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Capitalism without Capitalists? A Bottom-Up View of Industrial Transformation in East Germany

Katharina Bluhm
Friedrich Schiller University
Minda de Gunzburg Center for European Studies
at Harvard University

Abstract

Research on the industrial transition in East Germany and its outcomes has long focused on the strategy of the *Treuhand-anstalt* (THA). According to institutionalists, David Stark and Lazlo Brustz (1998), the powerful position of the German privatization agency was not only a result of German unification but also a function of a pathway rooted in the institutional peculiarities of the East German economy before 1989. This paper shows that neither a simple top-down perspective nor the pathway approach, as Stark and Brustz suggested, are adequate for explaining the internal dynamic of enterprise transformation as well as the outcomes of this process. First of all, the dissolution of the former organizational structures and hierarchies was less coordinated by the THA than is often assumed. Often *Kombinates* fell apart more quickly from below than they could be dismantled from above since enterprises or their units chose the exit-option and had good reasons to do so. Secondly, although the privatization by the THA resulted in the clear dominance of Western investors, the new ownership structure of East German industry as a whole could be characterized as a "capitalism without (East German) capitalists." In fact, what exists in East Germany is rather a kind of "small business capitalism" (*Kleinbetriebskapitalismus*) in which small-and medium-sized producers dominate the landscape. Finally, there was no single starting point in 1989. Two different industrial orders shaped the industrial history of the East German regions which were not destroyed between 1945-89, but rather transformed into the state socialist production system. It can be shown that these older historical patterns are relevant for transition and their outcomes as well.

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Capitalism without Capitalists?
A Bottom-Up View of Industrial Transformation in East Germany[1]

Introduction

The East German case is seldom chosen in comparative research on the transition from a planned economy to a capitalist one. One exception is the work of David Stark and László Bruszt (1998), which is significant for my paper in two regards. First, their work succinctly expresses a widely shared top-down perspective concerning East Germany's transition. Second, Stark and Bruszt's work is of particular interest since their institutional pathway approach plays a considerable role in the larger field of transformation research.[2] They suggest that the set of options available for political and other actors making institutional and policy choices is generally constrained by the institutional legacies of the state-socialist past. Stark and Bruszt conceptualize such legacies as institutional resources which actors recombine or rearrange under new circumstances with new outcomes but constrained by the institutional past. With this pathway approach Stark and Bruszt contrast the undersocialized "blue print" concept of the "shock therapy," that implies a sharp institutional break in order to implement the new, market incentives and market institutions (see also Stark 1995). They argue that even in the East German case of transformation by Unification and radical institutional transfer the specific institutional arrangements of the state socialist production system had shaped the way for the enterprise transformation that took place after 1989 in East Germany.

According to Stark and Bruszt, the institutional arrangements in the "Weberian Homeland" were characterized by much weaker social networks among firms than in other Central- and East European societies, and the planning system and the industrial organization were extraordinarily centralized and hierarchical. Therefore, social networks

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2 The pathway approach is a weaker variation of the neo-institutional concept of path dependency that Stark applied in earlier works (Stark 1992, 1995). An instructive critique of this approach is offered by Beyer/Wielgohs 1998.

could easily be destroyed after German Unification by "market shock" and the top-down method of privatization and restructuring carried out by the *Treuhandanstalt* (THA). Moreover, because of the intact centralized planning system it could easily be replaced by another centralized and cohesive administrative apparatus, now backed by the strong West German state. Although the THA—after facing increasing difficulties in finding western investors—organized deliberations with regional governments, unions and trade associations, these new "deliberative networks" remained artificial and without a vibrant associational life at the enterprise-level. As a result, the THA's top-down orchestrated transition resulted primarily in the creation of new western subsidiaries. Moreover, these transplants were seen as integrated into the networks of their western parent companies. Consequently, there seems to be little support for the revival of the eastern economy and for the development of vibrant networks. This type of firm-region relationship is often described as "cathedrals in the desert." For the East German social structure this finding would mean a kind of "capitalism without (East German) capitalists" (Stark/Bruszt, 1998: 140-142, 159, 163; Grabher, 1994: 192-193; Lange/Pugh, 1998: 83).[3]

In contrast to this approach, I argue that the East German case of enterprise transformation—like all the other cases in Central- and Eastern Europe—can only be understood by combining both perspectives, the top-down and the bottom-up view. Without a bottom-up perspective we dramatically misinterpret the starting point, the internal dynamics of the restructuring process and even the results of this process. Moreover, a bottom-up view reveals that the German case fits much less into the framework of the pathway approach and in the comparative concept based on this approach. It should, however, not lead one to exclude the German case from the comparison. In fact, the German case demonstrates how historical legacies can be influential inspite of radical institutional breaks.

In Part One, I will outline the institutional starting point in East Germany. This system has been insufficiently described as having been purely hierarchical and governed by an efficient, highly centralized planning bureaucracy. In fact, as in other planned economies

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[3] Stark and Bruszt claim that in contrast to the weak East German social networks, Hungarian firms had developed dense subcontracting networks that were provoked by the economic reforms in the 1970s and 1980s, and therefore after 1989 they were able to recombine and strengthen enterprise-to-enterprise ties through the creation of cross-ownership. Even the Czech Industrial Associations (VHJ), which were organized mainly along branch or regional lines at the meso level, were found to be more strongly embedded than the East German state enterprises in dense social and regional networks. After 1989, these Czech networks were not dissolved but transformed into rich new networks among banks, investment funds and enterprises by direct ownership connections (Stark/Bruszt, 1998: 163-165; Stark 1996; Grabher, 1994; 1995).

the formal production and governance system had its flip-side and only functioned when actors created informal networks and bargained to solve problems. Although these informal relationships deviated from official structures, they enabled the centralized system to exist as long as it did. In addition, the industrial *Kombinate* were not established on a "tabula rasa" but were based on different industrial orders that long preceded the state socialist system. These historical patterns influenced the construction of industrial organization after 1945 and reveal remarkable differences in structures.

In Part Two, I argue that the top-down process of breaking up conglomerates into small productive pieces and privatizing them was only part of the story. The disaggregation policy organized by the THA from above after 1989, was accompanied by a radical dissolution of the inter-organizational relations at the company and plant level. The motivation for this behavior lies not in weaker industrial networks, but rather in the specific constraints and opportunities that emerged following the fall of the Berlin Wall and German Unification.

Finally, in Part Three I argue that an over emphasis of the THA's role as the main actor leads to erroneous results that equate the *Treuhand*-privatization with the results of enterprise transformation. Such a top-down approach in the industrial sector fails to recognize that the results of this process are not the dominance of western owners and subsidiaries, but rather a dominance of smaller businesses. East German industry today should not to be characterized as a "capitalism without East German capitalists" but rather as a "small business capitalism" *(Kleinbetriebskapitalismus)* in which small- and medium-sized producers and their challenges dominate the scene.

Part One: A State Socialist Production System with Different Regional Industrial Orders

Two main points need to be considered with a bottom-up perspective of the East German state socialist production system, focusing on real-existing structures and relationships instead of ideal, formal models.

First, as in other centralized planning bureaucracies, the East German production and governance system was an embedded one with extensive informal bargaining and networking within and between the production and planning units. There existed in the plants or production units unspoken contracts mainly between blue collar workers and management. My colleagues and I have called this arrangement *Planerfüllungspakt* (Voskamp/Wittke, 1991; Bluhm, 1991). Faced with regular disturbances in the production flow because of defective machines or shortages in materials, successful plan realization greatly depended on the willingness of blue collar workers to rescue the plan at the end of the month or year, for example by working on weekends and putting in overtime when the material and/or machine problems were solved. Moreover, all employees were virtually unfireable, and there was a cronic shortage of blue collar workers. Thus, blue collar workers in particular, had a kind of "passive strength" in their daily informal bargaining with the managers over plan realization, wages and control over working hours.[4]

Bargaining among firms was often in the form of informal material and service networks based on personal relationships, that served to correct for supply imbalances and shortages. Reciprocal support was practiced for example, with various accounting maneuvers that made up for the differences between planned and actual produced goods (Marz, 1991, 1992; Heidenreich, 1991). Although the East German shadow economy was not developed to the extent of being an independent sector as in other planned economies, informal networks infiltrated the whole system, and were in fact a functional part of the system. The uniqueness of the East German economic transition is not the unusual weakness of pre-1989 informal networks but rather in their rapid disappearance.

Second, *Kombinate* differed not only according to the particularities of the various industrial branches, but also these large conglomerates were built on different regional traditions of industrial development. The East German state was not able to cleanly or

[4] An important indicator of such informal bargaining over wages and output is that the planning administration in the GDR had not been able to control the wage increases, especially of the blue-collar workers. For example, the intended differences among gross earnings of wage groups were often undermined and ended up favoring the lower wage groups as enterprises paid extraordinary bonuses. Bonuses were only determined by the state enterprises (VEB/ *Kombinate*), and in this way managers had a flexible instrument in their hands to increase labor earnings according the objectives of plan realization (Stephan/Wiedemann, 1991: 553). One additional instrument to increase the reserve funds for internal wage bargaining was to create so called "dead souls " *(tote Seelen)*: employees who did not actually work there but for whom the enterprise received money. "In this way *Kombinate* had wage funds which not only secured the payment of all workers as needed to carry-out a given plan, but also to pay for overtime, shifts on Sundays and public holidays, and to increase the average wages of the enterprise: that is the second foundation of future wage funds planning (Kusch et al., 1991)." Such methods, and also the unequal taxes for workers and service employees, led to the well known minimizing of differences in earnings, partly politically desired, but partly as a consequence of the worker revolt in 1953. After 1953, the government did not want to provoke workers by wage cuts or increasing labor intensitiy anymore (see Stephan/Wiedemann, 1991; Winkler, 1990; and Kusch et al., 1991).

easily supplant these traditions with their state-socialist production model after 1949. Since these traditions have also influenced the industrial reorganization after 1990 and since they are still less understood as the informal flip-side of the planned economy, I will go into some more detail here. I refer to Gary Herrigel's work in this area, who has studied the history of German industrialization and its two parallel patterns of productive organization and governance. He characterizes these patterns as forms of industrial order, which have shaped German regions more according to a North-South axis than an East-West one (Herrigel, 1996).

Prior to 1945, the substantial chemical industry of Sachsen-Anhalt (a past Prussian province) was deeply shaped by an autarchic form of industrial order: simply stated, all aspects of production and its governance were entirely embedded within the institutional framework of large firms. Large mass production plants were founded by big German corporations within poor, agricultural regions that were relatively free of preindustrial handicraft infrastructures. Such mass producers were vertically integrated and organized most supplies and services in house. After 1945, these organizational structures were easily adapted to the centralized state-socialist model with its inherent tendency toward self-sufficient production, vertical integration and autarchy. In 1989, for instance, the *Kombinat Leuna*—one of the three *Kombinate* of Sachsen-Anhalt's so-called "Chemical-Triangle"—encompassed only two *Volkseigene Betriebe* (VEB, or People's Enterprises) with about 30,000 employees. About 27,000 of these workers were concentrated in one single plant, 10,000 of whom worked in services and technical fields not directly related to the chemical branch, including machine and freight car production facilities that were in existence before 1945 (Voskamp/Bluhm/Wittke, 1993).

Southern parts of Saxony and Thuringia, like Baden-Württemberg, were on the other hand, characterized by specialized small- and medium-sized producers in diverse branches, situated in urban centers as well as smaller cities and communities, and supported by a variety of regional public institutions and associations. After 1945, this decentralized regional order was successively, but not entirely restructured by the state socialist production system. The three following phenomena illustrate that the regional, decentralized industrial order was not completely obliterated:

a) Until 1972, when the last phase of nationalization was implemented, a large number of small- and medium-sized producers in Thuringia and Saxony were able to maintain an existence outside the state's centrally planned industrial organization, surviving as partially nationalized or as cooperative companies. Compared to other regions, Saxony was able to sustain for a long time multiple and varied forms of property ownership (Bramke et al. 1994). And, even after having their property dispossessed in 1972, many business people and their offspring stayed on in their former firms as managers and engineers.

b) Even after the complete establishment of the state-socialist production system in 1972, the decentralized industrial structures did not vanish. Although decision-making was centralized, the specialized and dispersed production organizations were <u>not</u> concentrated nor were they strictly organized according to the principles of economy of scale and vertical integration. In fact, the enormous size of some VEB, like in Saxony's textile industry, was due to aggregated figures that masked the actual *Kombinate* structure. Two examples help to illustrate this argument:

- The VEB VERGO, a subsidiary of a textiles *Kombinat*, had about 3,700 employees, a typical number for a large state enterprise. Yet, VEB VERGO encompassed four plants located in four different small towns and communities throughout Saxony. And they in turn were geographically spread across 24 production sites. One of these plants had 211 employees and was divided into three locations, and another of these plants with 560 employees had five production units in different locations.

- The Cotton *Kombinat*—with nearly 70,000 employees the largest conglomerate of the German Democratic Republic (GDR)—was divided into 27 state enterprises or VEB. These enterprises were, however, divided into 215 plants, 236 production sites and 76 still smaller production units. Besides a few large units, the VEB were mainly dispersed into organizational units with less than 500 employees (see Bluhm, 1999).[5]

Sometimes, the spartial dispersion and heterogeneity in products were so high that the production units could hardly be governed by a single centralized office. Therefore the *Kombinate* structure—established in the late 60s and 70s—had to be adapted to the residual decentral order. Larger VEB within specialized small- and medium-sized industries were declared a kind of sub-leadership unit that comprised specialized groups of manufacturers (*Leitbetrieb*). Whereas most *Kombinate* were governed by one, large anchor manufacturing enterprise with planning and controlling responsibilities (*Stammbetrieb*) (Görner, 1989: 72-73).

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[5] The East German textile and clothing industry manufactured its products for the Soviet Union, the western markets and the domestic market. With around 300,000 employees it was one of the largest industries in East Germany before 1989. After the nearly immediate loss of all three markets the branch shrank to less than one-tenth of its former size.

The legacies of the historically decentralized order shaped the structure of *Kombinate* even in industries that were not as dispersed as the textile and clothing industry. For instance, the *Kombinate* of Saxony's tool and textile machine industry were essentially an assemblage of the different specialized manufacturers and some, but not all suppliers. The vertical integration of those *Kombinate* was far less developed than the concept implies. Each enterprise had its own product that generally predated 1945.

c) The state socialist production system did not destroy the given regional clustering of many producers and their various supply and service industries. Rather it preserved and strengthened the existing regional density with the expansion of production for the Soviet market. One impressive example of the high degree of clustering was the Chemnitz (alias Karl-Marx-Stadt) region—a center for the machine tool, textile machine, textile and car components industries, whose supplier relations were primarily regionally-based. Five *Kombinate* had their headquarters and main departments in Karl-Marx-Stadt as well as their industrial research centers.[6] Traditionally there were close relations between the regionally-oriented textile and textile machine industries in areas of research and development. Also in this region was the machine tool *Kombinat* "Fritz Heckert," that had a good working relationship with the Karl-Marx-Stadt Technical University that itself had a large machine tool institute (this in addition to the *Kombinat's* own R&D Center with 1,600 employees). A close cooperation between industry and the university was not only part of the planning system but was also supported by institutional and personal ties. For example the Fritz Heckert *Kombinat's* general director was also a member of the University rector's advisory council. Important suppliers belonging to other industrial groups were also located in and around the traditional industrial center of Karl-Marx-Stadt. This geographic proximity also enabled the emergence of dense regional informal networks among producers of both similar and differing industries as well as between industry and the various research institutes concentrated here.

In summary, *Kombinate* were to varying degrees vertically integrated. Behind the model of an autarchic, centralized bureaucratic production model we find remarkable variations in organizational structure that can be traced back to diverging historical origins and industrial orders. Whereas after 1945, the autarchic firm-based order of mass production could often be smoothly integrated into the state socialist production, the decentralized order presented some challenges. Thus, the state-socialist production system was not able to completely set aside the traditionally decentralized and dispersed organization of

6 In no other town of the GDR were there so many producers of investment goods as in Karl-Marx-Stadt (Chemnitz). 43.6 percent of the working inhabitants were employed in such industries.

production in Saxony and Thuringia, but rather had to work with and incorporate these traditional structures. Obviously after 1989, there was not just one starting point in East Germany for enterprise transformation, but rather different starting points based on historical lines that were much older than the state socialist system. We will see that this influenced the results of the industrial transformation in East Germany.

Part Two: Dissolution From Below

Enterprise transformation encompasses various processes, some of which occur simultaneously and others step by step, including reconfiguration, corporatization, privatization of assets, and internal reorganization. Reconfiguration is the redefining of boundaries of various economic units, and a redistribution of their resources. Corporatization is the legal conversion of state enterprises or their units into private companies, which generally speaking precedes a privatization of assets and liabilities. The process of corporatization in Central and Eastern Europe is often equated with commercialization, which I assume to be more precisely related to the transition to market-based, commercial relationships. With regard to internal reorganization I am referring to the internal organizational change and adaptation to the market environment that is not simply solved with the establishment of private ownership control.

A common interpretation of the East German case is that the THA had through a series of planned steps from above, disbanded and divided up the state *Kombinate* in order to sell them off to western investors. While this interpretation speaks of the THA as a powerful and forceful bureaucratic "superagent" we learn little about other possible actors—above all the behavior and attitudes of managers and employees. Certainly, East German managers possessed less power to influence the privatization process in comparison with their colleagues in Hungary, the Czech Republic or Poland. It would, however, be wrong to rule East German managers and employees out as actors in the transformation of their enterprises. A closer look at the role of East German managers (and often supported by worker representatives) leads to the astonishing observation that these actors from below seldom tried to resist the THA's deconstruction of their industrial groups. Moreover, these actors independently worked toward some of the same objectives as the THA, and acted in this way according to their own interests. I am convinced that the high speed of the dissolution from below in East Germany cannot be explained by historically weak social networks, as the institutional pathway approach would suggest. Nor can this dissolution be explained by a radically market-oriented mentality that the East Germans adopted as latecomers to the stage of reforms and restructurings. Most importantly, there were actual opportunities and constraints that had encouraged managers and worker representatives to act rationally when they chose the exit-option. The following three phenomena characterize the dissolution from below:

a) Autonomization of single enterprises or plants with respect to their former conglomerates (regarding decision-making hierarchies)

b) Vertical rearrangements with respect to former suppliers and service units (regarding vertical inter-firm relations)

c) The breakdown of communication between firms (both in horizontal and vertical relations).

I argue that we must consider these phenomena in order to adequately comprehend the rapid speed of the East German industrial dissolution and the limited resistance of managers and workers to the THA politics of disaggregation.

a) Autonomization

Autonomization is the process of setting enterprise units (firm, plant, department or production unit) free from their former subordinate positions within hierarchical structures. This process began in East Germany long before the THA started with its programs of disaggregation and privatization. In the early stage of transition at the end of 1989 and the beginning of 1990, managers who were unsatisfied with the subordinate role of their plants wanted to improve the position of their plant or enterprise within the old state conglomerates (i.e. to increase their budgets and gain influence). The Autonomization process picked up speed, and after a short time, the managers recognized that they were facing not only system reforms but a fundamental system change.

Corporatization was begun during the period of the original THA, founded on March 1, 1990, by the Hans Modrow Administration, before the first and last free election of the parliament in the GDR. Corporatization measures were to have been finished before the GEMSU of July 1, 1990, but ultimately lasted into the Fall of 1990 (see Fischer/Schröter, 1993). In this very early period, the objectives of the THA were still not clear regarding privatization and disaggregation of the conglomerates, nor concerning the shape of their own eventual organizational structure. The decision for a rapid privatization was made with the reformed *Treuhand* Act in June, 1990, by the newly elected GDR Christian Democratic government. But even then, the final organizational concept with which the THA was to work was not yet determined. The Union Treaty that was signed on August 31, 1990, by both eastern and western governments, still outlined the creation of five branch-based *Treuhand* joint stock companies to manage the privatization and restructuring process. Yet, the plan was soon set aside by the President of the THA, Detlev K. Rohwedder, who had always criticized the planned joint stock companies. Instead, a central administration was established with specialized *Treuhand* directorates. These directorates only began their work at the end 1990.[7] Evidence shows that the transformation process was already underway by the time the THA intervened.

I think it is important to note that local decision-makers had to face some issues regarding the corporatization efforts that the state enterprises had begun to prepare for in February and March of 1990:

First, should the *Kombinate* be dissolved or transformed into large holdings or joint stock companies? This was primarily a decision dealt with by *Kombinat* directors, who with few exceptions wanted to keep their conglomerates together.

Second, should the individual state enterprises (VEB) follow the *Kombinat* management into the joint stock company or holding, or should they pursue separate corporatization as limited liability companies directly controlled by the THA? This was above all a decision for the VEB to make for themselves.

I have analyzed how these decisions were made according to three branches: machine construction, the textile and clothing industry, and a part of the chemical industry that specialized in more refined customer-oriented products and that involved a number of VEB's in urban areas (Bluhm, 1999). In all three branches that I examined, there was a clear preference of the state enterprises for a corporatization as a single company under the direction of the THA, as opposed to remaining in the conglomerate. Hence, the substance of the newly founded joint stock companies was often already undermined from below <u>before</u> the THA had started to disaggregate them. For example, the machine

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7 Rohwedder, former top-manager of the Hoesch AG, was murdered in April 1991, as the last victim of the German terrorist organization RAF. His successor would be the Christian Democratic politician Birgit Breuel. For more on the history of the THA see Fischer/ Schröter, 1993; Freese, 1995, Kemmler, 1994; Seibel/Kapferer, 1993.

tool *Kombinat* "Fritz Heckert" consisted of 21 VEBs at the end of 1989, but only eight of them followed the Kombinat management into a strategic holding, and another 13 reorganized themselves as separate companies under *Treuhand* management. Among the 13 were the Fritz Heckert R&D Center and the *Kombinatsstammbetrieb*—the anchor enterprise—which gave the industrial group its very name. With 4,300 employees this VEB was the "flagship" of the East German machine tool industry and the largest manufacturer of its kind in the GDR. Meanwhile, in the transformation of another machine tool Kombinat, the "7th of Oktober," 16 VEB followed the management into an ambitious "strategic holding," and nine enterprises eventually decided to go their own way. However, even those state-owned enterprises that were integrated into the large holdings looked out for themselves. They asked the THA to directly manage some of the company shares so that the enterprises would not fall exclusively under the control of the holding (THA, 1994: 1053).

Comparable scenaries could be observed in other industries as well, such as the pharmaceutical industry, where the management of its *Kombinatsstammbetrieb* had selected an exit-option already in the early spring of 1990. The two other large manufacturers of this *Kombinat* went the same way. Altogether, these three plants produced 80 percent of the total of the East German pharmaceutical industry. Here only four of the former 17 VEB joined the new large holding. In spite of this, the *Kombinat* management initially went forward with the ambitious plan of forming an internationally operating corporation and found support for this from a prominent West German consulting firm (Bluhm, 1999: 70-71; Schlütter/Beilicke, 1993: 210-211). Since one of its most important plants had already in February and March of 1990 switched its strategy from upgrading within the group-hierarchy toward gaining fully autonomous status, the top-management of the GDR's only cosmetic *Kombinat* failed to form a holding. For this *Kombinat* there was not even a formal founding of a new holding company. The *Treuhand* manager responsible for this industry noted that this conglomerate fell apart literally "over night" (Bredereck 1993: 298). Yet, the fastest decay of the conglomerates occurred in the textile and clothing industry, where many of the newly founded holdings or joint stock companies came apart even before 1990 was over.[8]

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[8] Many *Kombinat* directors founded employer's associations in order to find more market-responsive methods to hold their groups together and to find new job perspectives for themselves. Yet, faced with the massive decline of the textile and clothing industry and under the influence of the West German textile industry employer's association, most of these associations merged step by step to eventually become one single, quite efficient association (Bluhm, 1999: 237-240).

The decomposition processes of the large conglomerates were influenced by their specific historical roots. For instance, *Kombinate* with substantial structural and organizational legacies of the past decentralized industrial order were easier to dissolve since the spatial dispersion of the productive capacities and organizational units fostered an easy redefinition of organizational lines after 1989. In addition, the relatively weak vertical integration of more specialized manufacturers also did little to hinder their disaggregation. It is remarkable that resistance to the dissolution of conglomerates only really surfaced in those industries where conglomerates mainly consisted of one large enterprise. More precisely, this concerned resistance to the THA's plans to separate single large firms, and not the breaking down of conglomerates as such.[9] Hence, we can confirm that the older industrial legacies had influenced the enterprise transformation at that stage by opening up strategic options that then fostered a dissolution from below. The past decentralized regional order however, did not trigger this behavior at the plant or state enterprise level.

Decisive for the behavior of managers and other actors with bottom-up perspectives was the specific situation in which they saw greater advantage in choosing the exit-option and more risk in staying within their conglomerate structure. I identify three primary arguments for the selection of the exit-option:

First, autonomization seemed to improve the chances for managers to remain in their positions. Faced with enormous restructuring measures, they had to fear that *Kombinat* directors would attempt to make changes in management staff. The exit-option was thus seen as a way of impeding an organizational restructuring strategy that might begin by shifting or letting go of lower level managers.

The second and more important argument concerns the high risks and costs of the dramatic changes the conglomerates were facing. In other words: to restructure within a conglomerate or holding meant that the cost of the market adjustment would be

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9 The *Kombinat* Buna, one of the three large enterprises of the chemical industry in Saxony-Anhalt, was thus able to resist *the Treuhand* strategy of breaking down different divisions into privatizable independent units, while the infrastructure would be managed by a special service company. This industrial park concept was realized in Leuna and Wolfen-Bitterfeld, while the THA had to develop new privatizing concepts for Buna as a whole firm. Managers and worker representatives in the former *Kombinat* "Ernst Thälmann" in Magdeburg acted similarly, and were for a long time successful in blocking the disaggregation concepts of the THA, only giving up after a long fight and clearly failing at the markets. Yet, also in this case, the conflict, while it arose upon the conglomerate as a whole, mainly concerned the enterprise in Magdeburg itself, regarding the possible future of the heavy machine manufacturer as one large company or as several small firms.

distributed among the units and according to strategies for the conglomerate as a whole. With many state enterprises, managers and worker representatives as well were afraid of absorbing overhead and extra transformation costs due to necessary adjustments of other less profitable units in their conglomerate. Thus, both managers and worker representatives saw better odds in taking on the new challenges as part of smaller independent units, and so were unwilling to be involved in the restructuring of all the other units in a conglomerate. Therefore it was not only unattractive for them to stay in their industrial groups, it was also seen to be quite risky. Profit-and-loss transfer agreements that were to be signed with the new holding companies underlined this risk, whereas the benefit in staying in the old conglomerate was expected to be less. The old conglomerates, were among other reasons, not so attractive as they were strictly production-oriented and as was the case of smaller enterprises found themselves newcomers in the vital areas of marketing and distribution. Under state-socialist conditions, such functions were separated from the industrial *Kombinate*, and were generally concentrated in Berlin. Moreover, from March of 1990 onward, and especially after the GEMSU, many firms began to expect that a rapid privatization would solve their marketing problems. Incentive for staying with a larger conglomerate was further whittled away as the formerly powerful *Kombinat* directors had already lost most of their political influence.

Third, actors at the enterprise level (i.e. managers and worker representatives) were generally correct in their belief that the founding of legally independent companies would improve the chances of finding a western investor. As independent companies they would also have more influence on the privatization process and the search for investors. By the summer of 1990, many managers of state enterprises had already begun this search for western capital and partners for joint ventures, participating in what was becoming a mass phenomenon. In other words, the political decisions concerning the path of the transition in 1990 had shaped the strategic options of local actors well before the THA actually went into action as the restructurer of conglomerates.

b) Vertical Rearrangement

During the process of enterprise transformation not only the hierarchical decision-making structures were reorganized but also the vertical relations between suppliers and manufacturers, both internal and external to the former conglomerates. The sudden currency conversion on July 1, 1990 and subjection to global market conditions dealt many eastern producers a nearly fatal blow, as from one day to the next they faced dramatically different production costs, even though they were still manufacturing the same products with the same productivity levels. These new conditions generated tremendous competitive challenges, and fostered an abrupt vertical rearrangement along value-added production chains. The manufacturers at the end of the chain rapidly instituted western standards (in quality and prices) and passed them down to their suppliers. Often, these suppliers were not able to meet the new demands. As a result, they were forced out of the chain since it was relatively easy for manufacturers to replace them with new western suppliers. This was possible since the GEMSU allowed easy access to western market alternatives. Hence, in contrast to other post-socialist economies in Central and Eastern Europe, the vertical rearrangement was radical and happened very quickly. Moreover, long-term relationships, like R&D-cooperation, could hardly survive the GEMSU and the political orientation of rapid privatization. After the currency and economic union, most of the East German producers had become dependent on liquidity credits paid as subsidies by the THA. The relations among firms as well as research institutions suffered from the great uncertainties regarding the future. This contributed to a collapse of long-term relationships and a dramatic "de-clustering" of supplier and service relations.[10]

I conclude, as do Stark and Bruszt, that the "market shock" had indeed fostered a vertical disintegration even before privatization measures were actually implemented. However, it is a mistake to assume—as the pathway approach does—that the high speed of disaggregation would have been much different had the previous supplier-producer relationships been organized via stronger subcontracting relations and not as they were

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[10] The dissolution of the former supplying relations was so dramatic that in 1991, IG Metall, the local union of the metal- and electric industry in Chemnitz, organized a car rally of its members in order to demonstrate for the industrial products of this region, and to demand that local firms remember their former local suppliers: just as East German consumers were asked to remember the regionally produced consumer goods (Interview. 5.10. 1994. K.B.; IG Metall, 1993). The employer's association of the East German textile and clothing industry (vti) in 1994 organized a "day for internal cooperation" to revitalize the contacts between East German firms (horizontally and vertically). Here the president of the East German textile and clothing association appealed to the member-firms: "Due to the fundamental structural and economic changes in the East German textile and clothing industry, breaks are being observed in many of the former cooperative relationships among enterprises. ...however a great advantage for the East German economy and its enterprises could be cooperation among the great range of the textile branches in connection with the proximity to the markets of all of the partners in the textile production chain. ... So we see that in West Germany the enterprises have enjoyed success for many years through such cooperative relationships of partners that are 'just down the street.' And this helps to explain the higher ability of West German producers to 'add value' to their goods. Let us use this model of cooperation as an example for our own efforts (Heindorf, 1994). "

via the centrally planned economic system. Here it is important to note that even stronger subcontracting relations would have been subjected to the dramatic competitive pressures and rapidly changing commercialized relations such as new cost systems, and would have had the same deficits regarding product quality, flexibility and productivity.

The reasons for a delay of the dissolution of former supplier-producer relations were usually technological or technical in nature, but even then only when a substitution of new trade partners would lead to costly adaptations and adjustments. However, this was only a serious impediment when managers did not expect a rapid improvement of their competitive capabilities. That replacing suppliers would lead to technological adjustments did not by itself hinder managers when they hoped that this would quickly take them up to western standards. Quite often managers incorrectly equated such an achievement of western product quality with an ability to compete in western markets.

c) Communicative Closure

The characteristic behavior of East German enterprise managers concerning changes in hierarchy, customer-supplier relations or R&D cooperation can be explained as the strategic choices of actors who reacted to new constraints and at the same time also tried to estimate or calculate their risks and advantages under great uncertainty. Not only such "hard" business relationships were broken off but also the "soft," communicative, inter-firm relationships. Observers with direct experience in the mediation of industrial, inter-firm relations offered the following comments concerning this phenomenon that I have called *kommunikative Schließung* (communicative closure):

"In the first two and a half years or so they [the managers - K.B.] did not speak to each other: they saw each other as the worst of enemies (Interview. 4.30.96. K.B.)."

"There was the belief that, now we finally have the free entrepreneurship and every one can venture out into the market. And then no one wanted to share information anymore. The new principle was: of course no one wants to help their competitor get ahead (Interview. 4.11.96. K.B.)."

Such a crumbling of the formerly loose inter-organizational relations, before many enterprises were privatized, is hard to explain within the framework of the pathway approach. Indeed this approach can only explain the East German behavior by claiming that the former social networks among state enterprises were so weak that they could not survive the transition. In contrast to the "weakness thesis" we could also assume that managers were over-reacting to the previously planned and forced division of labor, and so dramatically overstressed the new opportunities they saw in competitive markets. The conversion of formerly cooperative enterprises into fierce competitors and the new wariness of opportunistic behavior seems to confirm this position which is articulated in the German literature.[11] Nevertheless, the phenomenon of communicative closure does not readily match this interpretation either, because of its paradoxical character. Another interview revealed:

"It was a paradox: there were a lot of conferences with western companies at that time, whereby they (East Germans) spoke quite openly with the West German firms, but would not talk with their own neighbors. They were astonished afterwards when they found out that other West German firms knew all about their situations as well... And so they caught on that they [western firms] talked with each other too (Interview. 4.30.96. K.B.)."

In other words: this behavior was specifically directed against other East German firms, that is to say against the formerly well-known and trusted organizational environment. In comparison, communication and even the willingness to cooperate and to give up the newly gained autonomy was very high toward West German firms, at least at the beginning of the transformation process. While fear of opportunistic behavior from former East "neighbors" was high, there seemed to be less concern about such behavior coming from western firms. In other words: they trusted the unknown but mistrusted the known.

And this paradox goes deeper. *Kombinate* were organized in such a way that each had their own product specialization, and there were actually few enterprises that had manufactured the same products. In the early stage of transformation this underlying labor division continued. Yet, eastern managers started to perceive each other as fierce competitors, even when their enterprises were <u>not</u> competitors in the product market. A representative of the chemical industry trade association describes this behavior:

"People stayed close together around the time of the border-opening and reunification. It was unclear what changes were just ahead, and then somehow it all collapsed. We had a hard time really comprehending that since it took place outside of the association...Then came the time, when the enterprises didn't speak with each other, because they saw each other as competitors, but in reality they were anything but direct competitors (Interview. 10.17.96. K.B.)."

Identifying the overly rigorous market-orientation of newly transformed East German managers does not seem to be enough to explain these curious cuts in communication. In this case the definition of who presented a competitive threat would have to be both more

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11 Arguing similarly are for example: Rachel et al., 1993; Claus, 1996, Treichel et al., 1993.

universal (i.e. do western firms also offer competitive threats?), and more accurate with regards to the difference between real competitors concerning product markets and those (eastern) firms which were not direct competitors in product markets. The paradox of one-sided communicative closure must be observed in connection with the enterprise transformation itself. I see three possible interpretations:

First, the communication cuts might be interpreted as an effect of disassociation. This argument suggests that an enterprise was to be understood as self-reliant and in clear separation from former organizational connections. Thus, transformation meant that firms would have to create their own, new organizational identity and do so by drawing new lines of demarcation—especially between themselves and those organizations which they were formerly associated with. The communicative closure was therefore directed toward the "neighbors" or the other members of the former *Kombinate*, and was felt to be necessary as long as the new organizational or firm boundaries were considered to be uncertain by the actors. As one of my interviewees said: "First you have to build the fence, then you can open the door." As long as the new firms had not yet established themselves as serious market contenders, and consolidated as organizations, external communication was closed or limited with respect to the former organizational environment.

Second, the astonishing openness to western, mostly West German firms—even when they were direct competitors on the product markets—can be explained by the high expectations or hopes of profitable cooperation with these western firms. Moreover, East German firms saw western companies primarily as potential investors which one needed to impress. The more difficult it became to find investors, the more obvious it became that there were far more eastern firms seeking western investors than vice versa. Investors were a scarce good and were thus able to choose among a number of competing offers. From this point of view the curious competitive behavior of East German firms against other East firms, even when they were not direct competitors, is rational. It is also much clearer why East German firms underestimated the opportunism of West German firms, while they overestimated the opportunism of former fellow enterprises. East German firms were indeed real competitors—if not on the product market then on the privatizing market—where they collectively offered a large supply of productive capacities but were met with weak demand. Hence, there were few incentives to "show one's cards" to other eastern companies who were also looking for western capital and know-how, and access to new markets. Western firms, in contrast, appeared on the privatization market as investors and not as competitors and so eastern managers were willing to reveal company information even to their western market competitors. Product and privatizing markets therefore represented rather divergent demands and risks for the management of the East German firms. East German managers were thus completely surprised by the opportunistic behavior of West German firms which sometimes preferred for instance to simply take advantage of the company's lists of customers rather than get involved in the risky venture of restructuring.

Here lies the implicit argument that the isolation of East German firms and their one-sided communicative closure with respect to their previously familiar environment is neither purely the result of fixed institutional aspects of the transformation, nor is it due to fixed ideologies. Instead, I argue here that the communication cuts are to be explained by the actual changing environmental conditions and as an integral part of a dynamic learning process.

Part Three: Revisiting the Results of the East German Transformation

A top-down perspective that narrowly focuses on the THA as the central actor of restructuring and privatizing in the East German transformation typically overlooks the contribution of actors from below and identifies the results of the enterprise transformation with the outcomes of the *Treuhand*-privatization.[12] I have argued in this paper that the transformation of the large conglomerates into private companies was not totally controlled and directed by the THA. Though there is little doubt that the THA was a central actor in this process, the high speed of disaggregation would not be understandable without respect to the activities from below. These actors partially reacted to new conditions and alternatives in the product markets, but also calculated the opportunities and constraints of the situation as a whole.

In addition, since enterprise transformation was not simply a passing of enterprise control from state to private hands, but also a reconfiguration of an enterprise's productive capacities and resources, it is necessary to consider the creation of <u>new</u> firms as a

[12] Not only do Stark and Brustz argue this way, but also other authors like Lange und Pugh (1998): "East Germany has ... been assimilated into German capitalism but lacks a substantial capitalist class," tracing this back to the "top-down method of privatization ... that mainly created subsidiaries of West German companies, and tended to exclude East Germans (83-84)."

Such regional variations can be attributed to traditional patterns of industrial orders that do not determine the regional prospectives but shape opportunities and constraints for actors in different ways. In contrast to the legacy of the autarkic, firm-centered industrial order, the legacy of the decentralized industrial order fosters the (re)establishment of inter-organizational relationships in a number of ways:

First, in Saxony like in the smaller Thuringia, the "critical mass" of potential cooperative partners is considerably greater than in the regions of Brandenburg or Saxony-Anhalt. Even in comparison to West German Länder the density of enterprises in Saxony is not as low as normally expected in East Germany. As Table 5 and 6 reveal, Saxony is ranked sixth among the 16 German Länder in respect to the number of enterprises; Thuringia is eighth, Saxony-Anhalt is ranked tenth, followed by Brandenburg and Berlin (including Berlin-West). Moreover, Saxony in particular maintains a diversity of branches, suppliers and producers in automobile, machine, microelectronics and textile industries, and as a region offers a wide-range of opportunities for inter-firm cooperation.

In addition, Saxony has been quite succesfull in attracting new green-field investments. One of the most important investors is the car producer Volkswagen in Zwickau and the U.S. electronic company AMD in Dresden. The former headquarters of the micro-electronic *Kombinat* Robotron was in Dresden, and the city was able to beat out Frankfurt an der Oder (Brandenburg) in the competition for new investors in this industry. While Brandenburg could not prevent the demise of its micro-electronic enterprises, Saxony's state administration was able to build Dresden into a German center for semi-conductors. Dresden's attraction can be explained not only by the enormous subsidies the state administration was able to mobilize to this end, but also by the rich offering of highly skilled workers and the scientific and technical infrastructure. The April 1999 announcement of the U.S. micro-electronic firm Mattson Technology Inc. to locate their European-Center for R&D in Dresden once again demonstrated the success of Dresden's policies for restructuring and strengthening its micro-electronic industry.

Second, the high concentration of branch-specific institutions and services (university and other R&D institutes, training institutions, the headquarters of the *Kombinate*) did not simply vanish after 1989. They provided human resources and sometimes even organizational structures for the founding and restructuring of new regional private organizations and public or para-public institutions. In spite of the massive collapse of industry-related research in East Germany after 1989, Saxony was able to maintain a diversified and decentralized research landscape. Saxony, together with Thuringia, make up 60.8 percent (1995) of the industry-related R&D personnel in the former East German states.[16] While the share of this personnel in Saxony and Thuringia rose between 1991 and 1995, it continued to decline in Saxony-Anhalt and in East Berlin (Stifterverband, 1997: 27-28). Even the dramatically shrunken textile and clothing industry was able to maintain 11 small research institutes located in Saxony and Thuringia.

The relative density of the regional service institutions also concerns various collective organizations. Behind the new/old capital Berlin, Saxony has more business associations than all other East German states (some of these associations were transferred to Saxony and others were founded there). When one also takes into consideration the state and para-public institutions that developed through the transfer of institutions and the regional economy, then it is clear that Saxony enjoys a significant "density of actors": according to district research this density is a key factor for regional networks. And so we see a variety of public, para-public, and private institutions offering themselves as initiators, moderators, brokers of inter-firm cooperation and as organizers of state assistance (see for more details Bluhm 1999). The problem here was not a lack of "density of actors," but rather that these actors have to find a constructive balance between cooperation and competition. Although these actors are not competitors in product markets, they do compete with each other for political influence, legitimacy, state support and, sometimes, associational membership. Moreover, it is often not easy—as district literature sometimes assumes—to identify in which regard such actors can provide useful support. The deep economic and structural changes as well as the great uncertainty of the future in particular after 1989, made it even more difficult. Under such circumstances, the identification of potential common goods is already a difficult learning process. It is no wonder, that in the last years more projects were initiated than successfully completed (see Bluhm 1999). The machine industry in Chemnitz in particular has seen a number of such initiatives. The first was the foundation of the Interest Federation of the Chemnitz Machine Industry (ICM) started by the local IG Metall in April 1992. Yet, it took more than five years before the local industry put together promising projects. One of them was the founding of a research cooperation center (*Kompetenzzentrum Maschinenbau*). This "Center of Competence" was founded by ten companies in Chemnitz based on a contract for joint research and development of new products. This resulted in several projects and each of them includes a different combination of partners (Chemnitzer InnovationsWerkStadt,

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16 This however only amounts to about five percent of the R&D staff in Germany's economy. A look at the patent applications reveals a similar picture. With 32 percent Saxony has by far the largest yield, followed by Thuringia with 21.5 percent, Brandenburg with 13.7 percent, Berlin (East) 13.5 percent, Saxony-Anhalt 12.8 percent and Mecklenburg-West Pomerania with 6.6. percent. The filing average is 21 patent applications per 100,000 inhabitants, the German average as a whole was 58 percent in 1998 (www.deutsches-patentamt.de, *Jahresbericht* 1998).

1998: 11). Though the "Center of Competence" was initiated by a few companies, the idea received early financal support from the state government of Saxony and got institutional support by the Economic Development Corporation of the city of Chemnitz (see Bluhm, 1999: 166-170).

Third, part of the legacy of the decentral regional order is the identification of certain industry (not one single large firm but a number of smaller firms) with the region or sub-region in which they are located. This kind of regional-based identity also facilitates cooperation since it is easier to create and recognize joint interests and potential common goods. Sometimes, this identification is so strong that even trademarks are not firm-based but regional-based. One example is the Plauener lace and embroidery industry in and around the town of Plauen. In the state socialist system this traditional small- and medium sized industry was organized within one large but highly dispersed VEB. After a period of dissolution, separation and deep mistrust the firms learned that they have a common good to protect, namely the regional-based trademark "Plauener Lace." They founded a trademark association in order to protect the regional manufacturer's use of the tradename and to determine and monitor quality standards. Based on this agreement further initiatives became possible. The most advanced of these was the expansion of the market for "Plauener Lace" beyond household textiles (as it was under state socialist conditions) to undergarments and clothes and to present the "umbrella trademark" at international exhibitions. These expansion efforts were monitored by the employer's association of the East German textile and clothing industry, located in Chemnitz, and financially supported by the para-public Economic Development Corporation of the state of Saxony.

The old regional-based brand products like the "Plauener Lace" or Vogtland's Music Instruments provide a model for cooperation. The textile association and Saxony's Economic Development Corp. have begun to encourage other very small firms in Saxony to create "umbrella trademarks" even though these firms have not had a traditionally a regional-based trademark. Up to 1999, 18 such joint marketing associations were founded including 650 companies and more than 8,000 employees. The aim is mainly the same, namely he pooling of resources to ensure a uniform market presence and enhance the degree of brand recognition, while firms maintain their own individuality. The bargaining process between the firms is monitored and moderated either by the textile association or (in other industries) by the Economic Development Corp. of the state of Saxony.

Conclusions

I have argued, that the East German enterprise transformation can only be understood when one combines both top-down and bottom-up perspectives. In this respect, East Germany is no different than other Central- and Eastern Europe cases where the necessity of a combined view is widely accepted. Integrating the bottom-up perspective also reveals that the insitutional pathway approach explains the East German case less than Stark and Bruszt suggested. In addition, a closer look at this case identifies two more general weaknesses of the pathway approach:

First, the institutional pathway approach did, in fact, ignore the possibility of institutional decay and dissolution. Thus, this approach assumes as a constant in all transformation processes that institutional resources are to be recombined and rearranged, and that through this the socialist past reaches into the post-socialist present and future. While the concept of the "shock therapy" is "undersocialized," the pathway approach "oversocialized" the behavior of actors in a way that does not focus closely enough on the different constraints and opportunities for strategic choices of actors. There is enough evidence, for instance, for Poland or the Czech Republic that autonomization was a relevant option for enterprise managers during the transformation.[17] Gerald A. McDermott shows for the Czech Republic after 1988/89 that some conglomerates stuck together, while others almost immediately fell appart (McDermott 1998). He also gives impressive illustrations that an autonomization-strategy under the conditions of an "emerging market" was highly risky. "Renegades," when they gave up their membership in a large enterprise, were, especially in the early stage of transition, in danger of losing access to government or bank credit and to their former suppliers that could hardly be replaced (see McDermott 1994, 1998).[18] Such special benefits and risks did not exist in the Geman case.

Second, the institutional pathway approach also over- and underestimates the role of historical legacies. These legacies are overestimated as the institutional arrangements of

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[17] In addition, there are the processes of "spontaneous privatization" and "asset stripping," generally carried out by management in the earlier phases of the transition (compare Mertlik, 1996; MacDermott 1994: 27; Gaçiarz./Pañków, 1996; Tänzler/Mazálkova, 1996; Dornisch, 1999; Urban, 1997: 187; Ernst et al., 1996: 295; Beyer/Wielgohs, 1998).

[18] Ernst et al. also show with Poland, that in the earlier years there were considerably more small, independent enterprises than large firms that had to officially declare bankruptcy. The average size of the firm that was actually liquidated by mid-1994 was about 41 employees (1996: 109).

significant part of this process. The creation of new enterprises and the reconfiguration of enterprise units were intertwined processes in which resources and assets were transferred. These processes could scarcely be disentangled from each other. Though there was not much asset stripping in East Germany, many managers, engineers and qualified workers tried to create a new professional existence by applying previously accumulated social and intellectual capital and also often purchased machinery and technical equipment from their former workplace. Even product ideas and key technologies from these new enterprises often had their origins in former work contexts and experiences.[13] It is important to distinguish between the 1994 statistics that describe the outcomes of the *Treuhand* privatization and the results of enterprise transformation in general. While the *Treuhand* statistics show a clear dominance of western, especially of West German owners (Table 1), surveys reveal another picture. According to the Economic Institute in Halle (IWH) it is East German owned property that dominates East German industry, with the exception of the chemical industry (1998: 14). As Table 2 shows, in 1996, 86 percent of industrial firms were in East German ownership, and only ten percent of these firms were privatized or reprivatized by the THA. The German Institute for Economic Research (DIW) came up with similar results, and their survey showed that independent firms and <u>not</u> subsidiaries were the dominant form of enterprises in East Germany as of 1998. The proportion of East German owners appears to be high among these firms (Table 3), though we also have to consider that with regard to the employment and business volume the share of East German firms is clearly lower (see Table 2). According to the IWH (Table 2), East German owners employ 58 percent of the employees working in manufacturing industries, whereas West German owners employ about 31 percent of such workers.

In addition, even when we include West German and foreign-owned property the average size of industrial firms in East Germany is far below the average size in comparable West

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13 One example: With the corporatization of the former R&D Center of the "Fritz-Heckert" *Kombinat* as a separate firm, it became a company to be privatized by the THA just like other corporatized enterprises. The THA—supported by the management—soon found an investor for the Center who agreed to take over 160 employees of the Center (1,600 people had been employed in 1989). But even before that, the R&D Center lost many employees in other ways. A considerable number sought new jobs in West Germany or in the restructured regional or city administrations. Yet, a lot of engineers left the Center in order to create—with their know how and colleagues—their own enterprises. In some cases they developed and commercialized new ideas or technologies which stemmed from their time with the Center. We do not know exactly how many start-ups can be traced to such resources and uses of social capital. But in this case, one can say the *Treuhand* privatization of this R&D Center failed, and after a long decline it finally went bankrupt in 1996. Still, at least three or four of those new start-ups survived. In the end, only the privatization of the former Center emerges in the statistics of the THA.

German industries—we see a so-called "scaling-down of enterprises," or a *Verkleinbetrieblichung*. In 1998, the average size of mining and manufacturing enterprises in Saxony lies around 80 employees, in Saxony-Anhalt around 115, while in West German *Länder* like Baden-Württemberg it lies around 140 and in Nord Rhine-Westphalia around 145 employees (see Table 4).[14] To summarize, East Germany's enterprise transformation resulted not primarily in the creation of western subsidiaries. In fact, we find a mixture of some western enterprises, mostly larger than indigenous firms, and many small and independent East German manufacturing companies. These companies often attempt to survive in specialized niches and operate with minimal capital and profit. Thus, the structure of the East German industry can be characterized as a kind of "small business capitalism."

Based on these findings, the difficulties faced with respect to regional and associational networks are quite different from what Stark and Bruszt suggested. Regional networks and associational ties were <u>not</u> impossible because of the dominance of western subsidiaries. However, due to the radical dissolution of former inter-organizational relationships these networks had to be extensively reconstituted, and this is a long and difficult process.[15] Moreover, the reconstitution of regional networks and associational ties has varied among East German regions, and a clear North-South divide is emerging.

Brandenburg's industry, for example, is characterized by a fragmentation of endogenous potentials and little regional networking. This situation is attributed to the vertical integration of key area enterprises into West German companies whose headquarters and R&D capacities are mostly located outside of the region (Schwarz, 1999). In Saxony-Anhalt the privatization of the huge chemical enterprises was only possible with an active industrial policy and state subsidies, that Helmut Kohl's government agreed to fearing both the high work force concentration in the "Chemical-Triangel" and pressure from the trade union. The relatively good ranking of Saxony-Anhalt in respect to investments (see Table 4 and 5) can be traced back to the huge investments in a few chemical plants that, in fact, have little use for regional suppliers or research capacities. Meanwhile, in Saxony with respect to R&D, some researchers even see a higher level of regional cooperation than in comparable regions of West Germany (Fritsch/Lukas, 1998), and there continues to be many initiatives to develop cooperation among firms (see Bluhm 1999).

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[14] See also Lutz 1996: 125. Schmidt, 1996.

[15] In 1997 the DIW found that the supply routes for East German producers were still on average longer than those of producers in West Germany (1997: 599).

the particular state-socialist economy are always identified as foundations of a "post-socialist pathway" after 1989 without adequately considering the institutional breaks. The institutional pathway approach at the same time underestimates the influence of historical legacies by highlighting the state-socialist starting point above all other historical factors, especially of the more distant past. With the German example I showed that even with its massive institutional and structural breaks, there were older histories of industrial order before the time of the state-socialist production and governance system, that have influenced the process and results of the recent industrial transformation.

Appendix

TABLE 1

Ownership structures of enterprises in the THA portfolio after September 30, 1994.

	Portfolio of enterprises			**Portfolio of enterprises**	
Activity	Number	%	Ownership Status	Number	%
Liquidized	3.718	31	—		
Was taken over by municipalities	310	2	Municipalities	310	4
Reprivatized	1.588	13	Former owners	1.588	19
Privatized	6.546	54	MBO/MBI	2.983	35
			West German investors	2.703	32
			Foreign investors	860	10
Total net	12.162	100	Total	8.444	100
Remaining with THA	192		Remaining with THA	192	
Total gross	12.354				

Sources: Bundesanstalt für vereinigte Sonderaufgaben: Abschlußstatistik, IWH (1998).

TABLE 2

Ownership structure 1995/1996 in the East German industry (%), according IWH.

Owners	**Enterprises**	**Employment**	**Business Volume**	**Common Stock Capital**
East Germans	86	58	42	22-29
West Germans	12	31	41	51-44
Foreign Investors	1	6	11	7
Public ownership	1	5	6	20
Total	100	100	100	100

Source: IWH 1998: 13.

TABLE 3

Enterprises and employment in the East German industry regarding ownership structure and origin, 1991 until 1998 (%), according DIW.

	Enterprises (%)						Employment (%)					
Quarter/Year	Sommer 1991	Sommer 1992	Winter 1993/94	Spring 1995	Fall 1996	Begin 1998	S 1991	S 1992	W 1993/94	Sp 1995	F 1996	B 1998
Ownership status												
Private Enterprises	**14**	**66**	**94**	**99**	**99**	**100**	**8**	**41**	**76**	**95**	**95**	**99**
including: Independent Enterprises	9	49	80	77	77	76	1	19	42	50	51	49
Enterprises owned by West German or foreign firms	5	17	14	22	22	24	7	23	34	45	44	50
including: Privatized Enterprises	X1	48*	41	34	33	26	X1	36*	55	60	57	55
Reprivatized	X1		20	17	13	13	X1		8	13	10	12
Enterprises, that were in private hands before 1990	X1	5	7	5	8	8	X1	2	5	2	6	6
Start-ups after 1989	X1	13	26	43	44	53	X1	3	7	20	22	26
Enterprises remaining with THA or its Successor	**86**	**34**	**6**	**1**	**1**	**0**	**92**	**59**	**24**	**5**	**5**	**1**
Total	100	100	100	100	100	100	100	100	100	100	100	100

X1) Numbers are not available, or insignificant, due to a small number of cases. *) Included reprivatized enterprises.

Source: DIW 1998: 585.

TABLE 4

Structural data on mining and manufacturing in the 16 German *Länder* (patent application figures reflect all sectors of the economy)

German *Länder* and *Stadtstaaten*	Enterprises	Employees	Turnover	Turnover abroad	Investments	Patent Applications
	Number	1000	Mill. DM	Mill. DM	Mill. DM	per 100.000 Inhabitants
	1998	1998	1998	1998	1997	1998
Baden-Würtemberg	8857	1245	405409	150025		105
Bavaria	8294	1189	413018	154009	16070	97
Berlin	950	121	59304	12276	2153	40
Brandenburg	1116	93	27463	4014	2636	17
Bremen	355	66	33488	15974	627	25
Hamburg	602	103	94722	15853	2571	52
Hesse	3257	470	154059	51429	8146	69
Mecklenburg-West Pom.	556	44	12169	1808	725	12
Lower Saxony	4215	560	235214	84779	8925	38
North Rhine-Westphalia	10429	1520	527934	168818	18266	94
Rhineland-Palatinate	2276	312	113755	46512	3932	52
Saarland	527	107	31556	11230	1166	27
Saxony	2656	211	52510	11693	3875	23
Saxony-Anhalt	1262	103	29660	4010	4261	15
Schleswig-Holstein	1483	143	50678	15083	1413	24
Thuringia	1531	117	29886	5654	1522	28

Source: Statistische Bundesanstalt, *Jahrbuch 1998*, www.statistik-bund.de (only enterprises with more than twenty employees are included), Deutsches Patentamt, *Jahresbericht 1998*, www.deutsches-patentamt.de

TABLE 5

Ranking of the mining and manufacturing industries in the 16 German *Länder* according to structural data (patent applications rankings reflect all sectors of the economy)

	Enterprises	Employees	Turnover	Turnover abroad	Investments	Patent Applications
	Number	1000	Mill. DM	Mill. DM	Mill. DM	per 100.000 Inhabitants
	1998	1998	1998	1998	1997	1998
1	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	Baden-Würtemberg
2	Baden-Würtemberg	Baden-Würtemberg	Bavaria	Bavaria	Baden-Würtemberg	Bavaria
3	Bavaria	Bavaria	Baden-Würtemberg	Baden-Würtemberg	Bavaria	North Rhine-Westphalia
4	Lower Saxony	Lower Saxony	Lower Saxony	Lower Saxony	Lower Saxony	Hesse
5	Hesse	Hesse	Hesse	Hesse	Hesse	Rhineland-Palatinate, Hamburg
6	Saxony	Rhineland-Palatinate	Rhineland-Palatinate	Rhineland-Palatinate	Saxony-Anhalt	
7	Rhineland-Palatinate	Saxony	Hamburg	Bremen	Rhineland-Palatinate	Berlin
8	Thuringia	Schleswig-Holstein	Berlin	Hamburg	Saxony	Lower Saxony
9	Schleswig-Holstein	Berlin	Saxony	Schleswig-Holstein	Brandenburg	Thuringia
10	Saxony-Anhalt	Thuringia	Schleswig-Holstein	Berlin	Hamburg	Saarland
11	Brandenburg	Saarland	Bremen	Saxony	Berlin	Bremen
12	Berlin	Saxony-Anhalt/ Hamburg	Saarland	Saarland	Thuringia	Schleswig-Holstein
13	Hamburg		Brandenburg	Thuringia	Schleswig-Holstein	Saxony
14	Saarland	Brandenburg	Thuringia	Brandenburg	Saarland	Brandenburg
15	Mecklenburg-West Pom.	Bremen	Saxony-Anhalt	Saxony-Anhalt	Mecklenburg-West Pom.	Saxony-Anhalt
16	Bremen	Mecklenburg-West Pom.	Mecklenburg-West Pom.	Mecklenburg-West Pom.	Bremen	Mecklenburg-West Pom.

Source: See Table 4

References

Beyer, J. and J. Wielgohs.1998. "Path-Dependency Approaches for Explaining Post Socialist Institutional Building. In Criticak Response to David Stark. Paper presented at the 10th International Conference on Socio-Economics "Challenges for the Future: Structural Changes as Transformations in Contemporary Societies." Vienna, Austria. July 1998, (forthcoming East European Politics and Societies)

Bluhm, K. 1991. "Vom gescheiterten zum nachholenden Fordismus?" *Berliner Debatte INITIAL*, 3:251260.

Bluhm, K. 1999. *Zwischen Markt und Politik: Probleme und Praxis von Unternehmenskooperation in der Transitionsökonomie*. Opladen: Leske+Budrich.

Bredereck, R. 1993. "Kosmetik-Kombinat Berlin: Ungeschminkt in die Marktwirtschaft" Pp. 293300 in *Kombinate: Was aus ihnen geworden ist*, edited by Wochenzeitung Die Wirtschaft. Berlin: Verlag Die Wirtschaft.

Bramke, W. et al. 1992. *Sachsens Wirtschaft im Wechsel politischer Systeme im 20. Jahrhundert. Strukturelle Entwicklung und soziale Problemfelder vom Ausgang des Ersten Weltkrieges bis in die frühen 60er Jahre*. Leipzig: KSPW-Studie.

Chemnitz InnovationsWerkStadt.1998. *Kompetenzzentrum Maschinenbau Chemnitz*.

Claus, T. 1996. "Existenzgründungen in Ostdeutschland: Ergebnisse einer empirischen Untersuchung in Ostdeutschland" in *Aus Politik und Zeitgeschichte. Beilage zum Wochenblatt Das Parlament* B 15: 3-19.

DIW. 1997. "Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte Ostdeutschland." Pp. 549-577 in *Wochenbericht* (64) 32.

DIW. 1998. "Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland." in *Wochenbericht* (65) 33.

Dornish, D. 1999: "Project Networks vs. Networks of Cooperation, Regional Restructuring and Governance in Post-Socialist Polands." Paper presented at the conference "Institutional Life World or Economic Rationality." WZB Berlin, April 1617.

Ernst, M. Alexeev, M. and P. Marer. 1996. *Transforming the Core: Restructuring Industrial Enterprises in Russia and Central Europe*. Oxford: Westview Press.

Fischer, W. and H. Schröter. 1993. "Geschichte, gesetzliche Rahmen und organisatorischer Aufbau der Treuhandanstalt." Pp. 17-39 in *Treuhandanstalt: Das Unmögliche wagen*, edited by W. Fischer, H. Hax, and HK Schneider.

Fritsch, M. and R. Lukas. 1998. *Innovation, Cooperation, and the Region*. Freiberg, Working Paper, no.1.

Freese, Ch. 1995. *Die Privatisierungstätigkeit der Treuhandanstalt. Strategien und Verfahren der Privatisierung in der Systemtransformation*. Frankfurt a.M./New York: Campus.

Gaçiarz, B. and V. Pańków. 1996. "Unternehmenstransformation in Polen: Soziale und institutionelle Bedingungen." *Berliner Debatte INITIAL* (7) 6: 67-79.

Görner, G., et al. 1989. *Leitung und Organisation in Kombinaten: Rechtsfragen*. Berlin: Staatsverlag der Deutschen Demokratischen Republik.

Grabher, G. 1994. "The Disembedded Regional Economy: The Transformation of East German Industrial Complexes into Western Enclaves." Pp. 177-195 in *Globalization, Institutions, and Regional Develpoment in Europe*, edited by : A. Amin and N. Thrift. Oxford: Oxford University Press.

Grabher, G. 1995. "The Elegance of Incoherence: Economic Transformation in East Germany and Hungary." Pp. 33-53 in: *Industrial Transformation in Europe: Process and Contexts*, edited by E.J. Dittrich, G. Schmidt and R. Whitley. London: Sage.

Heindorf, W.-E. .1994. "Branchentag der inneren Kooperation der ostdeutschen Textil- und Bekleidungsindustrie, Reichenbach." 9. Mai (ms.).

Heidenreich, M. 1991. "Zur Doppelstruktur planwirtschaftlichen Handelns in der DDR." *Zeitschrift für Soziologie* (20) 6: 411-429.

Herrigel, G. .1996. *Industrial Construction: The Sources of German Industrial Power*. Cambridge: Cambridge University Press.

IG Metall. 1993. *Wir bauen unsere Zukunft selbst. Daten, Fakten. Januar 1992 bis Dezember 1992.* IG Metall, Verwaltungsstelle Chemnitz.

IWH. 1998. "Eigentums- und Vermögensstruktur in Ostdeutschland: Eine Bestandsaufnahme." *Wirtschaft im Wandel* 1: 11-20.

Kemmler, M. 1994. *Die Entstehung der Treuhandanstalt: von der Wahrung zur Privatisierung des DDR-Volkseigentums.* Frankfurt a.M./New York: Campus.

Kusch, G. et al. 1991, *Schlußbilanz DDR. Fazit einer verfehlten Wirtschafts- und Sozialpolitik.* Berlin: Dunker&Humblodt.

Lange, Th. and G. Pugh. 1998. *The Economics of German Unification: An Introduction.* Cheltenham/Nothamton: Edward Elgar.

Lutz, B.. 1996. "Die mühsame Herausbildung neuer Beschäftigungsstrukturen." Pp. 121-158 in *Arbeit, Arbeitsmarkt und Betrieb*, edited by B. Lutz et al. Opladen: Leske+Budrich.

Marz, L. 1991. "Der prämoderne Übergangsmanager. Die Ohnmacht des 'realsozialistischen' Wirtschaftskaders." Pp.104-125 in *Demokratischer Umbruch in Osteuropa*, edited by R. Deppe, R. Dubiel and U. Rödel. Suhrkamp: Frankfurt a.M.

Marz, L. 1992. "Beziehungsarbeit und Mentalität" Pp. 75-90 *in DDR-Gesellschaft von innen: Arbeit und Technik im Transformationsprozeß*, edited by E. Senghaas-Knobloch and H. Lange. Forum Humane Technikgestaltung no 5. Friedrich-Ebert-Stiftung.

McDermott, G.A. 1994. *Renegotiating the Ties that Bind: The Limits of Privatization in the Czech Republic.* Discussion paper, FS I 94-101, Berlin: WZB.

McDermott, G.A. 1998. The Communist Aftermath: Industrial Networks and the Politics of Institution Building in the Czech Republic, Doctoral Theses at the MIT

Mertlik, P. 1996. "Czech Industry: Organizational Structure, Privatization and their Consequences for its

Rachel, G., et al. 1993. *Voraussetzungen, Engpässe und Probleme bei der Entstehung neuer Arbeitsplätze in Klein- und Mittelbetrieben. Ein kooperatives Entwicklungskonzept für die Mansfelder Region.* Berlin/München: Söstra/ISF.

Schlütter, B. and W. Beilicke. 1993. "Pharmazeutisches Kombinat Germed Dresden: Bittere Pille geschluckt." Pp. 209-218 in *Kombinate: Was aus ihnen geworden ist*, edited by Wochenzeitung Die Wirtschaft. Berlin: Verlag Die Wirtschaft.

Schmidt, R. 1996. Restrukturierung und Moderenisierung der industriellen Produktion." Pp. 227-250 in *Arbeit, Arbeitsmarkt und Betrieb*, edited by B. Lutz et al. Opladen: Leske+Budrich.

Schwarz, A. 1999: "Mutual Patterns of Perception Concerning Cooperation Between East- and West-German Innovative Entrepreneurs" (Case Studies in the IT-Industry of Berlin and Brandenburg)." Paper presented at the conference "Institutional Life World or Economic Rationality." WZB Berlin, April 16-17

Seibel, W. and St. Kapferer. 1993. "Die organisatorische Entwicklung der Treuhandanstalt." Pp. 111-147 in *Treuhandanstalt: Das Unmögliche wagen*, edited by W. Fischer, H. Hax, and H-K. Schneider.

Stark, D. 1992. "Path Dependence and Privatization in East Central Europe." *East European Politics and Societies* (6) 1: 17-54.

Stark, D. 1995. "Not by Design: The Myth of Designer Capitalism in Eastern Europe." Pp. 67-83 in *Strategic Choice and Path-Dependency in Post-Socialism: Institutional Dynamics in the Transformation Process*, edited by : J. Hausner, B. Jessop and K. Nielsen. Aldershot/Vermont: Edward Elgar.

Stark, D. 1996 "Recombinant Property in East European Capitalism." *American Journal of Sociology* (101) 4: 993-1027.

Stark, D. and Bruszt, L. 1998. *Postsocialist Pathways, Transforming Politics and Property in East Central Europe.* Cambridge: Cambridge University Press.

Stephan, H. and E. Wiedemann. 1991. "Lohnstruktur und Lohndifferenzierung in der DDR." *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung (MittAB)* (23) 4: 550-562.

Stiftungsverband. 1997. *Forschung und Entwicklung in der Wirtschaft 1995 bis 1997. Datenreport*, edited by Wissenschaftsstatistik GMBH im Stiftungsverband für die Deutsche Wissenschaft.

Tänzler, D. and I. Mazálková. 1996. *Dezentralisierung und Rezentralisierung: Restrukturierung eines tschechischen Maschinenbaukonzerns.* Discussion paper, FS II 96-601, Berlin: WZB.

THA. 1994. *Dokumentation 1990-1994.* Bd. 4, Berlin: THA.

Treichel, H.-R., et al. 1993. *Endberichtsteil des Projektes "Arbeit und neue Technik in der Druckindustrie - FuE-Betreuung klein- und mittelständischer Unternehmen, Evaluation und Anstöße zum Ergebnistransfer.* Bochum/Düsseldorf

Urban, L. 1997. "Structural Changes and Privatization Process." Ch. 7.1. in *The Privatization Process in East-Central Europe: Evolutionary Process of Czech Privatization*, edited by M. Mejstik. Dordrecht/Boston/London: Kluwer Academic Publishers.

Voskamp, U. and V. Wittke. 1991. "Aus Modernisierungsblockaden werden Abwärtsspiralen: Zur Reorganisation von Betrieben und Kombinaten in der ehemaligen DDR." *Berliner Journal für Soziologie* (1) 1: 17-39.

Voskamp, U., Bluhm, K. and V. Wittke. 1993. "Industriepolitik als Experiment-Erfahrungen aus der großchemischen Industrie in Sachsen-Anhalt" *WSI Mitteilungen* (46) 10: 648-658.

Winkler, G. (ed.). 1990. *Sozialreport '90. Daten und Fakten zur sozialen Lage in der DDR*. Berlin: Verlag Die Wirtschaft.