

UC Berkeley

Recent Work

Title

Using Industrial Capacities as a Way of Integrating Central-East European Economies

Permalink

<https://escholarship.org/uc/item/5jq7g4k9>

Authors

Kurz, Constanze
Wittke, Volker

Publication Date

1998-05-01

**Using Industrial Capacities as a Way
of Integrating Central-East
European Economies**

**Constanze Kurz
Volker Wittke**

Working Paper 123
May 1998

©Copyright 1998, BRIE

Constanze Kurz is a Senior Researcher at the Sociological Research Institute at the University of Göttingen.

Volker Wittke is Co-Director of the Sociological Research Institute at the University of Göttingen.

This paper was prepared for the Kreisky Forum and BRIE Policy Conference: *Foreign Direct Investment and Trade in Eastern Europe: The Creation of a Unified European Economy*, Vienna, June 5-6, 1997.

Generous support for production of the BRIE Working Papers Series was provided by the Alfred P. Sloan Foundation.

1. Introduction

The breakdown of state socialism has not only caused far reaching changes in the economies and societies of Central and Eastern Europe. Moreover, the transformation of these societies from a planned to a free market economy is connected with the opening of economies which had been almost completely cut off from the world market for decades. Since the early nineties, Central-East Europe has not only been accessible as a (new) sales market, but also as a manufacturing location for companies from the western industrial countries. This opening results in new strategic options, in particular for European manufacturers¹ as, in the age of increasing globalization, integration of economic activities takes place mainly within the three large economic areas (Europe, North-America, South-East-Asia). The increased orientation of West European manufacturers to the East is thus accompanied by a reorganization of their activities at the previous locations in the West. This interdependence is intensified by the fact that the transformation for the European -- and in particular for the German -- industry falls into a phase of fundamental restructuring, in any case forcing producers to reorganize existing supply chains, and to search for new sales opportunities beyond traditional markets.

There is evidence for the extent of Central-East Europe's integration. The available data concerning trade and foreign direct investment confirm, at least for some of the transformation countries, a rapidly increasing orientation to the West since the early nineties; at the same time some western industrial countries show a growing orientation toward the East. Much less clear is, however, what type of economic integration is hidden behind these figures. Which kind of options precisely have occurred for the West European industry with the opening of Central-East Europe? How have these options -- up to now -- been used? In what direction has the industrial division of labor in Europe been modified, and which implications arise for the activities of western manufacturers

1 In this context "European manufacturers" are companies producing in Europe -- what ever the parent company's nationality is. For the change of the industrial division of labor in Europe not only indigenous European producers' activities in the East are relevant. It matters as well, when U.S. or Japanese automobile and electronics manufacturers re-organize their European manufacturing activities by including locations in Central-East Europe.

at their previous European locations? Does this, in the long run, weaken or strengthen locations, such as Germany, France or Italy?

The discussion on western companies' new options basically is stressing two integration paths, each comprising different, sometimes even contradictory implications for the development of the transformation societies. The distinction is whether the Central-East European economies are mainly seen as 'manufacturing bases' or as 'markets'. In the 'manufacturing base' perspective the European industry now seems to have a similar opportunity it's U.S. and Japanese competitors already had in the past, i.e. to get access to cheap industrial workforce in the immediate vicinity. To use this option extensively would imply an export driven economic development for the Central-East European societies by neglecting consumption needs and expectations of their population. The second integration path expects new sales opportunities from the opening of markets, to which western companies previously had no access. This integration path would require a rapid expansion of customer demand. To fuel this demand the transformation societies would have to move to the opposite direction than the first path requires.

Apart from these contradictions, the shape of integration paths feasible in a medium and long term remain unclear. For example, of what importance precisely is the role of Central-East Europe as a *new market* for the strategies of western manufacturers? Will the products that were developed for already existing markets -- mainly West European -- now be offered without any significant modifications in the East as well (as it was largely the case in East Germany)? Or do the producers count on a specific Eastern European demand, which is specific not only as a result of a low spending power, but due to distinct lifestyles and types of consumption in Central-East Europe as well? If the latter case is true, would serving these markets require modifications, or even new developments of products? With regard to the use of Central-East Europe as a *manufacturing base* the issue is, what kind of resources are actually being used at these locations: is it mainly -- or even exclusively -- the qualified labor force? Or are sections of industry utilized as well, which have been developed within decades of planned economy, and which were -- even beyond the existence of state socialism -- deeply

entrenched in technical and organizational structures -- such as plants, firms, and combines? In contrast to the low wage locations next door to Japan and the U.S., the transformation of the socialist societies in Central-East Europe is the end rather than the starting point of an industrialization process. Even before 1989, the economies of these countries were generally -- beyond differences between countries such as Hungary, Czech or Poland -- heavily shaped by the industrial sector. In this context, the structures of sectors, plants and production lines are the result of a specific industrialization path, deviating from West European patterns as well as from Japanese or the U.S. ones. One of the characteristics is the predominance of heavy industries -- such as iron and steel and mechanical engineering -- and, complimentary, the low emphasis of consumer goods industries, in particular those which in the West have shaped the era since 1945: automobiles, household appliances, and consumer electronics. Further more there have been specialization inside COMECON (with specific structures of internal trade and cross-national production networks as well as patterns of the industrial division of labor). And, last but not least, there was a notorious weakness in innovations (Nove 1977; Kornai 1980, Conert 1990). This specific path of industrialization with its modernization blockades has particularly contributed to the crisis and collapse of the planning economies. The question is, how the western companies are dealing with this legacy of the past. Are they making use of elements of the existing industrial structures (in a reorganized form) to integrate them into their production network? Or do they prefer to establish new firms and to erect new manufacturing facilities at the eastern locations? In the latter case, which would correspond to the model of transformation as it occurred in East Germany, they would utilize primarily the well trained and experienced industrial workforce.

To sum up: Widely differing paths of integration could emerge, depending on the various alternatives to deal with industrial resources, markets, and regional environments in Central-East Europe. The differences between these paths would affect the process of industrial transformation in the East as well as the new industrial division of labor between Eastern and Western Europe.

The paper is stressing the ‘main streets’ of integration by arguing in two steps. The first argument deals with the spatial dimension of integration. We analyze the regional pattern of integration, as it is created by trade and foreign direct investments. The point is that closer relationships between Western and Eastern Europe are concentrated on some rather than involving all European countries (section 2). Whereas the first argument is stressing the country level, the second argument is focussing on the sector and the company level. To identify the main directions of integration we distinguish ‘supply base driven’ and ‘market driven’ activities of western companies in different industrial sectors, such as automobiles, telecommunications equipment, and consumer electronics and household appliances. The conditions and implications of these integration paths in the East will also be discussed as probably effects for the West (section 3).

2. Dealing with the Neighbor: Regional pattern of integration

Since 1989, the extent and structure of the economic activities of the Central-East European countries² -- in particular of the Visegrád³ states -- have changed drastically. For this period two stages of the economic development can be distinguished: following the political change, a massive decline of industrial production took place in the industrial states of the East (most of all the former CSSR, but also Poland) -- countries regarded as economically developed also by the West. Up until 1992 the respective figures annually fell by double digits.⁴ In 1991, the overall industrial production in the Visegrád states had dropped by 30% compared to 1985 (cf. Habuda et al 1996). The depth and duration of this "transformation recession" surprised not only western experts, but also the reformers in the affected countries themselves (cf. Habuda et al 1996). A whole bundle of exogenous factors (breakdown of traditional western export and domestic markets, economic slow down in the western industrial countries, growing

2 In the following the Central-East European countries are also abbreviated as CEE.

3 These comprise Hungary, Poland, the Czech and the Slovakian Republic as well as Slovenia.

4 In Hungary, for example, the industrial production during 1990 shrank by 10.2%, during 1991 even by 16.4% and in 1992 still by around 9.8%. The process in Poland was similar, where the loss during 1990 stood at 24.2% and during 1991 at 11.9% (cf. "Handbuch für Investoren im Ostgeschäft" (Manual for Investors trading with the East) div.Erg.-Lfg.1995 to 1997)

fiscal and budget deficits) increased the effects of structural modernization blockades within the industrial sectors and firms and accelerated the industrial decline in the reform countries. Initially these economies proved to be unable to compete or survive under world market conditions.

This "destructive" development slowed down during 1992/1993. Poland, where industrial production already showed signs of a slight recovery after three years, was leading the way. Starting on a distinctly reduced level, production slightly increased again by 4.9% in 1993, added 6.2% in 1993, and a further 12.1% in 1994. In a number of other reform countries, the economic development also became more stable and, since 1994, has produced positive growth figures -- not only for the gross domestic product, but also for the industrial production.

Alongside this consolidation process the CEE countries have increasingly opened up and became integrated into the western markets. Starting from a very low level, trade with the EU has skyrocketed. From 1989 to 1995 exports to the EU have thus increased threefold and imports fourfold for Poland, the Czech Republic, Slovakia, Hungary, Bulgaria and Romania (cf. Table 1).⁵

A look at the development of the regional structure of the CEE states' export trade demonstrates the following: after the dissolution of the COMECON the Central-East European countries have reoriented themselves to the western markets and in particular to the EU. Within a relatively short time this has led to far-reaching shifts of trade interconnections within the western countries, as well as between the "East" and the "West". While trade of the CEE states with the "West" expands, trade among themselves and the succession states of the Soviet Union declines. Only in the Baltic countries does the latter still achieve a comparatively high level (cf. Table 2).

The dynamics of this development can only be appreciated correctly, if one considers that the increase of trade volume with the western countries was not achieved at the

5 cf. Deutsches Institut für Wirtschaftsforschung (DIW), Wochenbericht 14/97

price of rising disparities in the goods structure of export and import. The high rates of increase are certainly not explained by a simple strengthening of the pattern: "exchanging raw material for industrial products". Admittedly, the structure of goods exported in 1992 -- for example to Germany -- still indicates a strong emphasis on energy carriers and basic goods, which account for more than two fifths. At high growth rates, however, already a quarter of exports to Germany consisted of capital goods and one third of consumer goods.⁶

⁶ cf. Deutsche Bundesbank, Monatsbericht Juli 1996. Listed here are the countries Slovenia, Hungary, Czech Republic, Estonia, Russia, Croatia, Poland, Latvia, Slovakia, White Russia, Ukraine, Lithuania, Romania, Bulgaria, Moldau Republic, Macedonia, Albania.

Table 1:**Foreign Trade of the CEE States¹ with the EU 1989 through 1995
in Mill. US \$**

Country	1989	1990	1991	1992	1993	1994	1995
Export							
Poland	5.202	7.752	8.826	10.217	10.017	12.236	16.085
Czechoslovakia	3.577	4.226	5.886	8.320	...	...	...
Czech Republic	...	...	...	...	6.552	8.367	11.845
Slovakia	...	...	...	...	1.647	2.602	3.921
Hungary	3.697	4.571	5.525	6.102	5.741	7.213	10.129
Bulgaria	658	814	997	1.242	1.207	1.617	2.415
Romania	2.889	2.058	1.918	1.931	2.090	3.382	4.501
Slovenia	...	...	...	...	3.726	4.554	5.667
Estonia	...	...	...	...	354	747	1.244
Latvia	...	...	...	...	899	1.263	1.364
Lithuania	...	...	...	...	857	985	1.412
Total	...	...	...	...	33.091	42.966	58.584
Import							
Poland	5.042	6.343	10.944	11.769	12.966	14.462	19.685
Czechoslovakia	3.182	4.273	5.672	9.582	...	...	...
Czech Republic	...	...	...	...	8.237	10.356	15.110
Slovakia	...	...	...	...	1.866	2.543	4.045
Hungary	4.150	4.767	5.779	6.888	7.547	9.568	10.749
Bulgaria	1.889	1.287	1.359	1.602	1.735	2.131	2.738
Romania	820	1.667	1.756	2.466	2.958	3.368	4.819
Slovenia	...	...	...	...	4.234	5.144	6.688
Estonia	...	...	...	...	575	1.243	1.826
Latvia	...	...	...	...	484	829	1.185
Lithuania	...	...	...	...	637	978	1.354
Total	...	...	...	...	41.238	50.623	68.201

Deviations by rounding of the figures.

1 Status: Association countries of the EU.

Source: OECD, Foreign Trade Data, Magnetic Tape 1995; IWF, Direction of Trade Statistics, Magnetic Tape, August 1996; in DIW-Wochenbericht 14/97.

Table 2:

Regional Structure of Foreign Trade of the CEE-States¹ 1989/1995

Country	EU (15)		ECE (6)		ECE (10)	EU (15) + ECE (10)	former USSR	CIS	Other Countries	
	1989	1995	1989	1995	1995	1995	1989	1995	1989	1995
Export Shares (in %)										
Poland	41,5	70,1	10,9	5,9	7,2	77,3	20,1	10,2	27,5	12,4
Czechoslovakia	31,2		16,6				30,5		21,7	
Czech Republic		55,2		24,4	26,4	81,6		5,4		13,0
Slovakia		37,4		44,9	46,2	83,6		6,9		9,5
Hungary	39,1	62,7	10,4	9,0	11,5	74,2	25,1	10,5	25,3	15,3
Bulgaria	11,5	38,3	11,6	3,2	4,7	43,0	65,2	14,9	11,7	42,1
Romania	32,9	53,2	10,5	4,0	4,3	57,5	22,6	5,6	34,0	36,9
Slovenia ²		86,6		3,0	3,1	89,7		4,5		5,8
Estonia		54,7		1,8	14,0	68,7		25,8		5,5
Latvia		44,0		3,6	12,3	56,3		38,3		5,4
Lithuania		37,4		7,7	13,6	51,0		37,6		11,5
Import Shares (in %)										
Poland	41,3	64,5	10,6	5,8	6,5	71,0	18,9	9,3	29,2	19,7
Czechoslovakia	32,7		17,3				29,7		20,3	
Czech Republic		56,4		17,3	18,0	74,4		10,3		15,3
Slovakia		34,7		32,7	33,5	68,2		19,3		12,5
Hungary	45,7	61,5	10,9	7,3	8,0	69,5	22,1	14,7	21,3	15,8
Bulgaria	18,2	38,1	12,9	4,2	4,6	42,7	52,9	32,5	16,0	24,8
Romania	13,8	49,6	14,4	5,2	5,5	55,1	31,5	16,1	40,3	28,9
Slovenia ²		69,2		3,4	3,4	72,6		2,3		25,1
Estonia		67,0		1,0	4,7	71,7		18,7		9,6
Latvia		49,9		3,7	14,3	64,2		28,2		7,6
Lithuania		40,9		5,4	14,7	55,6		42,4		2,0

1 Status: Association Countries of the EU.

2 1994.

EU (15): Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Sweden, Spain. - ECE (6): Bulgaria, Poland, Romania, Slovakia, Czech Republic, Hungary. - ECE (10): ECE (6) und Estonia, Latvia, Lithuania, Slovenia.

Quelle: National Foreign Trade Statistic; Calculations of the DIW; in DIW-Wochenbericht 14/97.

The German Institute for Economic Research (DIW) (1997) sums up as follows: "With an extremely low level as a starting point, in countries such as Poland, Hungary the Czech Republic, Slovakia, Bulgaria and Romania, the comparative disadvantages in branches with high research and development intensity and production differentiation have been distinctly reduced in the trade with the EU, and the emphasis of intra-industrial trade has increased. A step by step approximation of structural preconditions - - at different speed in individual countries, can therefore be assumed" (p. 228).

By further differentiation of this picture according to countries (Czech Republic, Hungary, Poland), the increase of intra-industrial trade, i.e. trade between the same branches of industry becomes unmistakable obvious.⁷ In other words, the rising trade volume simultaneously indicates an increasing intra-industrial division of labor between the CEE states and Western Europe.

Admittedly, the increasing integration of the CEE in western markets is not driven by extended trade activities alone. Mainly over the last three years it is being strengthened by stepped up investment activities of western firms in Central and Eastern Europe (cf. Table 3).⁸

The amount of foreign direct investments between 1993 and 1996 has increased almost four fold. Development is particularly powerful in the CEFTA states where this increase concentrates and which, in 1996 alone, were able to attract almost 90% of direct investments. The strong disparities between the EU-neighboring countries on the one hand and South-East Europe on the other are quite apparent. Within the Baltic states the picture is subtly differentiated: Estonia gains advantage from its proximity and affinity to Finland; Latvia, despite traditionally strong ties to the West, moves in midfield, while Lithuania's commitment maintains a low level.⁹

7 cf. Deutsche Bundesbank, Monatsbericht 1996, as well as Deutsches Institut für Wirtschaftsforschung (DIW) Wochenbericht 14/97).

8 Although the share of German direct investments in the capital transactions with the CEE countries has grown considerably (4.2 Bill. DM and thus half of the German investments in those countries), the German investments in the CEE countries have overall during the last three years, in general, increased less than before (cf. Deutsche Bundesbank 1996)

9 cf. DIW 11/1997.

Table 3:
Foreign Direct Investments in the Transformation Countries 1993 through 1996¹ (Stock in Mill. US \$)

Region	1993	1994	1995	1996	01.07.1996 ²
CEFTA ³	8.701	13.891	18.958	30.659	32.568
Poland ⁴	1.370	2.307	3.789	7.843	9.045
Slovakia ⁵	231	366	547	726	803
Czech Republic ⁶	1.598	2.166	3.029	5.587	6.045
Hungary	5.502	8.342	9.965	13.740	13.868
Slovenia	...	710	1.629	2.762	2.806
The Balkans	581	844	1.547	2.115	2.498
Bulgaria	65	192	412	517	610
Romania ⁵	516	652	1.135	1.597	1.888
The Baltic States	166	487	978	1.483	1.551
Estonia ⁶	59	221	442	646	680
Latvia	33	75	294	485	496
Lithuania ⁷	74 ⁵	192 ⁵	242 ⁵	352 ⁴	375
Central-East Europe Total	9.448	15.222	21.483	34.257	36.617
CIS-States	8	4.537	6.045	9.866	11.225
among them:					
Kazakhstan	...	1.271	1.910	2.769	3.244
Russian Federation	...	2.783	3.365	5.875	6.550
Ukraine ⁶	...	219	484	891	1.083
White Russia ⁵	8	264	287	331	348

... Not available.

1 In each case the beginning of the year.

2 Preliminary.

3 Central European Free Trade Association.

4 Figures in currency of the country, converted according to exchange rates of the end of the respective year

5 Cumulated foreign shares in the nominal capital of firms with foreign participation.

6 Cumulated rates of flow of the balance of payments.

7 New collection method since 1996.

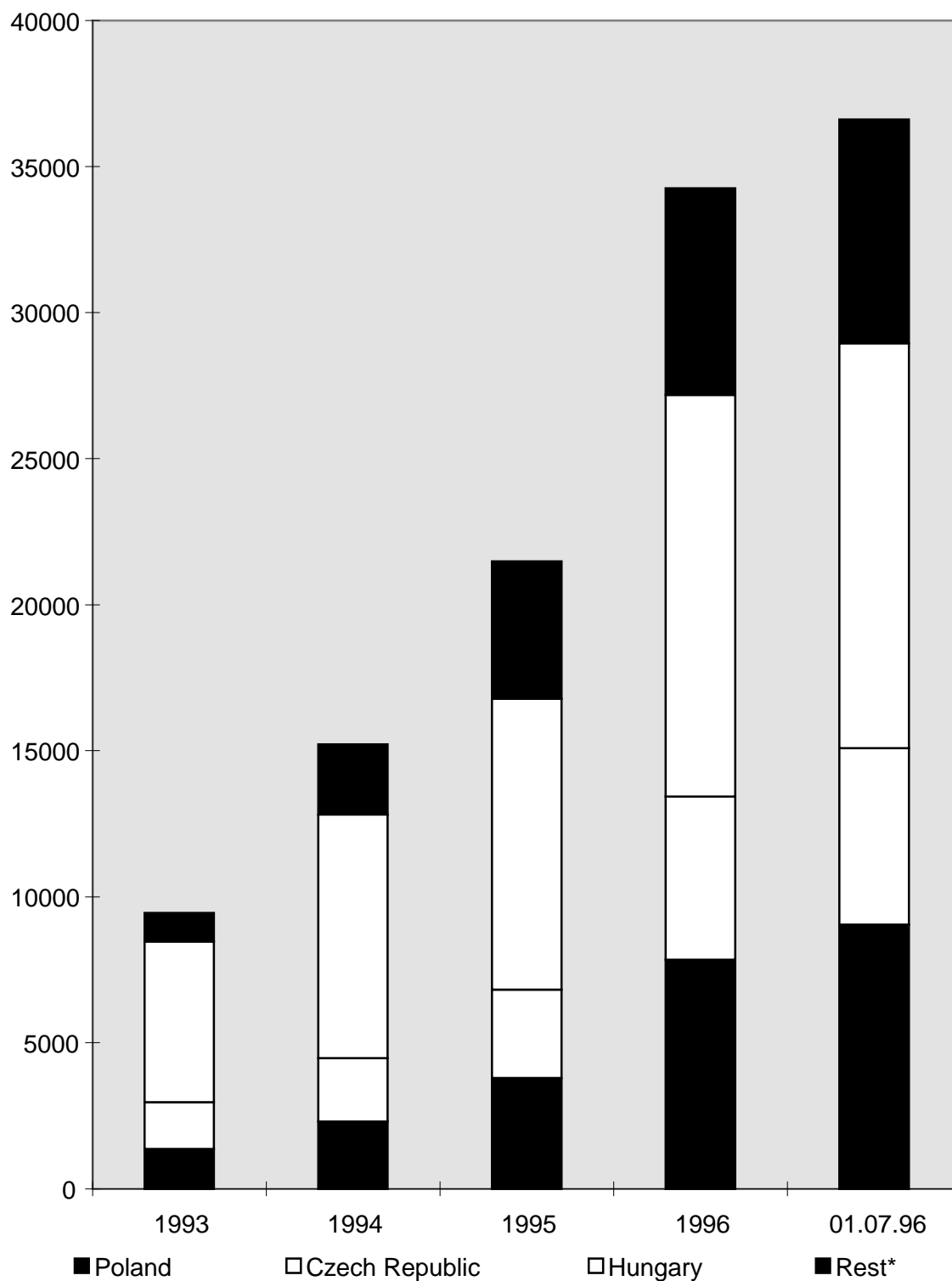
Source: UN-ECE 1996, based on national statisti; calculations of the DIW; in DIW-Wochenbericht 11/97.

During the last years integration has been stepped up through trade and direct investments. However, extent and dynamics of this integration movement within the CEE are distributed highly unequally, and are concentrating mainly on the so-called "leading states" in the reform process: Poland, Hungary and the Czech Republic. Not only do these three countries handle most of the trade with the western industrial nations (in 1995 the share amounted to approximately 65%) and are in the forefront in the new orientation of trade flows to the "West" (cf. tables 1 and 2), but they also draw the majority of direct investments to Central-East Europe. As an investment location, Hungary traditionally takes on an outstanding position (almost 40% in 1996). Remarkable, too, is the exceptionally dynamic course of development happening in Poland during the last two years (approximately 25% in 1996). By comparison, western investors are losing interest in the Czech Republic¹⁰ (its share settled down at approximately 16%) (cf. diagram 1).

As far as the national origin of western trading partners and investors is concerned, there are comparable imbalances. Germany, by great lengths, is the most important trading partner of Poland, Hungary and the Czech Republic. This trend -- and this applies to direct investments as well -- is additionally strengthened by the fact that, in many instances, Austrian firms are subsidiaries of German companies. In real terms Germany's commitment, therefore must be estimated considerably higher than becomes evident from a purely country-related viewpoint (cf. diagram 2).

10 Besides the real upward revaluation of the country's already strong currency, this may also be due to the increased wage level and certain saturation effects in investment opportunities.

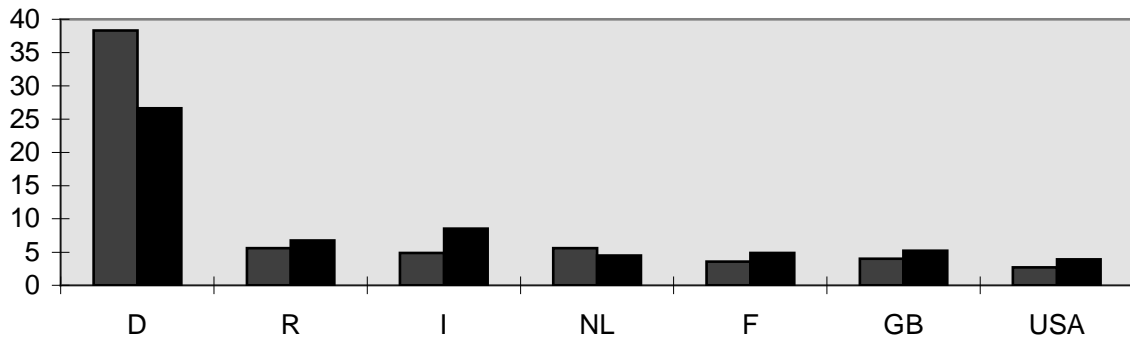
Diagram 1:
Shares of the CEE States in Direct Investment of the Western Industrial Countries (Stock in Mill. US \$)



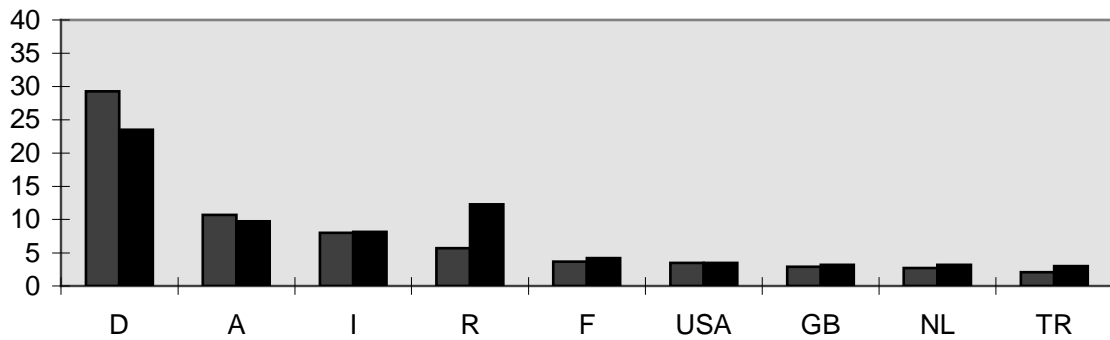
* Slovakia, Slovenia, Bulgaria, Romania, Baltic States.
 Source: Calculations of the DIW.

Diagram 2:
Structure of the Foreign Trade of Selected CEE States (shares of the most important customer and supplier countries, in %)

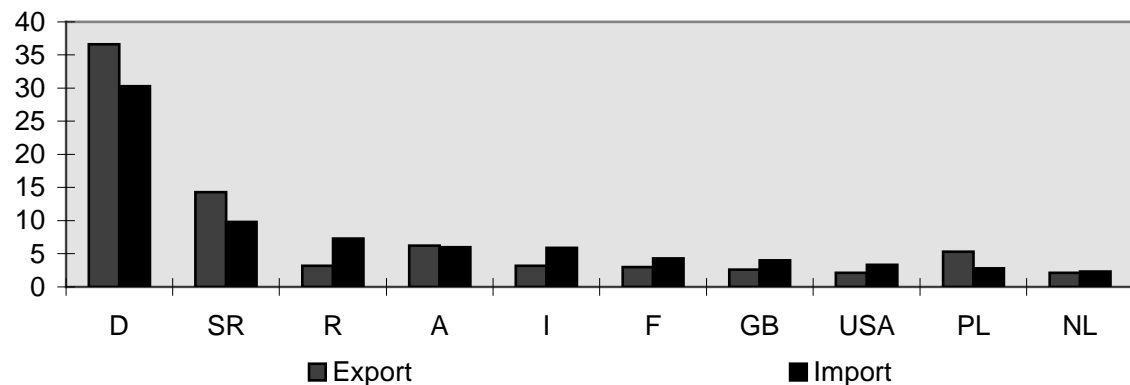
Poland¹



Hungary²



Czech Republic³



1 Figures for the year 1995.

2 Figures for the year 1996, January through November.

3 Figures for the export structure 1995; for the import structure 1996; both 1st through 3rd quarter.

In 1995 Germany's share of Polish export hovered around 38.3%. Russia followed this at a huge distance with 5.6% and Italy with 4.9%. The share of Hungarian export was almost 30%, while Austria's share amounted to 10.7% and Italy's to 8%. For the Czech Republic it was almost 30%, while Austria's share was 10.7% and Italy's 8%. For the Czech Republic, Germany's share of 36.6% was at a similarly high level as for Poland. In second place did Austria follow the former federation partner, the Slovakian Republic at 14.3%, at only 6.2%? At a slightly lower level the countries structure of imports appears similar to that of exports. At 26.6%, Germany is Poland's most important supply country, ahead of Italy at 8.5% and Russia at 6.7%. In Hungary the German share amounts to 23.5%, ahead of Russia at 12.3%, which bases its high supply share on sources of energy. In third place finally, is the neighboring country Austria at 9.7%. Germany's supply share at 30.3% is distinctly higher in the Czech Republic. In place two is the Slovakian Republic at just under 10%, in third place is Russia at 7.3%, ahead of Austria at 6%.

Germany's preeminence in trading continues in direct investments -- with the exception of Poland. The major share of foreign capital invested in Central-East Europe originates in the most important industrial countries of Western Europe. In 1996, the most important amount almost exclusively came from Germany.¹¹ The shares by U.S. firms in Poland, Czech and Hungary reached almost 20%; the contribution of Japanese firms -- with the main focus in Hungary -- remained marginal at 2%.¹²

If one views the *cumulative* foreign investments according to countries of origin in an exemplary manner for the Czech Republic and Poland, the imbalance between the western investors are slightly less obvious, though, than is the case for the trade (cf. diagram 3).

11 No absolute figures are given by the DIW, but it states: "Exceptions to this rule came about only through Finland (in Estonia), Denmark (in Lithuania), Austria (in Slovakia and Slovenia, as well as Korea (in Romania)".

12 cf. DIW 11/1997

This is mainly due to the commitment of U.S., in some cases also to Asian investors. U.S. interest is focused on Poland, but in the Czech Republic as well U.S. firms develop considerable activities with a share of 15% share, next to the Netherlands (15.3% share) and Swiss investors (12.7% share).¹³ By value, the U.S. is by far the largest investor in Poland with a share of almost 25%. Germany with a share of 12.7% and Italy follow it at 10.2%. By the number of firms which have invested at least one million U.S. \$ in Poland however, Germany with 113 firms is leading ahead of the U.S. and France.

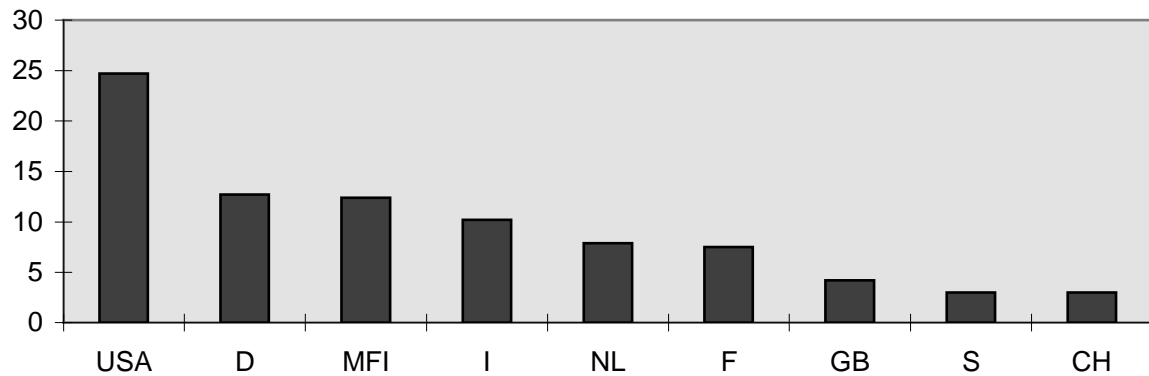
In effect, within few years, the CEE countries -- in particular Poland, Hungary and the Czech Republic -- have achieved a considerable status in foreign trade and in direct investments for the main actors within the western industrial countries. In 1994 and 1995 exports of Germany -- by far most important trading partner and direct investor -- to its Central-East European neighboring region skyrocketed by 30% to 60 Billion DM. More than half of this went to Poland, Hungary and the Czech Republic. Due to this sharp increase the structure of Germany's foreign trade shifted distinctly. For Germany, the trade with Central-East Europe, at a share of 8.2% of total exports during 1995, is now of greater importance than the trade with the U.S. During the last years the development of imports has been even more powerful than that of exports. In 1995, the imports had reached a level of 58 Billion DM and were thus almost 50% higher than in 1993. Alongside this development, German firms have invested 7.3 Billion DM in Central-East Europe since 1989, 4.3 Billion DM alone in 1995. Economic interest in this region therefore is greater than, for instance, in Asia, where 3.4 Billion DM were invested in the same period.¹⁴

Not "the" Central-East European industry per se is increasingly included in the activities of "the" Western European industry or is becoming its main area of activities. Integration takes place on both sides in areas located in close proximity to what used to be known as the "Iron Curtain". Thus, spatial proximity can be seen as an important quality that determines and structures the range and dynamics of integration.

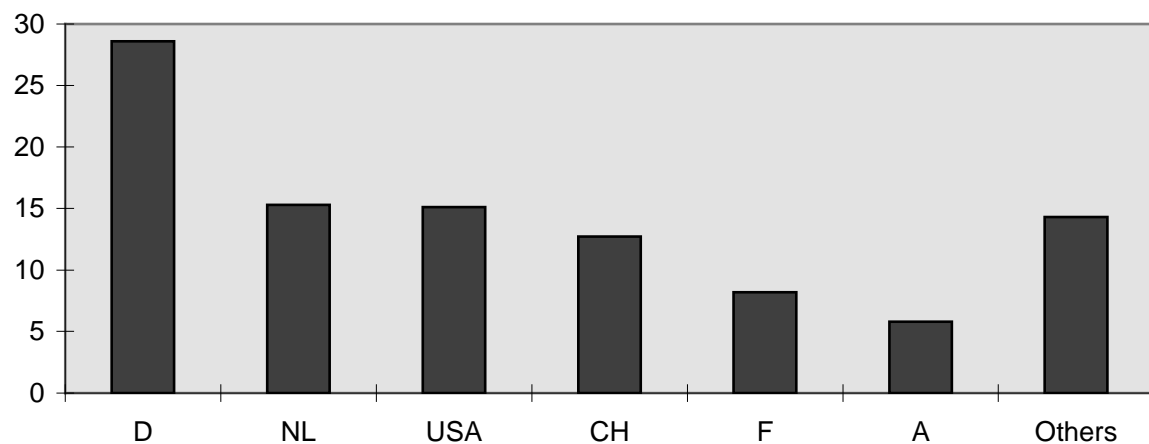
13 In the case of the US this also applies to Hungary. As far as data is available, Austrian combined with German investors are far ahead of US-investors (shares in billion Forint 1994: 42 Austria, 41 Germany, 23 USA, 19 Netherlands) (cf. Habuda 1997).

**Diagram 3:
Structure of Direct Investments of Selected CEE States According to
Countries of Origin**

Poland¹ (in %)



Czech Republic² (in %)



MFI = Multinational Firms/Institutions.

1 Cumulated through December 1996.

2 Cumulated through September 1996.

Source: FAZ-Informationdienste 1997.

3. Paths of Integration

3.1 CEE as a new supply base for the (West) European industry

It is characteristic of this path of integration that CEE serves as a manufacturing base within the supply chains of western companies, which have already manufacturing activities located in (Western) Europe. The final products continue to be manufactured in Western Europe. Exceptions to this rule are consumer goods such as textiles, clothing and shoes, produced according to western blue prints in CEE and re-exported as end products.

The main motivation for using Central-East Europe as a "supply base" is the availability of a qualified, well trained and experienced industrial labor force, yet inexpensive compared to existing (West) European locations.

With regard to different degrees of reversibility and intensity, the types of cooperation between western buyers and eastern suppliers reflect a certain range: one can distinguish the business relation of 'subcontracting' -- which can be subject to short term dissolution -- on the one hand, and investment commitments on the other.¹⁵ To almost all types of cooperation related to this integration path the following applies: western buyers predetermine the status of eastern manufacturers in the supply chain which, in most cases, means extreme dependency.

Integration of eastern manufacturing capacities into western supply chains generally concentrates on the production of parts and components with low transport costs, at locations in close spatial proximity to the plants for the final production steps (such as

15 Trade relations based on subcontracting can be roughly differentiated according to whether the supplier himself is responsible for to organize manufacturing processes and the procurement of materials or whether the western partner makes available materials, intermediate products and blueprints for foreign production. In contrast, it creates a tighter framework for cooperation if western partners have stakes in their suppliers. Forms and contents of supplier-customer relationships vary quite strongly in this case. To treat suppliers as 'workbenches' remains an option, although direct investments provide a much better framework to transfer products, manufacturing processes and know-how than in the case of "subcontracting".

final assembly). In this context spatial proximity seems to be important for various reasons:

- Spatial proximity shortens transport routes (due to the underdeveloped infrastructure in the transformation countries, distances are of greater importance than in the West - in particular for supply chains in which delivery time is critical).
- Spatial proximity enables the western companies to minimize risks of running cross-national production networks without transferring managerial or engineering staff to the East on a permanent base. Short distances allow them a quick and easy access to their facilities in CEE for control and in cases of troubleshooting. This is true for management ('management by being nearby') as well as for the engineering staff (e.g. for fire fighting to fix problems in manufacturing). These aspects are of particular importance for companies without experiences in managing cross-national productions networks, which in many cases is true for small and medium sized enterprises. For them it is much more attractive to utilize the new 'low wage' options nearby than it has been the case in the past for South-East Asia (or even for countries within the EU, such as Portugal, Spain or Greece).

Beyond these more general characteristics there are different approaches by western producers in utilizing the east as a "supply base".

'Workbench' approach

This pattern of integration is driven by western companies' decisions to locate manufacturing activities in Central-East Europe primarily for least cost reasons. Some companies -- and partly entire sectors -- which suffer under severe cost pressure in the West, try to escape the cost squeeze by relocating a more or less large part of their production activities to the east. This applies mainly to labor intensive processes -- such as parts production and (sub) assembly operations --, that can be run with standardized technologies. Often companies relocate existing manufacturing operations to the East

instead of reorganizing them in the West (e.g. by implementing new process technologies or work organization or by upgrading the product range). Utilizing Central-East European manufacturing bases promises short term remedy. In this case of short term oriented cost cutting the western companies are often using existing production capacities in Central-East Europe, which, however, do not necessarily remain in the pre-1989 organizational contexts (such as huge vertically integrated combines). Small and medium-sized manufacturers are using this strategy of trouble shooting -- mainly in the German context --, because they can take advantage of existing production facilities in close spatial proximity. In these cases though, to set up product and process innovations more or less remains the duty of the western head offices.

Evidence for the 'workbench' approach is mainly found in the production of parts and components in the metal, electrical and electronics industry (such as stamped parts or founding moulds).¹⁶ The consumer electronics producer Grundig, for instance, manufactures TV sets, apart from its main plant (Nuremberg/Fürth), in two subsidiaries: a large plant in Austria (Vienna) and a plant in Poland with, at least up to now, small scale production line. In early 1997 Grundig announced planning to concentrate the production of TV sets on the subsidiaries in Vienna and Poland, and to close the TV-production in Nuremberg due to cost reasons. The Vienna plant, they told, is producing more cost effective. Grundig explained this lead in performance of Vienna by subcontracting of sub-assembly to a Hungarian plant in Szekesfehevar. "The labor intensive production steps are carried out at low costs in the Hungarian plant, which can easily be reached within about two hours from Vienna, whereas only the final assembly is still carried out in Vienna."¹⁷

Beyond low cost reasons, in some instances capacity problems also motivate the utilization of Central-East European manufacturing capacities as a supply base. E.g.

16 The extent of workbench activities is not revealed by the foreign trade figures, which we also cited above. The aggregated figures do not differentiate between intermediate and end products in those cases, where parts and components are supplied within the same sector, which is the normal case in cross national production network. Exports of assembled boards in the electronics industry, for example, are counted as „finished product export“ in the aggregated foreign trade figures, just like the export of complete TV-sets or PCs.

17 Süddeutsche Zeitung, 10.01.97

western producers of household appliances are using -- for limited periods -- manufacturing capacities of producers in CEE to cope with order peaks, like Philips is doing with vacuum cleaners in the Czech Republic.

The German clothing industry is utilizing manufacturing capacities in CEE on an extraordinary large scale. In 1995, this sector consisting mainly of small and medium-sized enterprises produced about 60% of its products abroad. In 1995 woven clothing alone amounting to 7.7 bn DM, was produced abroad, representing 70% of all contract-manufacturing orders in the EU in this sector. For the past 20 years, contract manufacturing in low wage countries has been an important strategy of cost cutting for the German clothing industry. With the opening and integration of the CEE countries, traditional customer-supplier relationships are now expanded, for example, in the cases of Romania (where approximately 70% of production capacities are utilized by contract manufacturing) and Hungary (50% contract manufacturing), but in the case of Poland as well.¹⁸ These activities in the CEE countries are at the expense of traditional suppliers in East Asiatic, but also in some EU countries such as Greece. Given the low technical level of production and having in mind, that this industry is calculating wages by minutes rather than by hours, the CEE countries with their low labor costs are offering workbenches that fit to the needs of German producers of ready-made clothing. In this case western standards of quality are produced, often by using second hand machinery supplied by the German producers.

After the end of initial euphoria, which was characterized by many western producers expecting quick results from relocating manufacturing activities to the East, in particular the western pioneers in CEE have gained experience in the down side of these shifts. Many manufacturers have underestimated the difficulties of their eastern activities occurring in the West. Besides administrative obstacles (legal insecurity, governmental influence), reports of lacking product quality and productivity as well as of problems due to exceeded delivery times were heard.¹⁹ However, these problems do not necessarily seem to be permanent. The results of a recently conducted survey of

¹⁸ cf. Handelsblatt 14.08.1996; Frankfurter Rundschau 15.04.1997

enterprise point towards the fact that, in the meantime, western producers do get what they are looking for in CEE countries. "In the reform countries, willingness to perform, quality awareness, reliability and level of training of staff are obviously satisfactory (...). For the investors having committed themselves in the CEE countries, cost saving was higher than expected. Opposed to this, hopes of meeting fewer administrative obstacles in CEE, did not materialize" (Beyfuß 1996, p. 30 f.).

To use CEE manufacturing facilities as workbenches seems to work quite well in customer-supplier relationships in which delivery time is not critical. Nevertheless, two questions arise concerning the medium and long-term perspectives of the least cost approach. The first open question is how long the present conditions -- in particular the low wages levels -- will be lasting in the currently preferred places to locate in the East. Rising wages would endanger the compensation of the ongoing productivity gap. In the currently three most important CEE countries -- Poland, Hungary, Czech Republic -- workbench activities possibly only of a temporary nature. Western companies probably will react with a further shift to other CEE countries having waged levels (and social standards) even below the levels the Visegrád states have already reached.²⁰ However, the question is to what an extent the workbench option can be easily extended further east if the advantages of spatial proximity (such as low transport costs and rapid intervention from western head offices) diminish. A further shift seems to be particularly a problem for Western small and medium sized enterprises.

The second question is about the danger that to utilize industrial capacities mainly as workbenches could lead to a 'regressive specialization' in the East. This could be the case if eastern producers specialize anew their activities for the production of technically little demanding intermediate products. There are at least indications of this development.²¹ In such a case the existing human resources would not be used extensively either. Instead, qualified employees would be utilized for undemanding

19 cf. VDI-Nachrichten 08.07.1994

20 The three countries mentioned might even become active themselves; this is suggested by the latest figures regarding direct investments from Poland, Hungary and Czechia into other CEE countries.

21 <proof from Ifo-Bericht über Elektroindustrie...>

tasks and duties, and, as a result of this, possibly could lose their skills and competencies in the medium term.²²

Complementary specialization

To include Central-East European industrial capacities into western supply chains is not in every case driven by short term oriented cost cutting strategies, which are motivated by low wages. Beyond the 'least cost approach' there are sourcing strategies basing on experience and skills of employees in Poland, Hungary and the Czech Republic. Furthermore, these strategies -- at least partly -- utilize eastern specialties in some industrial sectors, which have emerged even before 1989. No doubt, in these sourcing strategies low wage levels as the basic motivation to attract western activities are important as well. But in contrast to pure cost cutting, these strategies do aim to develop complimentary capabilities in the CEE countries. In these cases manufacturing activities located in the East do not rank on the lowest level within western supply chains (i.e. production of simple parts and components) and therefore are not easily to exchange. There are differences in the time horizons of western commitments as well: investment strategies are more long term oriented, and projects have a longer planning stage. In the long run, these sourcing strategies could lead to a pattern of integration, which is characterized by a complimentary specialization between West and Central-East European industrial capacities.

Company's strategies along this integration path do not -- or only partly -- utilize 'firms' or manufacturing facilities existing already before 1989.²³ Western investors reorganize, set up and run manufacturing plants in the East largely for themselves, and western specialists are deeply involved in these activities. But, nevertheless, the newly established manufacturing facilities are not really 'greenfield' plants, because they are

22 There are also indications of this development: in the Czech Republic, between 1991 and 1992, almost half (41%) of 'skilled employees' who changed their occupation moved to jobs, which required a significant lower skill level (Keilhofer 1995, p. 347).

23 There are a number of cases where the western partner starts his activities within the framework of a joint venture where he has some stakes in, and where he takes 100% control of the establishment in a second step. For instance, this applies to Ikea in Poland.

placed in traditionally industrialized surroundings, and this environment seems to be an important precondition for their establishment.

Typically this pattern is true for large western companies investing considerable sums in the East to optimize their supply chains (e.g. ABB in Poland or Audi, who is investing 730m DM or so in Győr/Hungary). They envisage good conditions for realizing quality production at low wages (ABB, for instance, seeks to use Polish workers extended capabilities and experiences in welding operations for their complex power supply machinery). To get parts and components delivered on time and in the right volume the spatial proximity of the CEE countries offers a further important advantage for western investors having previous and sequential manufacturing steps located nearby (e.g. Győr is very well situated for the automobile triangle Regensburg/Ingolstadt/Munich). The constitutive characteristics of the Central-East European supply base for these advanced sourcing strategies seem to be a combination of skilled workforce, low wages, established infrastructure, and spatial proximity to the West.

The pattern of complementary specialization seems to emerge mainly as a result of the reorganization of companies' in-house production networks. Especially large companies manufacturing products of great complexity (such as automobiles or power supply machinery) tend to internalize their production networks not only by worldwide sourcing (i.e. by getting parts and components from external suppliers) but also by locating in-house manufacturing capacities abroad, and Central-East European industrial capacities provide new opportunities for these strategies. It depends on the complexity of production processes, but mainly on the status of the (new) Eastern supplier (single or second source?), how far reaching the division of labor is shifting within companies' in-house production networks by (re)locating manufacturing facilities to the East -- and to what an extent this means a shift at the expense of existing plants in the West.

Győr stands for a pronounced radical variation of this approach: for certain car models (A4, A6, A8) Audi wants to relocate its entire engine production to the new Hungarian plant at Győr (while it is not yet clear, whether only the parts production or the engine

assembly as well will be relocated). For Audi's Ingolstadt plant this constitutes a loss of approximately 250 jobs. Győr currently has already 460 employees. It is planned to extend this to 860 people by 1998/99.²⁴ A similar case is the Swedish-Swiss electrical engineering company ABB Asea Brown Boveri that built up vast activities CEE²⁵, but in Asia as well. The Polish ABB company Zamech serves as an example for the pattern of integrating CEE manufacturing capacities into the worldwide production network ABB: Zamech, an enterprise manufacturing turbines, is seen as one of the most profitable enterprises within the ABB-group. The majority of Zamech exports consist of deliveries for power plant orders, which are acquired by ABB's mother companies in Switzerland, Sweden and Germany respectively. In contrast to the case of Audi, ABB used already existing production lines at Zamech. Within these lines production processes as well as work organization were modernized according to western examples. ABB increased the technology level by a successive substitution of state of the art production machinery for the existing outdated equipment. Nevertheless, manufacturing processes remain predominantly characterized by manual work (e.g. in grinding turbine vanes).

Western companies about the future of manufacturing plants set up the open question. In the medium and long term this future depends on whether these plants have indigenous capacities to upgrade manufacturing processes as well as product design or not. In this context it is unclear, to what extent even the most advanced plants serving as supply base for the West have local resources for product/process development. It is unclear too, to what extent the regional surroundings are utilized beyond the western controlled manufacturing facilities itself.

24 cf. Handelsblatt 29.04.1996

25 ABB entered Poland in 1990. Meanwhile the company has 13.000 employees in 13 facilities in CEE. 'Hard' investments in these countries have reached 160m US.

3.2 Market driven integration

Apart from utilizing CEE as a manufacturing base within western production networks, companies are motivated by the opening up of eastern markets as a distinct reason for their activities in the East. In this perspective multinational enterprises in particular regard low production costs as a welcome though temporary phenomenon. On the other hand, the investment decision is made solely on the basis of long term growth prospects of the markets.²⁶ This mainly concerns the producers of consumer goods and of infrastructure equipment (such as telecommunication equipment).

To get access to telecommunications and other infrastructure markets by manufacturing locally

Eastern European countries' efforts to modernize their infrastructure are providing new market opportunities for western producers of the appropriate equipment. This dynamic is particularly true in the telecommunications sector. According to a study of the Kreditanstalt Investment Bank (CAIB), telecommunication is one of the fastest growing sectors in the East. This dynamic is fuelled by the privatization of the state owned 'PTT's' in the CEE countries and the market entrance of western telecom providers.²⁷

This dynamic provides market opportunities for western companies rather than for existing eastern producers because of two reasons: Firstly, the technology gap of Central-East European industry is particularly large in telecommunication equipment. Secondly, there seems to be no 'eastern' or 'western' style products in telecommunications as these products are meeting worldwide-accepted standards in technology and design -- there is no space for specific 'eastern' demand. Nevertheless, the 'big players' in the West (Siemens, Ericsson) have entered joint-ventures with the eastern branch leaders, and have thus gained local market knowledge as well as experienced and qualified workforce. These joint-ventures are mainly driven by local-

²⁶ Cf. Hans-Böckler-Stiftung (1995)

²⁷ In Hungary the major part of state-owned MATAV was privatized by the successive sale of shares to a joint-venture of Deutsche Telekom and Ameritech.

content requirements. To provide local-content is an important argument in negotiations to get the order to build up complete telecommunication systems. In this context it is not crucial that local activities to manufacture telecommunication equipment are profitable but that the entire business (i.e. to build up telecom systems) pays off.

The following examples are to demonstrate the scale of western activities in telecommunication equipment manufacturing: Within the next years Siemens AG will be the main supplier of switchboards exchanges and other equipment of the Hungarian telephone company Matav. The order volume sums up to four to five billion DM. The local subsidiary Siemens Telefongyar Kft. Budapest -- which will later be producing part of the equipment -- is acting on behalf of Siemens.²⁸ However, at Matav merely 372 workers develop, produce and market EWSD-systems (digital switchboards) (cf. Siemens Welt 3/97). The case is similar in the Czech Republic. The Siemens-EWSD plant near Prague employs 240 employees, despite the fact that in the public communication sector in the meantime EWSD-systems 'are in use for almost half the country' (cf. Siemens Welt 3/97).

In addition, joint-venture products are hardly less expensive than direct supplies from abroad: 'production of small series and difficult starting conditions result in higher costs compared to production in Germany. Low wage costs cannot fully compensate for such a technologically intensive product as EWSD. Even now distinct cost advantages can, however, be achieved by a joint-venture in the service sector (service, assembly, customer training), which is of increasing importance when dealing with large technical projects' (Steffens/Sundrum 1993).

Access to consumer goods industries

For this path of integration, the activities of western enterprises are concentrating on sectors such as the food and beverage industry, the automobile industry, consumer electronics and household appliances.

28 Cf. Süddeutsche Zeitung 12.01.1996

If one excludes the food and beverage industry, the mixture of industries (automobile industry; consumer electronics) shows considerable similarities to the investment projects of Japanese manufacturers in the UK during the eighties and the nineties (additionally in the case of CEE household appliances are important as well; in this sector we can see a strong move towards internationalizing of production, although household appliances in the past have been of little importance in Japanese strategies to enter EU markets). In contrast to the UK, the CEE does not seem to be serving predominantly as an export oriented manufacturing base to supply EU markets.

In the case of CEE the promising markets are domestic. Western companies try to take advantage of a specific move in the East to 'catch up' on consumption. The notoriously inadequate supply of industrially manufactured consumer goods as a legacy of the past offers a promising starting point here. There is evidence -- at least in those countries western activities are concentrating on -- for the orientation towards 'western' lifestyles and types of consumption, particularly with regard to the use of automobiles, PCs, consumer electronics and household appliances. At the same time -- and this marks a difference to newly industrializing countries -- there exists already a developed infrastructure (electrification, road network -- including gas stations and garages --, TV-stations etc.) which is being modernized continuously²⁹ and which allows to expand the 'consumption' of these products rapidly.

The strategies of western companies to gain access to consumer markets by running local manufacturing plants have been concentrating on countries which, compared to other CEE countries, have a high GDP per capita (cf. table 4). The CEE countries in total have a population of approximately 400 million people. Poland, with a population of almost 40 million, is of particular importance as a 'lead market' of CEE. Particularly in recent times this 'lead market' has grown in quantitative as well as in qualitative terms. According to interim reports, the real private consumption in 1996 rose by 8.2%

29 In Poland 2,300 km of new national highways are to be constructed within the next 15 years, and the existing 300 km of national highways are to be improved. Meanwhile first orders for certain sections

(1995: 4.5%). The above-average growth has been supported by distinctly rising real wages (plus 5.9%) and higher employment.³⁰ At the moment for many people -- not only in Poland -- there is still a

Table 4:
Comparison of Per Capita Income of Selected Transformation
Countries (GDP per Inhabitant in US \$)

Country	1992	1994	1995	1996	1997 ¹
Czech Republic	2.536	3.489	4.567	5.066	5.298
Hungary	3.441	4.025	4.384	4.263	4.449
Poland	2.196	2.400	3.055	3.466 ²	3.750
Slovakia	2.015	2.556	3.228	3.504	3.622
Russia	659	1.870	2.413	2.398	2.936
White Russia	...	...	2.272 ³	...	...
Estonia	...	1.500	1.700	...	...
Bulgaria	1.062	1.180	1.511	...	1.345
Romania	852	1.260	1.450	1.197 ²	1.370
Ukraine	...	...	698	...	...
Germany	24.436	...	29.593	...	27.248

... Not available.

1 Prognosis.

2 Estimate.

3 According to more recent estimates, this figure is probably too high. Due to different methods of data collection and analysis, however, results on this issue differ considerably.

Sources: FAZ-Informationdienste; BfAI (Bundesstelle für Außenhandelsinformation).

have been placed with Polish enterprises, but also with the French-British consortium Atkins WS-Scetauroute.

30 The FAZ-Länderanalyse (1997) draws the following conclusion: 'In addition to a quantitative growth in consumption in Poland, a growth in quality has also been observed. Opportunities to sell goods of a higher standard and luxury goods have distinctly increased since 1996. Under these positive conditions and additionally supported by further marked real wage increases, private consumption for 1997 ought to again realize an above average increase - according to our estimate, by effectively 7.5%.'

Wide gap³¹ between the abundant supply of consumer goods and income related restrictions to use these new opportunities. Furthermore investments are increasing at a far greater rate than private consumption. Nevertheless shows Poland an increase in domestic demand representing a market of '40 million' buyers.³² In other words, on the basis of increasing real income the 'making of mass consumption' was initiated in the CEE countries even without the backing of a flourishing domestic mass production (an interdependence, which has been typical for the Fordism in West). Admittedly, there is a decisive difference compared to the West European societies and 'model of production' of the sixties: in the case of CEE the 'making of mass consumption' is to a large extent initiated and strengthened from 'outside'.

An impressive example of this is Poland's rapidly expanding automobile market, which today is regarded as the most important one in Central-East Europe.³³ During the first five months of 1996, 167,687 new vehicles were registered in Poland. This is 32.8% higher than for the corresponding period of the previous year.³⁴ With this growth rate, Poland ranks third in Europe, behind Norway (40.2%) and Ireland (36%). The Polish market research institute Samar further reports that in the first six months of 1996 a total of 200,896 vehicles had been sold. As has been the case in previous years, these cars were largely produced or at least assembled domestically. Only a small part has been imported.³⁵

In contrast to the integration path of "complimentary specialization", broad case evidence exists, where western enterprises are including eastern providers of consumer goods in their activities (as a rule this takes place within the framework of joint-ventures

31 About one quarter of the population live in impoverished circumstances (cf. FAZ Länderanalyse).

32 In this context, Habuda et al. observed a connection to the activities of a Hungarian manufacturer of gas cookers: "After liberalization of imports, three groups of household appliance consumers formed; one group with a low income continued to buy cheap East-European products; the middle income group preferred cheaper West-European or Yugoslavian brands (e.g. Gorenje), while the top stratum insisted on buying well known brands. Since liberalization, competition has been intensified in practically every price segment" (p. 22).

33 Currently the total number of registered cars is at 7.15 million, but forecasts for 2010 give a figure of 20 million. The extent of requirements to modernize is reflected in the fact that more than 50% of the cars registered are now more than 10 years old (cf. Handelsblatt 26./27.07.1996).

34 For 1996 a total increase to 373,500 cars, which corresponds to about 41%.

35 Cf. Handelsblatt 26./27.07.1996.

with successively increasing western shares³⁶). Taking over existing firms/plants besides utilizing existing qualifications and production capacities³⁷ is, of course, to a large extent a market driven motivation: either to prevent the entrance of western competitors (e.g. in the case of VW the take-over of Skoda was also set up to prevent the entrance of Renault), or to take up on existing distribution networks and to enter Eastern European markets via products which traditionally enjoy a 'good reputation'.³⁸

Besides joint-venture activities, western producers themselves increasingly set up manufacturing plants. These 'greenfield' investments have increased distinctly and, among other reasons, aim to reduce the conflict potential often contained in joint-venture activities.³⁹

In contrast to a 'supply-base driven' integration path producers from countries further afield in Europe, as well as overseas producers, participate in a relevant manner in efforts to get access to consumer markets by producing locally. This applies in particular to the automobile industry, but also for consumer electronics.

Example GM in Poland: Erection of a new assembly plant in Gleiwitz (Upper Silesia) (start of construction: August 1996; duration of construction: 2 years) with an investment volume between 400 and 500m DM. Capacity is estimated at 70,000 to

36 VW for example, only holds a minority of the share capital of Skoda, but has options for a key shareholding.

37 Firstly: utilization of the high qualification level of skilled workers and technicians in combination with the 'collective knowledge' based on experience in process- and product know-how (example Skoda: for 100 years not only cars have been manufactured there. Skoda was also the only manufacturer in the whole COMECON to market a new vehicle which they had developed themselves). Secondly: utilization of existing machines and plants. Even if these meet Western standards only in part (body-shop at Skoda, the recourse to the old means of production is still profitable. Stepped-up mechanization on the model of the West does not make much sense in the face of lower numbers of units, the labor cost differential and, last but not least, the 'talent for improvisation' of the skilled workers in the East, particularly in the work-intensive sections of production (assembly). Obviously, the activities are restricted to a successive renewal of the existing plants.

38 Which at the same time mark the prerequisite for a joint venture to come into being.

39 Cf. Hans-Böckler-Stiftung (1995), The VDMA comments on the increasing importance of 'independent western initiative'. 'One of the reasons lies in the still laborious dealings with East-European partners. The different interests are often revealed in contract negotiations. The Eastern side is looking for new technologies, investment capital and the opening up of western markets. The German

100,000 vehicles annually. Production start is envisaged for mid 1998. As far as the manufacturing process layout is concerned, Opel Eisenach is not only for GM *the* reference planting as such. This pattern of a new "core plant" comprises, as is well known; not only assembly, but also core manufacturing processes, such as body pressing/assembly and painting. Based on Opel Eisenach's capacity, 2,000 jobs are a possibility. No definite decision has been reached regarding models.

Fiat's commitment in Poland dates back to the year 1965, when the Fiat 125 was produced there for the first time. Of the 1.3bn U.S.\$ which foreign producers have so far invested in Poland, 1bn has been invested by Fiat. Further investments totaling 1.5bn DM are being planned. In its Polish plants Fiat produces the 126 model as well as different versions of the Cinquecento and Uno. Approximately 55% of the vehicles produced are destined for export.

In 1996 the South-Korean DAEWOO-group bought the FSO-plants for 1.1bn U.S.\$. In the same year, Poland became the most important market for DAEWOO in Europe (38,000 units of the Nexia, Tice and Espero models. For comparison, Romania 22,000; Great Britain 21,400; Germany 19,000 and Spain 14,000). 85% of the vehicles sold in Poland originated from domestic assembly. The second regional focus of commitment in Eastern-Europe is Romania where, starting in 1998, 200,000 vehicles are to be produced annually.

DAEWOO Electronics Manufacturing Poland (investment volume 165m U.S.\$) produces 600,000 color TV-sets annually, of which one third are contract manufactured for West European brands. Latest customers are Hitachi and Matsushita Electric Industrial (Japan). Added to this are 100,000 washing machines, 200,000 refrigerators and 200,000 car radios. In addition to the color TV-set plant, Daewoo has erected another building and production complex in Pruszkow for household appliances and consumer electronics.

side generally pays attention to the low labor costs and the national market as well as the markets in

The medium and long term effects of a market driven integration very heavily depend on the 'mission' of the CEE manufacturing facilities. Although there are more open questions than clear answers, some trends are to describe:

a) The CEE subsidiaries are manufacturing the same products than their West European mother companies are producing in the West (type of local content according to the pattern 'from Poland for Poland'). This 'mission' aims at a pure market occupation⁴⁰ by the western producer. Although it offers job growth, there are no qualitative development and growth perspectives for the facilities located in CEE.⁴¹ The weight of the CEE facilities is reduced to final assembly of parts and components prefabricated in the West (CKD sets). At best infrastructure improvements can be expected in order to reach the 'logistic level' and meet the matching demand of western 'supplies'. GM's (Opel's) commitment at FSO (Fabryka Samochodow Osobowych) stands for such an 'assembly philosophy'. Since 1994, approximately 10,000 Astras are annually assembled there for Opel. Since FSO in the meantime in the majority belongs to DAEWOO, the future of this joint-venture is open. However, it is expected that for the next two or three years, the Astra is still being assembled there and at a later stage, a component production might be started.

Of course, such a sub-complex task-setting could be the preliminary stage to intensify division of labor and cooperation activities (in the case of joint-ventures) and the expansion of manufacturing plants (in the case of 'greenfields') to real transplants. DAEWOO stands for such a stepped-up strategy of integration and division of labor strategy. Although the Polish brand Polonez is currently still being produced in Polish plants (approx. 100,000 units), DAEWOO clearly strives for a take over and production of Korean models into the product and production spectrum of the Polish plants. The

Eastern Europe' (quoted from *ibid*).

40 This also becomes clear from the fact that a considerable part of the products is reexported to the West (at least this is true for the automobile industry)

41 In the years from 1990 to 1995, the German electrical and electronics industry, according to estimates of the ZVEI (Central Association of the Electrical and Electronics Industry) created about 100,000 jobs abroad, 37% of them in Eastern Europe (*Handelsblatt*, 25./25.07.1996).

Polish location represents a strategic basis of operation, not only to gain access to the Polish domestic market, but also to the entire West European markets.

An example for a 'greenfield' plant on a large scale is the previously mentioned GM-plant in Gleiwitz (Poland). The new factory site receives the status of a special economic zone with the result that not only production equipment but also parts and components are permitted to be imported duty-free.

The repercussions of this expansive transplant strategy for Central-European locations are contradictory also in view of the supply industry. Positive job effects (at least for new establishments and, of course, depending on investment volume) are faced with the 'autonomization' and a 'foreign control' of eastern enterprises by the west. Experiences with transplants in other country show that research and development activities are, in general, left to western headquarters and local supply relationships are reduced to downstream supply chains.

b) The facilities in CEE manufacture products designed particularly for the CEE markets. Without question this describes a constellation which, firstly, in a fundamentally different fashion than a) takes up existing market conditions and consumption patterns, and which, secondly, makes much more use of already existing manufacturing expertise as well as product know-how.⁴² It also has its sight set on developing and supplying third markets situated further west or even developing countries (Fiat in Poland; Bosch-Siemens-Hausgeräte in Lodz, washing machines). There are mainly two factors which decide on extent and quality of growth dynamics: first, whether product profile and product quality are being optimized and in the medium term thereby are also able to withstand increased competition of western products (i.e. what about incremental innovations in the eastern facilities?). And closely connected to this, secondly, whether the CEE locations in the course of their own further qualification and specialization hand over certain functions to others less developed ('flying geese'). The increasing direct investments of transformation countries abroad -- mainly in

neighboring countries of the region (CIS, Russia) suggest such a development to 'Eastern Tigers'⁴³ (cf. table 5).

42 This applies, of course, mainly to joint-ventures. The starting conditions and effects outlined in a) hold for new business starts.

43 Cf. DIW Wochenbericht 11/1997.

Table 5:
Direct Investments from Transformation Countries Abroad 1993 through
1996¹ (Inventory Figures²) in Mill. US \$

Region	1993	1994	1995	1996	01.07.1996 ²
CEFTA ³	359	744	1.209	1.813	1.865
Poland ⁴	101	198	262	328	343
Slovakia	...	...	...	55	58
Czech Republic ⁵	32	78	176	209	232
Hungary	226	227	293	489	496
Slovenia ⁴	...	242	477	733	735
The Baltic States	...	8	9	16	45
Estonia	...	8	9	12	38
Latvia ⁴	...	...	...	4	5
Lithuania	...	...	...	1	2
Central Eastern Europe Total	359	752	1.218	1.830	1.910
CIS-States	1.566	2.299	3.119	3.244	3.364
among them:					
Russian Federation	1.566	2.288	3.099	3.160	3.269 ⁶
Ukraine	...	11	20	84	95

... Not available.

1 In each case the beginning of the year.

2 Preliminary.

3 Central European Free Trade Association.

4 Figures in currency of the country, converted according to exchange rates of the end of the respective year.

5 Cumulated rates of flow of the balance of payments.

6 New collection method since 1996.

Source: UN-ECE 1996, based on national statistic; calculations of the DIW; in DIW-Wochenbericht 11/97.

c) The CEE locations were concentrating on a specific product segment which fits both the CEE market as well as the lower segments in Western Europe. This integrated strategy contains a specific type of division of labor. The reason, initially similar to complimentary specialization, is oriented towards increasing competitiveness of the

entire group of companies. In contrast to complimentary specialization, chances for CEE manufacturing facilities are, however increasing to sell complex products with great production depth and their own production image on the world market. This may be accompanied by considerable loss of autonomy for the CEE group of companies. Decisive for growth and 'success' of the CEE facilities -- which for this case could also indicate considerable regional spillover effects -- are its independence and competence concerning research and development, logistics, procurement, marketing and financing.

A positive example of know-how and innovation transfer is the joint venture Skoda-VW. The joint venture includes the agreement to set up innovation in products and manufacturing processes, research and development are operated jointly. The Czech supply industry also receives technical aid from VW in order to secure quality standards. Besides optimizing traditional Skoda-brands ('Skoda-Felicia') and their own production of two engines, VW-Skoda has developed a new model ('Octavia') and has already been able to place it in the market. According to group-chief Piech, Skoda-VW in future is to be positioned distinctly higher in the VW-group. Based on the latest Golf-platform, Octavia was fitted with a 'western flair' design which, 'according to all relevant aspects (target clientele, history, image and competitiveness) was a 'hit'. The 'new pearl of the East' has in the current year 1997 already increased Skoda sales by 30% to 340,000 automobiles (the market share of this model in Germany is almost one percent).⁴⁴

Regional embeddedness of market driven manufacturing activities

Already at this point regional spillover effects are evident in the form of supply networks which -- as far as the first supply chain is concerned -- are being newly established. Central actors in this restructuring process are not so much the end producers which attempt to reduce allocate costs, but their main suppliers (systems suppliers and 'single source' suppliers). In the wake of the end producers they erect their own supply plants or restructure local supply firms and reorganize the downstream

44 Cf. Handelsblatt 18./19.04.1997.

supply levels.⁴⁵ Their future prospects should be rather different, whereby a number in the long run may surely establish themselves in western production associations with their own suppliers.

Example: Lucas Industries, the world's largest producer of brake systems, electric and electronic systems as well as fuel injection systems. After VW's entry at Skoda, Lucas Industries expanded its commitment with the Czech enterprise Autobrzdý, which as early as 1984 supplied disc brakes and cylinders for Skoda (turnover 90m DM; 850 employees). Skoda is planning (Tender 1994) to transfer production and assembly of entire modules to about ten system suppliers which increasingly also take on development tasks. In future, the suppliers are to assemble the modules on the assembly line at their own responsibility.

References

- Beyfuß, Jörg (1996): Erfahrungen deutscher Auslandsinvestoren in Reformländern Mittel- und Osteuropas. Reihe: Beiträge zur Wirtschafts- und Sozialpolitik, Institut der deutschen Wirtschaft Köln, 232. Deutscher Institutsverlag. Köln.
- BfAI (Bundesstelle für Außenhandelsinformationen) (1996): Wirtschaftsdaten aktuell. Laufende Berichterstattung.
- Conert, Hansgeorg (1990): Die Ökonomie des unmöglichen Sozialismus. Krise und Reform der sowjetischen Wirtschaft unter Gorbatschow. Westfälisches Dampfboot. Münster.
- Deutsche Bundesbank, Monatsbericht Juli 1996 (1996): Neuere Tendenzen in den wirtschaftlichen Beziehungen zwischen Deutschland und den mittel- und osteuropäischen Reformländern. Frankfurt am Main.
- DIW (Deutsches Institut für Wirtschaftsforschung) 11/1997 (1997): Ausländische Direktinvestitionen in den Transformationsländern. Wochenbericht, 64. Jg., Heft 11, Berlin.
- DIW (Deutsches Institut für Wirtschaftsforschung) 14/1997 (1997): Europäische Union: Osterweiterung beschleunigt Konvergenz. Wochenbericht, 64. Jg., Heft 14, Berlin.
- FAZ-Informationendienste (1997): Länderanalysen der Frankfurter Allgemeinen Zeitung GmbH. Polen: stabiler Aufstieg des polnischen Adlers; Ungarn (Hauptbericht): Überzeugende Rückkehr auf den Wachstumspfad; Tschechische Republik; Slowakische Republik (Hauptbericht): Leistungsbilanzdefizite initiieren Abwertungsdiskussion. Frankfurt am Main.
- Habuda, Judit; unter Mitarbeit von Marga Jennewein und Erich Langmantel (1997): Perspektiven der ungarischen Industrie im Spiegel der europäischen Integration. Reihe: ifo Studien zur Osteuropa und Transformationsforschung. Weltforum Verlag . München, Köln, London.

45 In 1993, Skoda cooperated with 210 Czech, 25 Slovakian and 105 other foreign suppliers. On a medium-term basis, the Czech suppliers are also expected to supply other companies within the VW-group as well (cf. Hans-Böckler-Stiftung 1995).

- Habuda, Judit; Jennewein, Marga; Oppenländer, Karl Heinrich (1996): Der Transformationsprozeß in Ostmitteleuropa. Stärkung der Mikroebene angesagt. ifo Studien zur Osteuropa und Transformationsforschung. München, Köln, London: Weltforum Verlag;
- Handbuch für Investoren im Ostgeschäft: div. Erg.-Lfg. 1995-1997. Industrie- und Handelskammer Kassel.
- Hans-Böckler-Stiftung (1995): Ein Status Quo-Bericht zu Polen und Ungarn sowie der Tschechischen und Slowakischen Republik. Gutachten im Auftrag der Hans Böckler Stiftung; Bearbeiterin: Nina Boschmann. Manuskript.
- Keilhofer, Franz X. (1995): Wirtschaftliche Transformation in der Tschechischen und Slowakischen Republik. Das ORDO-liberale Konzept der Wettbewerbsordnung und seine Bedeutung für die wirtschaftspolitischen Herausforderungen in Mittel- und Osteuropa. Reihe: Schriften zum Vergleich von Wirtschaftsordnungen, Band 51. Herausgegeben von Gernot Gutmann; Hannelore Hamel; Klemens Pleyer; Alfred Schüller; H. Jörg Thieme. Gustav Fischer Verlag. Stuttgart, Jena, New York.
- Kornai, Janos (1980): Economics of Shortage. Amsterdam: North Holland.
- Nove, Alec (1977): The Soviet Economic System. London: Allen&Unwin.
- Steffens, Marec Béla; Sundrum, Lisa (1993): Joint Ventures in der Telekommunikationsindustrie -- Erfahrungen eines Großunternehmens in Osteuropa, in: Osteuropa-Wirtschaft, 38. Jg., Heft 1, S. 47-55.
- Zeitungen und Zeitschriften (div. Jg.): Handelsblatt, Frankfurter Rundschau, Süddeutsche Zeitung, VDI-Nachrichten sowie SiemensWelt (1997), Heft 3.