labour) who manage to balance their conflicting interests in these institutional forms.

Institutional forms are central to the functioning of accumulation regimes since within or through these institutional forms economic and social interaction between economic agents is regulated in a (at least temporarily) stable pattern. The relevance of institutional forms and social interaction has also been stressed in much recent literature on regional development, as reviewed by Storper (1995), Asheim & Dunford (1997) and Morgan (1997). Although there is no agreement on what the single most important ingredient for dynamic regional development is, most authors do agree that proximity matters, in a geographical, social and cultural sense, even in a globalizing economy, and that socially created 'competitive' advantages of regions are now more decisive than 'comparative' advantages (e.g. cost of raw materials and labour). Different authors stress different aspects of the economic and social environment. For the continuous innovation required in post-fordism, Lundvall (1992) points to the importance of *knowledge and learning*, much of the knowledge being tacit in character and 'embodied' in employees. Storper (1995, p. 205) locates the basic advantage of dynamic regions in *untraded interdependencies* including

'... labour markets, public institutions, and locally - or nationally - derived rules of actions, customs, understandings, and values.'

Grabher and Stark (1997) view localities from an evolutionary perspective and emphasize the role of *loosely coupled networks* and of *organizational diversity* as effective means of securing long-term adaptability of economic systems.

In cross border regions, where spaces touch that are subject to different national/regional regulatory systems, economic exchange is additionally hampered by obstacles specific to border regions. Such obstacles that influence economic exchange across borders in general are ordered by van Greenhuizen *et al.* (1996) into four major groups: *transport* barriers, *technological* barriers (e.g. different standards), *socio-cultural* barriers (e.g. language, different organizational cultures, distorted perceptions about people on the other side), and *economic-institutional* barriers (e.g. differences in national regulatory systems (law, economy, environmental protection). All these barriers exist between the Polish and the German border region and each one of these barriers is especially pronounced under the present political, economic, historic and socio-cultural conditions.

But since border areas are not only areas of separation but also of contact, economic agents could profit as well from effects of proximity, turning the socio-cultural differences into advantages. For example knowledge about market conditions on the other side could be better than in the rest of the respective country, giving firms a locational advantage. Similarly economic-institutional differences could be exploited by firms by establishing plants with different locational requirements (e.g. qualifications of the labour force) on either side of the border thereby increasing their flexibility. The overall effect for the whole transborder region can be negative, zero or postive (Ratti, 1994).

The concepts of regulation used in this study are national/regional in their orientation and not specifically adapted to the case of border regions. A theoretical integration of the approaches to cross border regional development, regulation and industrial agglomeration as proposed by Sum (1997) is beyond the scope of this paper. It is rather attempted to investigate how a *particular industry* is organized and agglomerated in space, thereby making a step towards remedying the lack of such studies observed by Maskell & Malmberg (1997) to compare the changing spatial and organizational structure and performance of different 'national' industries, and to relate these trends to the regional growth potential of Polish and German firms of that specific industry in the border area.

The paper is organized into five main parts. In the following (second) part recent large shifts in European trade flows of furniture are described, mainly as concerns Germany, Poland, Italy and Denmark. Based on existing research these shifts are related to the organizational and spatial structure of the furniture industries in these countries. Small and medium sized firms clustered in industrial districts dominate the furniture industry in Italy (of course) and Denmark. These districts are compared, related to the German industry and some comments are made about the Polish furniture industry, where (somewhat unexpected) district-like organizational forms exist, too. The third part focusses on the specifics of the transformation process in Poland and East-Germany: It takes the legacies of the socialist systems into account and aims at identifying the effects that the very different approaches to privatization in Poland and Germany, and the strategies of large multinational firms had on regional development in those countries. The fourth part traces the outcome of the different privatization policies and internationalization in the German and Polish part of the border area and presents summarized results of a survey, in which we made an attempt to assess the prospects for a modernization of the furniture industry in the border area. Finally, in the fifth part, conclusions are drawn for economic development policy in the border region.

2. Furniture as cultural products, flexible specialization, organizational and spatial change in Europe

The furniture industry produces a wide range of highly differentiated products, distinguished by use value and quality, by style or fashion, and therefore by time and place. Tables, arm chairs, and kitchen cabinets are manufactured in different qualities, in various styles such as Bauhaus, baroque or country style, in 'Scandinavian' or Italian design. Recently Scott (1997, p. 324) included furniture in what he very broadly defines as *cultural products*, which are products that

'... function at least in part as personal ornaments, modes of social display, aestheticized objects, forms of entertainment and distraction, or sources of information and self-awareness'.

From this view the furniture industry is not at all a traditional sector being under the threat of losing its importance in western industrialized countries as usually assumed, but part of a wider array of products and services that are continuously gaining in economic significance (Lash & Urry 1994).

Whereas similar trends can be discerned in Western countries when analyzing the development of product characteristics and production technologies, organizational forms (firm sizes, forms of cooperation, degree of integration, relationships with suppliers) of national furniture industries vary considerably. One the one hand, there are regions in Italy where very successful clusters of small firms are concentrated, on the other hand there are large transnational corporations that continue to integrate vertically and horizontally. These opposite organizational forms can be connected to diverse effects for regional host economies, simply said: endogenous development and regional cooperation vs. external control and spatial division of labour. What are major trends in the organizational forms and spatial structure of the European furniture industries, is there a trend towards internationalization or regionalization, or a mixture of both tendencies, and how successful are different 'national' industries in international competition?

To start with the latter question, that can be answered with a short look at some data from trade statistics and secondary sources: Until the beginning of the seventies, Western Germany had been by far the largest exporter of wooden furniture, long exporting twice as much as Italy, the major rival. But beginning around 1975 the Italian share in world exports started to increase and surpassed the German share around 1980, reaching 20.1% in 1993 (cf. UN, 1995; Best, 1989). The German furniture industry increased its share temporarily around 1990 due to the boom triggered by German reunification, but then the share dropped again and fell to 13.8%. The third largest exporter at that time was Denmark, which also increased its share of exports, beginning in the early eighties, reaching 10.9% in 1993. Dramatic changes are now underway concerning trade between West European and Central East European countries, particularly as concerns trade between Poland and Germany. In 1989 Polish exports of furniture into Germany only made up 3.9% of the total German furniture imports compared to 27.1% from Italy and 13.4% from Denmark (Ollmann, 1992). Recent

figures show that Polish exports of furniture now amount to 1.25 Billion DM, which is more than one third of Italian exports (3.15 Billion DM) and almost equals Danish exports (1.30 Billion DM) into Germany. Further, if not value of exports but quantities of goods would be compared, Poland would probably surpass even Italy, according to experts' estimate.[1] This however indicates that mostly comparatively low value, standardized goods are imported from Poland.

These data have to be interpreted with the reservation that they tell nothing about the importance of multinationals and large international trading groups in the furniture industry. This industry is 'buyer-driven' (as opposed to 'producer-driven') which indicates that the decisive knowledge and power now (probably) shifts increasingly to large companies that specialize in distribution, as opposed to those companies that perform manufacturing (Gereffi 1996). Some remarks about the large furniture companies based in Germany will be made later. Little is known in the literature about the organizational and locational structure or input-output relationships of international furniture retailers like IKEA.

To answer the question on the interdependence of spatial and organizational structure in the furniture industries of Italy, Denmark, Germany and Poland, four categories for the comparison of the organization in the furniture industries of various countries or regions were defined. The regulationist perspective was, as outlined earlier, combined with approaches to regional development and innovation, leading to the following four basic categories:

- *Forms of cooperation between enterprises* because under conditions of increased uncertainty, instability and accelerating innovation, knowledge and information become decisive factors, making networking and cooperation superior to hierarchical or purely competitive forms of coordination (Powell 1990).
- *Industrial relations* to describe the degree of involvement and motivation of employees that is necessary for flexible and high quality production.
- *Public policies* to characterize the role that institutions supporting the industry play, in particular in fields such as technology transfer and training.
- *Socio-cultural milieu*, which is important for the creation of social consensus and cooperative attitudes from the firm to the regional level and influences the institutional setting.

No claim is made that these are the only possible categories for a comparison, nor can all categories be fully described for all regions or countries from a literature analysis, but interdependencies of organizational and spatial factors and major differences between countries and regions can be revealed with this approach.

Italy

For Italy Sforzi (1990) presented an analysis of its spatial and industrial structure aimed at identifying industrial districts that fit Marshall's description. Sforzi found 61 industrial districts, out of which 12, located mainly in Veneto, Emilia-Romagna, and Lombardy, are specialized in furniture. Compared to a total employment of 196,000 in Italian furniture industry as a whole in 1981, employment in these 12 specialized furniture districts was 32,000 and additional 23,000 employees were found in other industrial districts.

An important instrument to coordinate activities of firms in the Italian furniture industry, as in other industries, is the *consorzio* (Best, 1989). A consorzio provides services especially in marketing and finance to its members and is accountable to them, receiving its financial means from these members and by public grants and loans. The structure of consorzios has to comply with a fixed legal framework. In 1970 there were 48,000 consorzios, by 1979 the number had increased to 79,000.

Industrial relations in the Italian furniture industry are strongly influenced by the fact that the industry is dominated by small firms. In 1981 over 86% of firms had less than 10 employees, the average firm size was only 5.8 employees. It is reasonable to assume, therefore, that many of these firms are family owned and employment relations are very often not formalized. Part-time employment is also widespread in Italian furniture industry (ILO, 1991). High flexibility of labour relations, therefore, brings with it little (formal) social security.

Public policies from the local to the state level support small and medium enterprises (SMEs) in a number of ways (Bianchini, 1991). There is support for the consorzios on all spatial levels, benefitting mainly the SMEs. Local authorities have far reaching rights in the provision of land for SMEs, and in areas influenced by the political left, social services that indirectly favour work participation are widespread. Some regions have supported the establishment of service centers for all industrial sectors, but in some regions there are service centers working exclusively for the furniture industry. On the national level there are a number of regulations that support SMEs including tax breaks, subsidized health and pension regulations and a special credit fund.

The socio-cultural milieu and historical conditions are supportive to the construction of cooperative organizational forms in Italian industry. Bianchini (1991) points to the following four factors: (1) The regions where industrial districts developed have never been subject to large land owners, most farmers were independent and developed managerial capabilities. (2) There has been a long standing industrial and marketing culture in those regions and already centuries ago regional products reached distant markets. (3) Many localities in industrial districts have a long tradition in craft and design skills, and have technical schools for transmitting technical knowledge. (4)

Political factors contribute to shared perceptions and values, such as the common resistance against fascism that eased the collaboration of conservative and left forces on the local level.

Denmark

The Danish furniture industry managed to increase its share in the world market in the last decade. And, as Kristensen (1992) and Maskell (1998) show, this relates to the organizational and spatial structure of the Danish furniture industry. Large parts of the Danish furniture industry are now concentrated in industrial districts in West Jutland, mainly in the counties of Viborg, Ringkobing, and Ribe. These concentrations are the result of a massive spatial restructuring in favour of formerly rather under-industrialized areas. In 1982 the three above mentioned counties already accounted for 38% of total employment in the national furniture industry (Kristensen, 1992).

Forms of cooperation in the Danish furniture industry seem less dependent on formal organizations (e.g. consorzios) than in Italy. It appears that forms of cooperation are manifold, develop out of long-lasting trust relations in a 'negotiated economy' and are rarely formally agreed upon (Maskell, 1996a, b). One indication supporting this view is that Danish furniture firms only in rare cases possess specific property rights (patents, trade marks, protected design) to safeguard the use of their knowledge by themselves only. In addition surveys show that customer supplier relationships are remarkably stable and contain many elements of cooperation, e.g. 82% of furniture supplier firms cooperate with their customers in developing new products, including sometimes temporary exchange of personal, machinery, sharing of technological knowledge or coordinated investment in new production facilities. One other typical feature is to be seen in a reluctance to specify such coordination in formal, written contracts. Less than half of the firms engaged in customer supplier cooperations had any form of written contract, indicating that economic coordination is characterized by norms of reciprocity.

Industrial relations in Denmark are strongly influenced by trade unions, which represent about 80% of workers in the furniture industry on average and a somewhat smaller percentage in industrial districts (Kristensen, 1992). Firm size in the furniture industry has hardly changed in the last decades and is on average about 39 full-time employees nation-wide, but probably smaller in the industrial districts, as many of those firms are family owned SMEs (Maskell, 1998). Employees in districts are guarded by nation-wide regulations on on SMEs on one side (see below), while close social ties help to avoid opportunistic behaviour on the part of workers or employers on the other side. The higher appreciation of good quality work and social consensus found in industrial districts as compared to other regions, is illustrated by aspects of wage setting bevhaviour in industrial districts. Wage differentials, e.g. between skilled and unskilled workers or blue and white collar workers, are comparatively low in industrial districts. And, when nation-wide the government and

the employers associations tried to restrict wage increases in the early eighties, employers in Viborg county restructured the wage setting system, in order to raise wages much higher than the intended national limit (Kristensen, 1992).

Public policy in Denmark significantly changed in the mid-seventies and started to favour SMEs in relation to large enterprises. New programmes to support SMEs and new firm foundations with financial and technical assistance were introduced and technology centers opened in every county. In addition to the highly developed vocational and technical training system, very often adapted to local needs, these new regulations fostered the development of small firms (ibid.). In the nineties the national government launched an extensive 'network programme' to encourage cooperation of SMEs, in which thousands of firms, as well as large segments of the producer service sector, such as accountants, banks and investment agencies took part (Huggins, 1996).

As in the case of Italy, socio-cultural and historical factors seem to have supported the growth of an industrial culture in West Jutland (Kristensen, 1992). Independent farmers have long existed there with a long standing tradition of cooperative organization. Traditions of craft work and self-employment are stronger than in other regions of Denmark.

Germany

As in Italy and Denmark, the furniture (wood manufacturing) industry in Germany is highly agglomerated (Table 1) in certain regions.[2] The single most important (NUTS 2) region is Detmold (North-Rhine Westphalia), where 16.9% of the total employment in the wood manufacturing industry is concentrated. This is a higher share than the next two regions, Stuttgart (Baden-Wuerttemberg) and Oberfranken (Bavaria), account for if taken together. The region of Detmold, an important center of furniture producers since the turn of the century and clearly the dominating agglomeration of that industry in West-Germany since 1945 (Hobohm, 1967; Krätke *et al.*, 1997), also exemplifies the possible long lasting stability of regional specialization that is founded on interactive learning processes creating regional capabilities that are transferable over time but not over space (Malmberg & Maskell, 1997).

A comparative study of national furniture industries showed that the particular advantages of the German furniture industry as a whole are primarily rooted in close collaborative links between those industries and related sectors (e.g. woodworking machinery industry, tooling and tool-maintenance industry, subcontractors), in well specified and continuously improved methods of qualification and training (ILO, 1991).

Apparent differences between the Italian or Danish and the German furniture industry are different dominating strategies and structures of economic coordination. Whereas the Italian and Danish furniture industries are mainly dominated by very small and medium sized specialized firms

that engage in the production of high quality, well designed products and are organized in dense networks, the German furniture industry is increasingly dominated by large, integrated industrial groups (IBBH, 1996; Krippendorf & Pfäfflin, 1996). The three largest ones (Schieder, Welle, Steinhoff) now account for a share of 10% of total turnover of the German furniture industry, which is low compared to other industries, but high for an industry with many medium sized firms. In contrast to the mainly medium sized firms, the large firms continue to realize a growing turnover, as exemplified by the Schieder group, which is now the largest furniture manufacturer in Europe. Schieder employs a workforce of 8,900 employees in total, out of which 5,600 persons are employed in Poland, 2,600 in Germany, and 700 in other West European countries.

Table 1: *Regional distribution of wood manufacturing in Germany 1994*

(10 most important regions)

Region (NUTS 2)[1]	no. of plants	no. of employees	average plant size	share of national employment
Detmold	302	38613	128	16.9
Stuttgart	163	16523	101	7.2
Oberfranken	141	14698	104	6.4
Münster	107	12059	113	5.3
Mittelfranken	91	8313	91	3.6
Weser-Ems	76	7751	102	3.4
Freiburg	83	7706	93	3.4
Karlsruhe	103	7690	75	3.4
Tübingen	82	7656	93	3.3
Oberbayern	72	7626	106	3.3
Germany	*2639*	*228942*	*87*	*100.0*

Note: 1. Nomenclature of statistical territorial units of the European Union.
Source: Gemeinsame Statistik der Länder und des Bundes (1996), World Wide Web, http://pns.brandenburg.de/statreg

Apart from these three very large enterprise groups, the German furniture firms appear to be in general higher vertically integrated and therefore less flexible and specialized than Italian or Danish firms. On average, German plants have 87 employees (Tab. 1), which is more than twice the average size of Danish firms, not to speak of the extremely small Italian firms[3]. It seems that in most subbranches the German furniture industry is still oriented towards high output levels, which allow little flexibility (ILO, 1991). Furthermore, and in contradiction to much literature about industrial districts, in which they are described as agglomerations of small firms, and in contrast to districts in Italy or Denmark, the average plant size in the German furniture districts listed is much *higher* than the national average. In fact, in the most important district, the region of Detmold, firm size is higher on average than in any other region. In the German industry, therefore, vertical

integration seems to be higher than in the furniture industries of major western competitors, and specialization, flexibility of production and networking not as well developed.[4]

Poland

Large German furniture firms have invested heavily in former socialist countries in recent years and have changed locational and organizational structures fundamentally. The largest German industrial group, Schieder, invested in the largest Polish combine of the furniture sector (IBBH, 1995), and it is reasonable to assume that hierarchical locational patterns of former socialist enterprises in Poland are thereby reinforced and become even more pronounced, since high level functions of the group are now performed outside of the country. The Polish furniture industry was, however, not organized completely by vertically integrated combines. There are at least two regions that rather fit into the model of industrial districts. The smaller one of those clusters of furniture firms is located in the town of Kalwaria Zebrzydowska near Cracow, the larger one in Swarzedz, east of Poznan (Stryjakiewicz, 1995).

Kalwaria Zebrzydowska is a small town with about 4,000 inhabitants and some 500 mostly family owned small firms. Swarzedz is a town of 20,000 inhabitants and location for 1,700 small furniture firms, in addition to two plants of large state owned enterprises that employ about 1,300 workers (Bilinski, 1996). Both clusters show traits similar to Western industrial districts. The firms are small and highly specialized, some activities (e.g. training, marketing) are organized collectively, the socio-cultural milieu is characterized by long established informal relationships, products are of high quality and produced in small batches according to clients' specifications, employees are qualified and flexible to perform different tasks. The network of supporting institutions is however not well developed, and it appears that the small firms produce furniture only in traditional design and are mainly oriented towards national markets, which could hardly be different under those historical circumstances. Whether these 'districts' will prosper or decline under market competition is then an open question.

3. The transformation of the furniture industry in East-Germany and Poland

Transformation in East-Germany: 'non-creative' destruction plus subsidization

The restructuring that followed the German unification led to an extremely unequal development of the wood manufacturing sector in the eastern and western part of Germany, concerning the location of workplaces and the distribution of turnover. East-German firms are now disadvantaged by their (under prevailing conditions) small average firm size and still only reach productivity levels (measured roughly by turnover per employee) far below West-German values (Tab. 2).

Table 2: *Development of wood manufacturing industry in Germany*

	West-Germany			East-Germany		
	Plants	Employees[1]	Turnover[2]	Plants	Employees[1]	Turnover[2]
1989	2286	200	34723	-	-	-
1990[4]	2299	207	38126	428	62	3092
1991	2310	216	43104	553	48	2190
1992	2319	218	45364	482	29	2256
1993	2282	209	44846	440	24	2771
1994	2201	204	45160	446	24	3116
	Employees/ Plant	Turnover/ Plant[2]	Turnover/ Employee[3]	Employees/ Plant	Turnover/ Plant[2]	Turnover/ Employee[3]
1989	87.5	15.2	173.6	-	-	-
1990[4]	90.0	16.6	184.2	144.9	7.2	49.9
1991	93.5	18.7	199.6	86.8	4.0	45.6
1992	94.0	19.6	208.1	60.2	4.7	77.8
1993	91.6	19.7	214.6	54.5	6.3	115.5
1994	92.7	20.5	221.4	53.8	7.0	129.8

Notes: 1. Employees in 1000. 2. in Million DM. 3. in 1000 DM. 4. For East German states (1990): data for enterprises instead of plants, turnover estimated from data for last three months.
Source: Statistical Yearbooks of the Federal Republic of Germany

In addition to these changes in the spatial distribution of workplaces and turnover, the organizational structure and the spatial distribution of functions were also changed, probably even to a larger extent. The furniture industry of the GDR had been organized into six huge combines, each with one 'headquarter' (*Stammbetrieb*), where most of the managerial capacities were concentrated, usually in combination with a large manufacturing plant (Beyer, 1990). The number of firms in the combines varied from 17 to 30 and in total about 130 firms were organized in those combines. The firms were the lowest independent units of the combines, some having several plants in different locations. Most firms were middle sized, some very large and some small; overall mass production of highly standardized goods prevailed. Five of the combines manufactured solely different types of furniture, while the other one took over the production of woodworking

machinery, filters, different auxiliary parts and research and development in all these fields. Independent small manufacturing firms were non existent and most artisanal firms had long been organized into separate local organizations (*Produktionsgenossenschaften des Handwerks*) that were subject to many restrictions. Higher level managerial functions and research and development were accordingly concentrated in very few East-German locations.

The German approach to privatization of the former socialist industries can be characterized by three main attributes: it was rapid, radical and top-down. The speed of privatization was considered an important criterion to judge the success of the transformation, in accordance with the liberal idea, that only private property could guarantee the establishment of efficient enterprises structures (cf. Laier, 1996). The German approach was radical in the sense that restructuring and modernization of enterprises were not given high priority or time. Instead of supporting restructuring systematically, East-Germany was integrated into the West-German welfare system that buffered individual fates (e.g. loss of workplace) but could not hinder deindustrialization. The result was that East-Germany came to be dependent on massive subsidies from the West. And the German approach was top-down because privatization was carried out centralized under one single institution, the Treuhandanstalt (THA). This institution ironically mirrored many features of the former East-German socialist economy, and was

"... an institutional alien within the polity of what had made up the 'German model' of the FRG until 1989" (Grabher, 1995, p. 42).

The headquarters of the THA was located, like the former ministries of the industries, in Berlin, with only subordinate branches in the 14 districts of East Germany and decisions to sell firms were commonly judged using quantitative measures (amount of investment, number of jobs) similar to socialist planning indexes. Marketing or product development concepts of potential investors were taken into consideration only late and not given much weight in the privatization and decision processes.

On the level of individual organizations, the legacies of the socialist economy also interfere with the outcome of the transformation process, though sometimes not along a linear path. As Grabher (1996) shows, the past status of plants influences their present endowment with managerial capabilities (boundary spanning functions) in intricate and sometimes contradictory ways. Thus core plants (*Stammbetriebe*) that were on top of the hierarchically organized combines *(Kombinate)* conducting formerly high level functions were, in many cases, of interest for western investors. After being sold to large western enterprises, however, they lost most of their high level functions since they were integrated into the investors' organizations, and eventually were reduced to performing only assembly activities. In the mid-nineties however when the investors realized that hopes for a smooth development of postsocialist economies were premature and that they had

partially ‘overrationalized’ their Eastern acquisitions, some reacted with a partial relocation of higher level tasks into their Eastern firms. On the other hand, former branch plants of the combines were less often acquired by western investors but rather privatized by management-buy-outs, leading to an enrichment with managerial functions, albeit mostly incomplete.

The privatization of the furniture industry is now, like privatization of industry in general, almost concluded. The furniture combines and firms were first reorganized into 258 independent enterprises to be privatized subsequently. Out of these enterprises, however, 67 were liquidated, i.e. about one fourth of the former furniture enterprises were closed down in the privatization process (BfAI, 1995). Besides the loss of jobs and corresponding loss of human capital of employees, the physical capital was devalued in a short time. And, even worse in regard to regional development, the social capital, being represented by common norms, mutual trust, and formal as well as informal networks, increasingly seen as fundamental to the functioning of economic systems (Putnam, 1993), largely 'melted into the air'. The three fourths of the firms that were not liquidated were taken over by other enterprises and reorganized. Though not completely dissolved, most of these firms lost many workplaces and much of the above mentioned forms of capital and assets. Of the major investors that acquired East-German furniture enterprises, 22 originated from West-Germany, 15 from other, mainly West European, countries (BfAI, 1995). The largest West-German industrial groups used the chance for expansion, of course. The Schieder group bought five and Steinhoff bought eight enterprises.

The sale of enterprises of former combines, naturally the most efficient and profitable ones, left the remaining parts of the former organizations often without linkages that were vital for their survival, thereby accelerating the decline of the old organizations (Altvater & Mahnkopf, 1993). Since most investors were West-German firms from the wood industry, they integrated the Eastern firms into their organizational and spatial structure. The higher level tasks were probably concentrated in the established Western locations, leaving mostly routinized and standard tasks in the Eastern locations, which also have few linkages with their regional environment.[5] East-German firms and citizens were de facto largely excluded from actively taking part in the privatization, lacking the financial resources as well as managerial knowledge. Measured by the number of jobs involved, East-Germans participated overall in only 6% of privatizations (Sinn, 1995). The partial re-endowment in a number of firms controlled by western companies and the slight improvement of the activity structure of former branch plants could hardly offset the dominance of the West-German locations. In the recent history of Europe therefore the transfer of property and decision rights from East to West probably amounts to an unprecedented externalisation of control, keeping a whole part of a country and large segments of its economy in a dependent status. Any form of endogenous development faces severe restrictions under these circumstances.

Transformation in Poland: controversies and consent

In Poland the transformation is still in progress and shows strong elements of what some writers label an assymetric shock therapy, pointing to the fact that macroeconomic stabilization and liberalization were reached rapidly, but privatization conducted slowly (e.g. Quaisser, 1995). Transformation started in Poland from a very different background than in East-Germany. The labour movement in Poland had a strong stance, fighting for worker and civilian rights for many years. This strong position of labour ruled out the kind of top-down privatization, that occurred in Germany, and forced all administrations to develop widely approved methods. Many schemes of worker participation in the privatization process and in the distribution of assets were set up, conforming to the common opinion that the economic property of the country had been created collectively by the Polish people and that everybody should be entitled to receive a fair share of that property. Consequently, rights of foreign capital to participate in the privatization were controlled and in part restricted.

Two main procedures for privatization exist since the early nineties: commercial privatization and privatization through liquidation (Blaszyck, 1995). *Commercial privatization* is used for the largest companies. A part of the company is sold to investors and up to 20% of the stock is offered to company employees at half of the market price. *Privatization through liquidation* is used mostly for smaller companies. The enterprise is first moved from the register of state owned enterprises (liquidated). The assets of that liquidated company are then sold, transferred (as a contribution in kind to the equity of the company), or leased, with the option to be bought by a new firm, founded by the employees solely or in cooperation with an investor. This route was often taken when management (employee) buy-outs were feasible, mostly in cases when companies with good products or strong management and minor capital needs were privatized, and it was only open to Polish citizens. In order to privatize the large number of companies that were unlikely to be sold to investors, in most cases because they were severely indebted, an additional *mass privatization programme* was set up in 1993 (Thieme, 1995). Under this programme, 20 state investment funds were established, managed in cooperation with Western funds or organizations but under definite control of the Polish state. All Polish adults were allowed to buy universal share certificates for a fee of no more than 10% of the average monthly wage. Compared to Germany, privatization policies in Poland have resulted in a much greater equality in the distribution of costs and benefits, leading to higher social consensus, in spite of single steps being highly controversial. Strong elements of employee participation assure a wide distribution of benefits, but can also be expected to increase worker consent to restructuring and a higher motivation in general.

In stark contrast to East-Germany the industrial base in Poland was not eroded in the transformation process. The wood products and furniture sector in Poland developed in a stable manner as measured by aggregate figures. Between 1989 and 1993 employment in the wood and paper industry (including furniture) increased slightly, from 211,000 to 213,000 (Brada & Singh, 1995). And between 1993 and 1995 employment in the furniture industry alone grew from 120,000 to 132,000 (GUS, 1996). One cause was that a strong devaluation of the Polish currency took place which increased short term competitiveness, quite in contrast to East-Germany, where the currency union increased real wages suddenly and worsened competitiveness dramatically.

The other factors in the development of the Polish furniture industry are the different approaches to privatization and different strategies of the companies involved in combination with the legacies of the socialist period. Privatization led to processes of adaptation, old organizational forms were transformed into new forms, building on already existing human and social capital. In Poland those old forms provided a far better starting point than in the case of East-Germany. Both systems had been reformed over the last two decades, though in opposite directions. The GDR took the route towards a higher integration, 'concentration and specialization' in industrial organization under the control of an ever mightier planning bureaucracy (Grabher, 1995). The majority of remaining small craft-based private producers were fused with the vertically integrated combines and between combines production was reorganized so that no single product should be produced in parallel by two firms. The combines also lost autonomy in relation to the planning authorities of the state. This contrasts sharply to reforms in Poland where the role of SMEs was strengthened, diversity of organizations and autonomy of enterprises increased. (Bohle, 1996). Private SMEs owned by foreigners or Polish citizens living outside of the country were allowed, primarily to obtain hard currency. The number of such SMEs increased significantly, especially in the textile and wood manufacturing industry. Mixed enterprises, owned partly by state and private organizations were permitted. The autonomy of state enterprises was increased introducing elements of self-financing and self-administration, and workers councils were established. While the industrial system of the GDR suffered thus from an extreme lack of organizational diversity, a lack which was intensified by recent economic measures, economic reforms in the eighties in Poland enlarged the variety and autonomy of industrial organizations, resulting in better chances for adaptation to changing economic conditions. The exchange that then became legalized between the private, state and mixed sector laid the foundations for networking structures in Poland.

4. Transformation in the order area, results from a survey of German and Polish plants and regional development strategies

During the recent restructuring in the Polish furniture industry, employment grew in both voivodships (counties) of the border area, Gorzów and Zielona Gorá.[6] The large German furniture groups are present in the Polish border region and are involved in that expansion of employment. There are a number of new investments (greenfield and aquisitions) very close to the border, mostly taking advantage of the proximity to West-European markets, and the low wages and material costs in Poland. Some middle sized German firms from areas close to the border started outsourcing parts of their production processes for the same reasons. On the German side there was also some new greenfield investment. Of those investments, which were heavily subsidized by the state of Brandenburg with financial resources, and by the local authorities with provision of cheap land, one has already been closed down completely, another one shed most of the its 220 employees, shifted production to Poland and kept only a small team in Brandenburg that now performs development tasks.[7] However, in the state of Brandenburg as a whole, the wood manufacturing industry performed comparatively well in relation to other sectors (cf. Seitz, 1996). If this sector develops positively in Brandenburg and in both Polish voivodships, how well would it be suited to an industrial policy that builds on small firms, innovation, and cooperation and to a regional policy that aims at a higher integration of the German and Polish part of the border area?

The prospects of innovation in firms in peripheral regions and the use of strategies to create endogenous development impulses have generally been seen very critically by most theorists. Morgan (1997) however, drawing on the example of the regional innovation policy in Wales, supported by the Regional Technology Plan Programme of the Commission of the EU, demonstrates that a coherent strategy for regional innovation can be built along the network paradigm. For post-socialist countries development strategies that are based on small firms and networking were already proposed in the early nineties. Bianchi (1992) sketched out a model for regional development agencies. Although difficulties in learning from the Italian district model were acknowledged, these early perspectives now appear rather optimistic, when compared to recent empirical work about the development of SMEs in Central East Europe (Myant, 1995; Smith, 1997).

To investigate the prospects for a rejuvenation of the wood manufacturing sector according to a network approach and a stronger integration between the German and Polish part of the border area, a survey was conducted among plants on both sides of the border in 1996 with a questionnaire, followed by three in-depth interviews. On the Polish side 43 plants were questioned, on the German side 42 plants. Eight Polish plants (18.6%) and eleven German plants (26%) returned usable

questionnaires. These data are not completely representative and the interpretation further has to consider that from the German side only small and medium sized plants answered, whereas the Polish sample includes two larger plants, partly under foreign control. Selected empirical results of the survey are summarized here and address four main issues: a) general development chararcteristics, b) structure of production, c) linkages in space and to the service sector and d) cooperation with other institutions (Tab. 3).

a) Employment increased in most German plants and in almost all Polish plants, except for the largest Polish plant that has continuously reduced its workforce since 1990. On average employment change is then much higher in Poland than in Germany. Total turnover of the German and Polish plants increased to almost the same extent, the latter being however inflated by a higher price increase. Turnover per employee (as a rough measure for productivity) was an average of Polish plants at about 35,000 Zl. per year, the least productive ones reaching 20,000 Zl., the most productive plants reaching 40,000 Zl. per employee. Turnover per employee of German plants ranged from 56,000 DM to 222,000 DM, indicating strongly diverging productivity levels of German firms. The average was 120,000 DM, which is far below the average value in this sector for the state of Brandenburg (167,000 DM) and indicates the lagging of the sample SMEs behind the larger plants in the state. It appears that many small German plants are too small to prosper under present conditions. Asked about the relation of profits and earnings to costs, almost all Polish plants reported that they were on the positive side, that is they are making profits, while German firms reported either zero profits or losses. This clearly reflects the precarious situation of most German SMEs.

b) Important aspects of the production structure of plants are the size of the production series (number of same pieces produced) and the quality of products. Most Polish plants produced middle sized series, some almost exclusively manufactured comparatively large series. German plants in contrast produced mostly small series, a few middle sized series. Half of the Polish production is, as judged by the firms themselves, of standard (low) quality, compared to only one fourth of the production of German firms. And only 14% of the Polish firms' output is of high quality, whereas the corresponding value for German firms is almost twice as high.

Table 3: *Results of a survey of wood manufacturing and furniture industry firms in the German-Polish border area*

Border region	German	Polish
a) General development characteristics		
Change in employment *(1993-96 in %)*	14.2	50.1
Change in turnover *(1993-95 in %)*	54.9	54.1
Turnover per employee *(1995, national currency: DM, Zl.)*	120,320	34,780
Relation of profits to earnings *(No. postive:zero:negative*)	0 : 6 : 4	6 : 1 : 1
b) Structure of production		
Size of production series *(share small: middle: large in %)*	73 : 29 : 0	18 : 64 : 19
Quality of products *(share low : middle : high in %)*	24 : 46 : 30	50 : 36 : 14
Qualification of workers *(share unskilled : skilled in %)*	21 : 57	51 : 41
No. of firms with computerized:		
- pre-production planning	7	3
- manufacturing	5	2
- research & development	1	1
- design	1	1
- stock keeping	4	1
c) Spatial linkages and use of external services		
Supplies from *(in %):*		
- region: own border region : cross border region	11 : 0	49 : 0
- rest of nation *(Germany: West : East)*	54 : 31	28
- (other) Western Europe	3	23
- other countries	1	0
- total	100	100
Sales to *(in %):*		
- region: own border region : cross border	22 : 0	24 : 7
- rest of nation *(Germany: West : East)*	33 : 44	14
- (other) Western Europe	1	55
- other countries	1	1
- total	100	100
Use of external services *(never=0, rarely=1, often=2, always=3):*		
- advertising	1.4	1.3
- other business consulting	1.0	0.6
- research & development, design	0.9	0.6
- consulting on new technologies	0.8	0.9
- other technical consulting	0.8	0.6
- organization	0.6	0.7
- market research	0.5	1.0
d) Cooperation with (unimportant=0, import.=1, very import.=2):		
- other firms	1.2	1.0
- economic promotion agencies	1.2	0.9
- local banks, financial institutions	1.1	1.1
- institutions for training and qualification	0.6	0.5
- scientific and research institutions	0.6	0.9
- employers associations	0.5	0.7
- trade unions	0.1	0.3

Differences between Polish and German firms appear also in the qualifications of the workforce. In German plants only one fifth of the workers are unskilled and more than half are skilled workers, the rest being white collar employees. In Polish plants on average half are unskilled and 40% are skilled workers. However, there is a differentiation among Polish plants according to size: in the small plants 54% of the workforce are unskilled and only 22% skilled workers, in the larger plants the division is similar to the German plants, 20% are unskilled and 66% are skilled workers.

As a rough indicator for the innovativeness of the planning and production processes, plants were asked whether they use modern computerized technologies in various fields. Only three of the Polish plants used computerized technologies in pre-production planning, two did so in manufacturing. In research and development, design and stock-keeping only one single plant, the largest one, worked with computerized technology. The German plants almost all conduct pre-production planning by computerized equipment, five of them perform computerized manufacturing, and four perform computerized stock-keeping.

Taken together these results show that wood and furniture manufacturing of the sample firms is far from modern. On the Polish side mass production of standard goods prevail, the workforce is on the average qualified, however the SMEs employ mostly unskilled workers, the technological equipment in most Polish plants is largely outdated. On the German side production series are smaller, more high quality production takes place and more modern computerized technlogies are in use.

c) Polish and German plants show completely different spatial linkage structures, for both supply and sales markets. On the input side Polish plants are highly integrated into their regional environment, receiving almost half of their supplies from within the Polish border region. About one fourth is supplied from Western Europe. German plants in contrast have rather low linkages to their region. Only about one tenth of their inputs stem from the German border region, while over half are supplied from West-Germany and one third from (the rest of) East-Germany. Cross border trade for supplies is virtually non existent.

Major sales areas are also very differently structured. Polish plants export more than half of their sales into (distant) western markets and a small share to the German side of the border area. The main sales areas of the German plants are to be found in other regions of East-Germany, where 44% of the sales end up. About 33% are bound for West-Germany, 22% remain in the German border region, no sales take place east of the border.

Since specialized external services are of growing importance to firms, especially for SMEs, the plants were questioned about how frequently they purchase such services. These were differentiated into several categories like research and development. German firms buy on average all such services rather rarely. Polish plants purchase most services even less frequently, many

plants never buy any such services. The only service that is acquired a little more often is support in advertising.

Important service functions are carried out then not at all or insufficiently, especially in Polish but also in German plants. Firms are probably partly not able to perform such services internally because they lack managerial capabilities, for the same reason it is difficult to purchase services externally and put them to use in planning and production. And external procurement of services is further made difficult since important services (like research and development or design) are not available in the border area. Spatial linkages of supplies and sales differ markedly. Polish firms are integrated via supplies into their home region and reach Western markets. German firms are not regionally integrated and have hardly any access to western markets. This result for the furniture firms in the German border region is in line with research about the manufacturing sector as a whole (cf. Zidek, 1995). The obvious differences of spatial linkage structures between Polish and German plants indicates that Polish firms could retain or even extend their spatial networks, whereas German firms now face a very disadvantageous form of spatial integration. This seems to correlate to the differences in transformation policies outlined above.

d) Finally plants were asked how strong (unimportant, important, or very important) they value cooperation with other institutions, including other firms, banks etc. German and Polish plants arrived at similar results, yet it is a shared perception in a rather negative sense. On average cooperation with none of these institutions is rated close to ‘very important’. Cooperation with other firms, economic promotion agencies and local banks is mostly seen as 'important' by Polish and German firms. Cooperation with other institutions, like institutions for training and qualification, and employers’ associations is hardly perceived as necessary and cooperation with trade unions is rated with the lowest importance on both sides of the border.

5. Conclusion

Strategies to increase integration of the border area obviously face enormous difficulties. The border as a physical obstacle and as a line of separation between two countries with very different languages and cultures, and a history of conflict makes any transacation more complicated and costly. The border is now more open for capital, people and information than before 1989. Recent political and economic development in Poland and East-Germany, however, added a new dimension of separation and fragmentation to the border situation, since economic development has been influenced by two very different approaches to privatization and locational strategies of large firms.

Deficiencies and (relative) strengths of the two parts of the border area are, in addition to historical and geographical factors, mainly caused by divergent policies of the nation states and by

corporate strategies. A transborder network approach to regional development would be difficult to implement because of communication and transaction problems between different cultures. These problems are exacerbated by peripherality of the whole area, divergent national privatization policies and different spatial logics of corporate strategies. These are for the border region, in short, what Morgan (1997) labelled the *common problems* for which *joint solutions* have to be found and *rewarded* in a network of regional agents. The dimension of the task becomes clear, when the fact is acknowledged that networking of firms across borders even between many Western countries is still very underdeveloped (e.g. Hassink *et al.,* 1994), although these countries face much lower barriers to cooperation than those on the outer border of the European Union.

It appears that development prospects for the wood manufacturing and furniture industry on either side of the border, taken alone, are not promising. Polish firms compete largely on the basis of cheap, unskilled labour and standard goods, advantages that are only secure in the short term, since many regions further East could offer more favourable conditions to capital in the future. German firms lack regional suppliers and have no access to larger markets. Could then weaknesses and strengths of the two parts of the industry compensate for each other? Polish firms not only have lower labour costs, but are also integrated into denser regional supplier networks and also into wider and international markets, though products are mostly of standard quality. German firms have, at least relative strengths, in their better technologies and better access to technological competence of the German wood-working machinery industry and are more experienced in quality production. Could German and Polish firms pool their resources and both overcome part of their weaknesses and what institutions would be necessary to steer such cooperation? Up to now cross border linkages are very weak as concerns the exchange of goods, information and know-how. Networking, interactive learning, building of trust could be methods to improve this situation. A number of institutions exist that promote transborder activities, but as Grabher (1994) puts it, the internal diversity of every self-organizing system has to correspond to the complexity of its environment. Obviously, the conditions of the border area create a highly complex socio-economic situation and a great diversity of specially tailored institutions would thus be required, if networks for mutual beneficial cooperation are to be built up. Networking would have to include fields like innovation of production equipment and products, research and development, training and skill upgrading and marketing, fields in which simple market exchange does not lead to optimal solutions in a regional setting.

In view of the complexitity of problems and the financial constraints in public budgets it seems impossible to promote networking for all sectors at the same time.[8] Some sectors, especially those with large scale or continous flow production, are less in need of networking support, because their input and output linkages are more standardized, firms are larger and better equiped with

know-how. And if cross border trade is in larger quantities, the additional transaction cost per unit that is caused by the border, is smaller than for SMEs, trading only smaller quantities. Networking programmes should for these reasons be concentrated on sectors with a large share of SMEs and sectors that have rather complicated input-output structures, with frequent changes in product specifications or of linkages in space and time. Branch plants of such sectors should be included in regional innovation strategies, since under certain circumstances they can improve regional innovation capacity (Morgan, 1997). Sectors for promising networking approaches would have to be identified - furniture manufacturing might be one such case.

Even if such networking and innovation strategies were in part successfully implemented in the German-Polish border area, market conditions would still be difficult for firms. In particular because large firms continue their locational restructuring, partly to the detriment of the border area. Additionally the traditional furniture districts in Germany, now under pressure by cheap imports from Central East European countries and high quality products from Western rivals, also start to experiment with projects aimed at stronger regional cooperation. Regions with denser agglomerations of firms will in general profit more from intensified networking than regions with fewer firms (Storper & Scott, 1995). Obviously lagging regions, especially regions on the outer border of the EU, will continue to need additional support from the national and European level if they are to catch up to wealthier regions.

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NOTES

[1] Handelsblatt, December 7, 1995.

[2] For Germany the furniture industry is included in the wood manufacturing industry in all statistical data presented; it is measured by employment and turnover by far the largest subsector.

[3] The sources used don't allow the comparability of these data to be judged completely. German figures are based on the number of employees in social insurance, Italian and Danish figures on industrial statistics. Also, the years reported for differ from 1981 for Italy to 1994 for Germany. However, the vast majority of firms/employees in the furniture sector are probably covered, and since firms sizes in general change rather slowly over time, the ratio of employees per firm gives a meaningful indication of the (national) differences in firm sizes.

[4] To judge the degree of vertical integration more exactly, the actual size distribution of plants in the districts would have to be known.

[5] Grabher, 1997, identifies three different patterns of corporate integration and regional embeddedness that can be related to specific industries: the regionally responsive (e.g. food, construction), the globally integrated being divided into a modernizing-the-past and an experimenting-the-future pattern (e.g. automobiles, chemistry). None of these patterns fully covers the furniture industry that is internationalizing comparatively slowly (c.f. Dicken & Öberg, 1996) and still dominated by nationally organized firms.

[6] Wojewodzki Urzad Statystyczny 1995, Urzad Statystyczny w Zielonej Górze 1996, and data reported by the Statistical Office of the Voivodship Zielona Góra.

[7] Tagesspiegel, March 25, 1996; Berliner Zeitung, July 26, 1996

[8] GRABHER, 1994, however, arguing from an evolutionary concept of firm and regional development, advocates programmes that are not specific for particular industries, but oriented towards particular tasks (e.g. R&D) of firms instead.