PRIVATIZATION IN THE FORMER GERMAN DEMOCRATIC REPUBLIC:
CHANGING INSTITUTIONAL ROLES IN THE GOVERNANCE AND SALE
OF INDUSTRIAL ASSETS

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ABSTRACT  

The unification of Germany has left the federal government with a host of industrial  
assets from the state-owned companies of the former GDR. The transition from a planned  
to a market economy in Eastern Germany has created a need to redefine the traditional  
roles of corporate stakeholders. Many Eastern companies are not likely to be viable in a  
competitive market economy. High social opportunity costs of liquidation, however,  
often preclude their closure. As a result, the governance and sale of these industrial assets  
presents unprecedented challenges to public authorities and financial institutions.  

The case of the former German Democratic Republic is of particular interest, since at the  
outset it seemed that the Federal Republic of Germany's financial and legal infrastructure  
would ease this transition, when compared to other nations of Central and Eastern  
Europe. This thesis explores the privatization and restructuring of the East German  
industrial assets by examining two different aspects of the process.  

Part I, written by Hanno Schmidt-Gothan, examines the chemical industry, formerly one  
of the GDR's most renowned industries. Privatization of the chemical sector has turned  
out to be particularly difficult owing to the inherent complexity of the industrial assets in  
this sector. Part II, by Mark Jrolf, analyzes the ability of Western financial institutions to  
adapt to the challenges posed by the privatization process.  

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FOREWORD

The unification of Germany has left the federal government with a host of industrial assets from the state-owned companies of the former GDR. The transition from a planned to a market economy in Eastern Germany has created a need to redefine traditional roles of corporate stakeholders. Many Eastern companies are not likely to be viable in a competitive market economy. High social opportunity costs of liquidation, however, often preclude their closure. As a result, the governance and sale of these industrial assets presents unprecedented challenges to public authorities and financial institutions.

The case of the former German Democratic Republic is of particular interest, since at the outset it seemed that the Federal Republic’s financial and legal infrastructure would ease this transition, when compared to other nations of Central and Eastern Europe. This thesis explores the privatization and restructuring of the Eastern German industrial assets by examining two different aspects of the process.

Part I, written by Hanno Schmidt-Gothan, examines the chemical industry, formerly one of the GDR’s most renowned industries. Privatization of the chemical sector has turned out to be particularly difficult owing to the inherent complexity of the industrial assets in this sector. Part II, by Mark Jrolf, analyzes the ability of Western financial institutions to meet the challenges posed by the privatization process.
PART I

INSTITUTIONAL ACTORS IN THE PRIVATIZATION
OF ASSETS IN THE CHEMICAL INDUSTRY

Introduction

This section of the thesis examines the role of institutional actors in the privatization process of the East German chemical industry by using the example of the Chemie AG Bitterfeld-Wolfen (CBW), one of the four large chemical combines in the former GDR. While the chemical industry was considered one of the most successful branches of the GDR economy, it turned out to be one of the hardest sectors to privatize.

The process of transferring ownership of the East German industrial assets into private hands is unprecedented in its scale and complexity. It will be argued that the process of privatization is shaped by conflicts evolving between different actors, even though they were created with a common goal in mind. The complexity of the issues involved confers great power on local knowledge. The Treuhandanstalt, realizing that local knowledge is needed if it is to achieve its goal of successful privatization, has created a set of institutions to aid in this process. These institutions have become autonomous through the very power of this knowledge. Instead of aiding in the process of privatization of industrial assets, they have begun to interfere with each other and with the Treuhand's activities. The need to decentralize has led to the creation of new players that engage in various coalitions against their creator and each other. It will be shown that this paradox arises from differences in the actors' micro-level motives. Possible approaches to aligning these motives will be suggested.
To show the inherent complexity of the issues involved, the thesis will begin with an analysis of the chemical industry in the former GDR. It will then describe the different actors in the privatization process of CBW: the Treuhand, CBW local management, the municipalities of the district of Bitterfeld, the state of Sachsen-Anhalt, existing and potential investors, and other stakeholders. Deriving the need to handle the complexity by local knowledge through decentralization, it will be demonstrated how the different political and economic constraints faced by the actors led to the development of a so-called Industrieparkgesellschaft (IPG) as a central authority for the privatization and development process. Next, the micro-level motives of the various institutions will be analyzed, and possible and actual points of tension between the different stakeholders among each other and with the IPG will be described. Finally, ways to overcome the misalignment of micro-level motives will be suggested, and a variety of possible scenarios for future development will be examined.

The data included in this thesis section have been obtained from on-site interviews in Germany with officials in the Treuhandanstalt, management and staff of the Chemie AG Bitterfeld-Wolfen, city officials in Bitterfeld, officials of the Sachsen-Anhalt Ministry of Economics, and consultants from Arthur D. Little and McKinsey & Company, Inc. The interviews were complemented by extensive background literature and conversations with MIT faculty and staff.
1. The Chemical Industry in the GDR

The chemical industry was one of the most prestigious sectors of the East German economy. Its achievements were seen as a sign of the independence and superiority of the socialist planned economies. Today, Eastern chemical companies turn out to be among the most difficult to privatize and the hardest hit by environmental problems.

Along the lines of the GDR's drive for massive economies of scale and complete autarky from foreign supply, the chemical industry was concentrated at four sites, all within today's state of Sachsen-Anhalt. These were Buna, producing paint and dyestuffs, Leuna, a mineral oil facility and a refinery, Filmfabrik Wolfen, making industrial and consumer film (ORWO), and finally Bitterfeld, the "General Store" of the GDR chemistry, with a product variety of more than 4,000 different products, from industrial graphite to pharmaceuticals. All four combines were huge vertically and horizontally integrated entities that shaped whole regions of Sachsen-Anhalt. They operated their own kindergartens, supermarkets, and vacation centers on the Baltic Sea coast. Typically, they constituted the main source of employment in their respective cities.

Competitive production was hindered by the planned economic system of the GDR. The utilization of low-cost raw materials purchased in the market was prohibited by the state's drive for autarky. Maintenance and modernization of facilities were hindered by the investment budgeting procedure of the respective industry ministry. The state's foreign trade monopoly cut off access to foreign markets. In addition, the firms were forced to cover unrelated social costs and employ more people than needed. All major sites were intertwined through a network of mutual dependence: one site produced the raw material for another, as exemplified by Leuna's provision of feed stock for CBW.
The chemical industry was one of the core industries of the GDR, employing about 300,000 people -- 10% of total employment in the manufacturing sector. The four main sites still employed 74,000 people in July 1990, reduced to 63,000 on January 1, 1991, then down to 58,000 in May 1991, and decreasing further.2

To privatize the four combines, the Treuhandanstalt’s U-6 department has hired outside consulting firms to assess the state of the facilities and to develop a strategy for the development of the sites. McKinsey&Company, Inc. has examined Leuna and Filmfabrik Wolfen, while Arthur D. Little has analyzed Chemie AG and Buna. While large parts of Leuna, the refinery and the Minol gas station chain, have successfully been privatized (sold to a French-German consortium), Filmfabrik Wolfen's chance of survival is fairly low. Its one product line, film, is not competitive with Western products. The Filmfabrik's staff was cut from 15,000 in 1989 to 750 in January 1992.3 Buna AG's continuation of operation, making plastics, dispersions, solvents, and organic chemicals, can only be justified by taking the macroeconomic opportunity cost (unemployment, regional disintegration) into account.
2. Different Actors in the Privatization of Chemie AG

2.1 The Chemie AG Bitterfeld-Wolfen

The Chemie AG Bitterfeld-Wolfen (CBW) is located in the district (Kreis) Bitterfeld in the state of Sachsen-Anhalt, between Berlin and Halle. It is situated within the three cities of Bitterfeld, Wolfen, and Greppin.

2.1.1 Overview

An overview of the plant as a whole is given in Appendix A⁴. Noticeable are the fairly good traffic connections to the Deutsche Reichsbahn (DR) railroad system to Berlin, Leipzig, Halle, Magdeburg, and Dessau, and the proximity to the Autobahn A9 to Berlin and Halle. While there are no waterways usable by cargo ships, materials flow, especially on rail seems well secured.

The history of the Chemie AG Bitterfeld-Wolfen is described in Appendix B. It is interesting that CBW had a long tradition of successful research and innovation activity. Also, the historical development shows that the company had grown organically and through the merger of several very different business lines in the first half of the century.
2.1.2 Financial Situation and Ownership Rights

The balance sheet of CBW as of 1st July, 1990, the day of the monetary, economic, and social union in DM is shown in Appendix C. It must be considered, however, that these numbers are strictly book values, they do not necessarily reflect the true value of the company. A few things are noticeable on this balance sheet:

- Liabilities against credit institutes comprise more than half of the company’s liabilities.

- The assessed book values of buildings, technical plant and machinery make up almost one half of CBW’s assets.

- Inventories are almost 15% of the company’s assets.

- Cash and cash equivalents are only 3% of assets.

Overall, this statement shows that CBW’s financial situation is not very good. The company has high debt, little cash on hand, high inventories, and much potentially worthless equipment. Even under the most optimistic assumptions, cash flow from operations would not become positive until 1994.

Chemie AG Bitterfeld-Wolfen is 100% owned by the Treuhandanstalt. CBW used to be part of IG Farben AG, which still exists as IG Farben i.L. (in liquidation). The shareholders of IG Farben i.L. had been asked whether they wanted their property back. It turned out, however, that they were unwilling to accept CBW as a whole, i.e.,
including all financial liabilities. Hence, today there are no restitutional claims by former owners or stakeholders.

2.1.3 Organizational and Physical Structure

Appendix D shows the organization of CBW. It should be noted that Chemie AG has 5 "Business Sectors," Ion exchangers, dyes & intermediates, metals & plastics, organics, and inorganics. CBW has its own Boards of Directors, which has now been reduced to 3 members instead of 5 -- one for General Administration & Research, one for Finance, and one for all five technical SBUs. It is planned to further flatten the hierarchical pyramid to improve flexibility and vertical communication.

Physically, the Chemie AG Bitterfeld-Wolfen consists of three plants:

- **Werk Süd (southern plant)** with a power plant, an aluminum production facility, other production sites, and the Bitterfeld railroad station (Appendix E-1); main business sectors are inorganics, organics, and metals & plastics.

- **Werk Mitte/Nord (central/northern plant)** with a power plant, new graphite production plants, a vegetable garden, and sports facilities (Appendix E-2). Main business sectors are organics, metals & plastics, and inorganics.

- **Werk Wolfen (Wolfen plant)** with calciumammoniumnitrate production and some free areas. Main business sectors are ion exchangers, dyes & intermediates, and inorganics (Appendix E-3).
The total area of Chemie AG Bitterfeld-Wolfen is 560 ha (5.6 km²). From the maps, it can be seen that the Chemie AG Bitterfeld-Wolfen has grown organically to form a complex network of structures, common dependence on overhead, such as electricity, water, steam, and traffic infrastructure, and mutual dependence -- the output of one process feeds another process.

The shaded areas in Appendices E-1 to E-3 are individual objects for sale, while the open areas denote areas, with or without buildings, available for new construction.

The plant structure had grown for a hundred years, and Chemie AG Bitterfeld-Wolfen did sustain little damage in either world war. Hence, a large portion of the equipment was more than 80 years old -- and still operational. Recent estimates revealed that more than 70% of the plant was already depreciated completely.\(^8\)

2.1.4 Changes in Products and their Markets since 1989

Prior to 1989, CBW had a product line ranging from industrial graphite to pharmaceuticals and cosmetics. Today, more than 40 production facilities have been closed, with the remaining ones operating at an overall utilization of only 35%.\(^9\) Most of the closed plants were deactivated because of environmental pollution caused by their operation.

In GDR times, 70% of the products were used domestically, while 21% were exported to the Eastern Block. The latter ones were primarily agrarian chemicals, graphite, PVC, and ion exchangers. Two plants manufactured exclusively for the Soviet Union, best known is the insecticide Bi 58.\(^10\) Today, more than a third of CBW’s output is still exported to the Commonwealth of Independent States, and 50% are consumed domestically.
The high fraction of exports to the successor states of the Soviet Union clearly demonstrates a major market problem that many East German companies face today. Traditionally linked with buyers in the CIS or in other Eastern European nations, it is very uncertain whether these buyers, which are mainly state-owned entities, will be able to meet their payment obligations. The German federal government has instituted a system of credit guarantees for companies exporting to the former Eastern Block (Hermes-Bürgschaften) to ensure payment in case of customer default. Unfortunately for CBW, these guarantees have been limited to DM 5 billion for 1992 -- to be distributed among thousands of companies.

For CBW's current operations that means that in the long run at least the strategic business unit for organic chemicals may have to be eliminated due to a lack of demand, poor quality, and environmental problems.

2.1.5 Development of Employment since 1989

The number of employees of Chemie AG Bitterfeld-Wolfen has been reduced from 19,000 in 1989 to 6,300 in January 1992, according to Treuhand's accounting.\textsuperscript{11} Local Chemie AG management, however, sets the numbers at 17,000 and 7,300, respectively.\textsuperscript{12} Both agree that jobs will further decrease -- ADL has estimated a reduction to about 5,200 in the CBW core businesses by 1995 plus 1,500 jobs from new investments and CBW's tangential business.\textsuperscript{13} According to CBW's management, CBW's own efforts have secured more than 2,000 jobs already by direct solicitation of investors.\textsuperscript{14}
The average wage level corresponds to 65% of the average wage level in Western Germany for the chemical industries. This wage differential is likely to disappear gradually over the next several years. It is not clear if productivity per person, now at DM 100,000 per year, will increase proportionally.

2.1.6 Planning and Control of CBW Operations

The control structure that was inherited by industrial facilities from the centralized command economy of the GDR is shown in Figure 1.

![Diagram of State Planning Commission and Ministries](image)

*Figure 1-- GDR Industrial Control Structure*

In this structure, the State Planning Commission determined the macroeconomic need for a certain commodity. At the ministry level (the GDR had industrial ministries for most sectors), quotas were assigned to the individual Kombinate. The annual plan for a Kombinat included 200 items as in the case of Bitterfeld: revenue amounts, export quotas, personnel size, investments, profit utilization, etc. Investments were primarily
financed by an increase in long-term debt, and all expenses over 5 million had to be centrally approved.

Second, the so called *balance positions*, i.e., the amount of every item to be produced, was distributed to individual plants. There, the plans were discussed and altered if necessary. Then the revised plans were sent back to the ministry. On the basis of this plan, the ministry issued a binding schedule that had to be fulfilled at any cost. If this schedule was indeed met, everything was OK, but if not, then the schedule was "corrected" downwards to create a "virtual increase" in production. Alternatively, the local SED industrial chapter would step in and take direct control over the facilities.15

In this system, the driving force behind the business plan was the government's perception of macroeconomic needs. Today, the company generates its own schedule according to market demand. If there are customers and contracts for a specific product the chemical is manufactured, otherwise it is not. The business plan must, however, still be approved by the Treuhandanstalt, but there are no systematic restrictions.

Chemie AG Bitterfeld-Wolfen officials stated repeatedly that for them the most difficult problem in the process of restructuring and privatization was the issue of how to divide the plant's facilities for different future developments along logical lines. Because of the complex network, water, electricity, and steam lines run throughout the site, above and below the surface. Most investors would not appreciate somebody else's utility lines crossing their plot.16
2.1.7 Environmental Considerations

In 1990, the most environmentally polluting plants were closed by the Regierungskommission (Government Commission of the GDR), especially those affecting air quality. Not all environmentally dangerous facilities could be shut down, however, since due to the inherent interconnection of CBW's plants, downstream units need to remain operational in many cases to dispose of the toxic material produced by upstream units. Often, the draining of pipes with toxic material can only be performed through a downstream unit.

The amount of ecological damage to air, water, and soil was assessed by a group of two Western German environmental service companies and the Chemie AG Bitterfeld-Wolfen, sponsored by the BMU. Results were published in January 1992 and showed that there has been a significant reduction in new toxic emissions:

- Air polluting emissions have been reduced to 27% of 1989 levels.
- Waste water has been reduced to 50% of 1989 levels.
- Toxic waste has been reduced to 25% of 1989 levels.

While the quality of the air in Bitterfeld has considerably improved -- sulfur dioxide, nitric and nitrous oxide, chlorine, and dust concentrations are down to 40-50% of 1989 levels -- water and especially soil are far from being restored to below Western German limits. This is mainly because air tends to have much higher self-cleansing abilities due to diffusion and convection than water and soil. Most significant air contaminant is SO₂ due to the heavy reliance on brown coal as a heating fuel. Because of the dominant wind
direction, Greppin is affected the most by SO₂ and heavy metals. If the ground water
level rise after recultivation of brown coal mining areas, drinking water contamination
may become a problem. The district's soil is polluted in parts with dioxins.¹⁷

To reduce the risk of drinking water contamination by toxins and to eliminate hazardous
materials from future waste water, one of the major projects under consideration is a new
modern waste water treatment plant at a cost of about DM 325 million that would be
financed and utilized by existing facilities and new investors together. Such a project
would also receive significant funding from the BMU as part of an environmentally
sound development of the region.¹⁸ The district of Bitterfeld has also installed 5
measuring points for air quality control.

*The Treuhandanstalt has declared that it will relieve all future investors of the
responsibilities for environmental damages caused by the CBW.*

2.2 The Treuhandanstalt

The Treuhandanstalt was created in March of 1990 by the East German government
under the last communist Minister President, Hans Modrow. Its task was to separate the
industrial assets of the GDR from the party and the government, to continue operations,
and to set the stage for the privatization of these assets. After unification, the Treuhand
came under the management of Western German officials. After the assassination of Dr.
Detlev Rohwedder, the Treuhandanstalt's president in 1991, Birgit Breuel took over the
leadership.
The Treuhand's organizational structure is shown in Appendix G. The chemical industry is under the control of the department U-6. It is headed by Prof. Dr. Ernst Schraufstätter, with Dr. Kayser, a "manager on loan" from Bayer AG of West Germany, who is in charge of Bitterfeld and Leuna, reporting directly to him.

The Treuhandanstalt is under the supervision of the federal Ministry of Finance. As such, it has the best possible direct connection to federal funding. Due to the high cost of unification, much more than the government had expected, and because of the discontinuation of the 7.5% Solidarity Tax supplemental to income tax on June 30, 1992, the Treuhand's abilities to generate funds are limited, however.

Faced with a host of firms that are clearly non-competitive in their respective industries, the Treuhand is increasingly confronted with the prospect of having to finance continuation of operations and investments necessary for sustaining operations even though the respective companies are not viable under economic considerations. This in turn means that these firms are fairly unattractive to potential buyers. The justification for this spending is that the macroeconomic opportunity cost, in particular, unemployment, would by far exceed the cost of financing these firms. On the other hand, in some instances the cost of operation exceeds the macroeconomic opportunity cost. Then the firm should be liquidated.

Nevertheless, as a consequence of this concept of macroeconomic opportunity cost the phenomenon of restructuring before privatization -- or possibly restructuring and retaining assets -- arises for the Treuhand. As will be shown, in the case of CBW, and thus probably in related cases, the Treuhandanstalt is forced to take a mixed approach of privatization versus restructuring in order to produce results satisfactory to the different actors.
In the U-6 division, the person in charge of CBW has changed frequently. Dr. Kayser is already the sixth person in this position. It appears, however, that the continuation of the programs on privatization and restructuring have not been jeopardized by these frequent changes.

2.3 The Municipalities

As mentioned above, the CBW touches the areas of three cities, Bitterfeld, Wolfen, and Greppin. These three cities are part of the district (Kreis) of Bitterfeld. The Chemie AG Bitterfeld-Wolfen is the largest employer in Bitterfeld. From January 1991 to January 1992, the number of jobs in the Bitterfeld district supplied by CBW has shrunk from 13,520 to 7,992. The company claims that this reduction was mainly due to early pensioning and natural turnover -- only 1,000 to 2,000 jobs had to eliminated because of plant closures.\(^{20}\) The city of Bitterfeld had 20,000 inhabitants in 1989; now the number is down to 18,600. Currently, the unemployment rate is slightly above 11% due to a variety of state-sponsored temporary jobs (Arbeitsbeschaffungsmaßnahmen, ABMs), which may be converted to permanent jobs.\(^{21}\)

According to federal and state laws, municipalities have certain legal powers to influence economic development on their territory. These rights include the generation of a general development plan (Bebauungsplan) that stipulates the usage of certain plots of land for industrial, residential, public, or agrarian development. This plan is binding for all economic and construction activity. The district office (Landratsamt) has created an Office for Regional Planning that shall coordinate the development of the district and that also distributes subsidies for various projects.
2.4 The State of Sachsen-Anhalt

The state of Sachsen-Anhalt was created by the state-introduction law (Ländereinführungsgesetz) of the GDR in September 1990, shortly before unification on October 3, 1990 from several districts of the GDR, according to historical borders. Sachsen-Anhalt borders the states of Mecklenburg-Vorpommern, Brandenburg, Thüringen, Sachsen, Niedersachsen, and Hessen. Its capital, Magdeburg, is a very industrial city situated on the river Elbe. The state is governed by the CDU with the SPD being the main opposition party. Elections were held in the fall of 1990.

The four big chemical combines are all situated in the Southern part of Sachsen-Anhalt, in the region around Halle, about 2 hours south Berlin. This region (named the "Poison Triangle" because of environmental contamination) is heavily shaped by the chemical industry. A large fraction of total employment in Sachsen-Anhalt depends on the four combines.

Unlike Thüringen's involvement in Carl-Zeiss-Jena and Sachsen's "Sachsen Fund" for state holdings of former combines, Sachsen-Anhalt has not set up any state funds for retaining businesses in the public hand. The unions and the SPD opposition supported a nationalization of CBW, Leuna, and Buna, but the ruling CDU majority in the state parliament rejected this proposal with the argument that this would simply replace the federal government budget with the state's (limited) budget as the financial source. Hence, the role of the state in the privatization and development process is limited to administrative support and state loan guarantees. 22
2.5 Consulting Companies and Investment Banks

For the purpose of assisting with the privatization of industrial assets, the Treuhandanstalt has hired consulting companies and investment banks of different foci and sizes. Typically, the consulting companies are employed to concentrate on assessment of the overall viability of whole industries and on strategic concepts for restructuring individual firms. Investment banks, on the other hand, evaluate a set of assets, such as a combine or parts thereof, and then attempt to find a buyer for these assets.

In the case of the chemical industry, McKinsey&Company, Inc. has been hired to analyze Leuna and Filmfabrik Wolfen, while Arthur D. Little has worked with Buna and Chemie AG Bitterfeld-Wolfen. In July 1991, the two consulting firms introduced their Unternehmenskonzepte für die Großchemie (corporate concepts for the large chemical entities) to the Treuhand's management. One of the key conclusions of this report is that few of the chemical industry's assets can be privatized directly; most need restructuring and financial assistance first. Macroeconomic opportunity cost for liquidation would be greater than microeconomic cost of restructuring. The investment bank Goldman-Sachs has been involved with the sale of assets in the chemical sector as well.

The Industrial Park model described in Section 3 has been developed by the ADL team in Bitterfeld in cooperation with the Treuhand and local Chemie AG management. It is important to note that ADL has been hired and paid by the Treuhand, not by local management.
2.6 Potential Investors and the External Market

One of the main questions to be answered by the different institutional actors described above is how their efforts can serve to make the industrial assets up for sale attractive to the external market. Clearly, the Treuhand's primary interest lies in selling the Chemie AG Bitterfeld-Wolfen as quickly as possible. On the one hand, holding it as a national company would require substantial use of the agency's limited assets. This serves as an internal incentive (micro-level motive) to divest from CBW. On the other hand, the Treuhand would certainly like to get Chemie AG off its books to appease the Finance Ministry and the public outrage about the post-war high level of taxation. Consequently, it can be stipulated that the Treuhandanstalt's main goal in the CBW case (as in the other industries) is to privatize as quickly as possible rather than restructure and/or retain.

The external market potentially consists of larger chemical companies or companies interested for different reasons in a diversification into chemicals. The possibility of gaining access to Eastern European markets through CBW's extensive network of former or actual customers may serve as an additional incentive to potential buyers. The site offers a fairly well developed infrastructure and a solid supply of a well-educated work force, due to the tradition of Bitterfeld as a chemical site and aided by high unemployment.

Western German companies additionally may feel a sense of "national responsibility" towards a concerted action for saving the region -- along the lines of the well-known phenomenon of corporatism shown in the Ruhr valley and the Saarland in previous years. Chancellor Helmut Kohl has repeatedly asked the Western German industry to show national commitment and to invest in the new federal states to support the "Upswing
East." Being on good terms with the government should also help corporations to obtain favorable legislation or subsidies in the future.

On the downside, there are the rising wages and the high fringe cost of employing personnel in Germany not quite matched by a gain in productivity, possible ecological problems and liabilities not recognized toady, resistance of unions, local management, and local authorities to economic priorities, and the difficulty of carving up the plant into logically connected units with a viable infrastructure.

How is the status today? Bayer AG, Heraeus Holding GmbH, and SIDRA Wasserchemie GmbH of Western Germany have already begun to invest in Bitterfeld. About 70 ha of undeveloped CBW land are being prepared for sale to Bayer AG. Bayer plans to build facilities for the production of ion exchangers starting in the middle of next year. By waiting until then, the company can enjoy government subsidies to restructure the plot through the Treuhand doing the job for them. Heraeus has started in December 1991 to build a new plant for the production of quartz glass in Bitterfeld. SIDRA plans to begin with the construction of a new water treatment chemicals facility in July 1992. All three investors have already entered into formal contractual agreements with CBW and the Treuhand.

In addition, Treuhand, CBW, and the state of Sachsen-Anhalt have confirmed that there are a number of investors potentially interested in acquiring parts of the Chemie AG. A main problem seems to be the logical division of the facility.

Generally, three types of investors can be identified in the privatization process of industrial assets.
• The "Investor for Everything." It would take over a combine in its entirety, with all the firm's plant, property, and equipment, including liabilities, and possibly a large fraction of the work force. This would be the ideal partner for the Treuhandanstalt.

• The "Segment Investor." This agent would buy a segment of the combine without regard to the overall structure. The plant must be divided along logical lines prior to sale. The investor may or may not utilize the existing facilities; it may either continue with production or start from scratch, just using land and infrastructure.

• The "Scrap Dealer." This institution would simply tear down existing facilities and sell the remains for scrap. Neither jobs nor infrastructure would be conserved.

While clearly the first category is the ideal partner for the Treuhand, the agency has difficulty finding such an institution in most cases. Unfortunately, the second and the least desirable third category is encountered more often. In the case of Bitterfeld, it should be possible to sell the majority of the assets to segment investors. The rest might have to be liquidated.
3. Development of the Industrieparkgesellschaft

3.1 The Need for a Coordinating Institution

From the discussion above, it becomes clear that the Chemie AG Bitterfeld-Wolfen is a highly complex entity, grown over a hundred years, interconnected internally and with the rest of the GDR chemical industry. It is easily understood that there is no chance of privatizing Chemie AG as a whole. The sale of CBW’s assets can only be performed in logical subunits with some parts most likely being left over, others requiring major restructuring before privatization. Consequently, it is not possible for the Treuhandanstalt simply to auction off Chemie AG Bitterfeld-Wolfen. Rather, a formal structure to align the diverging interests of the institutional actors and to coordinate and guide the efforts made in the process of eventual privatization is needed.

Local involvement in the privatization efforts is indispensable. The enormous complexity of economic, social, environmental, and technical issues calls for competent on-site management. This existing pools of local knowledge of CBW and the region can only be tapped through a decentralized approach to the problem. Thus, the Treuhand is forced to yield some of its competencies and authority to local actors. As discussed below, it turns out that in fact the agency is compelled to create a new player in the game to coordinate and channel the different existing actors and their efforts.

Chemie AG Bitterfeld-Wolfen’s existence displays not only an economic but rather also a social and political dimension. A whole region depends on the continuation of operation in some way. While the different actors have quite different motives for privatizing CBW, they all share an interest in the perpetuation of Chemie AG.
This last postulate needs some justification. It is fairly obvious that the municipalities have a stake in keeping CBW alive, since a large fraction of their work force and their economic wealth as communities depends on the firm. Similar reasoning holds for the state of Sachsen-Anhalt. It certainly would not appreciate a region of poverty in its heartland with thousands of people unemployed. To see why CBW, the Treuhand, the consulting firms, and even the external market have an interest in CBW's survival needs some further description.

In a narrow sense, the Treuhand should be indifferent whether a firm owned by it becomes privatized or will be liquidated -- as long as it disappears from the agency's books. It must be considered, however, that the Treuhanhandstalt is a division of the federal government, in particular of the Ministry of Finance, the treasurer of the FRG. Hence, ultimately the tab for supporting thousands of people laid off by CBW will have to be picked up by the Social Security System, another federal agency that is funded indirectly by the Ministry of Finance. Thus, by eliminating CBW without finding new employment in the short run for the laid-off does not relieve the Ministry of Finance from its need to pay. In addition, it cannot be in the interest of any government to generate large-scale voter dissatisfaction through letting whole regions slide into the gutter.

For the management of Chemie AG Bitterfeld-Wolfen, the main issue is quite different. While CBW would surely not win much public support from the municipalities and the state for laying off thousands more, its management may very well be more concerned with their own jobs. Inherently, CBW's management will be out of work if Chemie AG disappears. For some of the Treuhand employees at the top of CBW, the future of employment may be quite uncertain.27
Consulting companies primarily live by their reputation. Doing good analytical work is certainly a worthwhile undertaking, but doing good work and actually helping the client to succeed builds reputation, while a client that may be inherently doomed and goes bankrupt hurts business for the consultant. It does not matter whether the survival or bankruptcy was a consequence of the consultant's advice -- success needs no explanation.

Even the external market, which should eo ipso be indifferent towards CBW's demise, has a minor stake in the region's survival. Potential investors can benefit from the location Bitterfeld in three different ways. First, they can utilize existing facilities and services of CBW, such as technical support, fire fighters, the hospital, the power plant, water, steam, and sewage network, etc., together, creating an effect of economies of scope, since no individual firm must bear the cost of constructing and operating such services alone. Second, they can enjoy federal and state subsidies and tax breaks when investing in this region. In particular, if CBW survives, the external market can buy into a facility that has already been prepared for new industrial investment through public money by the authorities. And third, assisting CBW and the region in their struggle to survive should build a good reputation with both the government at all levels and the public. This intangible asset of goodwill, though not quantifiable, may be of great value in the future.

Once the basic agreement of saving CBW in some form or another has been reached, the operational difficulties must be solved by building on this common denominator. To strengthen the alignment of interests and to facilitate the bureaucratic processes involved in keeping CBW, a formal institution is called for. Thus, it now becomes clear that both the mixture of products lines, but few product groups of CBW and the alignment of the least common denominator of the various institutional actors lead to the need for a formal structure crossing institutional boundaries and channeling the efforts of various
actors towards the common interest by coordinative action. The resulting concept would allow all participants to commonly use existing overhead facilities, such as utilities, etc., while they still retain their own corporate identity. At the same time the region would be developed in a coherent and coordinated fashion rather than through individual efforts.
3.2 The Industrial Park Concept

The coordinative concept postulated above is called an Industrial Park, with the formal structure being named *Industrieparkgesellschaft* (IPG). Main characteristic of the IPG is that this institution coordinates the efforts to solicit new investors. This includes the attempt to find investors for existing assets and for the introduction of completely new technologies, the representation of the Industrial Park for local, state, and federal authorities, and the granting of licenses and permits in a centralized fashion.

The IP concept clearly has some decisive advantages over free and uncoordinated investment. It avoids unhealthy competition between individual investors by prohibiting the manufacture of competing goods in the park, thus furthermore introducing an element of diversity to the region, which could help to ease future downturns in a particular industry by reducing the dependence on each product line. In addition, potential investors find a competent partner for their plans, since they only need to negotiate with one institution, the IPG, instead of separate talks with cities, EWG, state, CBW, etc. The IPG allocates scarce resources, such as utilities, among the participants. Firms can also try to sort out their differences in a round table fashion at the IPG level.

![Figure 3 -- Seats in the IPG](image)

An important issue is the question of control. Who is in charge of the IPG? *Figure 3* shows the distribution of seats in the IPG. Noticeable is the clear majority of the municipalities. Currently, the Treuhandanstalt holds the seats of the investors. They will be handed over one by one as investors start coming in.
3.3 Two Models for the Industrial Park

While originally the idea of the IPG has been developed jointly by the Treuhand, ADL, and CBW management, today there exist at least two different versions, the Treuhand/ADL version and the CBW version. Both versions are shown in Figures 4 and 5.

![Diagram of Coordinating Institution (IPG) and associated services]

*Figure 4 -- ADL/Treuhand Concept*
The main difference between the two versions is that the Treuhand/ADL version will strip the CBW of all its assets. It will provide only the common overhead services as described above through the Servicegesellschaft (SG) as a contractor to the individual stakeholders and the IPG. The CBW version, on the other hand, does include the provision for retaining productive capability at Chemie AG (marked in Figure 5 with Own Businesses), making it not just a service organization but also an active partner in the IP. Additionally, in CBW's concept, Chemie AG would be responsible for site development and planning, while in the THA model the IPG would be in charge of these activities. These differences hold the potential for a host of problems in the operation of the IPG, as outlined below.
4. Issues in the IPG Operation

Before analyzing the sources of potential conflict between the institutional actors, their explicit or implicit goals should be reviewed. Below is a short summary of the institutions and their micro-motives specific to the process under consideration.

- The Treuhandanstalt would like to privatize Chemie AG Bitterfeld-Wolfen as soon as possible. It wants to be able to report successful completion of this task to the Finance Ministry and to the public by summer.30 There should be no more assets retained by CBW -- certainly not in production.

- The state of Sachsen-Anhalt wants to save as many jobs as possible and to develop the region Bitterfeld at the minimum cost. It does not want to get (financially) involved in the process to avoid a "nationalization at a lower level." It would like to push the responsibility for the process up to the federal government and down to the communities.

- Chemie AG's management is interested in saving Chemie AG in particular -- not as a collection of scattered private assets, but as a company. It would like to retain some productive capacity -- preferably the most valuable facilities -- to get the firm going again through positive cash flows.31

- The municipalities mainly want to save jobs in their communities and develop the region according to their ideas. They would like to get their foot in the door in the process, since they feel that they are the primary victims of any decision about CBW. They feel that in prior negotiations they had been disadvantaged, and they are hence extremely cautious not to be left out this time.32
- The consulting companies would like to see either a viable Chemie AG Bitterfeld-Wolfen or a quick, complete privatization, reportable as a success partially because of their efforts.

- The external market is looking for good investment opportunities at low cost. Firms would like to have as much of the cost of old liabilities and the process of restructuring paid for by the Treuhandanstalt or some other actor. They are willing to incur some short-term overcapacity only in return for long-term gains through increased production/productivity, access to new markets, and overall improvement of their strategic position.

Though essentially all actors agree on the basic idea of a concerted action such as the Industrial Park concept, their micro-motives are not in agreement on what exactly the IPG should do and at what speed. Clearly, the dynamics of the privatization process, in particular, when CBW should be completely privatized are a potential source of conflict between CBW's management and the Treuhand. The Treuhand would get rid of the whole case rather today than tomorrow, but Chemie AG would like to be around a little longer. The unified opinion\textsuperscript{33} of CBW's management is to delay complete privatization until the firm is restructured to some extent. They would prefer a three-tiered approach to the process:

- Immediate privatization of assets that are ready for sale, i.e., where a concrete interest from an external investor exists, followed by

- Restructuring other parts of the plant that must be improved in some way, since there is a lack of interest at this point and in the foreseeable future, while specific
(attractive) sectors of the plant are retained by Chemie AG Bitterfeld-Wolfen as a manufacturing company for several years in order to help Chemie AG to make some money. These parts will then either be made into an independent AG traded publicly on the stock market, or it will be sold to investors at this later date. An example of this segment is the Chlorine-electrolysis facility, which produces hydrogen.

This is a concept that the Treuhandanstalt does not agree with. It remains to be seen if the Treuhand as the owner and financial supplier can force CBW’s management -- which was appointed by the Treuhand itself ironically -- to embrace the idea of immediate privatization. One of the agency's means to this end is to start selling off assets at a rapid pace to force the company into a cycle of increasing privatization by making it harder for the operative leftovers to remain profitable by themselves due to the inertia of overhead. In essence, this means that because of the fact that unproductive overhead cannot be reduced at the same pace as the productive assets are sold, the firm will be forced to sell out completely, since it cannot pay for its overhead with the revenues from the remaining production capacity.

CBW’s model of the IPG diverged from the ADL model because of the different "clients" that the two agents serve. While ADL works for the Treuhandanstalt, CBW's participants in the planning process -- which is by no means complete at this point in time -- were loyal to CBW's management. At some point in the planning process, the two models then became independent from each other, and they went their separate ways. CBW claims that the Treuhand's hope to finish the process by the summer is unrealistic -- "the region cannot plan with deadlines."34

Finally, Chemie AG Bitterfeld-Wolfen accuses the Treuhand of being unsuccessful in soliciting new investors. They claim that through their own initiative, CBW had secured
investments of DM 2 billion and more than 2,000 jobs. The Treuhand, however, had only managed to recruit one small buyer.\textsuperscript{35}

Another important issue is the relationship between CBW, the new investors, and the municipalities. As noted above, the communities have an interest in being involved in the process. Recall that they control 60\% of the IPG. While the IPG is still in its founding stage\textsuperscript{36}, the prospect of being controlled by a public body must appear somewhat ominous to a profit-oriented private investor. Bayer, Heraeus, and SIDRA were able to circumvent the problem of having to ask the IPG for permission to invest by reacting quickly. Other companies, however, will be faced with the threat of having to yield autonomy to the municipalities. The municipalities justify their large stake in the IPG with the claim that initially investors were scared away by the lack of concrete plans and communication in the planning process. They say a major goal of the IPG is to shorten planning lead times, which would require significant involvement of the respective political authorities. Additionally, only institutions that are publicly owned/control\textsuperscript{i}ed are eligible for federal and state regional aid programs. Thus, only through a public majority stake in the IPG can the Industrial Park obtain financial subsidies.\textsuperscript{37}

Besides the influence that the regional authorities exert through the IPG, the cities of Bitterfeld and Wolfen have also used another weapon to show their strength and involvement in the cause. Both cities have issued a ban on construction activity of buildings larger than 3m\times3m within their respective jurisdictions. Bitterfeld's order was issued at the same time that their general development plan was published with the ban as a complement to the plan. The order is shown in Appendix F. According to federal law, the municipalities are legally entitled to do so. The ban is limited to two years, however, and it can only be renewed twice for at most one year each time. Thereafter, the cities have no more legal instruments to block construction in the entire area.
The cities attempt to justify these bans with the statement that the region does not support engagement of investors that do not agree to a development policy based on the increase of common wealth for the region as a whole, and that flexibility in applying the ban could be shown. Other actors, foremost Chemie AG Bitterfeld-Wolfen, feel that this constellation simply obstructs the progress of the development process by scaring away potential investors. In this particular point, the Treuhand agrees with Chemie AG that the ban on changes in physical substance is certainly not beneficial to the process. In a sense, the Treuhand's own creation, the IPG, impedes the original plan of its creator.

Another interesting difference in opinions exits between the municipalities and CBW over the future scope of Chemie AG's operations. CBW claims to work towards avoiding duplication of the control and planning structures already existing in Chemie AG's current form (see Figure 5). It would like to act as the "Planning Contractor" for the IPG. Bitterfeld, on the other hand, wants to strip CBW of all its control structures and actually incorporate them into the IPG. This would effectively make the IPG a coordinating rather than a privatizing institution. The SG would then become a completely private company supplying simply utilities (cf. Treuhand's model) that would have to make decisions hand-in-hand with the IPG and its public stakeholders, giving the municipalities a much greater deal of control than in CBW's model.

CBW's opinion of consulting firms is generally positive, which is also true vice versa, even though their IPG models diverged towards the end of the planning process. CBW claims, however, that investment banks -- in this case Goldman-Sachs -- do not help in the process, since they did not know the technical side of the process. Recall that CBW stressed repeatedly that the problem of physically dividing the plant along logical lines was by far the most important issue. Thus, they say, investment banks should stay in the
legal and capital sectors of the Treuhandanstalt's business, rather then trying to force themselves onto Chemie AG development, which was quite different from Leuna's sale to the consortium led by Thyssen and Elf. Investment banks would be helpful in the process of selling one complete business with one product line, not for a "mess like CBW."
5. An Outlook on the Future

From the analysis in Section 4, it becomes evident that tension between the different actors involved in Chemie AG's fate stems from their different goals and perceptions of the process. The Treuhand was forced to create local institutions -- CBW's management and the IPG -- that ultimately turn against the agency in important issues. Mainly, the local institutions perceive certain combinations of assets to have values in excess of the sum of their individual values. This means, that there exist tendencies to delay the pace of the privatization process.

The situation is further complicated by the fact that the development of the IPG is still in flux. It is somewhere in between the Treuhand's view of their version of the IPG being the final word and CBW's hope for much room for negotiations. It is very interesting to note that there is a variety of shifting coalitions between the separate institutional actors. These coalitions change in time; at the point of the creation of Chemie AG from the Kombinat and of the IPG by the Treuhand, the Treuhand was in complete control. Now the other institutions have developed an opinion of their own, somewhat different from their creator's ideas. But the coalitions also vary with the issue considered. Treuhand and IPG/municipalities agree stripping CBW of its industrial assets and control structures, but they do not agree completely on the dynamics of the process -- the ban on physical changes is an example for this. The difference between the local viewpoint of the communities and the macroeconomic/financial considerations of the Treuhand is evident. The state of Sachsen-Anhalt stays completely at the side line. It may forfeit the opportunity to have a direct influence on the development of the region, but it seems to rely on district authorities (EWG, Regierungspräsident) to represent state interests sufficiently.
How can the different micro-motives become aligned? It seems that a joint-venture between an external investor and one of the more attractive parts of CBW, such as the chlorine-alkaline-electrolysis, would eliminate the basic conflict between the Treuhand and CBW's management about the future of CBW as an entity. In this model, CBW could through the Treuhand contribute equity to the joint-venture through its actual physical assets, while the investor would provide capital necessary for modernization. The serious problem of carving up the plant into logical units would remain, but interested investors might be able to provide some expertise relevant to this issue.

Another alternative to overcome the tension between the Treuhand and CBW management, which would clearly prefer to have a secure job, could be the use of non-specific long-term contracts for CBW managers. These contracts would guarantee a secure management job for a specific time (e.g., 5 years) without stipulating a specific assignment/company. In this way, CBW management would not have to worry about their professional future, which may soften their resistance to rapid privatization. The Treuhand would free valuable management expertise for utilization in other companies.

The continued interest of consulting companies should be ensured by involving them in the process of actually implementing their recommendations rather than simply suggesting solutions. Since they have gained considerable inside knowledge of the local situation, including technical facilities, but they also have dealt extensively with the Treuhand as their client, they could serve as mediators in the whole process, as a kind of lubricant to communication.

The municipalities are already integrated into the process through their involvement in the IPG. The other actors should be attempt to convince the local authorities of the advantages of certain development approaches by strengthening the role of the IPG as a
planning institution, parallel to and in conjunction with the cities' own planning divisions. CBW's vast knowledge of the facilities and related problems should also be drawn into the process by establishing an independent planning council reporting to the IPG. In this manner, CBW would not experience such a loss of authority over the development of their own company. New investors would be invited to participate in the planning process by contributing their respective business plans that can subsequently be discussed by all actors for optimal alignment of micro-motives. The state of Sachsen-Anhalt would represented in this strengthened council through the regional government (EWG, Regierungspräsident).

It is interesting to compare the local system CBW-SG-IPG as a network of interlinked organizations with the more global picture of the relationship between the different sites of chemical manufacturing activity in former East Germany. Especially the connection between Leuna as the supplier of feed and CBW as the user exhibits parallels to the CBW's local structures.

As a result of this dynamic environment -- different stakeholders pulling from different sides -- where may Chemie AG Bitterfeld-Wolfen end up? It is too early to be certain, but in the following paragraphs some possible alternatives will be presented.

The first possibility is the optimal outcome in macroeconomic terms. In this scenario the IPG and possibly some kind of strengthened planning council within the IPG framework would be well established within the next two or three months. With the help of the IPG, the Treuhandanstalt would be able to sell off Chemie AG Bitterfeld-Wolfen's assets reasonably completely within about a year. After the sale of the CBW's assets, the IPG would become some kind of a "round table," a coordinating body for the different institutional and private stakeholders in the process, and a forum for resolving
differences between stable, existing businesses and public actors. A large fraction of CBW's work force would be carried over to the new ventures, that coexist harmoniously without competition among each other. Common overhead would also eventually be privatized in the form of the Service Company. The Treuhand and the municipalities would clearly prefer this outcome, since it would achieve their main goals -- privatization and saving the region. CBW's management may not be all that happy about the rapid pace of the privatization, however.

Alternatively, the worst case for the economy as a whole can be imagined. In this scenario, Treuhandanstalt and IPG hold each other hostage by blocking the process of new investment -- the Treuhand through the right of ownership and the IPG through the equally important right of development. Large fractions of Chemie AG Bitterfeld-Wolfen would not be sold due to this constellation -- they would have to be retained and financed by federal funds for years, or they may simply be liquidated, introducing the macroeconomic opportunity cost of the zero-alternative. Clearly, the Treuhand would least prefer this outcome because of the financial burden it presents to the agency. CBW's management may not be too concerned about this outcome, since it would give them the authority to retain control over some industrial assets for several years.

Finally, different shades of mixed scenarios are imaginable -- both blocking the process and non-blocking. CBW could retain some assets, possibly as a contractor, it could keep the control structures it now possesses, the state could intervene on behalf of the municipalities, investor interest may decrease or increase, possibly through a change in Treuhand, state, or local policies, or any combination of these developments may occur. These various coalitions could lead to privatization -- of the whole, of parts, or of very little. Since the overall framework for the IPG is not fixed yet, almost everything is still
possible. It can only be hoped that eventually the developments lead to an economically viable solution that minimizes social cost to the region.
Conclusion

The political developments of 1989 and 1990 in the German Democratic Republic led to the unification of Germany in the fall of 1990. To privatize the industrial assets of the GDR, the Treuhandanstalt was founded by the East German government. Because of the drive for autonomy of the socialist economy, the GDR's industries were mainly concentrated in heavily integrated large-scale manufacturing facilities. The chemical industry was situated in the state of Sachsen-Anhalt at four different sites, Leuna, Buna, Wolfen, and Bitterfeld. Out of these four sites, the Chemie AG Bitterfeld-Wolfen has the most diverse product spectrum. Because of this variety and due to the complex physical network grown in Bitterfeld for 100 years, it is not possible to sell the CBW to an individual investor. To overcome this difficulty, the Treuhandanstalt has decentralized the process of privatization to enlist local sources of knowledge more familiar with the specific economic, social, and physical issues. The agency has involved outside consultants, CBW's management, and the municipalities of the region of Bitterfeld to develop a common institutional structure for the privatization process. Through their inherent explicit or implicit interest in the survival of Chemie AG Bitterfeld-Wolfen, the other institutional actors support the development of such a central institution as well.

The resulting framework is called the Industrial Park. A formal Industrial Park organization, the IPG, is supposed to concentrate and channel the efforts of the individual actors in the process towards the common goal of saving the assets and jobs of CBW. Microscopic and macroscopic motives of the different parties involved differ however in several issues, such as pace of privatization, control of the IPG, etc. Through this divergence in goals, a variety of actual and potential conflicts has been created, which may threaten the success of the privatization process. New actors created by the Treuhand and existing institutions form shifting coalitions against the Treuhand and
against each other. It becomes evident that the Treuhandanstalt needs to engage in a great deal of restructuring also before complete privatization can take place. Several ways to align the diverging micro-motives of the different actors have been suggested. Finally, several possible scenarios for the future of the Chemie AG Bitterfeld-Wolfen and the IPG are developed that lead to different micro and macroeconomic outcomes.
Abbreviations

ABM Arbeitsbeschaffungsmaßnahme (publicly sponsored job program)
ADL Arthur D. Little
AG Aktiengesellschaft (public company, normally traded on stock exchange)
AWG Arzneimittelwerk Dresden GmbH
BASF Badische Anilin- und Soda fabrik (chemical company)
BMU Bundesministerium für Umwelt (federal ministry for the environment)
CBW Chemie AG Bitterfeld-Wolfen
CDU Christlich-Demokratische Union (ruling Christian Democrat party)
DBG Deutsche Beteiligungsgesellschaft
DIH Deutsche Industrie Holding
DM Deutsche Mark (ca. $0.60)
DR Deutsche Reichsbahn (East German public railroad)
EC European Community
EWG Elbe-Mulde-Wirtschaftsförderungsgesellschaft (regional developing agency)
EY Ernst and Young
FRG Federal Republic of Germany
GDR German Democratic Republic
IP Industriepark (industrial park)
IPG Industrieparkgesellschaft (coordinating body for CBW development)
SBU Strategic Business Unit
SG Servicegesellschaft (service firm supplying utilities for area of CBW)
SPD Sozialdemokratische Partei Deutschlands (social democratic opposition party)
THA Treuhandanstalt (trustee agency)
U-6 Unternehmensbereich 6 (Treuhandanstalt's chemical division)
Notes to Part I


2 ibid.


9 ibid.

10 ibid.


19 The Treuhand is not controlled by parliament, however.


21 ibid.


27 The Chairman of CBW's Board, Dr. Ambros, is a retired Bayer AG manager for whom Chemie AG Bitterfeld-Wolfen yields a great opportunity for a second career, being at the top of one of the largest companies in Eastern Germany.


34 ibid.

35 ibid.

36 So far there are two directors and one secretary, all housed in CBW facilities.


38 ibid.


40 ibid.
PART II

THE EXPERIENCE OF WESTERN FINANCIAL INSTITUTIONS IN THE PRIVATIZATION OF EAST GERMAN INDUSTRIAL ASSETS

Introduction

The sudden liberalization of Central and Eastern Europe has created potentially historic opportunities for Western businesses. Companies throughout the capitalist world have been trying to identify the payoffs and costs of operating in these countries. Merger and acquisition firms are no exception. The transformation from planned to market-based economies has generated a wealth of privatization activity. To privatize the stock of state-owned companies, however, merger and acquisition firms must adapt their standard operating procedures.

This essay examines the role of merger and acquisition firms in the privatization of the former German Democratic Republic.¹ It looks at three types of organizations -- bulge-bracket investment banks, the corporate finance departments of "big six" accounting firms, and equity investment funds.² In the East German experience, some companies have chosen to enter the market while many of their close competitors have not. In each case, the decision to participate in the East German market resulted from a careful weighing of the payoff from entering the market versus the costs of adapting.

Bulge-bracket investment banks and accounting firms generally view the payoff in terms of fee income, value added to their reputation, and acquired learning. Equity funds see the payoff in terms of return on their investment. The costs include the risk of damage to their reputation and the expense of adapting their standard operating procedures. This
essay follows the decisions of a small group of companies in each of the above sectors that decided the payoff was greater than the costs. Each of these firms is experimenting with different ways to maximize the payoff and manage the required adjustment. The essay will examine in detail each firm's strategy for optimizing this tradeoff.

Ultimately, this is an essay about traditional institutional roles changing to accomplish the transformation from a planned to a market economy in Central and Eastern Europe. While the payoff for merger and acquisition firms will vary between East Germany and the other countries of the region, the dynamics of the adaptations are likely to remain the same.

Chapter 1 provides background on the condition of the economy in which merger and acquisition (M&A) firms must operate as well as a description of the Treuhandanstalt, the privatizing body in East Germany. Chapter 2 examines the evolution of the Treuhand's interest in working with Western investment banks. Chapter 3 presents the dynamics of the payoff and adaptation costs as perceived by bulge-bracket investment banks, and will go on to examine the experience of Goldman Sachs, J.P. Morgan and Wasserstein Perella in East Germany. Chapter 4 presents the same analysis of the payoff and adaptation costs faced by the corporate finance departments of the "big six" accounting firms. It then also examines the East German experience of Price Waterhouse and Ernst and Young. Chapter 5 provides the same analysis of the equity fund firms Deutsche Beteiligungsgesellschaft and Robert Fleming. The essay concludes in Chapter 6 with a summary of the respective firms' responses to the challenges of privatizing East Germany.

The study is based upon approximately sixteen interviews conducted from December 1991 through February 1992. The interviews included four officials currently working in
various departments of the Treuhandanstalt. Additional interviews were conducted with
current employees of Bankers Trust, Deutsche Beteiligungsgesellschaft, Ernst and
Young, Goldman Sachs, J.P. Morgan, Price Waterhouse, Robert Fleming, and
Wasserstein Perella.
1. A Challenging Environment

1.1 Industrial Decay

The opportunities and risks faced by merger and acquisition firms in East Germany are largely determined by the characteristics of the country's industrial assets and the strategy of its privatization program. The commercial sector of the GDR has not lent itself to an easy transformation to a free market system. As one banker described it, "it is mostly rotten." The businesses lack experience with Western management principles, are inefficiently organized, employ outmoded capital equipment, are the world's most prolific polluters and are experiencing a devastating disintegration of demand for their products.

One legacy of the country's communist past is the large, vertically integrated conglomerate structure of its industry. In the late 1960's and early 1970's, the GDR attempted to implement Fordist industrial practices which seemed to be succeeding in the West, by creating giant industrial conglomerates or combines (Kombinate). The state hoped the conglomerates would generate significant economies of scale and avoid many of the coordination problems found among suppliers controlled by different ministries. This agglomeration resulted in large centralized production sites which included most key suppliers and research and development efforts. While officials intended to harness massive economies of scale, they created, in effect, many small operations within the combine that were far from their minimum efficient scale.

The construction of industrial robots typified the economy's inefficient scale. If a company wanted a tailor-made robot, it would typically produce it itself. By the 1980s, the GDR claimed 700 plants producing robots, with an average lot-size of less than seven
robots per year. Such product fragmentation existed within a highly concentrated manufacturing sector. In 1985, the GDR had 3,526 manufacturing companies with an average of 925 employees, compared to West Germany’s 47,826 firms with an average of 151 employees.

The GDR’s historical industrial structure has affected current privatization efforts in three principal ways. First, it deprived management of the critical experience of managing traditional customer/supplier relationships. Second, it left the economy without a network of specialized suppliers which Western economies depend so much upon today. Third, the combination of so many disparate product lines into one complex -- sharing warehouses, energy sources and transport equipment -- has made any sale fraught with practical complications. How would this common infrastructure be managed by different companies? What if the natural buyers of different pieces were fierce competitors in other product lines? These issues have complicated the task of privatization considerably.

Investment in the former GDR has been further discouraged by a relatively old stock of capital equipment and by the poor environmental practices found in many businesses. It is estimated that 21% of industrial machinery is more than 20 years old and a total of 50% is more than 10 years old. In West Germany, 5% of industrial equipment is more than 20 years old. The region is just as environmentally backward. If Western German environmental laws were applied in the East, 70% of East German industry would be forced to shut down. This poses two risks for investors. First, could they be liable for past environmental damages? Second, what will be the cost of bringing these operations into compliance with EC standards and how quickly must this be done?
Finally, privatization in East Germany has been hindered by the collapse in demand for many of the country's products. The traditional Comecon trading partners all have been experiencing their own economic transformation and are no longer interested in bartering for each other's goods. When they have resources to trade, they prefer to trade for superior Western goods. This exercise of personal preference has hit the East German domestic market particularly hard. With Deutsche Marks in their pockets and West German goods flooding the stores, East Germans are demonstrating a clear preference for the higher quality and cache of Western goods. The collapse in demand led to an 18.5% decline in East German GNP in 1990.

The condition of East German industry put considerable strain on Germany's efforts to transform from a planned to market economy. In 1990, the country faced not only a stock of unattractive businesses, but also a stock of rapidly deteriorating businesses. Something had to be done quickly or much of the industrial sector would be lost, requiring a government bailout of massive proportion. The FRG government decided the most effective way to revive the industrial sector was to privatize it as rapidly as possible. And thus the Treuhandanstalt was exclusively dedicated to this task.

1.2 Dedicated to Rapid Privatization

In March 1990, the GDR's last communist government established the Treuhandanstalt (THA) to oversee all of the state's commercial property. Initially, it was to serve as an organ of industrial policy-making. After the March 18 democratic election, privatization became a clearer priority and many of the senior communist officials who comprised the executive board (Vorstand) were replaced. On June 17, 1990 the Treuhandanstalt formally took control of all state-owned enterprises and property in the German
Democratic Republic and thus became one of the major actors in the country's transformation to a market economy. In its hands were 8000 industrial companies, 25 billion square meters of farmland and 19.6 billion square meters of forest. The future of the 16 million inhabitants, who depended on these enterprises for their wages, housing, schooling and healthcare, would be determined by the effectiveness of the transformation to a free market.

The Treuhand's charter was to privatize -primarily through 100% sales, to restructure with a view to privatization, or to close companies in its control when necessary. It was also given the latitude to break up the Kombinate where this would assist their sale.

The Treuhand's mission has varied during its young life between exclusive privatization and restructuring with a view to privatization. In October 1990, the agency published its "Business Policy Guide" which clearly established its priority to privatize rather than restructure, "in the firm conviction that privatization is the best way to restructure an enterprise." Since that announcement, a chorus of contradictory assertions have resonated throughout the political spectrum. On one side critics claim the Treuhand should place more emphasis on restructuring to save jobs, and that its privatizing too quickly. On the other side, people say it should place less emphasis on restructuring, and that it is privatizing too slowly. No matter which opinion is the favorite of the day, the Treuhand remains an agency dedicated to privatization through 100% sales. Only when that route has been exhausted does it consider closely related alternatives. As of November 30, 1991, the Treuhand had privatized approximately 5000 companies by this method, most recently at a rate of 20 per day or 400 per month. The Treuhand's progress can be seen in Figure 1 below.
1.3 Treuhand Structure

To carry out its formidable task, the Treuhand organized around eight central departments, each responsible for a broad industry sector as well as a functional task. For example, department 5 manages the privatization of the steel industry, as well as other sectors, and coordinates the financing of the Treuhand. In addition, the agency operates through 15 regional offices which handle the sale of companies with fewer than 1,500 employees. The Treuhand’s current organizational chart appears in Appendix G. The agency has not always been organized this way.

In August 1990, the Treuhand began to take its current shape under the direction of Dr. Detlev Rohwedder. In that month, Rohwedder called together 12 associates from the executive ranks of German banking and industry to form the new executive board. Of these 12, two came from J.P. Morgan, four from German banks and six from Daimler Benz.
The Treuhand was extremely disorganized at the time. It had no idea what type of assets it possessed because many of the ministries had burned their files at the time of the democratic uprising, leaving little or no information on individual companies. As of August, the agency was still operated on a day to day basis by 35 people from the former GDR ministries. The senior person among them was a former Professor of Ideology at the Party School. These operating officials kept all information from the executive board. In the midst of this chaos, the Treuhand became flooded with requests for company information and purchase inquiries.\(^\text{13}\)

The organization began to take shape after Helmut Kohl's "Chancellor's Appeal" for manpower for the Treuhand in November of 1990. Soon managers, lawyers and bankers on loan from their companies filled the organization. While this secondment was often thought of as a way to put aside underperforming managers from industry, it was viewed as a very positive assignment among bankers.\(^\text{14}\)

Secondment "bought" bankers entrance into the club of German privatization. Of all the banks and accounting firms interviewed for this paper, only Bankers Trust and Goldman Sachs had not seconded someone. Perhaps it is not a coincidence that Bankers Trust has not won a mandate from the Treuhand as of February 1992. Many in the German banking community expressed great satisfaction with their firms' experience seconding professionals to the Treuhand. Secondment has been a very effective way to learn the intricacies of the Treuhand bureaucracy and to understand what the agency looks for from financial institutions.

In addition to this cadre of professionals from industry, law and banking, the Treuhand filled in crucial spaces with hired corporate finance/consulting professionals from major firms such as Price Waterhouse, Arthur Andersen, Arthur D. Little, McKinsey, and
Roland Berger. Price Waterhouse, for example, has had corporate finance specialists running Treuhand regional offices in Erfurt, Magdeburg, Halle and Berlin. The firm bills these individuals out at it's standard per diem.\textsuperscript{15}

While the use of seconded and subcontracted professionals has generally heightened the effectiveness of the organization, the practice has generated some complaints. Many say seconding people for three to twelve months creates discontinuity. In addition, the use of corporate finance and consulting professionals to run regional offices, advise in Berlin and prepare opening balance sheets invites considerable conflict of interest. How does an employee seconded from a consulting firm to a regional Treuhand office negotiate a purchase price with another employee from the same consulting firm, working on behalf of the buyer. Others point to the practice of some Treuhand employees leaving the agency to take over as Managing Director of one of the companies that employee sold in his capacity as a Treuhand employee.\textsuperscript{16}

Such criticisms notwithstanding, the organization has mobilized itself in a very short time to handle the enormity of its task. It is unlikely privatization would have worked as well as it has if the agency had not drawn experienced individuals from the private sector.

The potential payoff and required adaptations have been dramatically influenced by the economic environment and the country's privatization strategy as executed by the Treuhand. East Germany's macro- and microeconomic environment have been the greatest obstacle to Western investment. The federal government has tried to counter the negative effects with investment subsidies, low interest loans, tax holidays, and negotiated indemnities on environmental and property claims. Nonetheless, the depressed economic environment has presented Western investment banks with risks they
would not ordinarily have faced in the West and has required adjustments to their
operating procedures. The nature of the banks' adaptations as well as the potential payoff
has been further influenced by the objectives of their primary client, the Treuhand.
2. The Treuhand Looks to Western Investment Banks

One could say that from its earliest days under the communists, the Treuhand recognized the usefulness of Western investment banks. In fact, as the nature of the Treuhand's task began to materialize before their eyes, senior communist party officials contacted Goldman Sachs. They asked Goldman, as the representative of capitalists around the world, to gather, in one hotel, all the capitalists who might be interested in buying their companies. They would come and present their businesses to the group. After this first invitation, it took the Treuhand six months to find other ways to work with the investment banking community.

From the beginning, investment banks showed considerable interest in the industrial assets of the former GDR. Unfortunately, according to a former executive board member, things were so chaotic at the Treuhand that they did not have time to consider these early requests. As the organization filled with seconded bankers, the question naturally arose of "why investment bankers were not used more." The former board member explained that the board was initially very cautious for the following reasons:

1. How could the agency involve outsiders at a point when it did not know the rules of privatization itself? For example, how should environmental liabilities, employee contracts or property claims be handled?

2. Hiring investment banks requires a competent body in-house to coordinate and manage them. Is the agency ready to develop such a body?

3. Standards were needed for dealing with investment banks. The agency could not have one department paying on one scale and another on a different scale.
While the Treuhand organized a response to the investment banks, many German buyers established their own contacts with East German companies. In some cases, West German buyers provided the Managing Directors with new BMWs and took over day to day management. During this time, banks and accounting firms began working with the Treuhand whichever way they could. Firms seconded young professionals, others represented buyers, and the accounting firms actively prepared opening balance sheets.

By late fall 1990, executive board member Schirmer, the former director of mergers and acquisitions (M&A) for Daimler Benz, had set up an Investor Relations department. In December 1990, J.P. Morgan won the first large mandate to sell East Germany's newspapers. The Treuhand's approach, however, was not uniform. Some areas of the agency were using investment banks, others were not. There was no standard fee agreement. In general, there was no real consensus throughout the agency that using investment banks to sell Treuhand companies was advantageous.

In the early days of the Treuhand, financial institutions assisted in the privatization process through informal networks. On this basis, the Boston office of Ernst and Young (EY) carried out advanced investment banking work for the Treuhand's regional office of Gera. The assignment developed out of a relationship between John Curtis, a partner in the Boston office and former office manager in Hamburg, and Hans Herz, former President of Freudenberg USA, and currently an adviser to the Gera office. Herz had returned to his former hometown in Eastern Germany to assist in the economic transition. He wanted to accelerate the privatization of businesses in this area by more aggressively marketing them around the world. He knew Curtis from the German-American Business Club in Boston and asked him to help coordinate presentations to potential investors in Boston, New York, Philadelphia and Washington D.C. The trip was paid for by the
Treuhand but on the condition that the presentation include general information about investing in Eastern Germany and specific information about investment opportunities in the neighboring cities of Erfurt and Suhl.

EY arranged the meetings in June of 1991 and then offered advice on how to improve the presentation of investment opportunities. EY’s advice focused on the preparation of more detailed information on individual companies. The Gera office then hired EY to spend July developing profiles of 28 companies in Gera, Erfurt and Suhl. EY and Treuhand officials jointly selected the 28 companies on the basis of their salability to American buyers. The firm arranged additional U.S. presentations for this region, made efforts to sell the 28 companies through its worldwide network and discussed developing additional company profiles. In the early fall, however, Gera told EY to speak to Investor Relations in Berlin regarding further assignments. This case reveals the early recognition within some bureaus of the Treuhand of the need to attract foreign buyers.

One of the problems of the Treuhand prior to the summer of 1991 was that many other parts of the organization failed to appreciate the value of investment banks and international competition in this process.

By June 1991, many members of the executive board and directors of various departments believed using investment banks was critical to their objective of rapidly privatizing at the highest possible transaction value. Nonetheless, by the end of July only 60 mandates had been awarded to fewer than 20 banks. The Investor Relations department was actively sending banks to the industry directorates (Referate) but mandates were not being given. Some senior Treuhand officials believed such behavior was motivated by a feeling among people in individual industry groups that they came to the Treuhand to privatize and now the investment banks were trying to take their job away.
In July 1991, the board issued a directive to all divisions supporting the use of investment banks in order to meet the pressing need for rapid privatization. With this came a significant increase in activity. Banks were given mandates to sell companies, prepare offering memoranda, provide market feedback for restructuring plans, and assist with management buyouts. Coordination of any work with intermediaries was centralized in Berlin, and the uniform fee agreement developed in March was widely adopted. The number of banks working with the Treuhand increased to 60 by December and the number of mandates awarded to 237. Foreign investment banks received 140 of the mandates. The Chemical directorate was one of the most active distributors of mandates.  

2.1 The Treuhand View of Investment Banks

The Treuhand sees four primary reasons to employ Western investment banks.

1. To promote international competition: this satisfies the political aim of Germany to involve more foreigners in Eastern Germany, and addresses a new group of investors now that most interested West German companies have already invested. In addition, international competition tends to lead buyers to offer a higher opening bid.

2. To alleviate Treuhand capacity problems: the Treuhand would like investment banks who can organize the entire process including developing the information memorandum, contacting buyers, following-up with them, and negotiating the transaction value. Such an extensive role is particularly valuable for large, complicated deals.
3. To assist in the restructuring process by providing critical market feedback.

4. To add credibility to the process: an international investment bank is best able to coordinate large groups of buyers.

Given these objectives, the Treuhand is looking for a bank that can provide sufficient German-speaking capacity, has extensive experience in M&A, a broad international network, experience doing transactions with the Treuhand or at least in East Germany and sufficient industry expertise to add value to its particular mandate. Treuhand officials are looking for banks that can assume much of the day-to-day workload and therefore require an institution that can devote one or two German-speaking professionals full-time to each transaction. This is a common limitation for corporate finance groups.

The need to shift a significant amount of the responsibility onto the banks also leads Treuhand officials to look for firms who are able to proactively and creatively sell companies. In the past, the agency has had negative experiences with banks who simply send out an information memorandum to 100 people in their database and wait for a response.

Experience in M&A, and particularly with the Treuhand, is probably the second most important criterion. Officials feel much more comfortable giving large, complicated mandates to firms like Goldman Sachs and First Boston which have been in the business for many years than to firms which have been involved for only a few years (i.e. accounting firms). Large properties which might lend themselves to an auction sale, will also be given to the larger institutions that have a process-oriented reputation. Because selling companies for the Treuhand requires specialized knowledge of the Treuhand
bureaucracy (e.g. sale proposals must be formally presented to the executive board) and the East German environment, Treuhand officials place high value on previous experience with the Treuhand itself. In fact, Treuhand officials believe it would be very difficult for a new bank to win a mandate at this late stage. A firm who can bring all of these qualities to the Treuhand is in a good position to win additional mandates.26

2.2 The Mandate Process

Mandates, the prize sought by all corporate finance groups interested in working with the Treuhand, are awarded directly by the individual industry groups with support from Investor Relations. Typically, an industry directorate interested in giving a mandate will come to Investor Relations with a description of the company. Investor Relations then recommends a group of most suitable intermediaries. The directorate can always include names of its own. Together, Investor Relations and the directorate invite this group to visit the company to decide if they are interested in pursuing. The interested banks are then typically put through a "beauty contest", a common Western practice, wherein they present the attributes that make them particularly qualified for the mandate. The final selection is then made by the directorate.

Fee arrangements with the Treuhand are standardized. Up until February 1992, fees were calculated from a "Lehman" formula based upon the highest of transaction price, commitment to employment levels with each employee valued at DM 25,000, or asset value. The formula paid a percentage of this highest value calculated as follows: 3% for the first DM 10 million, plus 2% of the amount between DM 10 million and DM 50 million, plus 1% of the amount between DM 50 million and DM 100 million, plus 0.5% of the amount greater than DM 100 million. The fee was based upon the successful
completion of the deal. In addition, firms earned a fixed fee up front of DM 80,000 to DM 120,000 for the preparation of the Offering Memorandum. The fixed retainer was negotiated and depended upon the complexity of the deal.

In response to feedback from the investment banks, this fee structure was expected to change in March 1992. The only difference will concern the number on which the Lehman formula is calculated, not the proportional scale of the formula itself. Rather than being based on the highest of the aforementioned factors, the new value will be a weighted summation of transaction price, commitment to employment levels and commitment to future investment. It is expected that transaction price will carry a 100% weighting, and employment and future investment will carry a weighting of 50% each. Asset value was to be dropped from the calculation because the number proved to be very arbitrary. This new weighted summation is thought to lead to lower fees and to be more in line with the Treuhand’s objectives.

While the Treuhand makes every effort to apply a standard fee structure to all transactions, individual directorates have been able to alter it. In the future, any change to the standard agreement will require approval from the board.27

2.3 Larger Role for Investment Banks

In the first two months of 1992, banks sensed a much stronger interest within the Treuhand in working with financial institutions. Some in the banking community attribute this to frustration with typical West German industrial buyers. Initially, West German buyers were very enthusiastic about unification and the industrial potential of the East. Now, however, buying activity seems to be motivated primarily by the desire to
preempt the entrance into the German market of a new competitor. Consequently, buying firms have not been proposing satisfactory levels of future investment or employment. This has not only frustrated the Treuhand, but has fueled a movement among Eastern state governments to buy businesses themselves. Sachsen Fonds and the extensive subsidy to Carl Zeiss in Thüringen are examples of such involvement.

The Treuhand believes it can no longer rely on industrial buyers and must now look to financial players. In this regard, the agency is not thinking so much in terms of increasing the number of sell mandates awarded, but rather in terms of developing a larger role for such institutions as financiers of Management Buyouts and even as buyers themselves. This idea was discussed as early as the Summer of 1991. Initially, the Treuhand spoke to players such as Deutsche Bank about buying a package of 20 companies, some good and some bad, with the intent of reshaping them and reselling them. The concept did not attract many adherents because it essentially would have left the banks with the complicated and politically sensitive task of restructuring. Bankers felt they had no more expertise in restructuring then the Treuhand had and were not interested in taking the risks associated with developing the skills in this highly visible manner. Currently, discussions center more around buying individual companies than packages of companies. Nonetheless, the Treuhand's concept of a larger role for banks still calls into question the bankers' restructuring skills.

The decision of the Treuhand to work extensively with M&A firms created a wide range of opportunities for the bankers. The privatizing agency's fee structure, mandate policy, restructuring efforts and acceptance of seconded professionals all increased the payoff for investment banks. At the same time, the overwhelming pace at which the Treuhand had to work and the weight of its bureaucracy presented new risks and necessitated an adjustment to the firms' traditional operating methods.
3. Strategy of Bulge-Bracket Investment Banks in East Germany

3.1 Payoff and Adaptation

The most active bulge-bracket investment banks in East Germany are considered to be Goldman Sachs, S.G. Warburg, Morgan Grenfell, Credit Suisse First Boston, and J.P. Morgan. Though it is not of comparable size, Wasserstein Perella is also included in this category because it competes head to head with these other players in the specific product line of M&A services. This study considers the cases of Goldman Sachs, J.P. Morgan, and Wasserstein Perella in the order of the approximate volume of their mandate fees from the Treuhand.

Merger and acquisition intermediaries maximize profit by maximizing revenue per man-hour. Revenues vary positively with deal size, but are only realized only when a transaction is closed. Man-hours, on the other hand, are fairly constant regardless of whether the transaction is large or small, closes or does not. Furthermore, personnel costs per man-hour are largely fixed. Though a large percentage of an M&A professional's compensation comes in the form of a bonus, high labor mobility in the industry makes paying a competitive bonus necessary to keep staff. As a result, firms maximize revenue per man-hour by concentrating on large deals, of low complexity, with a high probability of closure. Firms, therefore, view the tradeoff between payoff and adaptation costs in this context.

The payoff from Treuhand business comes from fees, value added to the firm's reputation and acquired learning. The value of the payoff is always relative to the opportunity cost of business forsaken to free capacity for East German work. For this reason, firms with constrained Western capacity demand a higher payoff than firms with excess capacity.
Fees are a function of the fee formula and the deal sizes available. The Treuhand's Lehman formula plus the small retainer compares favorably to fee formulae found in the West. Applying the proposed formula described in Chapter 2 to Goldman Sach's sale of the Leuna petrochemical refinery would generate a fee of DM 20 million to DM 25 million.\textsuperscript{32} Deals of this size, however, are not common in East Germany.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{size_of_treuhand_firms.png}
\caption{Size of Treuhand Firms}
\end{figure}

A very limited number of large transactions can be found in East Germany. Figure 2 shows that of approximately 6000 businesses still to be privatized, 80\% have fewer than 500 employees. Another 10\% are unaccounted for, which likely means they are also quite small. Only 176 of the Treuhand's remaining firms have greater than 1500 employees.\textsuperscript{33} Using the number of employees as an approximation of deal-size, a bulge-bracket firm would seek companies with more than 2000 employees.\textsuperscript{34}
Merger and acquisition intermediaries also profit from the enhancement of their reputation -- a leading basis of competition in the industry. Firms ascribe high value to opportunities to portray themselves as the most sophisticated, the most cunning, the most capable of managing high complexity or the most honorable. Firms expect their operations in East Germany to significantly enhance their reputations in the West German market. They believe their involvement in the East demonstrates civic responsibility to Germany, provides an occasion to work with many West German companies and presents the opportunity to succeed at a particularly challenging task.

The value of learning has been a secondary motive for the banks. Some have placed value on learning the intricacies of the Treuhand to better serve clients interested in investing in East Germany. Learning the different operating procedures required in privatization work may be transferable to operations elsewhere in Western Europe as well as Central and Eastern Europe.

The possible sources of return from privatization activity are countered by the increased costs of executing such transactions. M&A firms incur higher costs privatizing East German assets than selling Western assets for the following reasons:

1. Additional man-hours are required to prepare selling materials;
2. Additional man-hours are required to educate management teams;
3. Additional man-hours are required to manage the complexity of privatizations.
4. Lower probability of closing a transaction due to a limited market for buyers of East Germany's competitively weak businesses;
5. Lower probability of closing a transaction due to the Treuhand's bureaucratic decision making process and subjective criteria;
6. Additional man-hours are required to negotiate with multiple actors such as local and state governments; and
7. Negative publicity may arise from transactions involving plant closures, and mass layoffs;

Managing these sources of additional transaction costs necessitates a significant adjustment in the firm's operating methods.

In Western transactions, the selling management team often assists in the preparation of the offering memorandum and buyer presentations. In East Germany, neither the Treuhand nor management has the knowledge to play this role. M&A firms, therefore, must work much more closely with managers to develop long-range plans, budgets and product strategies.

Spending considerable time with the management can be crucial for the success of the transaction. As one investment banker explained, a foreign buyer is not going to have an entire management team it can ship off to East Germany. It is going to have to rely upon the managers in place to carry out the business plan on a day to day basis. Providing this education can be a formidable task when the management team has never been exposed to the notions of competitive analysis, marketing, or financial control.

The complexity of these transactions, coupled with the limited resources of the Treuhand, forces the investment banker to assume a greater strategic role in the company. Banks working for the Treuhand often must assist in restructuring the businesses and developing their strategic plans. In addition, the Treuhand requires every acquisition bid to be accompanied by an "acquisition concept." The acquisition concept must include the buyers future investment commitments, intended employment levels, and overall
strategy. In many cases, the investment bank must prepare this on its own because potential buyers want to know the true cost of the acquisition before becoming involved. Preparing the acquisition concept requires detailed knowledge of the companies' technological requirements, production methods and the like so that accurate plans can be developed. This activity represents a significant departure from the investment banks' standard operating methods.

A limited market for buyers of East German firms reduces the probability of successfully completing a transaction. Chapter 1 discussed many of the aspects of the East German environment that make its businesses unattractive to potential investors. Without repeating each of these factors, the point stands that the market for buyers of companies in East Germany is small and specialized. The buyer needs to find a near perfect strategic fit to achieve reasonable economies in taking over management and restructuring the entire operation. The buyer needs to place a high value on either the pre-emption option of closing off a specific industry to competition or on gaining access for itself to the West German market and the EC. The buyer also needs to be accepting of the environmental and employee difficulties it may find. Together these considerations lower the probability of finding a buyer.

The probability of successfully completing a transaction is also lowered by the idiosyncrasies of working with a client such as the Treuhand. The sheer volume of work on the agency's hands can keep it from making timely decisions. When these decisions are finally made, they are often based on subjective criteria such as the fit of the buyer's global strategy with the Treuhand's objectives for that company. Subjective criteria complicate efforts to identify the most appropriate buyers. In addition, the Treuhand's interest in the buyer's global strategy can discourage the buyer. As an example, a
chemical company might be very nervous about revealing its world-wide strategy to a
Treuhand official who is on secondment from Bayer.

The public stake in the outcome of the transaction complicates the negotiating process by
introducing an additional actor. Acquisition plans must be approved by local
governments in order to receive many of the subsidies provided to investors in East
Germany. The public nature of privatization may also cast unwelcome publicity onto the
investment banks. Western banks are accustomed to operating on a purely confidential
basis. As a result, they become very uncomfortable when journalists associate them with
layoffs and plant closures at their client firms.

J.P. Morgan is in the middle of lawsuits over its sale of East Germany's newspapers. In
addition, the firm has had to accommodate federal auditors who are auditing the
newspaper transaction as part of a wide-scale examination of the Treuhand's larger
privatizations. Sheparding the auditors through has taken valuable time of Morgan's
bankers.36 The public nature of the transaction can significantly add to the man-hours
required to process a transaction.

Although the costs of adapting appear greater than the payoff, many leading firms remain
active in the privatization business in East Germany. An analysis of the firms which
chose to remain in the East German market reveals an ability to keep the adaptation costs
below the level of the perceived payoff.

This chapter will continue with a detailed examination of the cases of Goldman Sachs,
J.P. Morgan and Wasserstein Perella. Each firm has had to adapt its standard operating
procedures in a variety of ways. In each case, the required adaptations were made as part
of a strategy to maximize their payoff and minimize their cost. For Goldman this meant
selecting a related family of transactions in the chemical industry, which, taken together, offered a significant payoff in terms of fees, reputation and learning. At the same time, Goldman remained highly disciplined about containing the cost of the adaptations. J.P. Morgan and Wasserstein Perella each took a basket of disparate mandates from the Treuhand. Each basket included one high profile, high fee transaction along with other more ambiguous transactions. J.P. Morgan and Wasserstein Perella both appear to have focused their strategy on enhancing their reputation in the German market with less regard to tightly controlling their adaptation costs.

3.2 Goldman Sachs

Goldman's effort in East Germany is managed out of London and Frankfurt. As mentioned previously, Goldman became involved in East Germany's privatization program at an early point when the Treuhand's communist leadership asked it for an introduction to the world's capitalists. While the firm did not accept that invitation, it was eager to begin working with the Treuhand on the privatization of the Leuna Chemical combine in June 1991.37

Leuna is one of the central complexes in the Halle-Merseburg area where East Germany's chemical industry is concentrated.38 It consists of a refinery which is inter-connected with the obsolete Leuna chemical complex, which in turn is linked by corroded pipelines to other East German chemical producers. The chemical industry employs approximately 130,000 people in this region.39

The Treuhand had hired management consultants McKinsey & Co. and Arthur D. Little to formulate a restructuring plan for the region's chemical industry. In July 1991 the
consultants advised that on microeconomic grounds the industry ought to be shattered but that the attendant macroeconomic cost of unemployment would be greater than the cost of rapid restructuring and privatization. Goldman Sachs was brought in to advise on the privatization plan.

From the beginning, Goldman was performing activities atypical of Western investment banking. Believing that the restructuring and privatization plan should be dictated by the market, not the Treuhand, consultants or itself, Goldman approached leading chemical producers around the world. It became clear no single buyer would be interested in the entire complex and the attractiveness of one product line would be highly dependent on the restructuring of others. The importance of the refinery exemplified these interdependencies. For many interested buyers, the value of the chemical product lines depended upon having a reliable source of inexpensive feedstock. Therefore, restoring the refinery at Leuna to Western standards would be critical. With this in mind, Goldman, McKinsey, ADL and the Treuhand developed a series of privatization plans to maximize the value of the entire Leuna complex in terms of employment guarantees, future investment commitments and purchase price. Out of these working group sessions came ideas to find consortia of buyers and to adopt the "Industrial Park Model."

Once the interrelationship among all of East Germany's chemical companies became clear, Goldman pursued and received the mandate to sell the entire East German petrochemical industry. The firm first set out to privatize the refinery, believing it would serve as a necessary catalyst for the privatization of the other components of Leuna Chemical Works. The Minol network of service-stations was bundled with the sale of the refinery to expand the market of interested buyers. Goldman narrowed the field to 13 interested buyers whom it organized into three consortia. The consortia included: a) Societe Nationale Elf Acquitaine, Thyssen Handelsunion and Deutsche SB Kauf AG; b)
British Petroleum, Total, the French Oil concern, Agip SpA and several smaller partners; and c) Kuwait Petroleum Corp., Conoco Inc., and Metallgesellschaft AG and several smaller partners.  

The consortia of Societe Nationale Elf Acquitaine, Thyssen Handelsunion and Deutsche SB Kauf AG won the bid. The winning bid for Leuna and Minol included the following: 1) the highest commitment to future employment levels; 2) a commitment to invest DM 3.3 billion for a new refinery at Leuna, DM 3.3 billion for a new pipeline from the Port of Rostock to Heinersdorf and DM 1.4 billion for improvements to the Minol network; and 3) an agreement to allow future investors in the Leuna Chemical site to invest and become partners in the refinery. In addition, Mr. Klaus Schucht, in charge of the chemical industry at the Treuhand, said that the Elf consortium won over BP because Elf "had a strategic interest in moving eastwards while BP was more concerned with short-term returns." For its part, the Treuhand is expected to invest DM 10 billion in infrastructure improvements in the Halle-Merseburg area and assume responsibility for debts and environmental damage. The deal, essentially completed in January 1992, took Goldman Sachs 6 1/2 months.

The Leuna and Minol transaction demonstrate the enormous complexity associated with East German privatization. To manage 13 of some of the world’s largest companies through this process of consortia building and bidding in a manner which would facilitate the desired restructuring plan required considerable adaptation. The transaction also revealed the Treuhand’s subjective decision-making process. The agency’s comment that Elf won over BP partly due to Elf’s "strategic interest" versus BP’s interest in "short-term revenues," caught the Treuhand making a decision on grounds which would have been difficult for the buyers or the investment bank to predict.
With this seminal transaction essentially completed, Goldman has turned its attention to the sale of the industry's remaining properties, including the pharmaceutical company, Berlin Chemie. In addition, it continues to involve itself in non-traditional variations on its role as investment banker. At the Leuna complex, for example, Goldman has recently auctioned off the energy supply contract for the chemical plants. For the first time in over 50 years, the supply of energy was put out to competitive bid. Why is Goldman Sachs managing the client's energy supply? A firm spokesman says these efforts will eventually pay off, whether the savings translate into higher purchase prices and thus higher fees or simply into the faster sale of the property. Goldman expects to complete the privatization of the petrochemical sector by mid 1992. This compares to an earlier forecast of the end of 1991.

Goldman Sachs' role in the privatization of the East German petrochemical industry differs in many respects from the standard operating procedure in Western markets. Differences include: building consortia of multinational interests, playing an active part in the industry's strategic planning, looking after the energy supply needs of Leuna, and keeping unusually copious documentation to appease the public nature of the transaction.

The success of the Leuna transaction should not be taken to mean it was without complications. In fact, Goldman initially had difficulty completing it. In early December 1991, Treuhand officials were questioning whether Goldman would succeed. The firm had been experiencing frequent delays, first predicting closure in early fall and then by the end of the year. Nonetheless, Goldman Sachs is a good example of a firm who saw a high payoff in working with the Treuhand and proactively managed the adaptation costs.
Goldman Sachs actively managed the tradeoff between payoff and adaptation costs by limiting its involvement to deals that enhanced its reputation, generated large fees, attracted a sizable group of buyers and had a reasonable probability of closure. The firm moved decisively into the East German privatization market as part of a strategic effort to develop business in all of Germany. Goldman describes its efforts in East Germany as an integral part of its strategy for penetrating corporate Germany. The company expects the Treuhand experience to fundamentally reshape the German M&A market. German CEOs have now had the opportunity to witness the value an investment bank can add to the merger and acquisition process. In addition, many German executives are getting their first taste of active M&A as a corporate strategy tool and they like what they see. For many years, Western investment banks looked at the economically powerful German market with frustration as its largest companies bought, sold and merged businesses without the assistance of external advisors. If the market blossoms as Goldman is predicting, the players who built a presence and a reputation through privatization will be at a distinct advantage in the "clubby" atmosphere of German banking.

The opportunity to build a strong reputation in the German and world market has been a common motivation among all banks participating in East German privatization. Goldman Sachs believed positive reputational effects on the German and worldwide market would be necessary to offset the extraordinary costs of adaptation to East German requirements.

Reputational effects not only affected Goldman's decision to enter the market but also the type of business it took on in East Germany. Goldman decided that if it were to work with the Treuhand, it would do something "tough and important." Accordingly, Goldman took on a project that was both tough and important considering that over
400,000 people work in East German petrochemicals. The complexity of the Treuhand deals resulted in a valuable payoff for Goldman by raising its stature worldwide.

The East German mandate also has given Goldman Sachs a good opportunity to work with high level people in the world petrochemical industry. Though the firm's industry specialists are already accorded much respect around the world, this was a chance to begin new relationships and demonstrate Goldman's competence to new clients. Therefore, even though privatization work in East Germany may offer lower fees, greater complexity, and a lower probability of closure, the firm justified its participation with the enhancement of its reputation.

This is not to say that Goldman abandoned the need to concentrate on high profit deals. Goldman actively managed its business in East Germany to maintain a firm-wide standard in profitability. The firm was only interested if it could find large enough transactions, involving decisive clients and marketable properties. A Goldman spokesman said that when the investment bank began speaking to the Treuhand in June 1991, approximately 100 companies in its portfolio could have been of interest to a bulge-bracket investment bank. Of these 100, only about five met Goldman's criteria of being tough and important, large enough, salable, and possessing a good client.51

The transactions in the petrochemical mandate are certainly large enough. Goldman's precise fee arrangement is not known but the firm admits it was a very respectable amount. Based on the proposed standard fee agreement, where the bank receives the Lehman formula described in Chapter 2, Goldman most likely would have received at least DM 21 million -- a sizable fee by Western standards.52
A chemical property was right for the firm because it had reasonable marketability and the Treuhand staff in this Referat was extremely competent, making for a very good client. To add to the probability of completing the transaction, Goldman Sachs stipulated it would only take the mandate if ADL and McKinsey stayed on to push through the necessary restructuring and answer inquiries from investors. Working with ADL and McKinsey alleviated the cost of not having a strong management team at the client who could help prepare budgets and competitive analyses and otherwise assist in the sale process.

To be sure, Goldman considerably adjusted its operating procedures to complete the Leuna transaction. Leuna was viable for the firm only because of careful pre-screening and subsequent management of the potentially costly aspects of adaptation. The deal paid very reasonable fees and enhanced Goldman's reputation. The costs of an inexperienced management team and absentee seller were constrained by the insisted upon presence of ADL and McKinsey and the choice to work with the competent chemical Referat. In addition, Goldman had won the mandate for a reasonably marketable property.

3.3 J.P. Morgan

J.P. Morgan has had some great success working with the Treuhand but also has experienced situations where the extraordinary costs of adaptation have begun to outweigh the potential payoff. Morgan became involved with the Treuhand in August 1990 when Managing Director Werner Pfaffenberger was called by Dr. Detlev Rohwedder to sit on the Treuhand's executive board. Rohwedder was the chairman of Hoesch and a member of the advisory board of J.P. Morgan GmbH.53 Morgan, serving
the Treuhand out of its Frankfurt office, won one of the first substantial mandates in December 1990. It was chosen to privatize the Eastern newspaper industry. The Treuhand wanted an investment bank "to organize the bidding and assure the 'highest degree' of objectivity." J.P. Morgan was able sell the papers for DM 850 million, twice the original offering price. This accomplishment firmly established the value an investment bank can bring to Treuhand transactions.

Since then, the bank has won four additional mandates. The current deals, however, are proving to be difficult. In addition, the firm is finding itself spending a great deal of time accommodating German government audits and responding to lawsuits relating to past deals.

The firm's objective has been to most profitability allocate its man-hours per year. When Morgan initially entered the privatization business in East Germany it believed the cost of smaller deal sizes and greater complexity would be more than compensated for by the opportunity to enter this market early and enhance the firm's reputation in Germany. This appeared to be the case with its first deal. Subsequent deals, however, have not proved so lucrative. The escalating difficulty is leading the firm to question its continued involvement.

J.P. Morgan decided to vie for mandates to seize the opportunity to be one of the first banks with expert knowledge of the Treuhand. It's clients had been showing interest in Treuhand companies and so the firm sought a competitive edge over the traditional investment banks in serving them. Today, however, many of the most attractive companies have been sold, leaving few buyers interested in the firm's special skills.
The firm also saw value in the opportunity to enhance its reputation as a sophisticated deal maker and a good corporate citizen. It believes the Treuhand mandates have established it as one of the leading M&A houses in Germany while it continues to shed the image of merely an ambitious commercial bank in Anglo markets. Perhaps the more powerful reputational motivator was the sense of obligation to be a good corporate citizen. Morgan followed the curious pattern seen in many other banks of working with the Treuhand out of an altruistic sense of duty. The firm took the first step of seconding someone out of the connection with Rohwedder and a connection between Morgan's German Vice Chairman in New York and German Finance Minister Waigel. These relationships made saying "no" very difficult.

Reputational effects are not always positive. Bankers see a real risk of damage to investment banks' names from headlines associating them with layoffs or plant closures.

While the perceived payoff may be ambiguous, the incongruence between the firm's cost structure and the revenues per man-hour from Treuhand business are becoming clear. The fees under the old standard mandate agreement were often substantial. They did not, however, compensate for the additional time required to process transactions with a significantly lower probability of success. "The Treuhand is asking banks to restructure, manage audits, analyze tax structures and more. We are certainly capable of doing this, but we must get paid. Relying on a success fee is too risky in this situation," said a J.P. Morgan spokesman.55

Law suits and federal audits associated with the newspaper deals have been raising costs further. For J.P. Morgan selling companies for the Treuhand has recently been costing more than it has been returning. Accordingly, the firm is thinking of exiting the business.
3.4 Wasserstein Perella

Wasserstein Perella runs its Treuhand business from its four-person Frankfurt office with support from London and New York. After seconding a new Associate to the Treuhand in November 1990 for eight months, Wasserstein has won four major sell mandates. In December of 1991, the company sold Arzneimittelwerk Dresden GmbH (AWD), East Germany's largest pharmaceutical company, for approximately DM 325 million.\(^5\) Wasserstein ran an auction among 60 investors. The firm mobilized industry and market experts from New York and London to complete the transaction. The firm also has been working on mandates to sell a Leipzig-based flavor and fragrance company, a Thüringen-based manufacturer of harvesters called Landtechnik Schönebeck, and a Thüringen-based construction company.\(^7\) It continues to compete for new mandates.

While AWD was a very marketable company, its sale to the Asta Medica subsidiary of Degussa required adaptation on the part of Wasserstein Perella. The investment bank had to prepare a preliminary business concept largely on its own. This was necessary because, on the one hand, buyers needed a sense of the cost of the acquisition, including required future investment and employment. On the other hand, the proprietary nature of the drug company's business precluded completely opening up the company to each bidder in the auction.

Wasserstein brought in its pharmaceuticals expert from New York to identify areas needing further investment, possible synergies with other competitors, and necessary restructuring steps. The firm calculated the costs and expected time frame of the necessary restructuring steps. It then spent considerable time "teaching" management the
Wasserstein Perella collected this information into a very technical selling memorandum along with budgets prepared by the consulting firm Roland Berger GmbH.

Wasserstein Perella needed to execute the sale quickly before Western competitors Hoechst and Bayer established distribution networks in East Germany. One of AWD's most valuable assets was its established distribution network throughout East Germany. If its advantage were left to atrophy, AWD and its employees would have lost most of their value to potential buyers. In addition to the complications of formulating a detailed business concept and educating management, Wasserstein had agreed to allow the state of Sachsen time to arrange its own management buyout. Soon all parties agreed that if AWD was not privatized quickly, it would lose much of its value.58

Wasserstein Perella eventually reached an agreement with Asta Medica. The nature of the sale process conducted by Wasserstein, led to a number of innovative acquisition concepts. The winning concept committed Asta to maintaining the AWD name and moving the Asta headquarters from Frankfurt to Dresden, thereby giving the Dresden town coffers significant tax revenues. Asta also promised to build a personnel training center in Dresden to train new employees.

The privatization of the flavor and fragrance company required significant restructuring work. The two lines of business did not fit together well and clearly needed to be separated. Shared production facilities complicated the task. To carry out the mandate, Wasserstein Perella developed a plan for dividing the two production lines. The plan not only considered the physical separation of the assets, but also the allocation of personnel, the structure of the new organization, and the allocation of its surrounding housing. In addition the firm explored other possible uses for the plant, opening the door to a much larger group of buyers. This activity was carried out without the use of in-house industry
specialists. The transaction was not yet closed at the time of this study. Its complexity dramatically raised the cost to Wasserstein Perella without clear compensating payoffs.

The mandate to sell a Thüringen-based construction company also presented certain difficulties. Wasserstein Perella described the firm as too small for most foreign buyers. Wasserstein also expected a limited market within Germany, because many German construction companies already had penetrated the market through acquisitions and joint ventures. In addition, selling a company in this industry does not demand sophisticated analysis or specialized industry knowledge beyond market-size information. The Treuhand awarded the mandate to Wasserstein Perella to run a disciplined auction that would bring the highest price. The agency felt German buyers had been "stealing" construction companies when investment bankers were not used. Wasserstein admitted this would be a difficult sell. One must question whether the payoff from this transaction exceeds the cost. The transaction does not employ Wasserstein's competitive advantages in attracting foreign buyers or executing sophisticated analysis.

Perhaps the answer lies in the high value the firm places on enhancing its reputation in the German market. Completing the transaction will add to Wasserstein's German volume and will provide a useful service to the Treuhand. The Financial Times reported in the Spring of 1991 that "Wasserstein Perella believes that activity in Germany, hitherto almost completely insulated from the takeover mania sweeping the Anglo-Saxon world, is set to grow." 59

The firm has a great deal to gain from building its reputation in Germany. As a relative newcomer to European M&A, the firm needs to establish itself in new markets such as Germany's, before the world's entrenched giants move in. It also needs to overcome some negative publicity which emerged in London and New York over its aggressive tactics.
Wasserstein is trying to build its reputation by being a good corporate citizen. Joseph Perella, Wasserstein's Chairman, said that "the firm intended to play its part in the East German regeneration task. We want to be mainstream and good citizens. That means we can not cherry-pick." The reluctance to cherry-pick may explain its willingness to take on complicated transactions outside its areas of expertise.

While valuing the effects on its reputation, Wasserstein is also watching the profitability of privatizing East German companies. The firm says it guards against the extraordinary costs associated with small and unmarketable companies. For example, it does not take deals below DM 100 million in revenues. In addition, the firm believes the experience of its seconded professional enables it to identify those transactions likely to become extremely difficult and costly and those that could pay off well. This does not, however, explain the firm's decision to take on some of its recent mandates.

According to a firm spokesman, Wasserstein Perella maintains a long-term strategy for the German market and therefore can accept a slightly lower payoff than might be available in Western Europe. He adds, however, that Wasserstein will not over commit resources to this activity. The firm points out that it is also committed to the higher profit deals found in West Germany, where it has thus far completed eight transactions, and is currently working on four more.61
4. Big Six Accounting Firms

The corporate finance units of Price Waterhouse, Arthur Andersen, and Peat Marwick have been very active in East German privatization. These units face a much more favorable payoff-adaptation cost tradeoff than the investment banks. They are trying to break into the corporate finance market for the first time and thus privatization activity in the EC is of immense reputational value to them. In addition, they have lower cost structures than the investment banks, allowing them to profitably work on much smaller deals. Their cost structures benefit from economies of scale among their audit and tax, consulting and corporate finance practices, all of which are very active in Eastern Germany. Other accounting firms have missed this strategic opportunity and are involved only sporadically, if at all. This Chapter will follow the experience of an active firm, Price Waterhouse, and one only sporadically involved, Ernst and Young.

4.1 Price Waterhouse

Price Waterhouse is one of the two accounting firms participating most actively in East German privatization. The firm maintains an office in Berlin staffed with 85 professionals, 25 of whom concentrate on M&A work for the Treuhand. Price Waterhouse professionals also have been retained by the Treuhand to manage its regional offices in Magdeburg, Erfurt, Halle and Berlin. The firm was one of the first financial institutions into Berlin after the falling of the wall, setting up offices in the Grand Hotel and seconding a corporate finance professional in August 1992. The firm has completed over 300 deals with the Treuhand. Its activity includes: representing the Treuhand with sale mandates, representing buyers, preparing opening balance sheets and other audit
work, providing informational services on behalf of the Treuhand and offering restructuring advice.

Price Waterhouse believes the Treuhand works with them so extensively because they offer a full package of services, objective advice, an international network and large numbers of German speaking professionals. For its part, Price Waterhouse has moved into Berlin with so much force because privatization work generates lucrative tax and audit revenue. It also provides an entree into the European corporate finance market. Building on a strong foundation of privatization expertise, Price Waterhouse hopes to use this occasion to establish its name with CEOs around the world as a corporate finance firm in addition to a tax and audit firm. Developing a reputation in corporate finance in the saturated Western markets has been very difficult.

The firm's cost structure facilitates this strategy. The extensive tax and audit base in East Germany absorbs much of the fixed costs of supporting the German presence. It also provides a useful entry into the Treuhand and buyers alike. In addition to the extensive tax and audit base, Price Waterhouse incurs lower personnel costs than the investment banks. Therefore the firm can accept a lower payoff and higher adaptation costs.

Price Waterhouse has involved itself with nearly every aspect of the privatization process. While this has firmly established its position, it has also led to widespread allegations of conflict of interest. M&A intermediaries throughout Germany complain that accounting firms occasionally distorted opening balance sheets to assist buyers for whom they were already working on the audit or corporate finance side. Such allegations could undermine the very reputational value a firm seeks to build by involving itself so pervasively in the privatization process.
4.2 Ernst and Young

Ernst and Young has not taken a centralized approach to work with the Treuhand. As described in Chapter 2, the firm's Boston office performed valuable M&A services for the Treuhand regional offices of Gera, Erfurt and Suhl. Meanwhile, other small scale services were performed by offices in Germany and Switzerland. The activities of EY's Boston office delivered buyers to the Treuhand from the United States, Europe and Japan and established a clear format for selling memoranda. By all accounts, EY satisfied its customer.

The firm, however, did not orchestrate a coordinated approach to the Treuhand. The East German strategy articulated by the Boston office concentrated on the smaller deals which might be of interest to the firm's middle-market clients. Without a strong in-country effort, pushing for audit, consulting and M&A business, EY never gained the stature of some of the other firms. When the Treuhand centralized the coordination of financial institutions in Berlin, EY-Boston lost its Gera customer and was not in line to win a new customer in Berlin. As a result, Ernst and Young has not won mandates or significant auditing assignments.

Unlike Price Waterhouse, EY did not have a grand strategy to develop a European corporate finance presence or expand its privatization expertise. Therefore, despite the firm's potential advantages in this market, it did not become a player.
5. Equity Funds in East Germany

While equity funds by definition do not act as merger and acquisition intermediaries, they are included in this study because they play a potentially important role in the privatization of East Germany. An equity fund makes private equity investments in businesses. Given their private focus, these funds usually invest upon a transition in ownership, such as a management buyout, management buy-in, leveraged buyout or strategic acquisition. Often these firms act as buyers themselves, buying the company with their equity and debt borrowed from another institution.

The Treuhand is attracted to equity funds by their potential as partners to management buy-ins and as outright buyers. As mentioned in Chapter 2, the Treuhand has repeatedly encouraged equity funds to buy blocks of companies, hold them for two or three years, carry out some restructuring, and then resell them. This study surveys equity funds because they exemplify financial institutions which have not adapted to the conditions in East Germany. As would be predicted, they have not accomplished much in the region, despite their intentions.

Four major equity funds compete with a multitude of very small funds for attractive companies to "buy" in East Germany. Three of the four are devoted to opportunities in the Eastern states. They are Robert Fleming, East German Investment Trust and Deutsche Industrie Holding, a subsidiary of Deutsche Bank. The fourth, which invests throughout Europe, is Deutsche Beteiligungsgesellschaft (DBG). Robert Fleming launched its fund in December 1990 with capital of DM 96 million and as of February 1992 had invested DM 15 million in two deals. East German Investment Trust began at approximately the same time as Fleming with approximately DM 145 million in capital.
It has invested roughly 75% of its fund, or DM 110 million. The annual fees to the manager of this fund double once it is fully invested.64

Deutsche Industrie Holding (DIH) was established in the fall of 1991 under pressure from the Treuhand. It started with DM 100 million. DIH is designed to do exactly what the Treuhand wanted: buy 100% of a company, restructure it and resell it two or three years later. According to a former Treuhand official, however, DIH operated in December 1991 with the same criteria as its Western sister, DBG. As of February 1992, DIH had not made its first investment.65 DBG, the traditional small investment equity arm of the Deutsche Bank, consists of a network of funds with total capital of DM 457.4 million invested throughout Europe. It has closed seven investments in the new federal states.

The dedication of the three funds to investments in East Germany establishes their intention to invest in the region. The dearth of closures at Flemings and Deutsche Bank indicates an incongruence between the equity funds' strategies and the realities of the market. This chapter examines in detail the activity of Robert Fleming and DBG. It demonstrates the strict adherence to standard operating procedures by each firm.

The strategy of the equity funds can be viewed in the framework of their payoffs and costs of adaptation in the East German market. Equity funds receive their payoff from the return on their investment over the course of approximately five years. Funds compete primarily on offering the best acquisition price or the lowest cost of capital. They compete on reputation to a much lesser degree than the investment banks and accounting firms. The costs of adaptation include the heightened risk associated with macroeconomic instability, the stock of managers inexperienced in Western management methods, outmoded technology and environmental liabilities. Naturally, equity funds
will try to optimize the tradeoff between payoff and cost of adaptation by seeking investments at the lowest purchase price which require the least amount of adaptation. This is precisely what the funds have been doing. If the firms intend to invest in the East, however, they must adapt their investment criteria.

5.1 Robert Fleming

Robert Fleming manages the DM 96 million Deutschland Investment Corporation (DIC) fund, dedicated to investing in the new federal states. The fund takes only a minority position alongside one or more industrial or management partners who provide new technology and management expertise. Flemings requires a 30% annual return over five years for its investments. A senior professional at Flemings active in East Germany, said the fund invests in East Germany with the same methodology it would apply in the West. The difference is that the environment in the East is riskier. He said a company must have a very good management team, significant market share in East Germany with brand recognition, and a relatively strong balance sheet. Bringing in managers from the West is not the most desirable solution to a local management problem. One would be concerned that these new managers might not fit with the local staff or middle management.66

To date the fund has invested DM 7 million in Autodorado GmbH, a project of greenfield gas station sites, and DM 8 million in Boizenburger Fliesenwerk GmbH, a tile manufacturer. In both cases, Flemings invested alongside Western industrial partners. This shielded it from the risks of poor management. The funds involvement in the "management" of the businesses has included working with management to prepare a five year plan and monthly budget, taking an advisory board position and negotiating
senior management employment contracts. All of these tasks are performed in Western situations as well.

Flemings admits its criteria do not qualify many opportunities. Few Eastern management teams have sufficient expertise to execute a management buy-in and few Western industrial companies investing in the East need Flemings' money enough to sacrifice ownership. As a result, funds like Flemings' best serve the West German Mittelstand, who have technological and management expertise, but may need capital.

5.2 Deutsche Beteiligungsgesellschaft (DBG)

Since DBG does not devote itself to investing in East Germany, it is no surprise that it adheres steadfastly to its standard operating methods. DBG invests DM 0.5 million to DM 40 million in minority stakes in small to medium-sized companies. The fund seeks companies with high growth and investment yield potential. It requires strong management and at least a proven concept if not a proven track record.

As the only Deutsche Bank equity fund mobilized to make investments in East Germany until the creation of DIH in the fall of 1991, DBG has made seven investments in the new federal states. Each investment has been made with either a management team from the West or in partnership with an industrial company. Often the industrial partner was one of their portfolio companies. In all cases, the acquired company had the unique characteristics of either a Western market share or a stable Eastern market share.

The acquisition of Multicar Spezialfahrzeuge GmbH, in Walterhausen/Thüringen, illustrates the Western-style criteria that guide DBG's investments into the East. DBG
purchased the company from the Treuhand in December 1991 in partnership with portfolio company Schörling GmbH & Co. Waggonbau and management. DBG did not disclose the purchase price but indicated that compensation was concentrated in a commitment to invest DM 18 million through 1995. This company manufactures small utility vehicles. Atypical of companies in the region, East German demand for its product has remained stable, and supports current employment levels. Multicar’s new owners also plan to market the product with slight modifications in the West. DBG and its partners have faced "Eastern" challenges such as restructuring the company’s production methods.

DBG believes the expertise of its industrial partner and the stable demand characteristics of this business will contain the adaptation costs of this investment. The firm would not have been willing to accept more risk than it has. A senior spokesman at DBG explained that the firm wishes to maintain its risk management criteria. The risks in the East are a priori greater than in the West owing to the unstable macroeconomic environment, the lack of good financial information, and the limits to available management expertise. DBG does not want to add to the risk by investing in weak businesses.67

The equity fund sees its role in portfolio companies as providing financial and strategic direction. DBG does not believe it or any other equity fund in Germany is qualified to do much more. The firm pointed out that in 1991, the German Venture Capital Association reported that German venture funds had only invested DM 53 million in the Eastern states. This underscores the reluctance of such funds to dramatically adjust their investing criteria. The DBG spokesman asks, "with so much to do in West Germany, why would firms take the added risk and increased cost of expanding rapidly in the East?"68

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The German venture capital or equity fund industry has not responded to the privatization opportunities in East Germany. Can their unwillingness to adapt be attributed to short-sightedness? The answer is no. These firms specialize in making investment decisions, not management decisions. In fact, Venture Capitalists throughout Europe and the United States cite a strong management team as the most important investment criterion. The Treuhand should not expect such firms to forsake this criterion or begin to provide the management expertise itself. The equity funds are staffed mostly by former accountants, commercial lenders and investment bankers. They are not equipped to provide hands-on management expertise themselves. Even the considerable adjustments undertaken by the investment banks do not include the assumption of daily management responsibilities.

Equity funds should realize, however, that their product is not well-suited to East Germany if they choose not to adapt at all. Their options include scaling down or adapting their core competencies to the unique situation of East Germany. For example, the funds could pool management talent from their portfolio companies to run blocks of Eastern companies until sufficient management knowledge has been transferred. DBG does this to a small extent where they invest alongside one of their portfolio companies. Why not fully integrate such a program into DIH’s charter? With purchase prices largely consisting only of future investment in the company owned, the payoff can be substantial. There may very well be opportunities in East Germany that the equity funds are uniquely positioned to take advantage of. They will, however, require adaptation.
6. Changing Institutional Roles in the Sale of East German Industrial Assets

The experiences of investment banks, accounting firms and equity funds in privatizing East Germany’s industrial assets show that all three types of firms need to adapt their standard operating procedures to the circumstances of the East German market. They have responded to this need in a variety of, for the most part, strategically sensible ways.

Sensitive to their own internal cost structures, the bulge-bracket investment banks have carefully managed the extent of their involvement in East Germany. Goldman Sachs selected a package of deals that would earn it high fees, utilize some industry expertise and significantly enhance its reputation. The firm maximized its probability of success by working with what it perceived to be one of the strongest bureaus within the Treuhand. It built up the capabilities of its clients by insisting on the continued involvement of ADL and McKinsey. This was not a case of the “cherry-picking” many firms have eschewed for reputational reasons. An examination of the decrepit, toxic industrial assets Goldman chose to sell would not lead one to believe the privatization of the chemical industry would be an easy job.

J.P. Morgan and Wasserstein Perella appear to be focusing more on the reputational payoff than on managing the extraordinary adaptation costs. Morgan demonstrated its civic commitment to Germany by taking a seat at the top of the Treuhand hierarchy. Along with the lucrative newspaper deal, Morgan accepted a number of less lucrative mandates. Today it finds the highly public nature of the newspaper deal can cause unexpected adaptation costs while the less marketable mandates are generating costs in excess of their payoff.
Wasserstein Perella has taken on a wide variety of mandates. In some it has managed adaptation costs by focusing on an in-house industry specialization. In others, it has operated with a generalist approach despite the need for an extraordinary level of involvement in restructuring and strategic planning. It also has accepted mandates for highly marketable companies, such as AWD, and others for less attractive properties, such as the Thüringen-based construction company. At Wasserstein Perella, the strategy behind its privatization activity appears to be focused on building its reputational value above all else. It is logical that J.P. Morgan and Wasserstein Perella focus more on reputation because they earn greater marginal benefit from it. Morgan is a traditional commercial bank that has been trying to demonstrate its M&A prowess for less than the last ten years. Wasserstein Perella is also a new firm. Building name recognition, and perhaps buying market share by doing Treuhand deals yields a very high payoff for them.

Some accounting firms seized upon the natural strategic fit between their corporate finance ambitions and East European M&A activity. Their need to build a franchise in a completely new business has placed an extremely high marginal benefit on any positive reputational effects. At the same time, their adaptation costs are more manageable than the investment banks. A lower cost structure and a paid for infrastructure of tax and audit professionals enable them to offer the Treuhand the manpower it is looking for. The accounting firms could be the big winners from privatization. Those that adjusted quickly to the unique characteristics of East Germany may have established themselves as credible M&A intermediaries in Europe and abroad. Those that failed to move early in a coordinated way have missed the opportunity.

The equity funds have not adapted themselves to the unique characteristics of East Germany. As a result, they have not become the significant player the Treuhand hoped
for. While their strategic response is consistent with their core competencies, some adaptation could lead to significant opportunity.

Taken together, the Western financial institutions engaged in privatizing East Germany have operated with considerable strategic dexterity. Their payoff from making the necessary adjustments is not likely to be limited to East Germany. Each firm’s reputation and adaptive skills will carry over to the Western European market as well as to Central and Eastern Europe. Valuable skills include experience managing large, multicultural consortia, negotiating with political actors, developing detailed strategic and operating plans, and selling assets valued on attributes other than purchase price, such as future investment and employment levels.

The application of these new skills to the West European market is likely to occur during a period of industrial consolidation expected to follow European economic integration. The European Continent will not need major air transport, steel, engineering and telecommunications companies for each nation. The resulting consolidation will involve politically sensitive, multicultural alliances. Investment banks will need to manage such transactions with care given to employment effects and the preservation of national 

In the case of state-owned businesses, banks will again exercise their planning and restructuring skills.

Naturally, the skills learned in East Germany will be transferable to other privatizing countries in Central and Eastern Europe. While each country has been following a unique privatization program, the experience of adaptation itself will serve M&A firms well.
Participating in the privatization of East German assets required a significant adaptation of firms' standard operating procedures. While such adaptation often carried a high cost, the payoff could be substantial. Those firms that became involved early and have stayed with the challenging task, will be well positioned to lead European corporate finance in the coming decades.
Notes to Part II

1 This essay follows the convention of referring to the two halves of unified Germany as West Germany and East Germany. The whole of unified Germany is referred to simply as Germany. When referring to these regions prior to unification, the terms FRG and former GDR are used.

2 For the purposes of this study, firms in each of the three groups: bulge-bracket or "Wall Street" investment banks, corporate finance units of the "Big Six" accounting firms, and equity funds are commonly referred to as "investment banks" or "banks".


5 ibid. p. 7.

6 ibid.

7 ibid.


10 ibid p.9.

11 ibid., p.10.


14 Nearly every person spoken to outside of the Treuhand felt that industry sent some of its poor performers to the Treuhand.


16 Interview, Ernst & Young, Boston, MA, Feb. 1992.


18 J.P. Morgan.
20 Ibid.
21 J.P. Morgan.
22 Ernst & Young.
23 Transaction value is a combination of price, guaranteed employment and future investment.
24 J.P. Morgan.
26 Ibid.
27 Ibid.
28 DBG.
29 Ibid.
31 J.P. Morgan.
32 A fee calculation based upon the publicized levels of committed investment would work as follows:
   The publicized DM 8.0 billion of committed investment would be weighted by 0.5 to yield a fee base of
   DM 4.0 billion. The Lehman formula is then applied to the fee base. The fee would be the summation of
   0.03 x 10 million, 0.02 x 40 million, 0.01 x 50 million and 0.005 x 3,900 million. This sum equals
   DM21.1 million. In addition, the firm will receive a fee based upon future employment and the
   transaction price.
33 THA.
34 "Struktur der Treuhandbeteiligungen," Treuhandanstalt, Zentrales Controlling.
35 Wasserstein Perella, Frankfurt.
36 J.P. Morgan.
37 Goldman Sachs - London.

ibid.

Colitt, "BP Hopeful of Share in East German Refinery."

ibid.

Colitt, "BP Hopeful of Share in East German Refinery," and "Treuhand to Sell Leuna and Minol."


Goldman Sachs - London.


Collit, "Treuhand to Sell Leuna and Minol."

THA.

Colitt, "BP Hopeful of Share in East German Refinery," and "Treuhand to Sell Leuna and Minol."

Goldman Sachs - London.

See discussion of the manadate process.


Leslie Colitt and David Goodhart, "Treuhand Restrains Media Barons in Sale of Newspapers."


J.P. Morgan.


ibid.


ibid.

Wasserstein Perella, London.

Price Waterhouse.
Price Waterhouse was a leading privatization adviser in the U.K. in the 1980's and currently is very active in other parts of Central and Eastern Europe.


ibid.

ibid.

DBG.

ibid.
CONCLUSION

The extraordinary transformation of industrial assets from public to private ownership occurring in East Germany has called into question the customary roles of corporate stakeholders. The process of privatization has brought to front stage a cast of players which includes public officials, local management, the employees, the Treuhand, and merger and acquisition intermediaries. Each actor plays a significant role in lifting the region out of its despair. At the same time, however, each actor is handicapped by this very despair. The tension that results can only be resolved through cooperation.

This study has examined the roles of each of these actors, analyzing their motivations, capabilities and interests in carrying forth the transformation to a free market. All players share the goal of economic revitalization through privatization. The Treuhand and the investment banks have been privatizing East Germany's industrial assets under the premise that rapid exposure to market forces is needed to preserve a minimum level of economic viability. The competitively weak state of many of these businesses has led to their privatization under terms that include layoffs and plant closures.

The employees, local management and their public officials also believe in economic revitalization through privatization, but to them revitalization means keeping the local inhabitants employed. Consequently, they believe the privatization process should involve a first step of restructuring which would make the firm attractive to private owners without the need to move jobs and production elsewhere. The tension between rapid privatization and measured privatization grips each actor. On the surface there is no universally acceptable outcome.
Out of necessity, however, the actors have crafted solutions which meld their respective objectives. The Industrieparkgesellschaft (IPG) of Chemie AG Bitterfeld-Wolfen (CBW) exemplifies such a cooperative outcome. Through the IPG, the different forces acting on the process of revitalizing CBW have been channeled towards a common goal. Private institutions are able to strive for profit, while public actors retain control over the development of the entire region. Although inherent differences in the actors' micro-level motives lead to conflicts at various levels, it appears that these challenges can be overcome by joint action of the institutions, resulting in successful revitalization of the region.

Cooperative outcomes can also be seen in many innovative privatization packages assembled by investment bankers. Wasserstein Perella's privatization of Arzneimittelwerk Dresden GmbH (AWD), for example, both resulted in a transfer of the business to private, market-directed hands, and brought additional jobs, training, and tax revenues to the city of Dresden. While, such cases are isolated examples, they demonstrate the benefits of cooperation among the multiple actors.

The actors in the privatization process have proven their ability to find cooperative solutions. Rapid privatization is necessary to rebuild the region's economic base. Productive employment for the region's people is also important. The Treuhand and other actors have realized the importance of accommodating the two objectives. Each actor should continue to recognize the objectives of the others, for without cooperation none of the actors' objectives will be met.
Acknowledgments

We would like to thank our advisors, Professors Nicholas Ziegler, Charles Sabel, and Horst Kern for their guidance throughout this project. Special thanks go to the faculty, staff, and students of MIT for their support.

We are thankful to the people at the Treuhandanstalt, the Chemie AG Bitterfeld-Wolfen, the City of Bitterfeld, the Ministry of Economics of the State of Sachsen-Anhalt, Arthur D. Little, Bankers Trust, Deutsche Beteiligungsgesellschaft, Ernst and Young, Goldman Sachs, J.P. Morgan, Price Waterhouse, Robert Fleming, and Wasserstein Perella for their generous help regarding information and logistical support.

Finally, we thank our families and friends for thoughtful advice and fun times.

We would like to dedicate this thesis to the people of East Germany in their struggle to rebuild their country after decades of political and economic repression.
Appendix A -- Map of Chemie AG Bitterfeld-Wolfen
Appendix B -- History of the Chemie AG Bitterfeld-Wolfen

In 1993 Chemie AG Bitterfeld-Wolfen will celebrate the centenary of the foundation of the first chemical plant in the Bitterfeld-Wolfen area.

1893
The board of directors of Chemische Fabrik Elektron Aktiengesellschaft Griesheim takes the decision to establish a plant for the electrolysis of alkali-metal chlorides in Bitterfeld (Southern Plant).

1894
Beginning of construction of the Bitterfeld plant for the electrolysis of alkali-metal chlorides. In the same year Elektrochemische Werke Berlin GmbH erect a further plant near Greppin for the electrolysis of alkali-metal chlorides (Northern Plant) for the manufacture of chlorine, caustic potash and caustic soda.

1895
Aktiengesellschaft fuer Anilinfabrikation Berlin (Agfa) erect a plant for dyes and intermediate products between Greppin and Wolfen (Farbenfabrik Wolfen).

1898
Chemische Fabrik Elektron AG Griesheim and Chemikalienfabrik Mainthal unite and form the Chemische Fabrik Griesheim-Elektron.

1904
Bitterfeld becomes an airship center. In the area of the Northern Plant an airship yard and
an airfield are built. The construction of Parseval airships is moved to Bitterfeld where
the necessary hydrogen can be obtained through the electrolyses

1909
The magnesium alloy Elektron is brought onto the market by the Bitterfeld light-metal
industry.

1916
Chemische Fabrik Griesheim-Elektron becomes a member of the interest community of
German tar manufacturers. With 160 baths the Bitterfeld aluminum works is put into
operation.

1921
Official takeover of the Northern Plant by Chemische Fabrik Griesheim-Elektron.

1925
Founding of IG Farbenindustrie AG. First, Chemische Fabrik Griesheim-Elektron
becomes a member; later it is followed by Farbenfabrik Wolfen. Up to 1945 the two
plants remain members of the Works Association Central Germany.

1935
First experiments for the production of PVC under the management of Dr. G. Wick.

1938
Erection of a large-scale plant for the manufacture of PVC. A completely new line of
production, namely the manufacture of plastic material, has its beginning in Bitterfeld.
Under the name of WOFATT®, Farbenfabrik Wolfen puts on the market the first resinous exchangers which were developed by Dr. Griesbach.

1937/38

Erection of a large-scale plant in Wolfen for the manufacture of sulfuric acid from gypsum according to the Müller-Kühne process.

1945

In Farbenfabrik Wolfen the production is started of cement, fertilizers, washing raw materials, plant protectives and pesticides. Among the first products from the Bitterfeld works are electron, hydronalium, igelit and vinidur.

1946

Takeover of the Bitterfeld Southern and Northern Plants, together with the dye works, into the possession of the Soviet joint stock company Mineral Fertilizers.

1952

Handing over of the plants to the former German Democratic Republic under the names of "VEB Elektrochemisches Kombinat Bitterfeld" and "VEB Farbenfabrik Wolfen."

1969

Setting-up of "VEB Chemiekombinat Bitterfeld" (CKB) with a parent company with the same name as a result of the amalgamation of VEB Elektrochemisches Kombinat and VEB Farbenfabrik Wolfen and including another six subsidiary companies within the newly established Kombinat.
Decartelization of VEB Chemiekombinat Bitterfeld by severing the subsidiary companies, and conversion of the parent company into Chemie AG Bitterfeld-Wolfen.
### Appendix C -- D-Mark-Opening Balance, 1st July 1990

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>DM</th>
<th>LIABILITIES</th>
<th>DM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Special loss account from reserve formation according to §17, section 4 DMBiG</td>
<td>224,656,200.00</td>
<td>A. Own capital</td>
<td></td>
</tr>
<tr>
<td>B. Fixed assets</td>
<td></td>
<td>I. Subscribed capital</td>
<td>220,000,000.00</td>
</tr>
<tr>
<td>1. Tangible assets</td>
<td></td>
<td>II. Statutory reserves according to § 26, section 2, clause 2 DMBiG</td>
<td>321,133,522.07</td>
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<tr>
<td>1. Land</td>
<td>241,006,035.61</td>
<td>Special reserve of that according to §17, section 4, clause 3 DMBiG</td>
<td></td>
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<tr>
<td>2. Buildings, including buildings on other land</td>
<td>264,465,842.20</td>
<td>DM 194,656,200.00</td>
<td>541,133,522.07</td>
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<tr>
<td>3. Technical plant and machinery</td>
<td>718,320,663.56</td>
<td>B. Reserves</td>
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</tr>
<tr>
<td>4. Other equipment, plant and business equipment</td>
<td>12,688,181.00</td>
<td>1. Reserves for pensions and similar obligations</td>
<td>32,723,500.00</td>
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<tr>
<td>5. Plant under construction</td>
<td>107,349,995.61</td>
<td>2. Other reserves</td>
<td>260,322,700.00</td>
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<td></td>
<td>1,343,830,717.98</td>
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<td>293,046,200.00</td>
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<td>II. Financial assets</td>
<td></td>
<td>C. Liabilities</td>
<td></td>
</tr>
<tr>
<td>1. Shares in associated companies</td>
<td>826,483.21</td>
<td>1. Liabilities against credit institutes</td>
<td>1,069,060,571.50</td>
</tr>
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<td></td>
<td>1,344,657,201.19</td>
<td>2. Liabilities from supplies and performances</td>
<td>140,914,459.89</td>
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<tr>
<td></td>
<td></td>
<td>3. Other liabilities</td>
<td>9,961,302.77</td>
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<tr>
<td>C. Floating assets</td>
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<td></td>
<td>1,219,936,334.16</td>
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<tr>
<td>I. Stocks</td>
<td></td>
<td></td>
<td>2,054,116,056.23</td>
</tr>
<tr>
<td>1. Raw, auxiliary and working materials</td>
<td>110,770,813.13</td>
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<td></td>
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<tr>
<td>2. Semi-finished products</td>
<td>73,240,504.40</td>
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<tr>
<td>3. Finished products and goods</td>
<td>109,563,428.30</td>
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<td></td>
<td>293,574,745.83</td>
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<tr>
<td>II. Debt claims and other assets</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Claims from supplies and performances</td>
<td>77,552,360.39</td>
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<td></td>
</tr>
<tr>
<td>2. Claims against associated companies</td>
<td>9,449,715.94</td>
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<tr>
<td>3. Other assets</td>
<td>43,198,796.28</td>
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<tr>
<td></td>
<td>130,200,872.61</td>
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</tr>
<tr>
<td>III. Cash balance, postal assets, assets with credit institutes</td>
<td>59,556,644.60</td>
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<td></td>
<td>483,332,263.04</td>
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</tr>
<tr>
<td>D. Deferred items</td>
<td>1,470,392.00</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>2,054,116,056.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D -- Organization of Chemie AG Bitterfeld-Wolfen

Structure of Chemie AG Bitterfeld-Wolfen
BETRIEBSTEIL BITTERFELD WERK SÜD

Betriebsteil Bitterfeld
Werk Süd

Objekt-Angebot (S₁–S₅)
- Einzelobjekte
- Anteilige Fläche für Produktionsneuansiedlung

(Stand 15. April 1991)
Betreibsteil Bitterfeld
Werk Mitte/Nord

Objekt-Angebot
Einzelobjekte
(MN₁–MN₇)
(Stand 15. April 1991)
Bekanntmachung der Stadt Bitterfeld über die Bebauungspläne und Veränderungssperren für das Gebiet Bitterfeld


II. Die beiliegenden Veränderungssperren zu den Bebauungsplänen werden hiermit bekanntgegeben.

III. Auf die Vorschriften des § 18 (2) Satz 2 und 3 des Baugesetzbuches über die fristgemäße Geltendmachung etwaiger Entschädigungsansprüche für eingetretene Vermögensnachteile durch die Veränderungssperren nach § 18 des Baugesetzbuches und des § 18 (3) des Baugesetzbuches über das Erlöschen der Entschädigungsansprüche bei nicht fristgemäßer Geltendmachung wird hingewiesen.

Kauf
Bürgermeisterin
Appendix G – Organization of the Treuhandanstalt

President

- Economic Affairs
- Federal/International relations
- Human resource
- Legal
- Audit

Enterprise Sector 1
- Heavy manufacturing construction
  - Special tools
  - Special machinery
- Petroleum
- Administration of shrinkages
- Enterprises auditing

Enterprise Sector 2
- Organizational mechanics
  - Water supply
  - Buildings
  - Transport

Chemicals
- Restructuring

Enterprise Sector 3
- Agriculture and forestry
  - Food, beverages, and tobacco
  - Mining and quarrying
- Administration
- Organization/EDP

Enterprise Sector 4
- Raw materials
  - Wood and paper
  - Service sector
- Petroleum
- Regional offices

Personnel
- Training personnel
- Personnel management
  - Labor market and social

Finance
- Financial planning and control
  - Enterprise balances
  - Enterprise operations
  - Accounting/investment

18 Regional Offices
- Berlin
- Chemnitz
- Cottbus
- Dresden
- Erfurt
- Frankfurt/Oder
  - Gera
- Heide
- Leipzig
- Magdeburg

Reckendorf
- Potsdam
- Rostock
- Schwerin
- Solth