

Büchtemann, Christoph F.; Schupp, Jürgen

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Patterns and Trends in the Socio-Economic
Transformation of East Germany**

by

Christoph F. Buechtemann and Juergen Schupp***

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Deutsches Institut für Wirtschaftsforschung

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Repercussions of Reunification: Patterns and Trends in the Socio-Economic Transformation of East Germany

by
Christoph F. Buechtemann and Juergen Schupp***

- * Senior Fellow, Human Capital Department, The RAND Corporation, Santa Monica, California, U.S.A.
- ** Research Associate, German Institute for Economic Research (DIW), Berlin, Germany, and currently (April to November 1992) visiting scholar at the RAND Corporation, Santa Monica, California, U.S.A.

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Deutsches Institut für Wirtschaftsforschung, Berlin
Königin-Luise-Str. 5, 1000 Berlin 33
Telefon: 49-30 - 82 991-0
Telefax: 49-30 - 82 991-200

1. Introduction

The fall of the Berlin Wall on 9 November 1989 initiated a historically unparalleled process known as German reunification. Since the coming into effect of monetary, economic, and social union of the two Germanys on 1 July 1990 and the subsequent formal accession of East Germany to the Federal Republic of Germany on 3 October 1990, the world has become used to speaking of "unified Germany" consisting of 16 member states, the eleven "old" federal states (*Bundeslaender* including Berlin) of previously West Germany and the five "new" *Bundeslaender* that formerly made up East Germany or what was called the "German Democratic Republic".

But does the term "unified Germany" properly describe what we find some two to three years after the Berlin Wall came crumbling down? In political and institutional terms the two parts of Germany have indeed been "united": with the bilateral state treaty about the creation of a monetary, economic, and social union of 18 May 1990, that went into effect on 1 July 1990, and the subsequent passing of the unity treaty of 31 August 1990 by both German parliaments that on 3 October 1990 effectively dissolved East Germany as a political unity and made it part of the Federal Republic of Germany, the political and institutional order of the former GDR was virtually abolished and the five newly created *Bundeslaender* were incorporated into the preexisting and persisting political and institutional order of formerly West Germany. That is why sociologists have argued that "incorporation" would indeed be a better term than "unification" to describe the political and institutional transition process (1).

But whereas in a radical breakup, as it has since occurred throughout Central and Eastern Europe, formal institutions can be suddenly altered, redefined, or replaced, the transformation of their social and economic substrata including the social-psychological structures imposed on people by the old institutional order is a much longer and open-ended process. As such, German unification, despite political and

institutional unity, is to viewed as an ongoing and in its historical uniqueness largely experimental project, the further progress and eventual outcomes of which are likely to leave their marks not only on East Germany, but also on West Germany and the emerging political, economic, and social "new world order" at large.

In the following paragraphs we give a brief description of the first, but decisive stages of the German reunification "project" with a focus on the socio-economic transformations following political and institutional unification. Chapter 2 outlines core aspects of the socio-economic situation of East Germany on the eve of monetary, economic, and social union. In chapter 3 we present empirical evidence about the economic and social changes that have occurred in East Germany since mid 1990. In the final chapter 4 we outline the further prospects of the unification process and discuss its implications for union policies.

2. Bottom Lines: East Germany on the Eve of Unification

In political and institutional terms the groundwork of social and economic unification was laid with the bilateral signing of the state treaty on the creation of a monetary, economic, and social union of 18 May 1990 which on 1 July 1990 made the West German DM the common currency of both German states, formally declared East Germany to be a free "social market economy" combining private property, free enterprise, competition, and free price setting with an array of social safeguards and protections, extended West German labor legislation and jurisdiction to East Germany, reestablished the system of autonomous collective bargaining over wages and working conditions between independent unions and employers organizations, and mandated the East German government to set up a multi-tiers social security system including a comprehensive unemployment insurance and "active" labor market policy scheme after the West German model. The treaty also provided for the establishment of a common "German unity fund" of the amount of 115 bn. DM for assisting East Germany in the transition process. Most consequential for the economic transition process have been those clauses of the state treaty that refer to the conversion of

wages, grants, pensions, rents, leases, as well as most personal financial assets of GDR resident to DM on a 1:1 basis. With the decision for a 1:1 conversion rate, which from one day to the other turned a hitherto sheltered, low productivity economy into an open high-wage economy, the makers of the transition treaty, stongly pressured by prospective East German voters and West German unions alike, set the stage for the subsequent demise of the run-down, in Western terms uncompetitive East German economy (2).

With the passing of the unity treaty of 31 August 1990 by both German parliaments the GDR ceased its existence and East Germany formally became a constitutional part of the Federal Republic of Germany on 3 October 1990. In particular the formal recognition of property claims of previously expropriated owners in the unity treaty and the concomitant *"Act on Unresolved Property Claims"* proved to be another decision with (unforeseen) farreaching consequences for the economic reconstruction process. Through the union treaty the Federal Republic finally took over the East German *"Act for the Privatisation and Reorganization of State Property"* of 17 June 1990 with which the East German interim government had set up the *Treuhand* trust to privatize and restructure the more than 8,000 GDR state-owned enterprises with massive financial assistance from the *"German unity fund"*.

These radical institutional changes all occurred at a time when the East German social and economic structure still very much resembled what it had been before the fall of the Berlin Wall in November 1989:

In economic terms the GDR system exhibited the typical traits common to most Eastern centrally administered, closed economies: low prices for everyday consumption commodities were artificially held stable through massive production subsidies; at the same time rising wage incomes created the money illusion of steady productivity increases and growing welfare levels, but were not matched by a growing supply of goods; whereas an open economy, where price fixing is left to the market and buyers have a choice, would have responded with high inflation and massive imports, both of the latter officially did not exist in the GDR:

instead, the Socialist economies were characterized by a situation of excess money supply or "too much money for too few goods". The lack of choice on the side of consumers and the fact that, due to price subsidies, firms did have no incentives to operate cost-effectively, resulted in enormous distortions in resource allocation, manifested in excessive waste of energy, material supplies and the natural environment, overstaffing, declining investments and a growing obsolescence of the capital stock, poor product quality, long shopping queues*, and hoarding behavior by consumers (3). In 1988 East Germany's industrial structure resembled that of West Germany in the mid-1960s, with some 11 percent of the GDR's 9.7 million person work force still employed in agriculture, 38 percent in industry, 10 percent in retail, and merely 32 percent in transportation and services (including the state) (4). Relative to West Germany, actual productivity and real living standards in the GDR had been declining steadily over the past three decades, widening the gap in both indicators to some 50 percent in early 1989 (5).

Only when confronted with market conditions through the introduction of the DM, the desolate state of East German production capacities, the low level of productivity, and poor product quality of East German industry became suddenly apparent: with a few exceptions (for example, the famous *Meissener porcelain manufacture*), close to all state-owned enterprises proved to be unable to match Western standards and - with the abolition of most state subsidies - were doomed to experience catastrophic declines in demand, output, and employment, or to close down altogether. While, due to the 1:1 currency conversion in July 1990, private consumption began to surge favoring primarily Western goods, East German industrial output during 1990 plunged well below 50 percent of its 1989 level.

* According to time budget data collected shortly before monetary union in June 1990 some 30 percent of all men and close to 50 percent of all women aged 16 or older in the GDR spent at least two hours on shopping on a normal weekday (6).

But as long as the Berlin Wall and politically administered rather than market-regulated trade with the other Eastern European economies sheltered GDR industry from Western competition, the illusion of stability and steady increases in living standards could be largely upheld. Even if GDR citizens were not ignorant of their - compared to the West - inferior material living standards, these disadvantages were long held to be compensated for by a higher degree of social and economic stability as manifested in the absence of unemployment and (open) inflation, continuing full or even over-employment, employment security, low work intensity, free access to medical care and other social services, as well as low prices for housing, public transportation, and care for the elderly.

In social terms, the GDR regime's declared goal until the late 1970s had been to achieve a high degree of social equality based on equal opportunity, a narrowing of persisting class differentials, and an abolition of the traditional distinctions between manual and intellectual labor. Attempts in the early 1980s to increase individual achievement incentives through allowing a higher degree of wage differentiation largely failed due to persisting supply shortages and the inability of the GDR economy to produce a more varied and higher quality portfolio of commodities and services (7). On the eve of monetary union, the dissolving GDR society still displayed a (compared to West Germany) highly homogenous or "compressed" wage and income structure: according to data from the first wave of the *Socio-Economic Panel Study East* (SOEP-East), a representative longitudinal sample survey of some 2,179 East German households (8), the distribution of both household and per capita incomes in the GDR shortly before monetary union showed significantly less dispersion and a higher concentration around the mean than in West Germany, a finding that held true not only for economically active, but also for inactive households as well as for households with and without children (9).

The relative equality in nominal incomes, however, was contrasted by a more unequal distribution of durables and housing quality, access to which was regulated largely through informal (and frequently politically

mediated) networks rather than through the market mechanism: "While West Germans at all income levels lived in homes with a bathroom and a toilet, about 30 percent of East German households in the lowest income quintile lived in homes without at least one of these furnishings. Central heating was provided for only 40 percent in the lowest, but for almost 70 percent in the highest income quintile in East Germany, compared with 75 percent and more than 90 percent, respectively, in West Germany" (10); and whereas, compared to a total of 51 percent of all GDR households (West German households: 68%), only 16 percent in the lowest income quintile possessed an automobile, in the highest quintile the share of automobile owners was 75 percent; similar patterns were found for other durables such as telephone (lowest quintile: 9 percent; highest quintile: 39%), freezers (40% versus 76%), and color TVs (53% versus 82% (11)). These data reveal not only a high degree of material inequality in basic assets among GDR households, but also a considerably lower overall living standard compared to most advanced industrialized countries in the West.

In many ways access to material and social amenities in the former GDR was mediated through the predominating sphere of work: more than in Western industrialized countries the world of work acted as the central sphere of political socialisation, control, and social integration, and social life was narrowly centered around the job and establishment, *Kombinat* or *Produktionsgenossenschaft*. Far from being autonomous interest associations of the workers, the all present FDGB unions acted as the prime political links between the working population and the Socialist power elite embodied in the SED * (12). At the same time the unions, supported by the pressures on management resulting from chronic labor shortages, acted as key agents in the distribution of social benefits, such as the provision of free childcare facilities, housing, access to hard-to-get everyday commodities, family vacations, and social activities (for example, youth clubs and sports facilities). Against this background it is hardly surprising that some 70 to 80 percent of

* Sozialistische Einheitspartei Deutschlands (Socialist Unity Party of Germany).

all GDR workers (as compared to some 30 percent of West German workers) were still organized as union members on the eve of monetary union (see *figure 1*).

(figure 1)

Chronic labor shortages and the character of the production sphere as the politically mandated center of social life are also reflected in the extremely high labor force participation of East Germans: prior to unification some 87 percent of the GDR working age population (16-64 years of age) were gainfully employed, the overwhelming majority (75% or 86% of all employed) in full-time jobs usually involving some 42 to 45 weekly working hours (13). In particular, female work force participation was considered as normal and - given labor shortages - even a social obligation: in June 1990, 78 percent of all GDR women aged 16 to 64 years were active labor market participants, and 5 percent were on temporary leave ("maternity year") (see *figure 2*). Moreover, most women's work in the former GDR was full-time work (76% of all employed women), and, given the persistence of traditional male-female role patterns outside work, added up to extremely long total work days of women (including household work and shopping: 13.1 hours; men 11.5 hours on a regular weekday: (14)). On top of their regular working hours (a 43.75 hours workweek was the common rule in East German enterprises), a relatively high proportion (20 percent) of GDR workers had casual or regular extra jobs (compare West Germany: 8%); even pensioners beyond the age of 65 reported twice as often as their West German counterparts (6% versus 3%) that they occasionally or regularly worked for extra money to supplement their old-age incomes. Generally, the tightly knit GDR social security net tended to provide significantly lower benefit levels to those who did not participate in the workforce anymore *.

(figure 2)

* pensioners over 65 years were generally allowed to leave East Germany even before the fall of the Berlin Wall in November 1989.

In terms of *formal workforce skills*, finally, East Germany on the eve of unification had a relatively highly trained workforce, although skills frequently did and do not match the requirements of modern Western-type work and production technologies: more than 9 out of 10 workers (96%) reported that they had gone through some formal, certificated vocational training (compare West Germany: 77%); 59 percent (West: 58%) had completed apprenticeship training or vocational education in two-year full-time vocational schools ("*Berufsfachschule*"); 23 percent (West: 12%) had attended higher ranking vocational schools or polytechnic higher education, and 9 percent (West: 7%) reported university degrees. This impressive picture of formal training is contrasted, however, by a substantial underutilization of workforce skills in the actual production process: according to establishment data, some 21 percent of the GDR workforce were actually employed in unskilled jobs, and one out of three workers reported that they were not working in the occupation for which they originally had received formal training; in fact, even 60 percent of all workers in unskilled jobs were formally trained workers, although only a tiny fraction of them (6%) considered vocational training necessary to do their job. In this respect, too, the GDR system revealed a high degree of horizontal mal-coordination and misallocation beneath its polished political propaganda surface (15).

All in all, East Germany exhibited all traits of a "work society" (*Offe*) centered around and focussed on the "sphere of production". This has also been deeply engraved and reflected in the social values of East Germans that mark a strong contrast to modern Western societies: generally East Germans, across all age, gender, and status groups, were found to attach a very high subjective importance to work, income, and achievement on the job; one the eve of union, in June 1990, some 40 percent of East Germans as compared to 27 percent of West Germans contended that they valued work higher than leisure in their lives. Likewise security of employment and earnings occupies a far more dominant position among East Germans' life concerns than in West Germany, where respondents place greater emphasis on occupational variety and job autonomy (16). It is against this background of a society strongly centered around the work sphere and its "deeply rooted

traditional work orientations across gender and age groups" (17) that the socio-economic and socio-psychological impact of the massive job losses associated with the dismantling of the East German economy in the wake of unification have to be interpreted. This experience has been all the more devastating as East Germans had not known (open) unemployment for more than forty years; even in the case of rationalization-induced reorganizations GDR establishments were held responsible for placing those affected in other jobs and for providing financial compensation for income losses resulting from reassignments to lower paid jobs.

3. First Stages of Transition: 1990 to 1991

Despite the fact that from the time of the memorable fall of the Berlin Wall in the late evening of 9 November 1989 East Germans have been free to visit the West, and some 538,000 East Germans had left the crumbling GDR for good to settle in the West between mid-1989 and mid-1990, East Germany's basic socio-economic and institutional structures were still very much the same in June 1990 as they had been prior to the demise of the old Communist regime. The coming into effect of monetary and economic union on 1 July 1990, by most East Germans expected to rapidly bring them the blessings of Western living standards, meant a severe blow to these structures, the social and economic consequences of which proved to be far more disastrous than anticipated either by the East or by the West.

3.1 Collapse and restructuring of the East German economy

In economic terms the decline of the East Germany showed first signs when with the opening of the border in late 1989 East Germans gained limited access to Western goods, though until June 1990 still constrained by an unfavorable exchange rate of the East German mark against the DM of up to 10:1. During the first half of 1990, i.e. before currency union, East German production fell to 93 percent of its 1989 level, initiating the rapid plunge that was to follow with the introduction of the DM at a 1:1 conversion rate on 1 July 1990. From July to December 1990 total net industrial production dropped by almost

50 percent, a plunge that was particularly pronounced in the consumption goods industries, reflecting the strong catching-up demand of East Germans for Western-type commodities as well as the fact that at non-subsidized DM prices East German producers had no chance to compete against the higher quality Western products that have been flooding the East German market. The plunge continued in the first half of 1991 when East German manufacturing output reached one third of its 1989 level. The sharp decline in domestic demand for East German consumption goods has been exacerbated by the final collapse of East Germany's trade with other Eastern European economies that severely hit the investment goods sector: following the phased abolition of export subsidies, most of East Germany's former Socialist trade partners, given their chronic lack of convertible Western currency, could not afford to buy East German products anymore or decided to switch to superior quality products from West Germany (18).

From 1989 to 1991 East Germany's total gross domestic product (GDP) declined by more than a quarter (-26%), while total consumption at the same time increased by more than 13 percent (private consumption: 16%; public consumption: 7.3%). In 1991 net imports to East Germany (including "imports" from West Germany minus exports) amounted to almost three quarters (72%) of her total GDP. An extreme example is provided by the automobile industry: whereas in 1990 West German auto manufacturers sold some 700,000 to 800,000 new cars to East Germans, East German automobile sales dropped to almost zero forcing most establishments to end their uncompetitive product lines and to cease their operations. Not only in the automobile industry, the rapid dismantling of uncompetitive industries in the East has so far primarily benefitted production in the West.

Whereas the destruction of East Germany's "old" industrial structures has been proceeding rapidly, the reconstruction process has been dragging. The privatization of East German state firms and conglomerates through the *Treuhand* trust, though endorsed by ample subsidies and guarantees by the Federal government, proved to be far more difficult and slower than expected: until mid-1991, less than one third of all

firms administered by the trust had been totally or partly sold, and potential buyers were found for some 25 to 30 percent of the remaining 6,500 firms under *Treuhand* responsibility (19). And although in the twelve months following monetary and economic union the number of business set-ups (net of business closings) totalled some 350,000 (primarily in retail, restaurants, and other services (19a)), serious investment barriers have been hampering the process of economic reconstruction: until early 1991 not more than 12 percent of West German manufacturing firms had made investments in the former GDR, a large part of which concerns marketing and sales activities rather than the setting up of new or takeover of existing production facilities. Among the investment barriers reported by most (78%) West German manufacturers, value assessment issues, infrastructural deficits, unresolved environmental liabilities, and uncertainties regarding third-party property claims were found to play a prominent role (20). But whereas some 30 percent of West German firms indicated that they nonetheless were planning investments in East Germany in the magnitude of some 60 bn. DM over the following two years (1991-92), most showed reluctance to buy or enter into direct cooperations with existing East German undertakings; in those cases where takeovers or direct cooperations were already in progress, the overwhelming majority of West German firms (72%) still considered manning levels in their East German subsidiaries as too high, indicating that, despite the recent massive cutbacks and close-downs, the "trimming" of the old industries has not yet come to an end (21). While both agriculture and industry continue their rapid decline, positive first signs of an imminent recovery, by contrast, have been limited to those sectors that have been underdeveloped in the former GDR, namely the crafts and services as well as - stimulated by massive public investments - construction and transportation: after initial output declines in the 1990 turmoil (exception: services), these sectors for 1991 report GDP growth rates at 22 percent or more.

3.2 Economic boom in West Germany

While large parts of the East German economy crumbled under the competitive pressures from the West and the collapse of her Eastern export markets, unification has presented the West German economy with an unprecedented boom crowning a six year period of uninterrupted strong economic growth since 1984. Annual real GNP growth in West Germany was over 4 percent in 1990 and 1991, up more than 0.8 percentage points compared to the period 1985-1989. From January 1990 to June 1991 manufacturing output alone increased by 7.6% in real terms, and capital utilization, particularly in consumer goods industries, reached a high of some 90 percent and more in 1990/1991 despite massive capital investments in production equipment (1985-90: +8% p.a.) and a recession-induced decline in exports to Western trading partners (1990/91: -12%: (22)). At the same time, West Germany experienced an unprecedented surge in employment, totalling some 900,000 additional jobs in 1990 and 1991 and bringing the West German unemployment rate down to 5.3 percent in 1991, that is its lowest level in a decade.

It was this extraordinary boom together with the preceding long period of strong economic growth that has enabled West Germany to take on the immense financial obligations involved with unification: currency union alone cost German taxpayers some 25 bn. DM (or 1% of West Germany's GNP), a large part of which, however, benefitted West German business through increased demand. To a large extent this also applies to special programs for public investments in infrastructure, housing, environmental cleanup, and public job creation in East Germany, which together amount to another 75 bn. DM, not counting financial transfers through the social security system and the various programs and tax allowances designed to stimulate private investments in the former GDR. For 1991 alone, total financial net transfers (excluding unification-induced increases in tax and social security revenues in the West, estimated at some 30 bn. DM in 1991) from West to East Germany amounted to well over 100 bn. DM (or 4.7% of West German GNP), with a further increase by 25 percent expected for 1992 (23). These figures make clear that German unification, indeed, involves a giant redistribution from

East to West, a large part of which has had to be paid for by West Germans in the form of massive tax increases and rising social security contributions*.

3.3 Labor market impacts of unification

Despite these enormous financial efforts to avert a total economic collapse of East Germany, to create more favorable conditions for West German and other foreign direct investments, and to prevent continued mass emigration to West Germany through ample income and restructuring subsidies, the steep declines in production in the wake of monetary and economic union and the dismantling of the giant GDR state apparatus induced a dramatic decline in jobs:

In the two years following the demise of the Berlin Wall East Germany's economy lost some 2.4 million jobs, that is close to a quarter (24.4%) of its employed workforce as of September 1989 (9.2 million). For 1992 another loss of some 1.1 million jobs is expected, bringing the total decline in employment close to 3.4 million, equalling 36.6 percent of its 1989 level (25). These net employment losses have been particularly pronounced in the primary and secondary sectors: between fall 1989 and fall 1991 both agricultural (-414,000 jobs or -46%) and industrial employment (-1.7 million or -47%) have shrunk by almost half and are projected to continue their decline until mid or late 1992. Further massive job losses occurred in construction (1989-91: -200,000 or -33%), trade and transportation (-410,000 or -30%), as well as in the inflated state sector (-700,000 or -40% (26)) which prior to unification accounted for some 31 percent of total GDR employment. In the area of the formerly state-run enterprises in charge of the *Treuhand* trust,

* In April 1991 social security contributions, shared by halves by employers and employees, were increased by 1.5 percentage points (as of gross wages), a special temporary "unity surcharge" of 7.5 percent was added to the wage, income, and corporate tax, and mineral oil, gasoline, as well as automobile taxes were substantially increased. The gap between gross and net wages widened from (on average) 30.5% to 32.5%. These increases in tax burdens were not matched by wage increases: on average the real net wages per employee declined by 0.5 percent in 1991: see IW, Informationsdienst der Deutschen Wirtschaft vol. 18, no.4 of 23 January 1992, p.8.

employment fell from nearly 3 million in January 1991 to almost 1.5 million one year later, and is expected to decline by another 200,000 to 300,000 during the next two years (27).

The socio-economic impact of these dramatic job losses would have been even more devastating, if strong employment growth in West Germany had not provided for job opportunities in the West and for the fiscal basis of an array of political "cushioning" measures had not been in place to cushion the economic blow resulting from unification:

- Net emigration to West Germany, amounting to almost 380,000 economically active persons until mid-1990 and continuing at some 150,000 active persons p.a. since, has acted as a drain relieving the East German labor market by some 600,000 persons until the end of 1991; a large number of these persons have meanwhile found employment in the booming West German economy. Recent survey data indicate that - given the desolate state of the East German economy - the potential for emigration to West Germany has not yet been exhausted: in April 1991 some 400,000 primarily younger persons indicated that they would like to settle in the West and some 30 percent of the adult population contended that they would be ready for such a step "under certain circumstances" (28).

- Since monetary and economic union there has been a steady increase in East German commuters to jobs in West Germany or West Berlin: until mid-1991 the number of West commuters had reached some 450,000 (29) with a further increase expected over the period 1991/92*. Data from the Socio-Economic Panel Study East (SOEP East) show that West commuters are primarily younger men in skilled manual occupations who have profited from rising labor demand and growing skill shortages in West Germany; their primary motives for commuting an average 35 miles to work in the

* Only to small extent these numbers of West commuters are balanced by West Germans commuting to the East: for 1991 the Berlin-based German Institute for Economic Research (DIW) estimated on balance some 310,000 West commuters with a further increase to 425,000 in 1992 (30)

West are the higher West German wages (50%) and the lack of adequate employment opportunities in their home area (46%: (31)).

Together net migration and net commuter flows have been estimated to amount to one million persons or more than 10 percent of East Germany's labor force as of 1989 (see figure 3). Moreover, significant shock-absorbing effects resulted from the large-scale deployment of labor market policies whose financial volume amounted to a total of some 30 bn. DM in 1991:

(figure 3)

- Over 1990 and 1991, early retirement from the age of 55 led to a reduction of the East German labor force by some 500,000 persons (or 5% of its 1989 level). All in all, one in four persons leaving employment between November 1989 and July 1991 did so through entering early or regular retirement. Because a large part of all persons in the eligible age bracket have already made use of this option, the number of persons entering early retirement is expected to decline in 1992.
- Public job creation programs ("Massnahmen zur Arbeitsbeschaffung") involving temporary employment subsidies for work tasks in the public interest that would not be carried out otherwise, provided employment for some 400,000 persons in December 1991.
- Full-time courses for vocational further training and retraining, funded through the unemployment insurance scheme and involving generous income support during participation, have been strongly expanded since mid-1990 and - as participants are counted neither as employed nor as unemployed - exonerated the labor market by another 450,000 persons in late 1991. The total number of persons updating their skills through (off-the-job or on-the-job) further training is much larger than these numbers suggest: within only four months from March to July 1991 a total of 1.6 million East Germans (or roughly 20 percent of the labor force) had participated in some kind of job-related further training (32).

- Last, but not least, the massive use of short-time working subsidies ("Kurzarbeitsgeld") involving benefits in between 68% and 100% of lost wages, has contributed to keeping some 2 million persons in employment, a large part of whom otherwise would have lost their jobs: until March 1991 the number of workers on subsidized short-time schedules had reached its peak of 2.1 million (or 28% of all workers still employed) whose actual working time on average was 44 percent of their regular work time and many of whom (some 650,000) were actually on zero work hour schedules (see table 1).

(table 1)

The cumulative exonerating effect of these measures on the East German labor market has been estimated to amount to some 1.5 million persons (full-time equivalents) in 1991 (33). Given the dramatic loss of some 3.4 million jobs during the 18 months following monetary and economic union, all these measures could not prevent a steep increase in (open) unemployment: the number of registered unemployed soared from zero to over a million in July 1991 and is expected to climb further to on average 1.4 million in 1992, equalling an unemployment rate of almost 20 percent of the labor force (34). Including full-time equivalents for time lost due to short-time working, total unemployment in 1992 amounts to over 1.8 million or 25 percent of the East German labor force.

The number of workers actually affected by the industrial upheavals of the transition process is even larger than the mere net employment changes suggest: over the four month period from March to July 1991 alone some 1.14 million (or one out of six) East German workers separated from their jobs; of these 17 percent (or 190,000 in absolute terms) left for West Germany (4%) or took up a commuting job in West Germany or West Berlin (13%); more than one third (or 400,000) became unemployed, and another 14 percent (160,000) left the labor force (one third among them through early retirement); the remaining third (or some 400,000) found a new job in East Germany or set up their own business (35,000). Over the whole period from November 1989 to July 1991, some 5.1 million East German workers or more than half of the total GDR

workforce experienced the termination of their employment relationships (see table 2).

(table 2)

The overall impact of these dramatic changes on people's previously highly stable and secure lives can be seen from a longitudinal perspective (see table 3): of all those more than 9 million East Germans in employment on the eve of currency and economic union (June 1990), one year later less than half (44% or 4 million) were still employed full-time in their "old" job; over 21 percent (or almost two million) had switched to a new job in the meantime, every fifth (4% or 380,000) among them through commuting to the West; one out of six (16% or 1.5 million) workers as of June 1990 was working on a short-time schedule one year later, and the remaining 18 percent (1.6 million) were either unemployed (8% or 760,000) or had left the labor force (10% or 860,000). All in all, one out of four workers as of June 1990 was one year later unemployed or on short-term schedules waiting to be laid-off. As shown in table 3, the proportion of workers not employed any more in their June 1990 job is particularly high among workers previously employed in agriculture and manufacturing: here two third or more workers have within less than twelve months after monetary and economic union experienced a change in their employment status; in May 1991 every second among them was either unemployed or on a short-time schedule. This is contrasted by the experience of those initially employed in the service sector (including the state) where well over half of all workers have (so far) managed to keep their job without experiencing unemployment or a reduction of their working time. It is these sectors at the same time that - together with the construction industry - show a clear *net* increase in employment over the observation period.

(table 3)

For those workers who were able to keep their job or managed to find employment elsewhere, the transition process frequently involved major changes in their employment and working conditions:

- one out of five of these workers had to change to a *different occupation* than the one worked in on the eve of union; this proportion was larger than average among higher skilled workers, whereas for low-skilled workers the transition process disproportionately involves job loss and subsequent unemployment (their unemployment rate was 14% in November 1990 as compared to an average of 6%:(35));

- 29 percent report that their job now requires *totally new skills* compared to what they were doing one year earlier; in many cases this involves that previous skills become devalued and cannot be used anymore in the new job: thus the share of university graduates who deem university education necessary to do their job declined from 82 percent before union to 69 percent one year later; likewise the share of skilled blue-collar workers able to use the skills acquired through training shrank from previously 82 percent to 67 percent;

- whereas of those with a change in job or working conditions slightly more than half (54%) think that their occupational situation has deteriorated, 46 percent report an improvement as compared to their work one year earlier; again it is the higher skill groups and in particular university graduates who frequently report job improvements, whereas deteriorations prevail among the lower skilled workers (36).

For most workers on *short-time schedules* the reduction of work time is a longer term arrangement that frequently ends in unemployment, showing that work sharing in most cases acts like a parachute delaying rather than preventing job loss: of all 1.6 million short-time workers as of November 1990 38 percent were still working short-time eight months later and 18 percent had meanwhile become unemployed, whereas only a minority (38%) had returned to normal schedules, mostly by finding a new job elsewhere (37).

At the bottom of the evolving "new hierarchy" we find the swelling ranks of the *unemployed*, among whom female workers (who were disproportionately employed in industries severely hit by unification),

low-skilled, as well as older workers are clearly overrepresented. For these workers unemployment increasingly becomes a long-term experience without high chances of securing a new job in the newly created or restructured enterprises: of all 550,000 East German unemployed as of November 1990, close to six out of ten (58%) were still unemployed eight months later (July 1991), and only one out of four had been able to find a new job. In July 1991, 29 percent of the meanwhile one million registered unemployed had been without work for more than eight months. In their search for new jobs the unemployed face the competition by another 1.2 million employed job seekers, bringing the total number of East Germans on job search to 2.3 million in July 1991 (38).

(table 4)

These results show that it is primarily the labor market through which the "old" social structures are being transformed, opportunities are redistributed, and new social dividing lines evolve to replace the more subtle, though by no means less severe, inequalities that characterized GDR society.

3.4 Winners and losers: Social impacts of unification

At this stage of the transition process it is as yet hardly possible to decide who will be its eventual winners and losers. With the political decision for a 1:1 currency conversion rate and the subsequent strong wage increases that the "new" (previously West German) unions achieved for East German workers by using the power vacuum on the employers' side, the dices had been tossed towards making the labor market the mechanism through which the fates of East Germans would be redefined.

From the very beginning, West German unions, determined to quickly gain ground in East Germany after the demise of the state-controlled FDGB and afraid of the negative impact that an East German low-wage territory might have on jobs in the West, had decided to push for rapid wage increases of East German workers that by 1994 would bring East German wages up to West German levels. In this quest the unions were reaffirmed

by the very contents of the state treaty of 18 May 1990 that set the basis for an immediate 1:1 conversion of wages, salaries, and social benefits, abolished all trade barriers between the two Germanys, and committed the East German government to "without delay" cut all subsidies for industrial and agricultural products. To a large extent both policy makers' and unions' rush for an alignment of Eastern and Western wage levels reflected their common (but misguided) apprehension that persisting steep wage differentials would result in a continuation of mass emigration to West Germany (39).

Between July and December 1990 East Germans' nominal wages increased by 30 percent, followed by another 50 percent increase in 1991 (40), raising unit labor costs by some 57 percent over their 1989 level. On average East German wages had reached 50 percent of the West level by the second half of 1991, ranging from as much as 74 percent in the construction industry and 67 percent in the clothing industry to 33 percent in the chemical industry and 28 percent in mineral oil processing. These drastic wage increases, that were in no way matched by productivity gains⁺ and also by far exceeded the price increases due to the abolition of subsidies*, did their part in undermining East German firms' competitiveness and hampering new business set-ups, thus contributing to the massive job losses described above. In 1991 gross wages in East German manufacturing amounted to on average 138 percent of net value-added (43).

The beneficiaries of this policy have been the declining number of East German workers who have managed to stay in their old jobs or to find new employment, whereas the price has been paid by the swelling ranks of the

⁺ East German productivity increased by 2.2 percent in 1990 and - reflecting the sharp reduction in manning levels - by 20 percent in 1991 (41).

^{*} For example, between June 1990 and April 1991 consumer prices in East Germany increased by 12.6 percent whereas nominal wages grew by more than 30 percent (42).

unemployed and those likely to lose their job in the near future **. The distributional implications of these policies are illustrated by the following data:

Between June 1990 and March/April 1991, the average real net incomes of East German households increased by some 12 percent. For 60 percent of East German households real incomes in spring 1991 exceeded their levels before monetary and economic union, whereas almost 40 percent had been forced to accept income losses. The highest income gains (by 79.5%) were realized by households that in the meantime had permanently settled in West Germany, followed by those in which at least one person had a commuting job in the West (41%). This is contrasted by the remaining households whose real incomes on average increased by only less than 10 percent. And although the overall income distribution (by quintiles) has remained largely stable, the data reveal a high amount of income mobility over the period that by far exceeds the amount of income changes in the West: whereas in the middle quintiles some 70 to 75 percent of households changed their relative income position (i.e. had either declining or increasing real incomes) between June 1990 and March/April 1991, the majority of households both in the highest and in the lowest quintile remained in the same position as on the eve of monetary and economic union. Losses in per capita real incomes were suffered primarily by those households in which the prime earner had become unemployed (on average -3.8%), whereas in active households where no one was unemployed, per capita incomes exceeded their pre-unification level by more than 13 percent (45). In other words: despite significant redistributive effects through taxation and social security benefits, the losers of the reunification process are clearly found among the unemployed "outsiders", whereas the employed "insiders", and particularly those who have gained employment in the West, are the clear winners of the transformation process. Unification thus seems to proceed at the price of a growing segmentation of the German labor market.

** According to survey data collected in March 1991, some two million East German workers (or 25.5% of the total employed work force) were expecting to lose their job in the near future (44).

Worse even, among the winners of this process we find those overrepresented who used to be the "winners" in the old Socialist regime. The latter can be broadly defined as those who had been employed as senior executives in the GDR state sector. As shown in table 5, more than 83 percent of this group that on the eve of union represented some 700,000 to 800,000 persons (or 8.5 percent of the East German work force) managed to keep their job or to secure employment elsewhere during the following twelve months, as contrasted by only 64.6% of all other workers. And whereas 27 percent of the latter found themselves unemployed or on short-time schedules one year after monetary union, this was true of only 9 percent of the beneficiaries of the "old regime". It is against this background that East Germans' recent fervor to uncover their former superiors' entanglement in the Socialist oppression apparatus, particularly the notorious STASI (state security), is to be understood. Though formally completed, political unification, just like economic unification, still has a far way to go.

(table 5)

4. Prospects: Unions' Wage Policies at the Crossroads

As of late 1991, there are first signs that the East German economy has touched bottom and will be entering a period of gradual recovery in 1992. After a decline by 23.5% in 1991, Germany's major economic research institutes are expecting a 10.5 percent growth in East German GDP in 1992; investments in East Germany are projected to increase by 23.5 percent as compared to their 1991 volume, East German firms' production plans for the first time show an upward trend, and productivity is predicted to rise by some 20 percent. In the labor market, however, the trough is not yet in sight: for 1992 experts expect employment to continue its decline, though at a somewhat slower pace (minus 1.1 million jobs or -14.4% as compared to minus 1.8 million or -21.6% in 1991); while the number of workers on short-time schedules will decline by more than half (from 1.7 million in 1991 to 750,000 in 1992), unemployment is projected to rise still further, reaching a high of 1,4

million and an unemployment rate of almost 19 percent (see table 1). Despite these gloomy labor market prospects, the bottoming out of the economy and the faint outlook of a beginning recovery are also reflected in East Germans' future expectations: whereas in November 1990 some 34 percent of the active population were optimistic regarding the overall economic situation in the following 12 months (as opposed to 36 percent pessimists), four months later, in March 1991, the share of optimists had fallen to a mere 16 percent, and a majority (51%) viewed the economic prospects with pessimism. In July 1991, optimism had regained some ground (29%), however mainly among the employed (31% as opposed to 29% pessimists), while among the unemployed the pessimistic outlooks (46% as opposed to 24% optimists) continued to prevail (46).

Even if there are signs that the period of economic collapse may soon be over, it is still a long way ahead until East Germany's economy will have entered upon a path of self-sustaining growth. So far, the adjustment process involving the replacement of old, non-competitive structures by new ones has proved far more difficult than expected. Currently (1991), annual real GDP per employed full-time worker in East Germany is less than one quarter (24.7%) of that generated by a West German full-time worker (47). To bring East Germany's economy up to Western standards, private investments in the order of some 600 to 700 bn DM and a further 300 bn DM in public investments (in transportation, telecommunications, and public infrastructure) have been estimated to be necessary (48). How long this will take is illustrated by the fact that currently private investments in East Germany range in the order of some 35 to 50 bn DM p.a., and public direct investments in 1992 will amount to 18 bn. DM *.

Against this background the unions' determination to raise East German wages to West German levels by 1994, which would require annual real wage increases of at least 20 percent**, is in need of reconsideration,

* According to recent estimates the process of adjustment of East German living standards and conditions to West German levels may in fact take as long as 12 to 20 years (49).

** Taking into consideration the longer work hours and lower levels of benefits of East Germans, equal wages would still imply total East

if persisting mass unemployment is to be prevented: only with a capital stock that matches that in West Germany can wages be raised to Western levels without rendering more East German firms uncompetitive, inducing further job losses, and preventing necessary investments for economic reconstruction . By causing further job losses and slowing down new job creation, the unions' high-wage policies, though justifiable in social equity terms, also fail to stem emigration to the West: several recent studies have found that it is unemployment or the threat of job loss rather than perceived East/West wage differentials that increase East Germans' willingness to consider moving to the West (50).

As most private investment in the East German economy will come from West Germany, unions are facing similar challenges here, too: to a high degree the projected reversal of economic decline in East Germany depends on moderate wage policies in the West. Nominal wage increases beyond productivity growth plus expected inflation tend to have an immediate depressing effect on firms' investment behavior. After a decade of moderate wage policies by the unions, West German negotiated wage increases in 1991 on average amounted to 7%, thereby exceeding productivity growth (3.3%) and raising unit labor costs by some 5 percent (51). For the 1992 collective bargaining round West German unions have announced wage claims in the magnitude of 10 percent to compensate for West Germans' higher tax and social security burdens due to unification. Given the recent slow-down in productivity growth, the realization of these wage claims, by inducing firms to reduce or postpone planned investments, could trigger a recession in West Germany and would be tantamount to a catastrophe for the East German reconstruction process.

Two years after formal unification, German unions are thus confronted with a classical dilemma: on the one hand, in order to contribute to an improvement of East Germany's desolate economic situation, they must organize solidarity in both parts of the country among their primarily employed members; on the other hand, in order to generate and maintain

German labor costs to amount to some 80 percent of those in West Germany.

union solidarity, they cannot ignore growing pressures from their members for a rapid alignment of Eastern wage levels and a compensation for increased tax and social security burdens on West German wages. If they insist on forcing employers to accept strong wage increases in the West, many of their (potential) members in the East will have to face job loss and prolonged unemployment; if they concede priority to the macroeconomic imperatives of East German reconstruction, they may jeopardize support by their members in the West and fail to win the trust of employed workers in the East. Put differently: German unions are facing the choice of either finding a way of balancing organizational goals with macro-economic imperatives or becoming the syndicalist representatives of a shrinking population of employed "insiders" at the price of continuing mass unemployment of "outsiders" and delayed economic reconstruction in the East. It is not the first time in the past 45 years that German unions have stood at such crossroads. History shows that in most cases - unlike their counterparts in many other countries - they managed to let long-term macro-economic considerations prevail over short-term organizing interests.

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(18) see DIW (German Institute for Economic Research), *Wochenbericht* vol.58, no. 47/91, 21 November 1991, p.664.

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(19a) According to data supplied by the Institute for Labor Market Research (IAB) at the Federal Employment Agency in Nuremberg, the total number of self employed East Germans on the eve of economic union did not exceed 185,000 or 2.2 percent of total employment in East Germany (1989), reflecting the systematic suppression of private business by the former GDR regime. In June 1990, some 8 percent of all East German workers were planning to set up their own business in the following years. The months following unification in fact witnessed a substantial increase in self-employed activities, raising the number of self-employed to a total of some 400,000 or 5 percent of the employed labor force: see M. Lechner, F. Pfeiffer, 1992, *Planning for Self-Employment at the Beginning of a Market Economy. Evidence from Individual Data of East German Workers*, DIW discussion paper no.42, February 1992, Berlin: German Institute for Economic Research (DIW), mimeograph.

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6. Appendix: Figures and Tables

Figure 1:

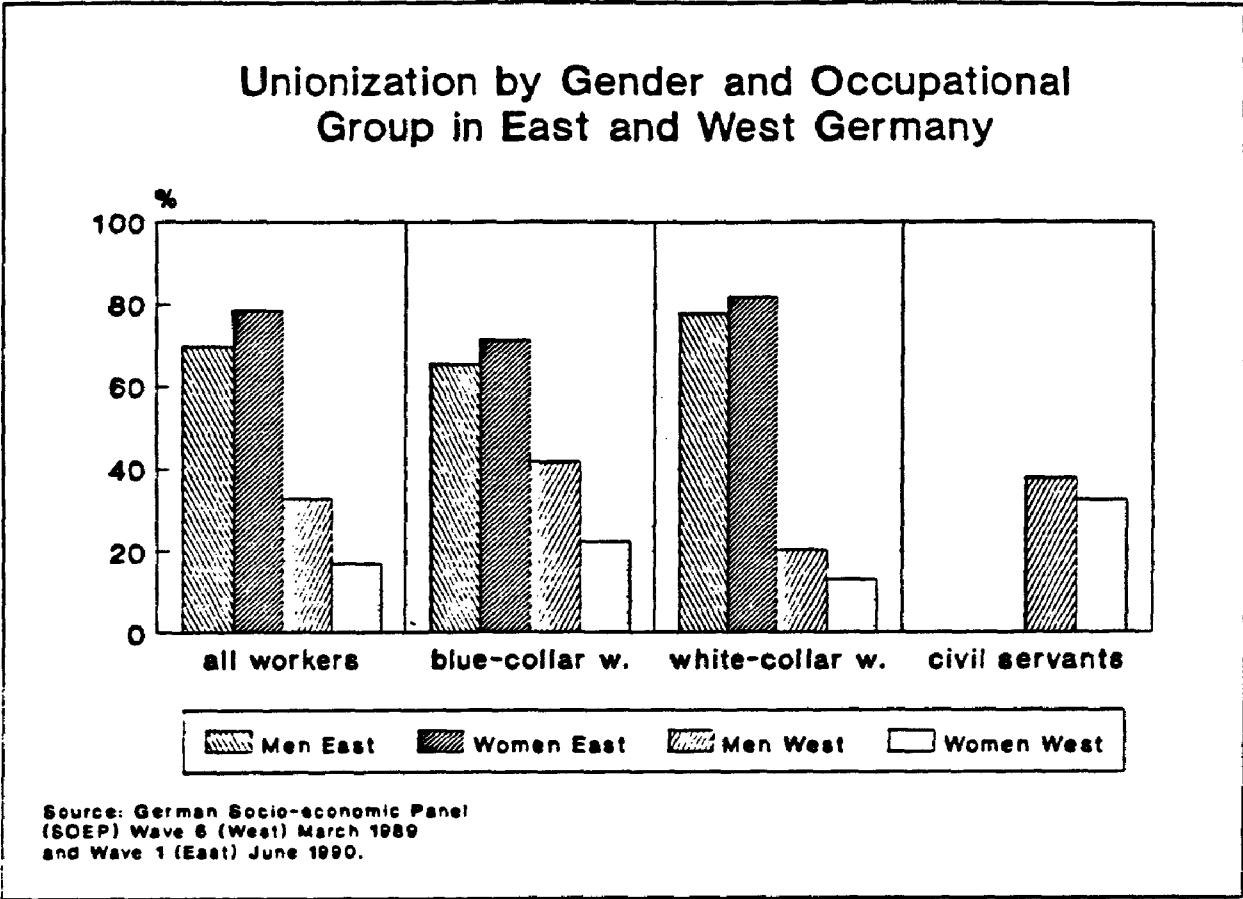


Figure 2:

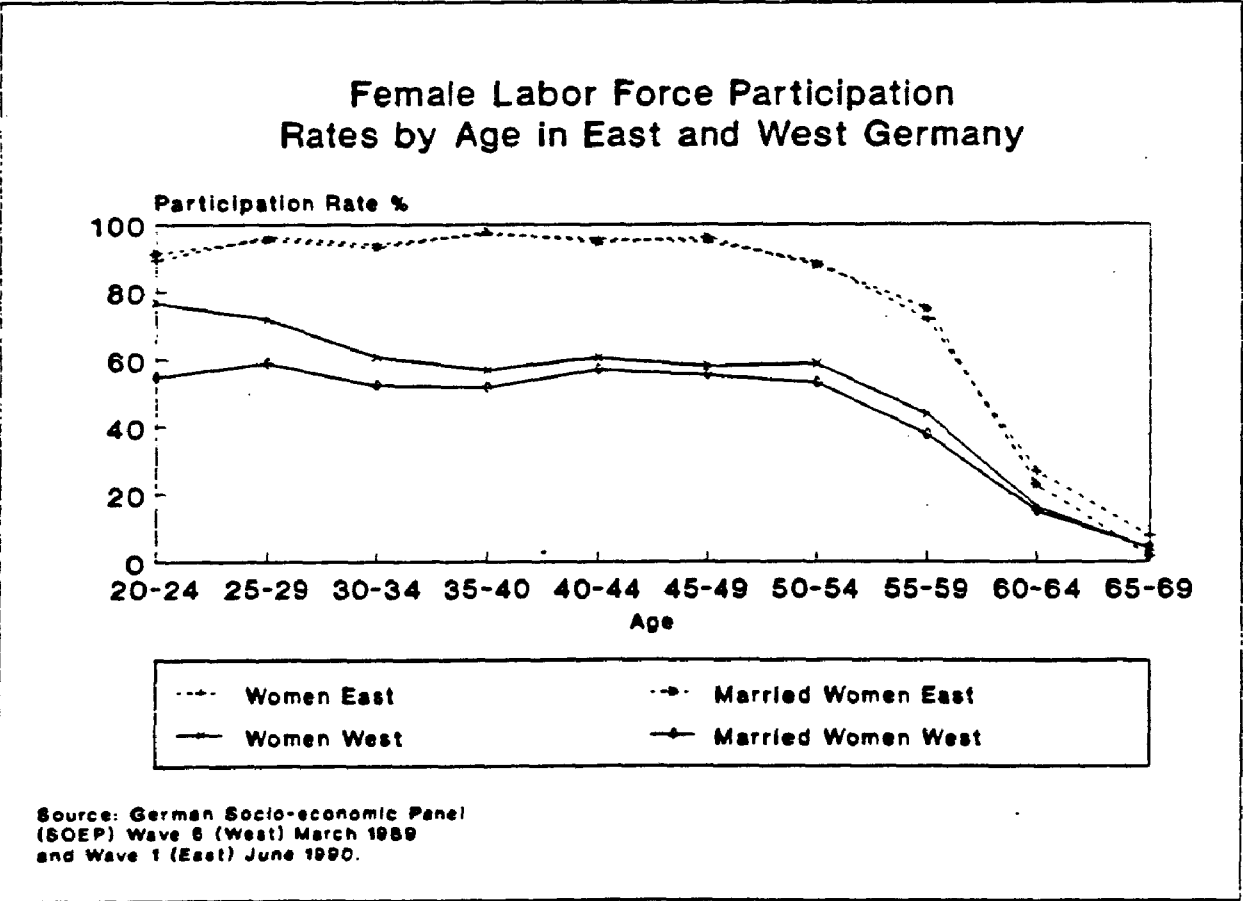
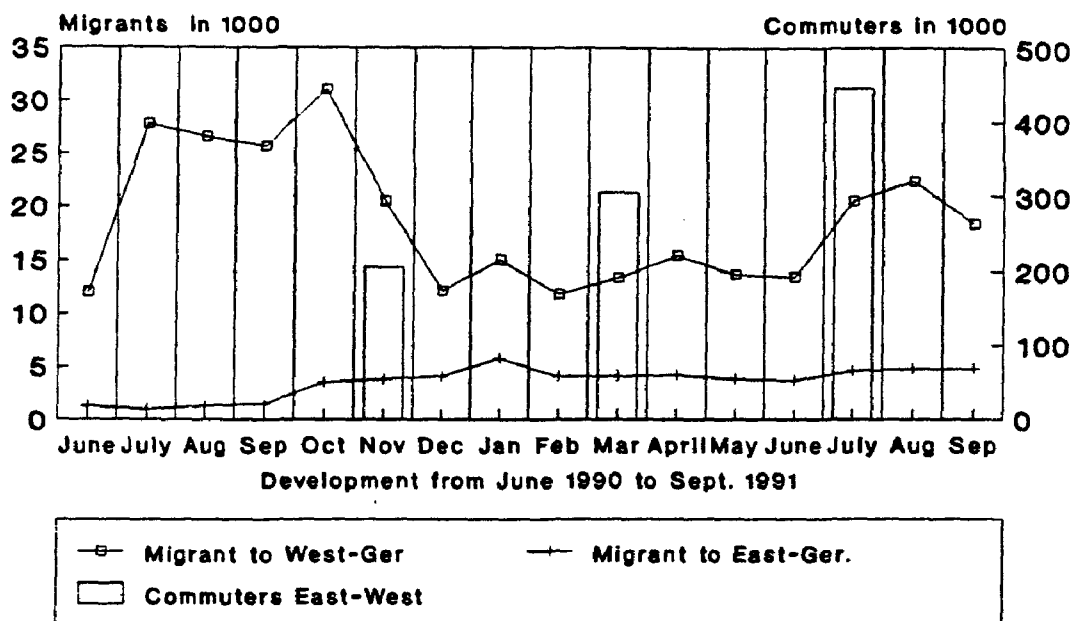


Figure 3:

Development of Migration and Commuting in East Germany



Sources: Zentrales Einwohneramt Berlin;
IAB-Werkstattbericht 1992
and Infratest 1991.

TABLE 1
LABOR MARKET INDICATORS FOR EAST GERMANY 1989-1992
(in 1,000)

	1989	1990	1991	1992
1. Total population	16,600	16,200	15,900	15,700
2. Labor Force	9,860	9,090	9,430	9,680
Employed	9,860	8,850	7,030	6,020
- on short-time schedules	-	760	1,630	750
% of employed	-	8.6%	23.2%	11.8%
- waiting for lay-off (notified)	-	50	175	-
- in public job creation scheme	-	5	200	450
Unemployed	-	240	950	1,400
- unemployment rate (% of civilian labor force)	-	2.6	11.9	18.9
3. Discouraged Workers	-	40	200	360
4. persons in full-time vocational further training	-	40	300	500
5. Commuter balance [^]	-	80	310	425
6. Active persons having left to settle in the West (cumulation)	90	446	600	700
7. Persons in early retirement (55-59 years of age)	-	250	500	455
8. Gross Domestic Product (bn. DM in constant prices)	287.6	2445.6	196.0	225.5
9. Productivity change		+2.2%	+20.0%	+19.5%

*Forecast

SOURCE: Economic forecast by Germany's five leading economic research institutes, in: DIW, Wochenbericht 42-43/91 of 23 October 1991.

[^]To work in West Germany as West Berlin minus East commuters from West Germany.

TABLE 2
DESTINATIONS OF JOB SEPARATIONS IN EAST GERMANY
NOVEMBER 1989 TO JULY 1991
(IN 1,000 and Percent)

	Nov.'89-Nov.'90		Nov.'90-March'91		March'91-July '91	
Total job separations (1,000)	2,864	= 100%	1,085	= 100%	1,144	= 100%
Thereof:						
•permant migration to West	300	10.5%	40	3.7%	46	4.0%
•Commuting to job in the West	206	7.2%	100	9.2%	144	12.6%
•Subsequently unemployed	552	19.3%	358	33.0%	394	34.4%
•Subsequently out of the labor force (incl. early retirement)	830	29.0%	168	15.5%	161	14.1%
•Change of establishment/job within East Germany	976	34.1%	419	38.6%	399	34.9%

SOURCE: Infratest "Labor Market Monitor for East Germany". in: Infratest 1991a, 1991b, 1991c.

Table 3:

Net and Gross Changes of Employment in East Germany: June 1990 to March/April 1991.

Sectors of Employment	Total 1990 %	1991 %	Index: net employ- ment change 1990 = 100 %	Indicators for Mobility - Situation in 1990 = 100 %					
				no change	with new job in the East	on short- time schedule	commuting job in the West	unem- ployed	not in labor force
Agriculture, forestry and fishing	12,1	7,9	55,9	31,5	19,8	20,0	4,8	15,8	8,2
Energy, water and mining	4,2	3,7	74,3	57,4	8,9	19,6	2,4	3,6	8,1
Manufacturing	32,0	29,3	78,4	34,9	14,8	28,2	4,8	7,0	10,3
Construction	6,7	8,3	106,3	44,7	23,0	11,9	6,0	10,0	4,4
Wholesale and retail trade	8,3	10,3	106,8	43,2	18,0	14,7	3,7	10,4	10,0
Transport and communications	8,1	8,0	84,6	61,9	13,2	7,2	3,3	2,5	12,0
Financial institutions and insurance	0,6	1,5	224,5	67,3	17,4	0,0	0,0	4,7	10,5
Services, restaurants, hotels, public administration, defence and others	24,2	27,8	101,6	55,4	20,5	4,3	2,8	7,7	9,3
No answer	3,8	3,3	73,5	-	-	-	-	-	-
Total	100,0	100,0	85,8	44,4	17,2	16,2	4,2	8,4	9,6
Trend Estimate in 1000 persons	9041	7754	-1287	4011	1556	1465	378	763	862

Source: German Socio-economic Panel (SOEP), Sample East, Wave 1 June 1990 and Wave 2 March/April 1991.

TABLE 4

**LABOR MARKET EXPERIENCE OF UNEMPLOYED WORKERS
AND WORKERS ON SHORT-TIME SCHEDULES IN EAST GERMANY,
NOVEMBER 1990 TO JULY 1991**

1. Workers Unemployed in November 1990		2. Workers on Short-Time Schedule in November 1990	
Total (1,000)	550	Total (1,000)	1,612
Thereof (%) were eight months later (in July 1991)		Thereof (%) were eight months later (in July 1991)	
- Still/repeatedly unemployed	58%	- Still on short-time schedule	38%
- Employed	26%	- Employed on regular schedule	38%
- In further training	4%	- Unemployed	18%
- Other (including West migration)	12%	- Other (including West migration)	6%

SOURCE: Infratest "Labor Market Monitor for East Germany",
Schnellbericht Juli 1991, Munich October 1991, mimeograph.

Table 5:

"Winners" and "Losers" of the East German Transition Process.

	Trend Estimate in 1000	Total %	Indicators for Mobility - Situation in 1990 = 100 %					
			no change	with new job in the East	on short- time schedule	commuting job in the West	unem- ployed	not in labor force
"winners" in the old regime (senior executives in the GDR state sector)	749	8,5	54,3	26,8	2,1	2,3	6,9	7,5
skilled workers outside the state sector	3857	43,5	37,5	15,1	26,2	4,0	9,1	8,1
other workers	4252	48,0	50,4	18,1	10,3	3,3	8,4	9,4
Total (1990)	8859	100,0	45,1	17,5	16,5	3,5	8,6	8,7

Source: German Socio-economic Panel (SOEP), Sample East, Wave 1 June 1990 and Wave 2 March/April 1991.