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Corporate restructuring and export performance in the transition process: The case of Eastern Germany

Kiel Working Paper, No. 845

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Kiel Working Paper No. 845

Corporate Restructuring and Export Performance in the Transition Process —

The Case of Eastern Germany

by Klaus-Dieter Schmidt

December 1997



Institut für Weltwirtschaft an der Universität Kiel
The Kiel Institute of World Economics

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#### Abstract

Economic restructuring in the transition from plan to market concerns the way enterprises try to achieve competitive advantage. Therefore, enterprises have to decide where to compete, that is to say with which product they should enter which markets, and how to compete, that is by which strategy they could succeed.

During the seven years since unification, the eastern German economy has undergone considerable structural changes. However, the outcome is a poor market specialization: industries which sell their products mainly in local markets have remarkably increased their share in total output, while industries producing for world-wide markets have lost importance. Sailing into the safe harbour of local markets may be the need of the moment for many companies. But it is a dangerous strategy. In the long run, it may prove to be a trap without any escape.

The paper provides a selective and interpretative account of the restructuring process in eastern German manufacturing. It starts with the given constraints — exchange rate and wage convergence — which constitute the wrong model for opening up a closed economy. It presents some stylized facts revealing a strong vertical differentiation between eastern and western German producers — with respect to product quality and product markets as well as with respect to technological and organizational environment. As a result, the division of labour between the eastern German economy and the rest of the world tends to be an inter-industry type rather than an intra-industry one. Finally, the paper turns to the key policy question of how to overcome these difficulties. It scrutinizes the main arguments for and against government's trade promotion towards eastern German enterprises (P 52).

### I Introduction: Still Unequal Twins<sup>1</sup>

Eight years after the collapse of the communist system in the eastern part of Germany, it has become clear that the transformation of a whole economy from plan to market is a mixture of success and failure. Accordingly, the process of Germany's economic unification is full of contradictions. On the one hand, eastern Germany's economic revival is impressive by any standards. Convergence with western Germany's economy has proceeded as a result of a very rapid growth of the capital stock. On the other hand, it has not proceeded fast enough: average labour productivity is hardly more than half of the western German level in aggregate, whereas the process of wage convergence is more advanced, with eastern wages at almost three-quarters of western wages. Burdened with excessive (unit) labour costs, only a minority of eastern German companies is already able to compete successfully in international markets. Export quotas are on average not even half as high as for western German companies, and their contribution to overall foreign sales is only in the range of 2.5 to 3 percent, which is very modest considering the share of eastern Germany in overall German population of around 20 percent (Table 1).

The paper was prepared for a planned conference "Market Economy and Privatization Experience" organized by the Friedrich Ebert Foundation in Cairo. Research was undertaken with support from the European Commission's Phare ACE Programme 1995 "Emerging Market Organization and Corporate Restructuring in Central and Eastern Europe", project no. 94-0590-R. I would like to thank my colleagues Katja Gerling and Birgit Sander for valuable research inputs and Wolfgang Winkler (Berlin) for linguistic improvements.

Table 1 – Eastern and Western Germany Compared (1991 and 1996)

	Share of eastern Germany in				
	Overall	Germany	Western	Germany	
	1991	1996_	1991	1996	
Residential population	19.9	18.9	x	х	
Employment	20.0	18.2	x	x	
Gross domestic product	7.4	11.2	x	X	
Gross domestic product per employed person	x	x	31.0	56.8	
Gross wage and salary per employee	x	x	48.3	76.7	
Unit labour costs	x	x	150.7	130.0	
Net wage and salary per employee	x	x	54.8	84.8	
Note:					
Gross output of manufacturing	x	x	4.0	6.3	
Export of manufacturing	<u>x</u>	x	2.4_	2.6	

Source: Central Statistical Office of the FRG.

Even hard-boiled optimists must concede that things do not proceed as well as they might. Until now, the east and the west are still unequal twins — each of them endowed with different hereditary factors and different physical strength. The most outstanding difference is: while the western German economy is highly integrated into the world economy which alternates with the United States in the position of the world's champion, the eastern German economy suffers from an extremely poor export market specialization: industries which sell their products mainly in local markets dominate the pattern of production and have even increased their share in total output. Industries producing for world-wide markets, in contrast, are of minor and decreasing importance. This is not only the legacy of the past: of the strategy of import substitution which caused a distorted industry specialization and foreign trade orientation towards the former COMECON. It is also an indication that something goes wrong in the transformation process in eastern Germany. Certainly, sailing into the safe harbour of local markets may be the need of the moment for many companies. But it is a dangerous course. In the long run, it may prove to be a trap without any escape.

The paper provides a selective and interpretative account of the restructuring process in eastern German manufacturing. It starts with the given constraints — exchange rate and wage convergence — which actually constitute the wrong model for opening up a closed economy. Then it presents some stylized facts highlighting the competitive weakness of eastern German companies in international markets. Finally, it turns to the key policy question of how to overcome the difficulties.

# II Theoretical Background: Exchange Rate and Wage Convergence: The Wrong Model for Opening-Up a Closed Economy

The eastern German economy, like all Soviet-type economies, displayed well-known deficiencies throughout its history:

- One was the distorted specialization of companies towards the requirements of the COMECON rather than towards those of the world market. Trade with the western world had more or less the function of a "stopgap" for financing necessary imports of raw materials and technology at what costs soever.
- Another was the poor competitiveness of companies in international markets due to technological backwardness. An indication is the implicit exchange rate between the GDR-Mark and the D-Mark which was 3.8:1 in 1989. On average, exporting companies could

just cover their costs at this rate.<sup>2</sup> However, there were enormous differences between industries: in the electronics industry, e.g., the rate was 7:1.

As Balassa [1982] demonstrated with reference to developing countries, trade liberalization in post-communist countries should start with a depreciation of their currencies. This was precisely the kind of strategy that most of the Central and East European countries have tried to pursue from the beginning, making a great part of the production capacities competitive in terms of international standards. As a result, these countries were very successful in redirecting their exports from eastern to western markets [Landesmann and Szekely 1995].

In contrast, the opening-up of eastern Germany started with the wrong model — an appreciation of the currency. When the German Economic, Monetary and Social Union (GEMSU) was implemented between eastern and western Germany on 1 July 1990, all current payments (including price and wage contracts) were converted from GDR-Mark into D-Mark at a rate of 1:1 and all stocks (including outstanding claims and liabilities) at a rate of 2:1. It was calculated that the conversion rate for current transactions came equal to an average appreciation of the

It would be misleading, however, to assess the competitiveness of eastern German producers according to the implicit exchange rate (which was called 'Richtungskoeffizient' in the GDR terminology). At the given implicit exchange rate, only a small fraction of goods and services could find their way to western markets. Furthermore, given the state of autarky, none of the companies had to compete at this rate with western companies in domestic markets.

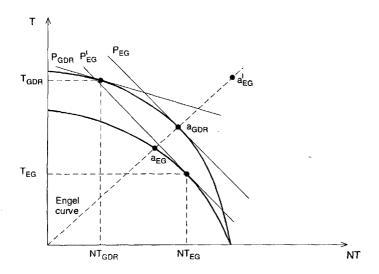
GDR-Mark of 4:1.<sup>3</sup> This brought most companies from one day to the other into the red. According to a rough calculation by Akerlof et al. [1991], only 8 percent of industrial companies were still competitive in international markets after GEMSU.

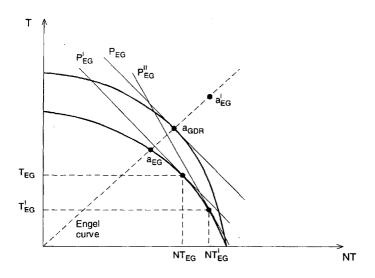
In addition, GEMSU was also a signal for a rapid adjustment of wages. From spring 1990 to spring 1992 standard wages (per hour) nearly doubled and by now, they have reached about 75 percent of the western German rates. Thus, wage increases completely decoupled from the companies' ability to bear the resulting cost burden. As a result, there was a strong pressure to cut costs by firing workers. Within the first two years, more than half of eastern Germany's industrial labour force lost their jobs.

It is evident that the modalities of unification made enormous fiscal transfers from western to eastern Germany necessary. From the beginning, a wide range of government support schemes was established in order to prevent companies from collapsing or to give incentives for restructuring them, to improve the infrastructure and, last but not least, to finance job creation programmes and social transfers. The crucial problem is that the lion's share is devoted to compensating for wage increases and to financing unemployment rather than to rebuilding the capital stock. It is estimated that roughly two thirds of total transfers are used for consumptive purposes.

On the one side, companies benefited from lower tax rates, better depreciation allowances and investment subsidies and, above all, lower costs for inputs of goods up to 60 percent of their resource costs — so the implicit exchange rate was reduced from 3.73 to 1.84. On the other side, their earnings per unit of output declined by even more than their input prices due to their low quality of products etc. which raised the rate back to 3.84.

Figure 1 – Relative Price Change and Structural Change in a Two-Factor Model of the Eastern German Economy Before and After GEMSU





The high consumptive transfers have created serious consequences for the emerging structural pattern of the eastern German economy. It is a strong incentive for investors to engage in industries producing for local markets rather than for export markets. In other words: the massive consumptive transfers have caused immense allocative distortions which can be labelled — in analogy to the well-known Dutch disease phenomenon — the "eastern German disease".

1

The situation before and after GEMSU can best be illustrated in the framework of a Salter-Swan-Meade diagram.<sup>4</sup> It is assumed that the economy produces two goods — tradables (*T*) and non-tradables (*NT*). The production possibilities are defined by the transformation curve, the allocation by the structure of relative prices.

• As usual in a socialist economy, the price structure of the eastern German economy was heavily distorted in favour of tradables. Thus, the transition to a market economy led to a pronounced shift of the price vector to  $P_{EG}$ : the prices for tradables decreased because they are determined by the world market, while the prices for non-tradables increased because they are determined by domestic resource costs and local demand conditions. As a result, the production possibilities frontier receded, visualized by a downward shift of the transformation curve. It is evident that this shift was more pronounced in the tradables sector being heavily affected by competition from abroad than in the non-tradables sector.

This was also used by Greiner, Maaß and Sell [1994], Naujoks [1993], Klodt and Stehn [1994] and Sell [1996].

- The downward shift of the transformation curve would have implied a conversion rate of less than 1:1, say 1:4 as it was suggested by the implicit exchange rate, in order to bring the consumption possibilities of easterners in line with production possibilities. However, due to the sharp wage increase, consumption possibilities increased considerably which is illustrated by a move of the budget point  $a_{GDR}$  to  $a'_{EG}$ . Since demand exceeded supply, eastern Germany's balance of trade ran into a huge deficit, which had to be financed by transfer payments from western Germany the line between  $a_{EG}$  and  $a'_{EG}$  on the Engel curve gives a description of the amount of fiscal transfer necessary to close the gap between consumption and production.
- As a result of huge fiscal transfers from west to east, the resource allocation shifted once again from tradables to non-tradables producing sectors: since prices for tradables are determined by the world market, the increase in consumptive demand affected only the prices for non-tradables, illustrated by an additional shift of the vector of relative prices from P'<sub>EG</sub> to P"<sub>EG</sub>.

It is important to understand that the shift from tradables to non-tradables, in terms of output and employment, has been by far no zero-sum game for the eastern German economy. In the short run, it has even been a negative-sum game. Since the weight of tradables is much higher than the weight of non-tradables, transfers have mainly raised imports of tradables from abroad rather than have stimulated output of tradables.

## III Stylized Facts: Non-Tradables Beat Tradables — The Eastern German Disease

Economic restructuring in the transition from plan to market concerns the way companies try to achieve competitive advantage. Defining their strategy, companies first have to decide

- where, that is to say with which products and in which markets, they should compete, and
- how, that is by which strategy, they could succeed [Gerling and Schmidt 1997].

Principally, competitive advantages may be based either on product differentiation defined by specialization (e.g., on high quality, exclusive product design, selected distribution channels) or on cost-leadership (low production and distribution costs achieved, e.g., by rationalization of the manufacturing system, pursuing economies of scale, training of staff or improving of quality control). Clearly, product differentiation and cost leadership can also be attained at the same time.

The development of competitive advantages has been the subject of many publications [Day 1984; Porter 1985]. However, these are mostly concentrated on theoretical considerations. Empirical studies are rare. The crucial point is that the determinants of competitive advantages are difficult to operationalize. In particular, the influence of qualitative characteristics such as product quality and design, brand image, reliability of delivery or after sales service can hardly be studied on a global level. Due to data constraint the following analysis concentrates on three variables: sectoral specialization, spatial market penetration and vertical integration.

### 1 Sectoral Specialization

Western companies show a strong product specialization in accordance with their comparative advantages. On a global level, this is defined by the given factor endowment, resp. factor prices. As (western) Germany ranks at the top of the technology frontier, its companies have held a strong position in the markets for products with highly-skilled labour intensity. In a competitive market environment, the given industry structure can be considered as a rough measure for competitiveness. Consequently, the deviation from the 'normal pattern' (which is supposed to be the present industry structure of western Germany) can be used as an indicator for the relative performance.

Therefore, one important aspect of the catching-up process of the eastern German manufacturing sector is to find a specialization pattern as to products and markets which is in accordance with its comparative advantages. It is well-known that in the socialist economy this pattern was heavily distorted. In this context, it is astonishing to see that the sectoral specialization in the field of manufactures on an aggregated level did not show significant differences in the GDR compared to the specialization of the manufacturing sector in the FRG.<sup>5</sup> In addition, changes in the sectoral structure in eastern Germany after unification were relatively small and developed in a parallel way as to western Germany (Table 2).

This was shown by Schmidt and Naujoks [1993]. However, from this one cannot conclude that both specialization patterns were more or less identical. The GDR production structure was biased in favour of poor product design and quality, low productivity and high resource costs. In fact, there was a significant — vertical — differentiation.

However, a closer look at the figures on the two-digit level reveals some interesting structural development patterns:

- Whereas the shares of most industries producing intermediate goods and consumer non-durables increased or remained stable, those of some industries producing capital goods fell. The most striking feature is the collapse of the machinery industry, once the showcase of GDR industries. This type of dualism can be explained by the special German way of transformation, which pushed the decline of industries producing goods saleable in international markets and the revival of industries serving mainly local markets [Gerling and Schmidt 1997].
- Whereas the shares of most industries producing human capital-intensive goods declined or remained unchanged, those of most industries producing fixed capital-intensive goods increased remarkably. Huge investment subsidies encouraged building up large modern fixed capital-intensive capacities, in particular in the refinery, chemical and road vehicle industries. These industries caught up rapidly.

A special case is the favourable development of construction-related industries such as glass, pottery and mineral products or metal products (which in the NACE classification includes steel construction). This can be explained with the building boom in eastern Germany which, however, has surpassed its peak by now.

Table 2 – Structure of Gross Output of Eastern and Western German Manufacturing<sup>a</sup> 1991 and 1995 (Shares in p.c.)

		19	91	19	95
NACE	Industry		Western		Western
No.		Gerr	nany		nany
15	Beverages, food	17.7	9.7	19.5	10.6
16	Tobacco products	2.3	1.6	1.5	1.5
17	Textiles	2.1	2.0	1.8	1.6
18	Clothing	1.0	1.8	1.6	1.2
19	Leather	0.6	0.6	0.2	0.4
20	Wood	1.0	1.4	1.9	1.6
21	Pulp, paper	1.6	2.7	0.9	1.7
22	Publishing and printing <sup>b</sup>	0.9	1.7	0.9	1.7
23	Refinery, coke oven products	1.2	5.2	4.2	5.7
24	Chemical products	2.3	4.4	3.9	4.5
25	Plastics, rubber products	2.3	4.4	3.9	4.5
26	Glass, pottery, mineral products	4.6	3.2	9.3	3.4
27	Metals	6.5	5.2	5.4	5.1
28	Metal products	3.9	5.7	7.8	6.2
29	Machinery	17.3	13.8	9.7	12.7
30	Computers, office machinery	0.5	1.7	0.6	1.4
31	Electrical engineering	6.1	6.1	5.7	6.2
32	Media technology products	1.4	2.1	1.4	2.0
33	Precision instruments	2.0	2.6	2.1	2.4
34	Road vehicles	2.3	14.0	6.8	13.5
35	Other transport equipment	6.6	1.8	3.6	1.5
36	Furniture, toys	2.8	3.0	2.9	2.7
	Total manufacturing <sup>b,c</sup>	100	100	100	100
	Note:				
	Intermediate products	44.2	45.0	47.1	47.7
	Equipment products	30.2	33.4	28.2	31.6
1	Consumer durables	4.5	5.1	3.7	4.6
	Consumer non-durables	21.0	16.4	22.0	16.1
<sup>a</sup> Enterp	rises with 20 and more employees only	y. – <sup>b</sup> Withou	t publishing	. – <sup>c</sup> Without	recycling.

Source: Görzig and Noack [1996].

All in all, the sectoral adjustment of the eastern German manufacturing industry is far from coming to an end. The congruence on the aggregate level conceals a strong vertical differentiation between eastern and

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western German producers — with respect to product quality and product markets as well as with respect to technological and organizational environment. The division of labour corresponds to an inter-industry type rather than an intra-industry one. However, as wage rates will equalize, one has to expect a strong pressure towards an upward movement ending up in an intra-industry specialization. Thus, the hopes have to be pinned on a few promising branches — namely the car industry and the microelectronics industry — which started to establish highly productive and innovative production centres in several eastern German regions.

### 2 Spatial Market Penetration

A second criterion with respect to specialization is how enterprises define the spatial dimension of their markets. On the basis of this criterion, enterprises can serve local, regional, national or international markets. Usually, they may tend to concentrate their activities on home markets which are near to them geographically. In home markets, transaction and transportation costs are lower and competitive pressure is weaker than in foreign markets. However, in home markets, sales potential is limited by size of the resident population and their purchasing power. Therefore, acting in an international context should be a strategic target for companies.

An outstanding feature of eastern German companies is their concentration on local and regional markets. Foreign markets still play a subordinate role (Table 3). Only in a few branches, eastern German companies have managed to offer a product range which is in line with international preferences. Among these are in particular light industries such as food, textiles and clothing, but not the traditionally export-orientated capital

goods industries, which obviously have not yet got over the breakdown of eastern European markets.

Table 3 – Export Quota<sup>a</sup> of Eastern and Western German Manufacturing<sup>b</sup> 1991 and 1995 (in p.c.)

		19	91	19	95	
NACE	Industry	Eastern	Western	Eastern	Western	
No.	-	Gerr	many	Gern	nany	
15, 16	Beverages, food, tobacco	3.9	8.2	6.1	10.3	
23-26	Refinery, chemical products,					
	plastics, rubber products, glass,					
	pottery, mineral products	17.4	25.1	10.0	26.4	
27, 28	Metals, metal products	12.8	22.7	10.9	25.4	
29	Machinery	27.5	39.9	22.4	43.7	
30-33	Computers, office machinery, electrical engineering, media technology products, precision	i				
	instruments	11.8	30.5	14.2	36.4	
34, 35	Road vehicles, other transport equipment	42.1	43.6	19.8	48.7	
17-22, 36	Textiles, clothing, leather, wood, pulp, paper, publishing and					
	printing <sup>c</sup> , furniture, toys	12.0	18.7	14.6	19.8	
	Total manufacturing <sup>c,d</sup>	16.3	27.5	12.4	30.3	
	Note:					
	Intermediate products	13.0	23.9	11.8	26.6	
	Equipment products	25.6	39.2	16.5	43.6	
ı	Consumer durables	13.0	25.8	14.9	26.0	
	Consumer non-durables	5.4	12.4	6.8	14.0	
<sup>a</sup> Share of sales in foreign markets in total sales. – <sup>b</sup> Enterprises with 20 and more employ-						

<sup>a</sup>Share of sales in foreign markets in total sales. – <sup>b</sup>Enterprises with 20 and more employees. – <sup>c</sup>Without publishing. – <sup>d</sup>Without recycling.

Source: Görzig and Noack [1996].

Information from a firm panel reveals that half of the overall turnover was realized nearby or somewhere else in eastern Germany in 1995 (Table 4). Another third was attained in western Germany. In recent years, there has been a shift in regional sales structures in favour of western German markets, but not in favour of international markets.

These figures indicate that a competitive export base has not yet been established. To a certain extent, this might reflect the suboptimal size and branch structure of eastern German manufacturing: the very high share of smaller firms and branches not producing for supra-regional markets. But this might also express a lack of competitiveness which makes itself felt on international markets rather than on local markets.

Table 4 – Regional Distribution of Turnover of Eastern German Manufacturing Firms in 1995

		Share	of turnover obta	ined	
	nearby	somewhere	somewhere	in eastern	in other
		else in east	else in west	Europe	countries
		Germany	Germany		
Formation/ownership status					
Private firms	18	32	31	7	12
of which:					
Independent firms	26	33	32	3	6
Firms owned by western German or foreign					
firms	15	31	31	9	14
of which:					
Privatized Treuhand-firms	15	31	34	8	12
Reprivatized Treuhand-firms	20	39	24	9	8
Private firms before 1990	44	25	25	1	5
Firms founded after 1989	27	32	28	3	10
Firms owned by Treuhand-successors	24	40	23	8	5
Size				1	
Firms with employees					
1 to 9	55	23	19	1	2
10 to 19	45	26	26	1	2
20 to 49	31	35	28	2	4
50 to 99	18	36	32	5	9
100 to 199	22	34	30	6	8
200 to 499	18	34	31	7	10
500 and more	10	30	32	11	17
Selected industries	· <del>-</del>				
Stone, sand and clay industries	43	48	8	0	1
Iron and steel, non-ferrous metals, foundries	ž	22	55	1	20
Chemical industry	4	46	19	18	13
Constructional steel and light metal	22	30	33	13	2
Mechanical engineering	6	24	32	19	19
Electrical engineering	12	23	36	5	24
Metal products	12	38	39	2	9
Wood processing	16	41	36	2	5
Printing	63	18	18	ō	ĭ
Plastics industry	18	23	40	7	12
Textiles	12	22	49	1	16
Food and beverages	31	47	13	5	4
Location of competitors		**		•	•
Firms whose main competitors are located					
nearby	71	17	8	1	3
nearby or somewhere else in east Germany	34	51	12	ó	3
in west Germany or abroad	8	24	42	9	17
anywhere	18	42	25	š	7
All firms	19	33	30	7	11
Note: 1993	19	36	27	8	10
11010. 1000	1.5	30		·	10

Source: DIW.

### 3 Vertical Integration

Vertical supplier and deliverer relationships can also affect competitiveness in international markets. In recent years, many companies incorporated themselves into networks serving as component producers or assemblers of final goods. The direct gains from this strategy result from a finer division of labour, which lowers production costs through specialization.

The socialist combines, in contrast, were extremely vertically integrated 'production units', producing most of their inputs inside. When they were split up in eastern Germany, the new firms started to optimize their value-adding chain. Two contrasting kinds of changes occurred:

- First, they began to purchase more inputs, replacing parts of inside production. By that, the share of value added in gross output decreased.
- Second, they began to restructure their production, replacing lowvalue-adding activities by high-value-adding activities. This way, the share of value added in gross output increased.

In the early stage, as a result of the splitting-up of combines, the first effect was predominant. The share of value added in gross output fell dramatically, revealing, however, the poor performance of most of the companies rather than an advanced restructuring process according to the western example. Meanwhile, this share increased again: from 14 p.c. in 1991 to almost 20 p.c. in 1994 (Table 5). Nevertheless, it is on average still considerably lower than in western Germany. Only in a few branches, the net production quota almost reached or even surpassed the western German level (refinery, paper and pulp processing, printing).

Interestingly, the gap narrowed in basic goods and consumer goods industries, not so much in capital goods industries.

Table 5 – Share of Value Added<sup>a</sup> in Gross Output in Eastern and Western German Manufacturing<sup>b</sup> by Selected Industries 1991 and 1994 (in p.c.)

Eastern   Western   Germany   Germany
22       Refinery       -2.2       2.3       3.0       2.7         25       Quarrying       25.2       32.6       24.5       33.0         27       Iron and steel       1.4       26.4       16.0       24.5         28       Non-ferrous metals       -2.4       21.0       -0.1       21.6         29       Foundries       13.3       41.9       21.9       40.4         40       Chemicals       3.5       29.1       10.4       28.8         31       Constructional steel       27.4       36.5       27.2       34.9         32       Engineering       19.9       37.1       22.2       36.6         33       Road vehicle building       13.2       26.0       13.8       26.5         34       Ship building       47.6       31.2       19.3       30.5         36       Electrical engineering       21.8       37.1       24.3       32.7         51       Pottery       8.9       46.3       33.2       44.2         52       Glass       -2.8       35.1       22.3       35.3         53       Wood processing       19.0       34.7       27.2       35.3
25         Quarrying         25.2         32.6         24.5         33.0           27         Iron and steel         1.4         26.4         16.0         24.5           28         Non-ferrous metals         -2.4         21.0         -0.1         21.6           29         Foundries         13.3         41.9         21.9         40.4           40         Chemicals         3.5         29.1         10.4         28.8           31         Constructional steel         27.4         36.5         27.2         34.9           32         Engineering         19.9         37.1         22.2         36.6           33         Road vehicle building         13.2         26.0         13.8         26.5           34         Ship building         47.6         31.2         19.3         30.5           36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3
27         Iron and steel         1.4         26.4         16.0         24.5           28         Non-ferrous metals         -2.4         21.0         -0.1         21.6           29         Foundries         13.3         41.9         21.9         40.4           40         Chemicals         3.5         29.1         10.4         28.8           31         Constructional steel         27.4         36.5         27.2         34.9           32         Engineering         19.9         37.1         22.2         36.6           33         Road vehicle building         13.2         26.0         13.8         26.5           34         Ship building         47.6         31.2         19.3         30.5           36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8
28       Non-ferrous metals       -2.4       21.0       -0.1       21.6         29       Foundries       13.3       41.9       21.9       40.4         40       Chemicals       3.5       29.1       10.4       28.8         31       Constructional steel       27.4       36.5       27.2       34.9         32       Engineering       19.9       37.1       22.2       36.6         33       Road vehicle building       13.2       26.0       13.8       26.5         34       Ship building       47.6       31.2       19.3       30.5         36       Electrical engineering       21.8       37.1       24.3       32.7         51       Pottery       8.9       46.3       33.2       44.2         52       Glass       -2.8       35.1       22.3       35.3         53       Wood processing       19.0       34.7       27.2       35.3         56       Paper and pulp processing       8.6       26.4       26.8       29.7         57       Printing       36.7       39.5       45.7       39.7         58       Plastics       13.0       32.8       25.4       32.5
29         Foundries         13.3         41.9         21.9         40.4           40         Chemicals         3.5         29.1         10.4         28.8           31         Constructional steel         27.4         36.5         27.2         34.9           32         Engineering         19.9         37.1         22.2         36.6           33         Road vehicle building         13.2         26.0         13.8         26.5           34         Ship building         47.6         31.2         19.3         30.5           36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5
40         Chemicals         3.5         29.1         10.4         28.8           31         Constructional steel         27.4         36.5         27.2         34.9           32         Engineering         19.9         37.1         22.2         36.6           33         Road vehicle building         13.2         26.0         13.8         26.5           34         Ship building         47.6         31.2         19.3         30.5           36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
31       Constructional steel       27.4       36.5       27.2       34.9         32       Engineering       19.9       37.1       22.2       36.6         33       Road vehicle building       13.2       26.0       13.8       26.5         34       Ship building       47.6       31.2       19.3       30.5         36       Electrical engineering       21.8       37.1       24.3       32.7         51       Pottery       8.9       46.3       33.2       44.2         52       Glass       -2.8       35.1       22.3       35.3         53       Wood processing       19.0       34.7       27.2       35.3         56       Paper and pulp processing       8.6       26.4       26.8       29.7         57       Printing       36.7       39.5       45.7       39.7         58       Plastics       13.0       32.8       25.4       32.5         63       Textiles       2.0       29.0       19.6       29.4
32       Engineering       19.9       37.1       22.2       36.6         33       Road vehicle building       13.2       26.0       13.8       26.5         34       Ship building       47.6       31.2       19.3       30.5         36       Electrical engineering       21.8       37.1       24.3       32.7         51       Pottery       8.9       46.3       33.2       44.2         52       Glass       -2.8       35.1       22.3       35.3         53       Wood processing       19.0       34.7       27.2       35.3         56       Paper and pulp processing       8.6       26.4       26.8       29.7         57       Printing       36.7       39.5       45.7       39.7         58       Plastics       13.0       32.8       25.4       32.5         63       Textiles       2.0       29.0       19.6       29.4
33       Road vehicle building       13.2       26.0       13.8       26.5         34       Ship building       47.6       31.2       19.3       30.5         36       Electrical engineering       21.8       37.1       24.3       32.7         51       Pottery       8.9       46.3       33.2       44.2         52       Glass       -2.8       35.1       22.3       35.3         53       Wood processing       19.0       34.7       27.2       35.3         56       Paper and pulp processing       8.6       26.4       26.8       29.7         57       Printing       36.7       39.5       45.7       39.7         58       Plastics       13.0       32.8       25.4       32.5         63       Textiles       2.0       29.0       19.6       29.4
34         Ship building         47.6         31.2         19.3         30.5           36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
36         Electrical engineering         21.8         37.1         24.3         32.7           51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
51         Pottery         8.9         46.3         33.2         44.2           52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
52         Glass         -2.8         35.1         22.3         35.3           53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
53         Wood processing         19.0         34.7         27.2         35.3           56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
56         Paper and pulp processing         8.6         26.4         26.8         29.7           57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
57         Printing         36.7         39.5         45.7         39.7           58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
58         Plastics         13.0         32.8         25.4         32.5           63         Textiles         2.0         29.0         19.6         29.4
63 Textiles 2.0 29.0 19.6 29.4
64 Clothing 16.1 27.5 36.6 44.9
Total manufacturing 14.2 29.0 19.5 28.0
Note:
Basic goods 4.4 23.3 14.9 22.8
Capital goods 21.7 33.8 22.1 32.2
Consumer goods 13.7 32.5 29.8 33.0
Food, beverages 11.0 17.1 13.7 17.5

<sup>&</sup>lt;sup>e</sup>Gross output minus material consumption, merchandise for resale, subcontracting costs, other service costs, rents and leases, other costs, depreciations, indirect taxes less subsidies. – <sup>b</sup>Enterprises with 20 and more employees only.

Source: Central Statistical Office of the FRG.

The low share of value added also reflects the unfavourable cost structure of eastern German companies.

- Material consumption in relation to gross output decreased only marginally since 1991. In 1994, it still exceeded the quota of western German companies by 16 percentage points (Table 6). This cannot be explained by the dominance of material-intensive industries. On the contrary, a rough calculation shows that the quota would be even higher if eastern Germany had the same structure of production as western Germany. The main reason is that many eastern German plants are operating as 'prolonged workbenches' of western German companies. They frequently perform relatively simple production steps creating only a low value added, such as assembling or refining, which imply high shares of material supply.
- Energy consumption, although decreasing in relation to gross output between 1991 and 1994, is also still higher than in western German companies. This is mainly due to the energy-intensive production structure within industries: the chemicals industry in eastern Germany, e.g., is an important supplier of mass-produced articles such as primary products, fertilizers, lacquers and plastics while in western Germany, it is rather a supplier of sophisticated products, in particular of pharmaceuticals.
- Finally, depreciations on fixed capital and interest payments for outside capital are almost twice as high as those of western German companies. This is the consequence of the modern capital equipment established in recent years.

The unfavourable cost structure of eastern German companies must be partly ascribed to the low capacity utilization. Most of the cost categories, except material consumption, are fixed costs. Unit costs tend to decrease with the increase of output and sales. However, the unfavourable cost structure is also an impediment to increasing sales. Therefore, companies are trapped: a higher capacity utilization could lower their costs, but without lower costs, a higher capacity utilization is hardly achievable.

Table 6 – Share of Selected Costs in Gross Output in Eastern and Western German Manufacturing<sup>a</sup> 1991 and 1994 (in p.c.)

	19	991	19	994
	Eastern	Western	Eastern	Western
	Ger	many	Gerr	many
Material consumption	45.4	36.7	42.1	35.5
Energy consumption	7.3	2.2	4.4	2.1
Merchandise for resale	6.0	10.7	5.8	10.9
Sub-contracting	1.4	2.4	2.3	2.5
Rents and lease	0.8	1.4	1.6	1.7
Other costs <sup>b</sup>	11.6	8.6	10.7	9.7
Depreciations	7.4	3.8	7.2	4.0
Interest payments for outside capital	2.4	1.2	2.3	1.1
Total above	88.3	69.2	76.4	67.5
9	h			

<sup>a</sup>Enterprises with 20 and more employees. – <sup>b</sup>Expenses for advertising, transport, insurance, legal advice etc.

Source: Central Statistical Office of the FRG.

### IV Policy Conclusions: How to Widen the Export Base of Economies in Transition

There is a general lesson to be learned for the process of restructuring: quick privatization and heavy subsidization are not enough to guarantee an immediate success in the hunt for market shares on a global level. Establishing a firm position in nation-wide and international markets ob-

viously requires some competition experience which can only be gained with time. As stated above, entering international markets is a stepwise process and the state cannot force it by granting high financial support. Money cannot buy everything, various things need time.

The key policy question is how to overcome these difficulties. In principle, there are two possibilities:

- First: the government could stop all consumptive transfers to eastern Germany. This would bring, as can be derived from a Salter-Swan-Meade diagram, consumption possibilities of easterners in line with output possibilities and as a result change the relative prices and the allocation in favour of tradables. In addition, trade unions could agree to a substantial cut in real wages in export industries. This would improve the competitiveness of these industries and give more incentives to invest. It is evident that there is no realistic chance for implementing such a strategy.
- Second: the government could concentrate its support on tradables producing industries on companies operating in supra-regional markets. Accordingly, many German economists and policy makers are in favour of prioritizing companies in the "export sector", which might include many branches of the manufacturing industry, but also some branches of producer-related services. The crucial point is: it is virtually impossible to accurately identify companies constituting the export basis of a region according to operational criteria. Frequently, "local players" are important links to export chains as was shown in the literature on so-called industrial districts.

The issue of export promotion is of general interest for economies in transition. It is true that these economies are very poorly integrated internationally although they are supposed to possess a huge potential for cross-border trade, contracting and investment. Therefore, it is argued that governments should have a strong commitment to provide large-scale support such that cross-border activities can flourish. This raises the question: what can governments really do and how should they do it? Does export promotion really make sense? Or are efforts to promote or sell companies' exports only a new form of the old mercantilism as was recently asserted by *The Economist* [1997]? In principle, things are clear for an economist:

- Governments should encourage all companies to exploit their opportunities in international markets. They should do so by conducting a liberal open-market policy, in particular, by ensuring free flow of goods and capital. In this way, all companies in all countries would benefit.
- Governments, however, should be kept out of the market and should be entrusted only with providing a sound regulatory framework. They should support the market forces and should not work against them. In particular, they should avoid
  - inducing companies to undertake cross-border activities which are beyond their reach and may be unprofitable,
  - influencing business strategies with regard to products, target markets, forms of integration and location of activities,
  - raising companies' "competitiveness" by granting subsidies,
  - making enterprises dependent on support.

Government support for internationalization — like most government interventions — may do much harm by generating severe market distortions rather than do some good by correcting market or policy failures.

In a well-working market economy, one can trust that markets ensure the optimal allocation of resources. Accordingly, companies can be expected to link the international division of labour according to their comparative advantages and to develop an adequate degree and adequate modes of internationalization. Notwithstanding, it is true that companies in transition economies — as compared to companies in western-style market economies — are less internationally integrated and that they prefer shallow integration, largely through arm's-length transactions. This by itself is not necessarily a sign of market failures but rather reflects that companies in transition economies generally have specific disadvantages in international markets like restricted access to information and limited branding capabilities. In the absence of economies of scale due to small plant size, they also suffer from higher production costs. However, these size-related impediments are market imperfections rather than market failures. Government action should accept them when steering companies' internationalization and not attempt to neutralize them.

Markets can fail in ensuring companies' optimal internationalization, though. The sources of market failures that may justify government intervention include:

- Lacking private supply of public goods, e.g., when markets fail to supply basic infrastructure.
- Inefficient market structures, e.g., when markets are monopolized.

- Imperfect or asymmetric information, e.g., when some information is not available to all agents or some agents have more rapid access to information than others.
- Risk aversion, e.g., when financial institutions refuse to fund highrisk though potentially high-return projects.
- Adjustment lags, e.g., when the markets adjust too slowly to internal or external shocks.

Market failures translate into risk from which companies in transition economies suffer relatively more frequently than companies in western-style market economies.

However, most deficiencies identified in international business do not fall into these categories. More often, companies have to deal with government failures causing market distortions. This is the case if governments impose or fail to remove

- · restrictions on trade and investment,
- regulations in commodity and financial markets,
- · exchange-rate controls,
- high tax rates and double taxation,
- public or publicly tolerated private monopolies.

Clearly, similar to market failures, companies suffer from policy failures. However, many of the export-boosting efforts of governments are not directed to eliminate market failures but to conceal policy failures. These measures may help companies in the short run, but not in the long run.

Therefore, market liberalization is the most important factor to boost international business and trade. It opens market opportunities in domestic as well as in foreign markets. Liberalization should focus on removing or reducing

- legal and procedural barriers,
- tariff- and non-tariff barriers to goods and capital flows,
- double taxation of profits,
- exchange rate controls.

Governments which are reluctant to promote general liberalization can start with a limited and controlled experiment. They can establish special areas where companies are allowed to do business as they like. Free Economic Zones provide companies with an ideal environment for cross-border operations. Beyond liberalization, private industrial parks can offer services which allow to overcome market imperfections.

An efficient assignment of responsibilities could look as follows:

Actor Problem	Government	Private agents
Market failure	X	
Policy failure	X	
Market imperfections	(X)	X

In the first instance, virtually by definition, governments have to take responsibility for correcting market failures, mainly by making monopolized markets contestable, by preventing environmental damages and by initiating the provision of public infrastructure. Second, they have to avoid policy failures. Third, government responsibility with respect to market

imperfections, however, is difficult to define. In principle, market imperfections give signals to private agents for benefits to be realized and in many cases, private solutions make imperfections disappear. However, private initiative may fail to emerge or it may take too long to produce a workable solution. Then governments may consider intervening with deliberately designed measures. In this respect, eastern Germany can serve as an example what a government can do.

In developing a general framework, the rules established by the OECD and WTO are highly useful steps to begin with. Actually, they do not require comprehensive and irreversible liberalization. Rather, they are established as a political compromise which sets the minimal standard for all countries eager to respond successfully to global competition. Once transformation economies succeed in unleashing the "animal spirit of entrepreneurship" [*The Economist* 1997] they may find it compelling to even go beyond the OECD and WTO standards, such as to move from the minimal to the optimal degree of liberalization.

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