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The Economic Integration of Post-Wall Germany

By IRWIN L. COLLIER, JR. AND HORST SIEBERT*

"...it would be hard to devise a better controlled experiment for comparing different economic systems than the experience provided by East Germany and West Germany: two nations that formerly were one, occupied by people of the same background, the same culture, and the same genetic inheritance, torn apart by the accident of war. On one side of the Berlin Wall is a relatively free economic system; on the other side, a collectivist society." Milton Friedman (1986, p. 89)

Modern experimental economics cannot duplicate experiments of the scale or the duration of postwar Germany. Now post-wall Germany offers a fascinating follow-up experiment to test the economic integration of an ex-centrally planned economy into a larger, established market system. In this paper we examine the experiment that began with the monetary, economic and social union (MESU) of the two Germanies last July.

The MESU treaty was signed on May 18, 1990. Two bold strokes resolved the issues of the institutional framework for economic integration and macroeconomic stability. The economic order of the FRG was transplanted to the GDR and East German fiscal and monetary sovereignty was transferred to West Germany in advance of the political act of German unification.

Two processes will determine the size of the post-wall integration dividend. The first process is the privatization of the East German economy — the assignment of private rights to existing East German assets. The second process involves real economic adjustments, including adjustments by existing firms and the creation of a broad base of new small and mid-size businesses. The gains from integration arise from merging a large open economy, relatively well-endowed in capital and technology, with a smaller, semi-autarkic economy, relatively well-endowed in labor and land. While the long-run prospects for Germany look excellent, problems encountered in the privatization and the adjustment

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processes make it unlikely that the integration of the post-wall German economies will be quick and easy.

Initial conditions and long-run prospects

According to Western estimates of relative real consumption based upon detailed consumer price comparisons and expenditure data for both Germanies, real consumption expenditure by East German working families was only about half the West German level (Collier, 1989). Because of higher labor force participation rates, longer work weeks, and shorter vacations in the GDR, average East German living standards were much less than half the West German level during the last half of the 1980s. The ecological gap between East and West Germany was at least as wide.

Aggregate investment in East Germany dropped sharply during the first half of the 1980s and one could sense a steady deterioration of East Germany's infrastructure and housing stock over the past decade. There were clear indications that planned investment was inadequate to sustained planned growth of output (Collier, 1987).

Looking beyond the crumbling buildings, obsolete equipment and desolate state of the environment, the long-run prospects for East Germany are bright. Within four or five years we expect to see major progress in living standards and productivity as well as effort at ecological recovery. The contributing factors for this rapid growth scenario may be identified as i) the economic integration effect, ii) the capital accumulation effect and iii) the impact of the market economy on economic behavior.

Economic integration of East and West Germany will exploit differences in factor endowments. West Germany contributes abundant capital and technology whereas East Germany brings a dowry of well-trained — though not necessarily cheap — labor and land. Thus, there will be gains from increased specialization as the new states open themselves more than ever before to exploit trading opportunities with West Germany and the rest of the world. The inability of East German industrial products to compete successfully in international markets in the past was largely due to insufficient specialization in production that limited economies of scale and to a lack of innovation. Furthermore, almost all East German producers were at the mercy of single domestic or CMEA suppliers for critical materials and components. Finally, the regional structure of East German foreign trade, especially its extremely large share of trade with CMEA partners, reflected political constraints rather than economic logic.

The capital accumulation effect is the positive association of high rates of growth with high rates of capital accumulation for economies that start from relatively low endowments of capital per capita. The capital stock East Germany brought into united Germany is largely economically and ecologically obsolete. Almost 55% of industrial equipment was installed over one decade ago, compared to about 30% in West Germany. This is somewhat comparable to the situation of the West German economy in 1948 when high rates of capital accumulation were necessary to rebuild a war damaged capital stock and to equip a labor force that had grown by approximately twelve million eastern refugees (Siebert, 1990).

The final reason for the favorable long-run prospects of the new states of the FRG was demonstrated in the controlled experiment mentioned at the beginning of this paper: economic system matters a great deal for economic performance. Following the economic and monetary reform of 1948, industrial production increased in the Bizone (British and American zones) at an annual rate of 50% within five months. From the second half of 1949 through the end of 1951, real GNP grew at 17% annually in West Germany. Were history to repeat itself, the new federal states could make up for much lost time by 1995.

1990 is not 1948

One must resist the temptation to overstate common patterns between West Germany in 1948 and East Germany in 1990. The most important difference between the two starting points is that East German firms entered German MESU as inefficient producers. The adjustment to the market economy in the new federal states entails a J-curve with a substantial drop in production and elimination of unnecessary jobs. In November, there were 589,000 unemployed — an unemployment rate of only 6.7%. But a far more accurate reflection of idle labor resources and a forecast of 1991 unemployment in East Germany is found in the 1.77 million workers on short-time.

The wage-setting process is also different now from 1948. The wage level in East Germany at the start of economic integration is completely out of line with productivity and wages are likely to grow even faster than productivity. Without an exchange rate to depreciate that would increase the competitiveness of East German firms, the wage rate should have taken over the function of giving East Germany a temporary comparative advantage in labor intensive industries. However as workers continue to move to higher paying jobs in the West and unions in East Germany (with the support of unions in the West) continue to push for wage increases to close the East/West wage gap, cheap labor will be only a fleeting advantage that the new states possess for attracting investment.

The social union that went into effect simultaneously with the monetary and economic union in July extended a social welfare system that has evolved to fit a relatively rich, well-proportioned economy to cover a much poorer economy in the middle of significant real adjustments in the transition from central planning to a market system. Direct investment in existing firms that require large cuts in the workforce will be discouraged because the dismissal constraints represent significant entry costs.

Problems of transition — reorganization and privatization

The core of the adjustment process is the restructuring of East German industry. In the restructuring of existing firms three different aspects need to be distinguished: (i) legal independence of the constituent enterprises in the large industrial trusts (Kombinate), (ii) economic efficiency of the individual enterprises and (iii) ownership.

Most of East Germany's production (1988) had been organized into 316 Kombinate, of which 221 were vertically and horizontally integrated industrial Kombinate. The Kombinate were protected from domestic competitors by governmental market delineation, while an extreme policy of planned specialization within CMEA protected the Kombinate from foreign competitors as well. The first stage of reorganization was completed when all the constituent firms of the Kombinate (approximately 8000) were declared legally independent economic units by law.

Now subject to formidable competitive pressures, East German firms must increase their efficiency by restructuring their input and product mixes: the production of inputs in-house that are cheaper to buy from other firms will be discontinued; departments dedicated to prolonging the life of economically obsolete capital will be shut down; product lines motivated by political considerations will be abandoned; and the provision of social services such as kindergartens will be eliminated. Cutting back the work force is clearly the most sensitive issue facing managers. Through the end of June 1991, managers have the option of keeping people on the payroll as short-time workers with a large part of the difference in earnings paid by the government. This is the reason why industrial production has fallen by half without a corresponding jump in unemployment.

The organizational restructuring of East German firms is closely linked to the issue of privatization. The rights to publicly owned firms were transferred to a new government trustee agency, the Treuhandanstalt. The primary task of the Treuhand is to privatize East German firms. The Treuhand has a secondary task which is to restructure industry, and if the net value of assets (i.e. privatization receipts less costs of restructuring) is positive, to transfer the net receipts from privatization to either the governments or the people of the new federal states. Thus the legislative intent was that the Treuhand should only exist for the time necessary to accomplish these tasks. However there is a genuine risk that the Treuhand might evolve into a super 'machinery' of sectoral policy exposed to strong political pressures.

Should the Treuhand restructure firms before offering them to private buyers or sell each firm "as is" and let new owners do the restructuring? This has been the subject of considerable public debate in Germany, and apparently within the Treuhand as well. The restructure-first approach has been rightly criticized on Hayekian grounds that the Treuhand has insufficient information for selecting winners from the losers for the allocation of scarce resources generated by the Treuhand's borrowing or from revenue generated in earlier privatizations. The Treuhand has also met with severe criticism for not proceeding faster with privatization. In 1990 Treuhand sales amounted to only about 1.5 billion DM.

The reorganization of existing firms is just one aspect of the restructuring of the East German economy. An important task of restructuring is to encourage the creation of new and small firms. New firms are needed to absorb the employees laid off as inefficient firms cut employment or shut down altogether. The distribution of firms in manufacturing by number of employees in the GDR in 1987 was characterized by a relatively small share of firms with fewer than 100 employees (4.4% vs. 35.9% in the FRG).

Over 226,000 new businesses have been established in the first ten months of 1990. About half of the new businesses are in retail trade and restaurants. Strengthening this growing *Mittelstand* will be the former owners (or their heirs) of small reprivatized enterprises. About one fourth of the 12,000 small firms previously nationalized have been transferred back to the original owners.

Barriers to investment. Is capital really a timid deer?

German economic integration constitutes a Schumpeterian "event" or a "new frontier" in the sense of Alvin Hansen. Vast quantities of investment will be needed to get restructured firms started and to create new jobs. While a strong boom in West German investment is underway, nothing comparable can be seen in the East as of yet.

The German MESU treaty was drafted with two primary goals in mind. First, it was hoped that the introduction of the DM would check the out-migration of East German labor by changing expectations of future living standards in the East. After dropping to a net out-migration of 12,000 per month in May and June, the flow increased to 30,000 per month during July through September. Second, by transplanting West German economic law, the treaty gave investors a legal environment for investment identical to that in West Germany, at least in principle. The May 18 treaty was supposed to signal the start of the great capital race into East Germany. However, with the notable exception of West German financial institutions and retailers, both West German and foreign investors have stayed pretty close to their starting blocks.[1] Their caution is not ill-founded.

Uncertainty in titles to land. Returning land titles to original owners sounds like a simple and obvious way to reestablish property rights in land. However the passage of time has complicated matters considerably and public records of land ownership turn out to have been badly neglected in East Germany. Establishing title to any particular property can be quite difficult, especially at a time when millions of people want to check these public records simultaneously! There is a pressing need for some form of title insurance in East Germany now.

The infrastructure bottleneck. The rundown public capital stock of roads, railways, airports and telecommunications is wholly inadequate for the rapid development of the new federal states. There are two issues in widening the infrastructure bottleneck: how fast can the East German infrastructure be expanded and how will the expansion be financed? Lags in supplying public infrastructure investment can be both long and variable — Germany is no exception. Considering the time factor alone, there is a strong argument for privately financing as much infrastructure investment as possible. The argument is considerably strengthened by the prospect of huge future government budget deficits.

Space for new businesses. This is an infrastructural bottleneck that has major consequences for the rate of new job creation. New firms must be able to acquire office space, warehouse space and locations for setting up production facilities. New industrial and office parks as well as shopping centers are sorely needed.

Macroeconomic aspects of German unification

The united German economy is divided into an economic boom in the West and an enormous contraction of economic activity in the East. The West German economy is growing faster than it has in nearly 15 years. Real GNP in the West has grown 4.5% in 1990 with 3% real growth forecast for 1991. In comparison, industrial production in the new federal states has plummeted — from August to October 1990 it had fallen 51% below the monthly levels of the previous year.

Ex ante it should have been obvious that German economic unification would initially constitute a strong negative shock to the aggregate demand for East German goods and a positive shock to the aggregate demand for West German goods. East Germany went from a position of semi-autarky to one of complete opening to West Germany and all of West Germany's trading partners and the average quality of East German products was far below the western standard. Without subsidies for many of the products exported to Western markets (Pentacon cameras for example), there was no reason to expect the initial impact of unification to increase East German "exports" to West Germany much, if at all. In fact, compared to one year earlier, September deliveries to East Germany had increased by 277% while the flow of goods from East Germany only increased by 36%.[2]

Despite the collapse of production in the new federal states, the economic and social union of the Germanies has increased the disposable income of East German households. Unfortunately for East German producers, western products have been getting a large share of that spending. Purchases by East German consumers contributed between a half to a full percent of the real GNP growth in the <u>old</u> federal states in 1990 and are expected to account for another .5% of the growth in 1991.

The expected combined budget deficit in 1991 for all German federal, state, and local governments (including social insurance funds) — on a national accounting basis — has been forecast by the Kiel Institute of World Economics at 130 billion DM. Estimates of the 1991 deficit of 150 billion DM (5.4% of GNP) are now reported in the financial press. Relative deficits of this size were last experienced in 1975 and 1982 when the government budget deficits were 5.7% and 4.1% of GNP, respectively.

Progress on deficit reduction over the next several years will have to come primarily from spending cuts, non-tax sources of revenue (e.g. private financing of infrastructure in the East and the privatization of government assets in the West) and economic growth in the new federal states.

The five leading West German economics research institutes estimate potential cuts in the defense budget of 5-6 billion DM and 10 billion DM in personnel and non-personnel expenditures, respectively (from a total defense budget of 55 billion DM). There are approximately 130 billion DM of government subsidies, including hidden tax breaks, that could be pruned back for savings of 20-30 billion DM annually. Privatization of a part of the telecommunications sector controlled by the Bundespost or of other federally owned firms such as Lufthansa is being considered as another possible source for deficit reduction.

Over the past decade West Berlin has cost West German taxpayers about 20 billion DM annually. Between 1951 and 1990 the support for Berlin and the zone-border regions plus miscellaneous "costs of division", such as the payments for East German political prisoners, totalled over 400 billion DM, 85% of which went to West Berlin.[3]

The political economy of German economic integration

We close by reminding the reader of an obvious difference between 1948 and 1990 — 1948 is part of the historical experience shared in the united Germany of 1990. Erhard's success inspired the self-confidence of West German policy makers last spring as they pushed for a swift and radical break from the institutions of the centrally planned economy in East Germany.

In the East we observe an understandable though unrealistic expectation that West German levels of real consumption can be achieved without closing the productivity gap between East and West. East German impatience for West German prosperity has been enhanced by an entitlement mentality that has survived the economic system that fostered it. These psychological factors still have the potential to complicate both the privatization and real adjustment processes of German economic integration. If in response to political demands government intervention comes to dominate market adjustments during economic integration, structural change in the new federal states could likely repeat West Germany's experience with sectoral policy for declining industries on a much larger scale. The risk of the new federal states turning into a Mezzogiorno is genuine.

Will the new united German polity allow the market a chance to prove itself once again? The economic question for Germany in the 1990s will be whether the German federal government can step back from playing the lead role in German integration now that the institutional foundations have been completed (pending successful privatization) and play only a supporting role in rebuilding East Germany's infrastructure and environment. In 1991 the Treuhand will no longer guarantee credit for working capital and most of the short-time workers will make the statistical transition to the ranks of the unemployed. Headlines will be dominated by news of plant closings and soaring unemployment. The demand for government action will be difficult to resist. German policy makers will need steady nerves and stamina if the benefits from the windfall of German economic integration are not to be squandered.

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FOOTNOTES

1 The five leading German economics research institutes estimated in October that 5 billion DM of direct investment would flow into the East German economy during 1990 and that another 15 billion DM would follow in 1991.

2 *Handelsblatt*, November 26, 1990.

3 *Handelsblatt* November 12, 1990.

Appendix Table 1 East German economic activity

	Average annual growth rates (percent)		1990 (Percent change from same month in 1989)								
	1980-85	1985-89	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
INDUSTRIAL PRODUCTION											
Total	3.5	2.9	-6.0	-4.4	-3.7	-4.0	-9.5	-16.0	-42.4	-50.9	
Energy and fuel	3.8	1.0	-3.0	-6.2	-6.8	-14.8	-7.7	-12.1	-40.1	-47.7	
Chemicals	2.5	2.2	-6.4	-9.6	-8.9	-5.7	-14.8	-20.1	-40.2	-51.5	
Metallurgy	1.5	1.4	-5.6	-8.0	-4.9	-6.0	-9.7	-23.0	-60.3	-66.9	
Building materials	.1	2.2	-7.7	-4.5	-4.0	-6.5	-2.6	-2.7	-37.0	-59.4	
Water	.8	1.4	6.8	-0.2	4.7	2.9	5.8	10.1	-10.4	0.8	
Machinery and vehicles	4.0	3.7	-11.3	-6.9	-3.0	-0.9	-2.5	3.8	-28.8	-35.8	
Electrical machinery, electronics, instruments	8.5	8.5	-6.7	-4.0	-0.2	-0.8	-1.1	-6.6	-32.7	-46.7	
Light industry	2.6	3.2	-4.2	-3.8	-2.3	-7.7	-12.9	-24.8	-51.1	-55.4	
Textiles	2.0	2.8	-3.2	-5.9	-1.4	-4.0	-18.8	-27.8	-51.3	-55.1	
Food	1.9	1.2	-1.4	-2.7	-4.9	-8.3	-13.3	-28.0	-57.7	-61.4	
CONSTRUCTION											
Dwellings built or modernized	.7	-5.5	-32.9	-35.6	-38.6	-35.2	-21.2	-41.0	-39.8	-44.4	-38.6
FREIGHT TRANSPORTATION											
Rail (tkm)	-1.4	4.8	-8.5	-9.9	-9.3	-12.2	-15.3	-23.1	-45.3	-52.3	-52.9
Canal, GDR fleet only (tkm)	...	.1	-12.3	-5.7	4.4	0.0	-1.6	12.3	-8.4	-45.9	-18.6
Trucking (tkm)	-5.1	3.6	-5.8	99.7	-6.7	-4.2	1.0	-7.3	-19.8	-24.8	...
RETAIL SALES											
Total	2.5	3.7	8.7	11.9	1.5	4.5	2.9	-9.1	-44.0	-44.8	-46.1
Food, drink and tobacco	2.5	2.1	4.0	5.3	1.1	8.8	4.7	2.8	-36.3	-34.2	-36.4
Shoes and leather goods	3.2	5.8	25.0	21.0	-0.8	-0.3	-0.3	-22.3	-53.3	-58.1	-55.9
Textiles and clothing	.7	5.2	18.5	18.9	0.3	-2.1	-4.9	-31.0	-54.5	-57.9	-58.5
Furniture, music instruments, sporting goods	.9	5.0	10.8	14.7	4.5	6.0	13.5	-10.6	-52.6	-58.4	-57.2
Household products	4.5	5.2	13.7	25.8	5.8	-0.3	-3.8	-29.6	-56.1	-58.6	-56.5
Technical products and vehicles	2.3	6.2	6.6	9.8	-5.6	-13.9	-27.7	-51.9	-68.5	-69.0	-72.4
Health, beauty, other household chemical products	3.5	5.0	1.0	13.3	-0.7	0.3	2.7	-17.6	-54.8	-55.9	-49.8
Building materials and fuels	5.0	4.7	20.3	28.9	14.5	22.8	39.1	37.9	-17.8	-21.2	-20.8

Appendix Table 2 East German migration, unemployment and prices

	1989	1990 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
MIGRATION (thousands)												
Emigration	297.0	46.1	48.9	48.9	28.4	17.7	17.3	34.0	34.0			
Immigration	52.9	5.9	4.7	5.0	4.9	4.9	6.1	2.9	2.9			
Net emigration	244.1	40.1	44.2	43.9	23.6	12.8	11.2	31.1	31.1			
LABOR MARKET (thousands)												
Unemployed		7	11	38	65	95	142	272	361	445	537	589
Short-time employees		...	...	...	...	...	...	660	1500	1730	1704	1774

COST OF LIVING	Average annual growth rates (percent)		1990 (Percent change from average 1989 price level)									
	1980-85	1985-89					May	Jun	Jul	Aug	Sep	Oct	Nov
Total	1.4	1.2	...	...	...	...	-1.7	-12.1	-5.5	-5.1	-3.4	-1.8	-1.9
Food, drink, tobacco	.4	.4	...	...	...	...	0.9	-2.6	15.4	11.9	11.4	12.2	12.4
Clothing and shoes	3.6	2.6	...	...	...	...	-11.0	-48.3	-42.5	-40.1	-35.6	-33.7	-31.9
Housing rents, energy for home	.1	.0	...	...	...	...	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Furniture,household	1.4	3.1	...	...	...	...	-4.0	-15.2	-25.5	-25.1	-23.7	-23.4	-23.4
Health and beauty	3.2	1.8	...	...	...	...	-7.7	-11.5	19.4	21.4	22.6	23.4	...
Transportation, communications	2.6	.4	...	...	...	...	0.2	-6.6	-14.8	-10.8	-10.2	-7.5	...
Education, entertainment, leisure	1.2	.9	...	...	...	...	6.4	-11.7	-11.5	-9.1	-4.8	-0.4	...
Other goods, n.e.c.	1.2	1.4	...	...	...	...	-9.5	-7.4	-1.0	2.0	5.1	...	...

Appendix Table 3 East German family budgets (2 parents, 2 children)

	1989		1990			
		Average Jan-Mar	Apr	May	Jun	Jul
	GDR marks	GDR marks	GDR marks	GDR marks	GDR marks	DM
Household net income (monthly)	2318	2609	2414	2559	3128	2328
Expenditure for goods and services	1814	1930	1830	1977	1721	2401
Food	523	506	579	603	572	537
Alcohol and tobacco	188	170	170	177	162	123
Shoes, handbags and leather goods	66	75	74	98	47	50
Textiles and clothing	219	226	209	226	137	160
Electrical products	81	79	52	57	41	164
New and used cars, parts	99	123	56	43	85	706
Other goods n.e.c.	394	421	446	538	422	363
Housing rent	55	56	56	54	54	55
Entertainment, education, leisure	57	143	54	41	37	99
Other paid services	131	133	134	140	164	144
Taxes, insurance and dues	208	197	266	209	172	142
Net saving	295	481	317	373	1235	-216

Source:
Authors' calculations based upon data published in Statistisches Amt der DDR, *Statistisches Jahrbuch der Deutschen Demokratischen Republik 1990* and Gemeinsames Statistisches Amt, *Monatszahlen Oktober 1990.*