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PRIVATIZATION IN EAST GERMANY

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Abstract

This paper is a critical review of east German privatization policy. It is argued that the restitution of old property rights has been a major obstacle to investment and that the attempt to sell two thirds of an economy in the market place is bound to be a failure. Such an attempt implies serious macro and microeconomic stock-flow problems which erode the sales prices of Treuhand assets, induce the Treuhand to slow down its sales, and reduce private investment. By combining a participation model with a wage freeze the paper designs a social contract that may help increase the chances of economic recovery in east Germany.

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1. Introduction

Germany has chosen what the OECD (1991, p. 127) called the big bang approach. Using article 23 of its constitution, west Germany simply gobbled east Germany, imposing practically all its laws and rules upon the formerly communist country. West German currency was introduced overnight, wages will, after a short transitions period, reach west German levels, and the economy is supposed to be privatized within a few months.

However, the big bang strategy did not work quite the way politicians had predicted. The former president of the Bundesbank, Karl Otto Pöhl, used the word "desaster" to characterize the development of the east German economy in the year after unification, and his evaluation was privately shared by other leading officials.[1] In May 1991 the effective east German unemployment rate was 24 %, close to the US and German rates in the great depression (25 % 1933 USA, 28 % 1932 Germany), and the decline in industrial output was even bigger than in the great depression. Industrial output fell by more than 50 % from the first half of 1990 to December 1990, while the decline in Germany from 1928 to 1932 was 40 % and in the US from 1929 to 1933 was only 35 %.[2] At the time of writing (summer 1991) there is light at the end of the tunnel, but only insofar as the second derivative in the time path of output has become positive.

One of the reasons for the current problems is the sluggishness of the privatization process. A rough guess is that, under the rules of the unification treaty, 30 % of the privatizable east German economy will have to be given back to previous owners and 70 % will have to be sold or given to new investors.[3] None of these tasks has proceeded as expected. At the beginning of 1991, seven months after the start of the privatization program, 1/4 of the 12,000 firms nationalized in 1972 had been returned to previous owners, but the restitution then paused because of legal problems. And, by the end of March, no more than 1/8 of the industrial firms, the pearls of the east German economy, had been sold. Currently, the number of non–privatized firms increases with each privatization step because the communist units have to be split up to match with the former properties or the preferences of the purchasers.[4]

A big disappointment is the revenue obtained from selling the state owned enterprises. The enterprises are being sold by the Treuhand, a federal resolution trust which currently owns most of the east German economy. Originally, the Treuhand had estimated a revenue of DM 600 b.[5] and in spring 1991, the Ministry of Justice published figures that would have implied a total Treuhand revenue of DM 280 b.[6] However the sales to March 1991 amounted to DM 5.8 b. Back of the envelope forecasts based on this figure do not yield a total revenue of more than DM 44 b. The net revenue of the Treuhand, after deducting the subsidies it pays, will probably be negative.

One problem with the low sales revenues is that it makes it impossible to execute article 25 of the unification treaty which promises east German savers ownership shares in the state owned properties to compensate for their wealth losses from the currency conversion. Calculated at the consumers' purchasing power parity, the wealth loss is approximately DM 60 b.[7] Clearly, an overindebted Treuhand will not be able to carry out the compensation. Another problem is the speed of the privatization process. The Treuhand has a strong incentive to slow down its sales to avoid driving down asset prices. There were a number of spectacular cases where this was an overriding motive for the agency's policy, even though, in the end, this policy did not turn out successful.

While the disappointing sales record is officially being attributed to the bad state of the east German enterprises, this paper argues that it is a natural implication of the law of demand. The paper identifies a number of reasons why it is difficult, if not impossible, to sell 70 % of an economy in the market place and it advocates an alternative privatization procedure that uses a participation model. This model can be introduced under existing laws, it avoids the problem of clearance sales prices, it speeds up the privatization process, it frees resources for productive investment, and it can be used as a bargaining ploy in correcting a dangerous development in the east German wage negotiations.

Section 2 of this paper discusses the problems connected with that 30 % of the privatizable east German economy that falls under the restitution rule, and the rest of the paper deals with the remainder. Section 3 describes the current sales and restructuring policy of the Treuhand, section 4 deals with the micro and macroeconomic problems of selling an economy, section 5 discusses the wage problem in connection with the Treuhand sales, and section 6 describes a social contract which would increase east Germany's chances of recovery. The conclusion, section 7, summarizes the paper's findings and puts them in a somewhat broader perspective.

2. Restitution

West Germany had always claimed to be the only legal state on German territory. It seemed, therefore, natural to turn back the wheel of history and to return the properties expropriated under communist rule to the previous owners. West Germany would have liked to repeal all communist nationalizations without exception. However, one of the conditions the Soviet Union made for agreeing to unification was the exemption of nationalizations it had itself made as an occupying power. A further constraint was the American preference for extending restitution rule to the Nazi period. As a result, the unification treaty and an additional "Law for the Settlement of Unsolved Property Questions" (of April 18th, 1991) specified that all properties expropriated since 1933, except those expropriated between 1945 and 1949, had to be returned, unless they had been given new and irreversible public uses or had been "honestly" sold to new private owners.

Some Facts

Even though in value terms the restitution of old property constitutes the smaller part of the east German privatization program, it is an enormous task in qualitative terms. More than 11,200 applications for the return of companies, and nearly 1.5 million applications for the return of property in general have been filed.[8] Not even the ministries responsible know at this moment how many of these applications have been dealt with yet.

The Soviet expropriations covered practically all big firms including the joint stock companies, all banks, the whole insurance industry, many medium sized firms, all mines and all Nazi properties. Moreover they included agricultural properties of 100 ha and more, amounting to about 40 % of all private agricultural and forestry areas. However, more than 12,000 smaller firms, hundreds of thousands of small and medium-sized farms, practically all plots of land and family homes were excluded. Two thirds of the expropriated land was given to about 550,000 small farmers including 83,000 refugees from Germany's former eastern provinces. During the time the GDR was in existence, nearly all remaining firms and about 250,000 units of real estate property were expropriated or put under state control. Nevertheless, substantial fractions of the east German real estate, including 73 % of the agricultural areas, continued to be privately owned, notwithstanding the fact that the farms had been combined into production cooperatives.[9]

The overwhelming share of the expropriated properties had once belonged to persons now living in west Germany. Those whose property had been expropriated by the communists fled to the west, and those who had fled for other reasons had their property expropriated after leaving. This may help explain west Germany's overriding interest in the restitution rule and part of its interest in unification as such.

The details of the restitution rule are very generous indeed for the previous owners. Even though the communist state had financed substantial fractions of its net investment by withheld wages — wages were 40 % of GDP rather than 52 % as in west Germany — as a rule not only the expropriated properties but also the capital accumulated since the time of expropriation is to be returned.[10]

The Rent Seeking Stage

At the time of writing, east Germany has not yet reached the stage where its resources can be productively developed. It is rather still in the middle of its rent seeking fight. Entrepreneurial efforts are largely absorbed by participating in zero sum games. Fighting the legal battle for property rights is currently much more profitable than supervising and designing the necessary reorganization of the east German economy.

One of the main problems is that restitution rights cannot be defined unambiguously. There are at least three facets of this problem.

The first is that land registration is frequently nonexistent. Often the books are simply not available, sometimes they are unreadable because of physical deterioration, often the important entries have simply been blacked out.

The second facet is that, under the communists, reorganization of the properties was frequent. Firms have been joined to others, parts of them have been eliminated, parts of other firms have been added, some of them have shrunk, some of them have grown, some have moved to other places. Typically, there is more than one owner claiming the restitution right, and frequently three and more claimants have to be dealt with because they all owned parts of the objects to be returned.

The third facet is that there may be a chain of multiple intertemporal ownership. Interspersed with expropriations, a certain piece of property may have had a number of owners at different times. By law, the first legal owner has the restitution right, but it is often unclear just who this is. An extreme, but possible, example is that of a small company owned by a Jewish family before 1933, sold at roughly the market price to a Nazi member before emigration, expropriated by the Soviets, sold to a GDR citizen after 1949, returned to the communist state in the forced sales program of 1972, and resold to a GDR citizen under the Modrow government during the last few weeks of communist rule. In this example, there are four potential candidates for first legal ownership.

Problems like these paralyzed significant parts of the east German economy. Given the uncertainty about the property rights, it was risky if not impossible to invest. Potential owners could stop all legal transactions associated with the contested assets, banks were unwilling to accept the properties as collateral, and the investors could not be sure that they would be able to harvest the fruits of their investments.

The "Obstacle Removal Law"

Because east Germany's economic life was being paralyzed, the restitution rule came under heavy political attack. Parliament reacted to this by introducing a special Obstacle Removal Law in March aimed at speeding up the investment process. The main aspect of this law is that it helps isolate the investor's decisions from the quarrel about ownership rights by replacing the restitution of real property with monetary compensation payments. The following provisions of the law are worth emphasizing.

— Until the end of 1992 a potential investor can buy an object that falls under the restitution rule unless the previous owner guarantees to carry out the same amount of investment.
— The previous owner's objections to the government's decisions will, in theory, no longer be able to put a halt to the privatization process as it could under the old laws.
— The government can rule out restitution by itself investing in the property.
— Current owners who bought property under the rules of the communist Modrow government will be able to maintain their ownership.
— Investors who do not keep their promises can be forced to return the property to the government.

The new law is a substantial improvement over the provisions of the restitution treaty, for it favors the investor over the previous owner and protects him completely from future compensation claims by the latter. All such claims must be directed towards the government and will not affect the safety of the investment. However, it is not fully equivalent to a clear monetary compensation rule, since in each individual case it is still necessary to negotiate with the previous owner to find out whether he is willing to match an investor's offer. This not only reduces the investor's incentive to make the effort involved in such an offer and in developing the detailed reorganization plan which the government requires. It also makes the government very cautious about not violating the rights of the old owners. It is said that the government employees handling the cases fear personal compensation claims by the old owners, even though, in fact, they are legally insured against malpractice. The restitution rule manacled the invisible hand. It remains to be seen whether the Obstacle Removal Law will be able to unchain it.

3. The Treuhand Policy

The Treuhand is a state bureaucracy that was founded under the Modrow government to rescue the state owned properties during the fall of the communist state. However, after the first free election in the GDR, it was given a new role. Its official function, which was later confirmed by the unification treaty, became the "privatization and reorganization" of the state owned property.[11]

The Sales Policy

The Treuhand is the legal owner of most of the assets formerly owned by the state, and it sees its main function as selling these assets for cash in the market place. Unlike Poland or the CSFR, where sales would have had to be made to foreign capitalists, the selling strategy is considered to be politically and economically feasible in the united Germany. After all, there are enough wealthy capitalists in west Germany who can buy the Treuhand properties. East Germans and foreigners have been invited to buy, but they were never expected to be significant players.

Originally, the agency owned 8000 firms, 6100 of which were to be privatized. The remaining 1900 firms were public utility companies that were to be given to local municipalities. As mentioned earlier, the number of firms has been steadily increasing because both successful sales and the needs of restitution required the units to be broken up. The total number of factories behind the legal entities is about 40,000. This is the maximum number of firms that can be sold. In July 1990 the 6100 privatizable firms included 4000 industrial companies. In March 1991, when 1300 of these companies had been sold, 9000 industrial companies remained.[12]

The Treuhand also owned 40 % of the total area of east Germany. After returning most of its forests to the local communities, this share shrank to 25 %. The largest chunk of Treuhand wealth is incorporated in its plots of land. Probably the agency owns more than 50 % of the private and privatizable urban land. The following table gives an overview of the Treuhand's land ownership. The quantities are official data and the prices have been taken from statistics on the reported prices of west German sales of vacant land. The first estimate uses actual 1988 prices, the second fictitious present values that would result, if east German land would had not generate rent before 1999, but after this would generate the same rent as west German land.

The Land Values of the Treuhand

	Area [m. ha]	West German price [b. DM]	West German price, 10 year adjustment [b. DM]
Agriculture	1.72	53	43
Forests	0.51	6	5
Plots of land	0.27	256	205
	2.5	315	253

Sources: Treuhand (1991), Statistisches Jahrbuch 1990 für die Bundesrepublik Deutschland, Sinn (1990), and own calculations.

The Treuhand does not sell its objects via formal bidding procedures, and only recently has it started to advertise the objects it has for sale. It very much relies on the activities of the firms to be sold and the offers being made by potential purchasers. The offer must include a detailed investment and reorganization plan, and the purchaser must guarantee his plan. In principle, the agency gives the object to the bidder who offers the highest price, however it is willing to compromise on the price if the purchaser promises a convincing restructuring plan that secures a large fraction of the jobs involved.

As mentioned earlier, the sales efforts of the Treuhand have been crowned with only limited success. By April, ten months after the Treuhand had been given its new role, 1000 of 2000 pharmacies, 17,000 of 45,000 pubs, hotels, shops and trading companies, and 1300 of 10,300 industrial firms had been sold. In absolute terms, these are impressive numbers, but the relative magnitudes show that the selling activities will probably have to go on for quite a few years yet. There are mixed signals from the Treuhand as to the change in the speed of sales. On the one hand, a better organization of the agency makes it possible to speed up the process in the next few months, on the other hand, as time proceeds, it is the more problematic firms that are difficult to sell that will be left. The initial revenue estimate of DM 600 billion is no longer being mentioned by the Treuhand. By spring 1991, the Treuhand had completely given up hope of generating substantial revenues. Instead, it now expects operating losses of tens of billions of Deutschmarks.

Reorganization

Although the tasks of the Treuhand include the reorganization of its companies, the agency makes every effort to sell the companies as they are and to leave the restructuring process to the private purchaser. "Reorganization through privatization" is the slogan. Alan Walters (1990), the personal advisor of Mrs. Thatcher, has argued that a socalled spontaneous privatization, the policy that is being carried out in Germany, "can be broadly characterized as the existing managements stealing the capital and running off with it." Indeed, such cases now seem to be very frequent in east Germany. However, there is no alternative to the Treuhand's policy. The number of firms involved is simply too large to follow the British pattern and restructure the firms before privatization. In Britain only a few dozen firms had to be privatized in a decade, in east Germany there are probably tens of thousands.

This is not to say that the Treuhand sells the firms as they are. In addition to splitting them into sellable units, it makes some effort to put the inaugural balance sheets in order. All firms are obliged to file such inaugural balance sheets. The original deadline was October 1990, but the date had to be extended to 30 June 1991 for small and medium sized firms and 30 October 1991 for big corporations. In May, 60 % of the corporations had filed their balance sheets, but only 6 % of the balance sheets had officially been approved by the Treuhand.[13] The approval date is crucial for the life of a firm. Before this date, the firm receives subsidies from the Treuhand to help cover its current expenses, and the Treuhand assumes that the firm has a chance of surviving unless it is utterly obvious that it has not. After the date, the Treuhand officially decides on the viability of a firm and closes the firm if necessary.

For a number of reasons, overindebtedness is not in itself a problem. First, the company debts had nominally been split in half with the currency conversion. Second, there is a special debt relief program for overburdened firms. Third, there is a system of compensation claims whose purpose is to equalize the firms' starting chances. A firm that is equity rich must accept an interest bearing liability from, and an equity poor firm receive an interest bearing claim against, the Treuhand.

The criterion for deciding on the viability of a firm is that it is able to earn its operating expenses, which means basically that it is able to cover its wage bill, its taxes and the costs of intermediate products. In May 1991, 330 companies, or parts of companies, had been liquidated or declared bankrupt. It can be expected that the number of bankruptcies and liquidations will increase dramatically after October 1991 when most of the inaugural balance sheets will be available for scrutiny by the Treuhand experts.

Often the liquidations occur in the context of successful sales, because the buyers are typically interested in special parts of the company or in branches rather than the whole entities being offered. The unattractive parts therefore remain with the Treuhand and have to be closed, since they are not viable. As a rule of thumb, the Treuhand currently "rescues" one third of the jobs with every sale.

4. Selling an Economy

Some economic advisors have recommended the Treuhand choose a microeconomic, business–like policy approach. It should, they say, behave as if it were one company among thousands, deciding between the options of closing or selling one of its branches. A similarly narrow view characterizes the public policy debate on Treuhand issues. This debate sees the privatization problem through the glasses of businessmen and lawyers and it ignores a number of basic economic aspects.

This becomes clearest with the utterly disappointing sales records. The politicians' popular explanation of this fact is simply that east Germany is a heap of trash. It is argued that east Germany is in a much worse shape than everyone had assumed and the blame for the false estimate of the sales revenues is put entirely on the former communist system. While there can be no doubt about the communist mismanagement and the poor performance of the GDR, this convenient explanation may well be overly simple. From an economic perspective, there are at least four explanations that shift some of the

responsibility back to German unification policy. The explanations identify necessary conditions for the sales policy to work which are violated in the German case. Satisfying one of these conditions is not enough to make the policy successful, but violating one of them may be sufficient to erode the sales prices.

The erosion of sales prices is not only a distributional problem, it also points to serious efficiency problems with the big bang approach. It will be argued that each of the reasons discussed is also an impediment to economic growth and that the replacement of the selling strategy with a participation approach would help remove these impediments.

The Macroeconomic Stock–Flow Problem

If the Treuhand's sales policy had functioned as planned, it would have had quite dramatic macroeconomic implications. The Treuhand would have immediately sold its properties, received DM 600 billion in cash and spent this cash, as required by the unification treaty, for east German purposes. If the sales had been compeleted in one year, the Treuhand expenses would have been three times as large as the east German GDP, and the overall German government budget deficit would have risen from DM 150 billion (in 1991) to DM 750 billion, i.e. it would have equalled 30 % of Germany's total GDP rather than 6 %.

Yes, the government could have used the Treuhand revenue to reinvest in the capital market. In this case the overall budget deficit would not have increased. But would it have done that? A public choice perspective on the issue gives a clear forecast. Government officials would have found a thousand reasons for spending the money quickly, perhaps not in one year, but they would have spent it. They would not have used it for debt redemptions: *Kasse macht sinnlich!*

The figures cited show that the magnitudes involved make the selling strategy non–trivial. It is not enongh to see this strategy from a microeconomic perspective, because selling a whole economy may involve difficult macroeconomic absorption problems.[14]

In principle, an immediate sale of all Treuhand assets is feasible if this sale is simply an asset swap. This would be the case if the Treuhand reinvested its revenue in the capital market. It would provide the funds which its customers need to finance the purchases of east German assets.

However, if the Treuhand revenue, or a substantial fraction thereof, is used for commodity purchases, then assets are to be exchanged for goods or, what amounts to the same thing, the asset purchases are to be financed with savings. However, savings are a flow and the assets offered by the Treuhand are a stock. After all, the assets represent two thirds of East Germany's privatizable economy. Obviously, the Treuhand policy suffers from a serious stock–flow mismatch. The agency wants to fill the dam with water from the river overnight.

The problem becomes even more severe insofar as the river is, in fact, a small creek. Currently, West German savings are not even large enough to finance private investment and the government's unification deficit. As the deficit has increased by more than DM 100 billion since 1990, a substantial strain has already been put on the capital markets. Real interest rates in Germany are higher now than since 1950, and although Germany was the world's largest capital exporter in 1989 it now is a capital importing country. A further dramatic increase in capital imports would have been necessary to cover the additional government budget deficit if the planned Treuhand revenues had materialized.

Optimists may be inclined to point to the high mobility of international financial capital and argue that the world flow of savings is large enough to provide the required capital imports easily even though there is a theoretical stock–flow problem. However, this line of reasoning entirely overlooks the absorption problem involved. For foreign financial capital to enter the German capital market, there must be a reaction of the current account. A financial net capital import will occur if, and only if, it succeeds in creating a sufficiently large current account deficit. To the extent that government expenses consist of imported commodities, this deficit can come about very quickly. However, those expenses that consist of domestic purchases need price or exchange rate effects. A plausible scenario is that the asset purchasers' demand for funds increases the German interest rate which then attracts international financial capital, revaluing the Deutschmark and causing the

current account to deteriorate. Unfortunately, however, such a reaction of the current account is unlikely if not impossible in the short run. If the modern theory of foreign trade has a lesson it is that, in the short run, the current account reacts adversely to exchange rate adjustments and that it may take two years or more before a normal reaction can be expected. Typically, there is a capital export rather than a capital import if the domestic demand for funds increases.

If the optimists' view were correct and the world was indeed without the fricitons that explain the sluggishness of current account reactions, then the unification deficit could not have caused the current German interest peak. The mere fact that this peak is there damps all hopes that the additional government budget deficit caused by the expected Treuhand revenues would not have been a problem for the capital markets.

Clearly, there are macroeconomic financial constraints that render the planned Treuhand policy infeasible or at least dangerous. The Treuhand revenues compete with private investment and the ordinary government budget deficit for domestic private savings and, if available, capital imports. Since savings and the ordinary deficit are rather insensitive to interest rate changes, this means that those Treuhand revenues that are used for the purchase of domestic goods will crowd out private investment and vice versa. The revenues bid the interest rate to levels even higher than its current historical peak and, as a reaction, the capital values of both ordinary private investment and the restructuring investment of Treuhand purchasers will be reduced. They will be driven even below the low values caused by the unification budget. While the subsequent reduction in west German investment seems acceptable, the crowding out of east German investment and the erosion of the competitive market prices of Treuhand objects does not.

Under ideal competitive conditions, the bidding price of a Treuhand object equals the present value of the cash flow generated by the restructuring investment opportunity it offers. Since this cash flow is first negative, and then later positive, even slight interest rate increases can easily drive the present value to zero or make it negative. By way of contrast, the present value of the permanently positive cash flow generated by an existing asset in the west will only minimally be affected. Even if the macroeconomic stock–flow problem were the only problem with the selling strategy, the Treuhand would not succeed in raising the expected revenue of DM 600 b.

Microeconomic Credit Constraints

The macroeconomic credit constraints imply that the unification deficit and the Treuhand's asset supply raise the interest rate, reduce private investment and erode the prices of Treuhand assets, but individuals do not feel these constraints as such. In addition to the macroeconomic constraints, there are important microeconomic credit constraints which are directly perceived by the borrowers. These constraints have similar implications for private investment and the Treuhand's asset prices, although they do not operate via the interest rate. Modern capital market theory explains that the microeconomic constraints result from informational asymmetries between borrowers and lenders which constitute a central element of credit markets. There are at least two reasons why the microeconomic credit constraints are particularly important for the Treuhand policy.

The first is that potential east German purchasers who are most interested in the Treuhand assets, and who may have comparative advantages as entrepreneurs, are poor. As mentioned earlier, easterners do not possess the financial equivalent of "their" real assets, but only the transactions cash they received with the currency conversion. They therefore need loans. However, to receive the loans they need equity capital. Even if the purchased objects could serve as collateral, banks would never finance 100 % of them. Banks do require independent equity capital, and if there is no such capital, they do not give loans.

The second problem is that the objects to be sold often cannot serve as collateral, because the legal property rights have not yet been confirmed. Land registration offices are in the process of being built, but it will take some time for them to function properly. Remarkably, this institutional detail has turned out to be a major obstacle to economic growth in east Germany.

In addition to these particular east German reasons, of course, credit constraints can become operative for the usual reasons. Even firms and entrepreneurs from the west are not always endowed with sufficient surplus equity capital to enable them to borrow arbitrary amounts of money for asset purchases in the east. In fact, a firm that has optimized its debt equity ratio under tax aspects may be unable to increase this ratio further for the purpose of expanding in the east. Of course the firm can then try to collect more equity capital in the west, but this is a time consuming and complicated activity, given that the typical west German firm is not a stock market company.

An important aspect of the credit constraints is that the rivalry between Treuhand revenues and private investment, that was seen to play a role on the macro level, carries over also to the micro level. Every Deutschmark the Treuhand collects will be withdrawn from restructuring investment or other types of investment the purchaser might have planned.

The rivalry implies that credit constrained firms will not be able to bid for a project up to the present value of its cash flow, but only to an amount that equals their borrowing capacity minus the restructuring investment the project requires. If all purchasers were credit constrained, this would result in a demand curve for Treuhand assets that is strictly inelastic in the sense that it has an absolute price elasticity of less than one = the fewer assets the Treuhand sells, the higher its total sales revenue. Aggressive sales strategies on the other hand would not only reduce the asset prices, but would also drive the total sales revenue to zero. This may help explain why the Treuhand's sales efforts resulted in such disappointingly low revenues although, of course, it cannot be assumed that all purchasers were credit constrained.

The microeconomic credit constraints are also affected by a stock–flow problem. Since the purchasers need equity capital and equity capital can most easily be generated by retaining profits, the Treuhand can increase its revenues by slowing down its sales efforts. The prices are low if the agency wants to sell its stock of assets at one point in time, but if it can wait and and convert the stock to a flow which is gradually released to the market, its purchasers can use the equity capital saved in the meantime to borrow more and make higher bids. This microeconomic stock–flow problem and its macroeconomic counterpart discussed above may be implicit reasons for the Treuhand's hesitation to sell its assets quickly.

Risk Problems

Treuhand assets are extremely risky for a number of obvious reasons. A purchaser will therefore not simply bid the expected present value of the cash flow which a Treuhand asset generates, but deduct a risk premium. Knowing this, the Treuhand agency should be expected to make active efforts to diversify the risks involved. One could think of issuing stock market shares, offering flexible payment rules to the purchaser or joint ventures as means of spreading the risks involved.

However, the agency has made hardly any attempts of this sort. Its policy is to sell entire companies, fractions of companies are not available. It is not possible to invest a few thousand dollars in Leuna, Zeiss or Meissen shares because such shares do not exist. In practice, east German firms are sold as whole units to western firms, typically, their west German competitors. The shares of industrial properties which have been sold to foreigners and east Germans are about 5 % each.[15] Only in one case has a company been sold via the stock market.

It is obvious that the policy of selling entire companies limits the number of purchasers who are willing and able to bear the risks involved. This reduces the potential sales revenues and slows down the privatization process.

A frequently used, but unconvincing excuse for this policy is the German stock market law which imposes stronger requirements on the solidity of companies than east German firms can satisfy. Among the many new laws that were necessary to pave the way for unification, a law allowing the sale of special east German junk bonds would not have been exceptionally revolutionary.

A better justification for the Treuhand policy is the existence of risk markets to which the purchasing firms might have access. If these firms sold new shares in international stock markets, wealth owners in the whole world could help diversify the risks of east German assets. Unfortunately, however, allusion to the limited role of the stock market in the German economy is again appropriate. Most German firms are owned by entrepreneurs or are organized in the form of small partnerships. Germany is not America. In the US, the fraction of the capital stock which is subjected to portfolio diversification via stock markets is two and a half times as large as in Germany.[16]

5. *Aggressive Wage Policies*

The Treuhand's privatization policy is also strongly affected by the wage policy carried out in east Germany. Basically, this policy followed a laissez faire approach, leaving the wage settlement exclusively to the bargaining between trade unions and employers' organizations. The west German system of collective bargaining was simply imposed on east Germany in the hope that market forces themselves would bring about the required workers' and employers' organizations, and indeed such organizations emerged quickly. In spring 1990, long before the monetary union, western unions helped found the first free trade unions in east Germany, in June collective wage bargaining of the west German type was installed, and in autumn the west German employers' associations stepped in, creating eastern branches and participating in the negotiations.

The wage negotiations in the east were dominated by west German advisors on either side of the table, since the east German union negotiators were unexperienced and east German entrepreneurs or capitalists did not exist. This bias created a strong incentive for excessive wage settlements. The west German trade unions and employers' associations alike had no interest whatsoever in creating low–wage competitors in the east. In fact, both parties quickly agreed that a high–wage policy was desirable for east Germany, arguing that this would stop migration and give the right signals for future high tech investment.

The only party that could have been interested in a low–wage strategy for east Germany were the east German union negotiators, because they should have known that high wages create unemployment. However, they were probably right in believing that, in one way or another, the west German government would subsidize the wages, and, if not, they knew that their members would be allowed to enter the German social security system at a high level; after all, in Germany the unemployment benefit is proportional to the last wage received.

Excessive wage negotiations in the west are typically blocked by the capitalists who defend the profits they expect from their existing stock of capital. The representative of the existing capital in the east, which could have been a counterweight in the negotiations, was the Treuhand, but this agency did not take an active part. After all, why should the Treuhand officials have objected to a policy which was publicly being praised from so many sides? Thus, there was no one who really was interested in low wages. The west German tax payers who ultimately will have to foot the subsidy bill, did not participate in the negotiations.

It may have been a serious policy mistake not to limit the rights of the negotiating parties in the unification treaty. The result of the laissez–faire policy has been, and will be, dramatic wage increases. First, nominal wages in East Germany rose by 17 % before unification. Then the one to one wage conversion that came with the currency union quadrupled the wage bill in Deutschmarks. Finally, after the unification, the negotiations defined growth paths for the eastern wage level that have already (spring 1991) led to an average hourly wage cost equal to 43 % of the west German one and and will raise this percentage to 77 % in 1994 and 85 % in 1995. In spring 1990, before the currency union, the east German hourly wage cost equalled 7 % of the west German, lying between that of Turkey (9.5 %) and Poland (4.5 %). In summer 1991 east Germany is half way between Greece (28 %) and Ireland (54 %), and in 1993 it will pass Australia (61 %), the United States (64 %), and Japan (68 %). In 1994 it will pass Italy (79 %) and in 1995 it will reach Norway (86 %). This may seem a utopian scenario, but it is no guess. It is the pattern that

was already agreed to in the trend setting negotiations in the metal industry of spring 1991. If anything, the numbers reported will underestimate the speed of adjustment in east German wages. In the current negotioations of the construction industry, trade unions are demanding 85 % of the west German wages for 1991![17]

It is clear that the negotations set east German wages far above the market clearing level and the level implied by the need to prevent excessive migration to the west.[18] If migration to the west was the reason for wage increases, i.e. if these increases resulted from a reduction in east German labor supply, then a labor shortage should be apparent in the east, not an unemployment rate of effectively 24 %. There is no way of escaping the conclusion that the wage negotiations pushed the east German wages far above the opportunity cost of labor.

Obviously the wage policy must have severely reduced the market values of Treuhand assets. Firms that might have been valuable if wages had equalled the opportunity cost of labor, may now have a very low, or even a negative, value. The Treuhand's businesslike approach may therefore judge them bankrupt even though, from a true economic point of view, they could have provided efficient and useful employment during the transition to a mature western style market economy.

On the other hand, it is by no means clear that many or most firms cannot have positive values because of the aggressive wage policies. No purchaser of eastern firms will continue to operate them in the same way as before. Instead he will immediately reorganize production processes and undertake restructuring investments. These activities will bring new life to the firms and generate positive profit streams. With a price of zero, the investments are likely to be more attractive than similar investments in the west where the real estate has to be bought at breathtaking prices. The value of the Treuhand assets should therefore at least be equal to the land values involved, and these are more than DM 250 billion.

6. A Social Contract for East Germany

Currently East Germany is paralyzed by the fight for endowments and the fight for attractive positions in the wage hierarchy. The first fight is between west Germans who are trying grab pieces of the Treuhand's cake. The second fight is between east and west Germans —between those who receive unearned wages and those who have to pay for the social program that supports them. Given that East Germans have no chance of participating in the bidding for their former state's assets, it may be understaudable that they have sought compensation by demanding high wages. However, this policy is dangerous because it destroys parts of the east German economy that could have provided useful employment in some transitional phase and because it will kill the young plants from which a new prosperity could have grown. In a market economy, wages are scarcity prices that serve important rationing and allocation functions. They cannot be used to compensate for distortions in the distribution of endowments.

This section outlines the features of a social contract for east Germany that shifts the distributional problems from the wage front to the initial endowments. Basically it combines the wage freeze with a participation model that gives the Treuhand assets to the east German population.

The Participation Model

The participation model is an intermediate solution between the current selling strategy and the Czechoslovakian model, where privatization begins with a distributiou of company shares among the population. The advantage of the selling strategy is that with privatization it brings in both new management and new know–how at a single stroke. The advantage of the pure distribution model is that it avoids the clearance sale problems discussed above. The participation model combines the two advantages.[19]

As with its current strategy, the Treuhand seeks competent investors who bring in the equity capital necessary for the restructuring process and take over the entrepreneurial functions. However, instead of demanding a payment in cash, the agency maintains a

fractional ownership in the firm, preferably a minority share. The majority share is given to the investor as compensation for his equity and know–how. If the investor's initial input is too small to justify a majority ownership, he nevertheless receives exteusive entrepreneurial functions, but he must promise to establish a majority ownership by further equity injections in the future. The investors make offers to the Treuhand in which they specify their restructuring plans as with the current selling strategy, and they must, as they do now, guarantee their restructuring investment. As there is no need to subsidize wages, the Treuhand pays no particular attention to the number of jobs secured, but gives the firms to the investor whose plans promise the highest expected returns.

In a second step, the Treuhand distributes its ownership shares to the east German population. To satisfy article 25 of the unification treaty, up to one third of the shares can be given to east German savers in proportion to those parts of their savings that had been converted at a rate of 2:1 (DM 60 b.). One third is distributed among the east German population according to the pattern chosen with the currency conversion (100 % for persons above 69 years of age, 66 % for persons between 14 and 69 years, and 33 % for children below 14 years). At least one third is given to the employees of the privatized firms. The three groups of beneficiaries are not mutually exclusive. A worker whose savings had been partly converted on a 2:1 basis, will receive shares for all three categories in which he falls.

The employees' shares are not diversified, but the two other thirds of the Treuhand shares will be consolidated in mutual funds before they are transferred to the savers and the general polpulation, i.e. these groups receive shares in the mutual funds rather than the firms themselves. Because of the east Germans' limited experience with capital market transactions the shares will not be tradeable for a transitional period of four years and can only gradually be liquidated thereafter.

The participation model is applied to all firms that are obliged to file balance sheets under the current German laws. Smaller firms that are not obliged to file balance sheets, as well as other Treuhand properties, continue to be sold, but not for cash. Instead the

Treuhand receives a fixed interest claim that may or may not be redeemed in the future. The claim is transferred to the savers and the general population via the mutual funds.

Under the existing laws, the Treuhand could start to privatize in accordance with the participation model immediately. There is nothing in the Treuhand law or the unification treaty that excludes the application of this model as long as the Treuhand holds the shares. The distribution of shares would need a law to specify the details. However, this is a separate step which would not affect the speed of the privatization process.

The Wage Freeze

The wage freeze is an essential ingredient of the social contract, since without it, east Germany's chances of quick economic recovery are weak. There would be no need to privatize an economic desert of dead firms.

A possible scenario is that all east German union wages are frozen at April 1991 level for a period of four years. To compensate for inflation and general productivity growth, the average percentage wage increases in the corresponding west German sectors are used to upgrade these wages regularly. This scenario fixes the average east German wage cost per hour at 43 % of the west German level if it is assumed that the east German gap between actual and union wages is zero and the west German gap stays constant at a rate of about 15 %. Given that the annual work time in east Germany still is somewhat higher than in west Germany, the average annual gross wage income per employee will then probably be kept at about 45 – 47 % of the west German level.

The wage freeze applies only to union wages. The individual employer and employee are perfectly free to agree on higher wages. This feature is important to allow for wage increases in occupations for which there is excess demand in the east. The plan will therefore not prevent wage increases that result from migrations to the west.

Since the freedom of coalition is a constitutional right in Germany, the parliament or the government cannot simply dictate the wage freeze. They can only introduce incentives for the unions to renegotiate wage contracts of the type described. A strong

incentive could be the limitation of the distribution of mutual funds and company shares to those who are not union members or agree to formally advise their unions to adopt the wage freeze program. To simplify the procedure, all members of a union could be made eligible for participation in the share distributions if the union declared that it was adopting the wage freeze plan. If a union does not adopt the plan, individual members who comply are nevertheless able to participate in the share distribution program.

The Advantages

The social contract described would help solve the current blockage in the east German economy and it promises huge efficiency gains. Moreover, it could be an acceptable compromise to the parties involved since it is roughly distributionally neutral. It has an impressive list of advantages.

First, the four year wage freeze implies more employment and therefore lower fiscal costs of supporting east Germany. It also stimulates new investment.

Second, the workers' participation in their companies' shares creates a natural interest in moderating the collective wage claims after the period of wage freeze.

Third, article 25 of the unification treaty, which was an important part of the compromise between the negotiating parties, could be satisfied. The savers could be compensated for their exchange losses.

Fourth, the macroeconomic stock–flow problem would be avoided. The interest induced price erosion could not happen, and more funds than under the selling method would be available for private investment. Lacking revenues, the Treuhand would have to stop its policy of cross subsidization, whose justification would anyway be eliminated by the wage freeze. Instead of the government agency, the capital market would allocate the available funds to competing needs.

Fifth, individual credit constraints and the microeconomic stock–flow problem connected with it would be less of a problem, since the available funds would no longer be needed to finance both the purchasing price and the restructuring investment. They could fully be used for private investment. For the same reason, managers or employees of east German firms would have a better chance of competing in the bidding process.

Sixth, because the micro and macroeconomic stock–flow problems are avoided, the Treuhand is no longer tempted to seek better bargains by slowing down its privatization efforts.

Seventh, compared to a price payment, the investor's risk is smaller with the participation model. A competitive bidding process of the type described will induce a risk averse investor to propose a restructuring plan where he takes more risks, injects more equity capital and, on average, cedes more funds to the Treuhand.[20]

7. *Concluding Remarks*

Among the east European countries, east Germany is in the unique situation of having been merged overnight with an efficient western market economy. The rapid integration has obvious advantages, but it has created more problems than politicians had predicted. Some of the unexpected problems can be attributed to the fact that the east German economy turned out to be in worse shape than the statistics had suggested. However, policy mistakes may also have been made.

This paper discussed three potential economic policy mistakes that may seriously undermine the chances for a quick revovery.

1. The attempt to restore old property rights.
2. The attempt to sell two thirds of the east German economy.
3. The assumption that collective wage bargaining would work without capitalists.

The first problem has been partly resolved by the Obstacle Removal Law of March 1991. However, the second and third mistakes are still waiting for a solution. One policy option that may be a solution has been described in the paper.

This option is a social contract in which east Germans participate in their state owned assets, but accept a wage freeze in exchange. The contract is a simple application of the basic economic wisdom that distributional aims can be satisfied by assigning property rights, but not by distorting the factor prices.

An essential ingredient of the policy alternative is a participation model. The model complements the investment stimulus of lower wages because it results in a lower interest rate than the selling method, leaves more investable funds with credit constrained purchasers, and induces risk averse investors to take the chance of higher equity injections. The participation model shares the selling strategy's virtue of bringing in entrepreneurial skills and know how right at the time of privatization.

The *social contract for prosperity* is fairly neutral with regard to distributional matters. East Germans lose wage income, but receive mutual fund securities. West Germans forego the windfall profits from the Treuhand's clearance sales, but they gain nsofar as they have to finance fewer social transfers to the east. The only important non–neutrality is among West Germans because the buyers of Treuhand assets are not identical with those who pay for the transfers. Given the asymmetries in the lobbying power of these two groups, this fact may be a serious obstacle to the implementation of this paper's proposal.

Notes

1 In his speech to European parliament on March 19th, 1991.

2 Cf. Sinn and Sinn (1991).

3 See Cornelsen (1991). The percentages indicate the shares of industrial production expropriated under communist rule after and before 1949.

4 See Treuhand (1991).

5 President Rohwedder in his speech to the Bundeskammer in Vienna. Cf. ADN news report of October 19th, 1990.

6 The Ministry of Justice had estimated the market value of the properties to be distributed to previous owners to equal DM 120 b. (AP news report of March 23rd, 1991.) If this value is 30 % of all values that are to be privatized (cf. note 3) then the value of the firms to be sold is DM 280 b.

7 Cf. Sinn (1990).

8 Information received from the Ministry of Economics.

9 See Penig (1991) and Möschel (1990).

10 See Law for the Settlement of Unsolved Property Questions of April 18th, 1991, § 6,3. The law is confusing insofar as it first postulates compensation payments for extraordinary wealth changes, but then defines such changes by reference to the firm's debt equity ratio. A firm that grew rapidly, but did not change its debt equity ratio will be returned to the previous owner as is.

11 Cf. First and Second Treuhand Laws of March 1st, 1991, and June 17th, 1991.

12 For this and other information provided in this section see Treuhand (1991).

13 Cf. Treuhand (1991) and Süddeutsche Zeitung No. 111, May 15th, 1991, p. 29.

14 A preliminary discussion of this argument can be found in Sinn (1991).

15 Süddeutsche Zeitung No. 101, May 2nd, 1991, p. 30, and Treuhand (1991).

16 See OECD, International Financial Statistics, December 1990, pp. 242 and 554; and The Handbook of World Stock and Commodity Exchanges, pp. 160 and 373.

17 These calculations are taken from Sinn and Sinn (1991).

18 This point has been made by a number of observers. Cf., e.g., Akerlof et al. (1991), Burda and Funke (1991) or OECD (1991).

19 The participation model is an extension of a model proposed in Sinn (1991) and in a minority report of the Council of Economic Advisers to the Ministry of Economics (Wissenschaftlicher Beirat 1991).

20 These statements are proved in a formal risk theoretic model by Demougin and Sinn (1991).

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