EAST JOINS WEST:
CHILD WELFARE AND MARKET REFORMS
IN THE "SPECIAL CASE" OF THE FORMER GDR

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EXECUTIVE SUMMARY

This paper on the specific case of East Germany since the transition to the market economy focuses first on changes in policy, the economy and society. Demographic developments and changes in the living conditions of children in East Germany are then investigated. Finally, outcomes are summarized and discussed critically in terms of the development of social policies for children.

Special policies for the transformation of the former German Democratic Republic have never been developed, because the transition has coincided with the inclusion of East Germany within the Federal Republic of Germany. The policy system of the Federal Republic has been transferred to the new Bundesländer (Federal states).

The economic situation in East Germany has been characterized by a very significant slowdown in industrial production and the disappearance on a wide scale of industrial enterprises and workplaces. This has led to an increase in unemployment that is affecting mainly women and the elderly. However, consumption opportunities and the incomes of the population have improved. Meanwhile, prices have become exposed to market forces, with the consequence that inflation has been rising. Formerly subsidized prices in areas like housing, power and basic foodstuffs have climbed enormously.

The demographic changes among the East German population demonstrate very clearly that the transition to the market-oriented economy is linked with high social costs. The birth rate in the new Federal Länder has fallen to the lowest point in recent decades. Even compared to the drop in birth rates in the other Central and Eastern European countries since the collapse of the Soviet Bloc, the case of East Germany is unprecedented. The transformation process has been accompanied by immense insecurity and social crisis, especially among women, for whom it has become more difficult both to maintain jobs and to raise families. The marriage and divorce rates in East Germany have also dropped to a remarkably low level.

An unexpected result of the analysis of the demographic picture is the finding that infant mortality rates are not being affected by the political and economic transformation as much in East Germany as they are in other former socialist societies. The large number of migrants from east to west in the first years of the transformation is decreasing. One cause is a policy of high wages in the new Federal states.

Among the initial outcomes of the changes in terms of the living conditions of children are the following.

1. The share of children living in atypical families, like single-parent families or families headed by unmarried couples, has been rising since the onset of the transformation. A significantly larger number of children is being born out of wedlock.
2. More children are being cared for in their own families than was the case before the breakdown of the socialist system, under which children tended to be cared for in institutions.
3. The material living conditions of children in normal families (that is, with two parents in a common household) have improved, while they have eroded for children in atypical families. Children in atypical families have been more affected by unemployment and dependence on public transfers like unemployment compensation and social assistance than have other children. The rise in the unemployment rate in particular is leading to a higher risk of impoverishment among children. Social inequality in the living conditions of children in East and West Germany has increased. An unintended impact of the mode of transition by inclusion into West German society resides in the fact that the benefits among East German children from the massive financial transfers from the west are less significant than are the benefits among other social groups (especially the elderly). This paper shows that the risk of welfare dependency is much higher among children than it is among any other age group and that the risk of unemployment is much higher among mothers than it is for any other group. Both effects are leading to a phenomenon called the "infantilization of poverty".

An appropriate social policy for children would involve subsidies for children that are provided directly and independently of the work records of parents. It would also mean that women would have a guaranteed opportunity both to have jobs and to raise families because sufficient daycare centres and kindergartens would be available.
I. INTRODUCTION

East Germany represents a special case among all the transitional economies. An analysis of the initial conditions, transition policies and welfare outcomes in East Germany can, however, be very helpful for an understanding of the entire region. This paper offers a brief overview of the principles of German policy in this area and highlights some of the major results in developments in the economy, the labour market and the welfare situation. It draws particular attention to demographic behaviour and the living conditions of children.

The situation in East Germany is unique relative to that in the other Central and Eastern European countries because of different specific conditions. Any comparison of the situation of the former GDR and the developments in the other Central and Eastern European countries since the transformation process began should take into account the fact that the GDR has followed an approach which is completely different from that of all other socialist societies. The abolishment of the old system coincided with unification with the Federal Republic of Germany—which is one of the richest countries in the world and has a functioning state system and a high level of welfare—and thus followed an "inclusion concept". According to Ofse (1991), this is not like rebuilding a ship offshore in stormy weather, but like rebuilding the ship in a safe harbour with sure resources, which signifies in this case economic and human capital from West Germany.

One consequence of the inclusion is that East Germany has not been protected by the existence of national borders as has Poland or Romania. The new Bundesländer (Federal states) are exposed to direct competition on a domestic market on which prevail West German prices and West German competitors who are highly productive and who rely on modern technology. Another consequence of the inclusion is that people in the former GDR have a perspective on their own welfare level that is unique relative to that in the other Central and Eastern European countries. The perspective of East Germans is mainly geared to the living standards in West Germany and seldom to the conditions of life in, for example, Russia. This "inward perspective" can lead to discontent, impatience, alienation and social instability.

Unification is surely one of the most important events in German history since World War II. The economic consequences will influence East and West Germany for a long time to come, perhaps for some decades. Some authors (for instance, Priewe and Hickel 1991, Sinn and Sinn 1992) underline the problems and difficulties of the transformation process and point to the crisis in all fields—policy, the economy and society in general—because of the transformation.
In the former GDR a radical change is taking place. From a political outlook the change involves the transformation of a bureaucratic party dictatorship into a competitive democracy; from the viewpoint of economics the change is from a centrally planned economy to a social market economy, and from a social perspective the change means that differentiation and pluralization are taking place within a formerly monolithic society. The process of social change can be explained as a process of modernization, or, more exactly, as modernization by "catching up" (Zapf 1991, 1994). Although East Germany is like the other former socialistic countries in that it must modernize, it differs appreciably in terms of the baseline of development, the means available for initiating the transition process and the political framework for implementing the necessary changes.

In the political sector, the transformation process means the adoption of the Federal structures of West Germany and the reestablishment of local self-administration, the forging of rational public administration, in which decisions are based on legal concepts, competence and expertise, the cultivation of public opinion, the abolition of uniform, collective organizations, and the fostering of special interest groups (Lange and Schöber 1993).

The most important aspect of political transformation in a locality is the rebuilding of local self-administration. Without functioning local self-administrations, the restructuring of local economies and of the entire economy of East Germany will not be possible. In the federal political system of Germany, local self-administrations are responsible for important economic tasks such as, for example, industrial and commercial zoning.

In the social sector, unplanned social changes are occurring because of the political and economic transformation. It is now to be expected that, with the rise in the incomes and resources of households, the social structure will become more differentiated; inequalities which are due to policy will diminish, and social differences caused by socioeconomic factors will increase (Lange and Schöber 1993). The fiscal and currency union has changed the resource-base of households fundamentally. For example, the prices for housing, power, water and garbage collection have increased, because these "services" used to be subsidized to a considerable extent, but they are now exposed to market forces.

In analysing the transformation process in East Germany, one can adopt three distinct perspectives to compare the former German socialistic system to the socialist systems in other Central and Eastern European countries. First, one can analyse the changes in living conditions since the onset of the transformation process in East Germany to the corresponding changes in the other countries of Central and Eastern Europe. Second, changes
in living conditions in the former GDR can be compared to changes in the Federal Republic. Third, one can compare the situation in East Germany since the onset of the transformation to the situation before the establishment of the market economy. The analytical problems involved in such comparisons are at least threefold.

1. If one compares the actual situation in East Germany with that in the other Central and Eastern European countries, one must realize that the GDR always had a relatively higher welfare level. This is a baseline problem. Thus, if the welfare level in East Germany turns out to be better than that in other countries, then this is not inevitably related to the efforts made after the unification of Germany or by the German state. For such a comparison, time series on development in these countries must be checked carefully for level differences.

2. One can compare the situation in East Germany with the situation in West Germany. This perspective is mostly taken in Government policy discussions and public opinion debates, because equality in living conditions in East and West Germany has been the principal, official aim of German policy since Chancellor Kohl promised in 1990 to reach this goal by making East Germany a "flourishing landscape" within four or five years.

   The discussion of the impact of political unification on the living conditions of children in Germany within this framework usually takes for granted a small set of theoretical assumptions on social change and places social change within an equilibrium model, as follows.

   - Political unification induces rapid social change, which has a massive impact on individual lifestyles and causes a structural change among households and families.

   - This change can be understood as a modernizing process involving the adaptation of East German families to the new conditions of private life by which the gaps in modernization are realigned according to the standards of the societal majority, a majority defined in terms of number and with respect to social power. On the other hand, the impact on families in West Germany has been negligible, or can be restricted to the comparatively limited welfare losses caused by the massive redistribution processes from west to east for public investment in the east.

   - This change will result in a reduction in the differences in lifestyles between east and west.

   The implicit assumption behind such argumentation is that all empirical findings from direct comparisons of living conditions in West and East Germany can be related to the
respective political system (market economy versus state socialism). The political system determines the shape of social institutions which determine individual lifestyles. A frequently cited example of this sort of "deterministic chain" is the relationship among state socialism, full employment, social policy and daycare institutions.

Another, more hidden background assumption is that the "variance between groups" must have been at a maximum at the time of the breakdown of the GDR (because the two Germanies had extremely different political and economic systems), while the "variance within groups" must have been at a minimum (because each of the two societies was relatively "homogeneous"). The "variance between groups" should have increased significantly as long as both systems existed, while it must decrease thereafter.

However, these assumptions can be questioned from two angles.

First, the GDR did not constitute a random sample of all German counties, and "state socialism" was not just one, homogeneous "sample variable" applied to a single sample group. The effects can be observed by looking at the differences with respect to the "control group" (that is, West Germany). Differences within groups—for example, long-lasting cultural traditions in family formation, attitudes toward marriage and divorce and attitudes toward children—may have existed in the various regions of Germany even before the foundation of both states on the territory of Germany. Recently established time series on regional differences within Germany reveal more and more clearly that "system differences" between both states are confounded with specific regional cultures and traditions.

Second, five years after reunification, living conditions are still dramatically poorer in East Germany than they are in West Germany. Although the objective conditions are improving in East Germany, the "absolute gap" between East and West Germany may not decrease but increase in the future because of the different "velocities" in the improvement of the welfare situation in east and west. This may result in long-term political risks. Mounting social inequalities between both parts of Germany may lead to tensions, distributional conflicts and migration. Moreover, as these inequalities are so strictly referable to regional affiliation, this may even lead to a kind of "ethnic" division of social conflicts between Ossis (Easterners) and Wessis (Westerners), and the unification may be redefined as a colonization process. Perhaps the growing gap between the welfare situations in the two parts of Germany may then be attributed to the fact that the Wessis have just obtained a new market for their products, dealing with Ossis merely as consumers and not allowing them to produce anything on their own.
3. One can compare the situation in East Germany before the breakdown of the former system to the situation after the breakdown. This perspective is taken mostly by scientific analysts. One of the main aims of this perspective is to identify the social groups which are the short-term, middle-term and long-term winners and losers in the whole process.

This paper will follow mainly this perspective. It attempts to clarify the situation of children during the transformation process in East Germany. The marginal notes about the situation in West Germany will serve on some occasions as a scale of comparison, which has a significance not only in terms of the policy debate in Germany, but for the majority of citizens as well.

II. GERMAN POLICY IN THE TRANSFORMATION PROCESS
IN ROUGH OUTLINES

Basically, there has been a "minimalist policy" with respect to the number of specific regulations governing the unification, but a "maximalist policy" with respect to the amount of money and manpower invested. A large amount of money has been invested in infrastructure (transportation, roads, communication) and in the job skills of the East German people (professional retraining and the rebuilding of the public school system and universities according to West German standards). However, there has been no special social policy and no special active labour policy; with few exceptions the West German active labour market policy approach involving retraining, job-creation measures, employment promotion, and so on has only been applied and slightly adapted to the new Federal counties. This means that no wage controls, no minimum wage, no consumer price controls, and no food supply or food price controls have been implemented. Furthermore, there is no special education policy or family and youth policy.

The basic philosophy has been for the state to improve the conditions for economic activity but not to participate actively in the economy. (This strategy reflects, of course, the political ideologies of the governing parties in Germany and might have been different, if another political party had been in power.)

This philosophy also means that many impacts have been "individualized", that is, individuals have been left alone to cope with the stress of the transformation. This has
resulted in very obvious distortions in living conditions and the social structure and led to a massive reorganization in the lives of individuals.

The Treaty of the State and the Unification Treaty

In 1990 an economic and social union was created three months before the establishment of the political union. Two treaties form the framework within which the adaptation of the monetary, economic, social and political system in Germany is proceeding: the Treaty of the State and the Unification Treaty.

1. The **Treaty of the State** governs the *union of the two economies*. The economic order of united Germany is characterized by market-oriented economic principles like private property, competition, unregulated prices, and full freedom of employment, capital, goods and services (Pilz and Ortwein 1992). These principles act as a guarantee for the freedom of contract, the freedom of trade and the establishment and freedom of occupation and association. On 17 June 1990 the law of the *trustee agency* (*Treuhandanstalt*) was enacted to fix the responsibilities of the trustee agency.

   The Treaty of the State also governs the *social union*. The regulations concerning social union are summarized in the provision "the order of labour law and the system of social security". The labour law thereby became the law in the former GDR. It guarantees freedom of association and free collective bargaining, establishes the labour dispute law and regulates the creation of industrial enterprises, codetermination (joint employer-employee consultation) at the level of business enterprises, and job protection (Pilz and Ortwein 1992). Within the system of social security, "combined-risk" insurance was replaced by a structured system. Pension, sickness, accident and unemployment insurance are managed by a public corporation regulated by Federal law. Social security is financed by contributions, which are paid 50 percent each by employees and employers.

   National budgets and finances are also governed by the state treaty. The significant financial transfers from west to east are managed through the German Unity Fund.

2. **Debt arrangements** are an important part of the **Unification Treaty**. Since the first day of unification the Special Federal Fund (Sondervermögen des Bundes) took over all the debts of the former GDR and fulfilled the necessary debt service commitments. Since 1 January 1994, the Government, following the liquidation of the Special Federal Fund, has taken on
all the debts, within the Special Federal Fund, of the new Federal counties and the trustee agency (Pilz and Ortwein 1992).

Social Policy

The social policy model of the Federal Republic has been transferred to East Germany. The social union encompasses labour law and the social policy of German unification. It has the aim of unifying social standards within East and West Germany. The Treaty of the State, which was approved on 18 May 1990, included the target of creating a union of currency and economic and social policy. It fixed the conditions of the social policy process which was to accompany the transformation process. The social union covers health, unemployment and pension insurance, unemployment compensation, social assistance, and retraining initiatives and allowances.

The implementation of the social union was facilitated through a financing measure amounting to 2.75 billion DM in the Federal budget in 1990. Federal law automatically went into effect in East Germany on 3 October 1990. A temporary gap exists between East and West Germany in relative social sector contributions, except those provided by the Federal Government, such as child and maternity allowances. Uniform social insurance rates went into effect on 1 January 1991. When the economic development of the former GDR reaches the level of the old Federal Länder, wage compensations (unemployment compensation, pensions and the sickness benefit) are to be adjusted (Weidenfeld and Korte 1992) (Tables 1 and 2).

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<tbody>
<tr>
<td>GDR</td>
<td>0</td>
<td>2,458</td>
<td>29,875</td>
<td>46,014</td>
<td>50,566</td>
</tr>
<tr>
<td>FRG</td>
<td>39,833</td>
<td>41,423</td>
<td>42,048</td>
<td>47,508</td>
<td>58,969</td>
</tr>
</tbody>
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Table 2: GOVERNMENT EXPENDITURE ON SOCIAL ASSISTANCE
(In Millions Of DM, 1985-92)

<table>
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<tbody>
<tr>
<td>GDR</td>
<td>60</td>
<td>56</td>
<td>120</td>
<td>2,794</td>
<td>4,482</td>
</tr>
<tr>
<td>FRG</td>
<td>20,824</td>
<td>28,775</td>
<td>31,782</td>
<td>34,119</td>
<td>38,120</td>
</tr>
</tbody>
</table>


Furthermore, a dynamic adjustment of pensions is being implemented in order to adapt to the general growth in incomes in the new Federal Länder (Table 3). Likewise, changes are significant in women and family allowances. The Federal subsidies which replaced the subsidies of the former GDR for daycare institutions and kindergartens and the generous initiatives for "sick child care" were terminated on 31 June 1991 in compliance with the Unification Treaty.

Table 3: GOVERNMENT EXPENDITURE ON PENSIONS
(In Millions Of DM, 1985-92)

<table>
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<tbody>
<tr>
<td>GDR</td>
<td>16,398</td>
<td>17,599</td>
<td>13,580</td>
<td>34,005</td>
<td>53,979</td>
</tr>
<tr>
<td>FRG</td>
<td>187,978</td>
<td>217,419</td>
<td>225,507</td>
<td>239,454</td>
<td>247,248</td>
</tr>
</tbody>
</table>


All three of the above tables clearly show the increasing Government expenditures and reflect the overall efforts in the social sector. These efforts have become necessary because the transformation process has produced social problems like rising unemployment rates and growing impoverishment among certain segments of the population, including children (see later).
Economic Policy

In the literature on the transformation process, very different positions are expressed on the process and on the consequences of German unification. Priewe and Hickel (1991) and Pilz and Ortwein (1992), for example, take a very critical view of the transformation process. On the other hand, Sinn and Sinn (1992), while approving of unification, report on the distributional conflict between "Ossis" and "Wessis". Thus, because of their wage demands, the Ossis benefited in the year of unification from wage growth rates which were not compatible with East German economic development. The Wessis had to pay more taxes to finance unification, including, for example, a special tax called the "Solidaritätszuschlag" ("solidarity surcharge"), but very often they forgot and still forget that unification has generated high gains in productivity.

Economic policy measures have included the change in currency. The trustee agency was created (see earlier and below), and the alignment of East German wages with those in West Germany has been set as a goal of economic policy.

1. The change in currency. On 1 July 1990 both parts of Germany became unified in terms of the union of currencies, economies and social systems. The next day all East German Ostmarks were changed into West German D-marks. Under-15-year-olds were allowed to exchange 2,000 Ostmarks at a ratio of one-to-one; adults under 60 could so exchange up to 4,000 Ostmarks, and the elderly were permitted to exchange 6,000 Ostmarks. Most other money stocks were exchanged at the rate of two-for-one. The stocks of money that had been accumulated through speculation during the year of unification were exchanged at three-for-one. Financial claims and debts, especially the debts of companies (reaching 260 billion Ostmarks), were calculated at two-for-one. Prices, wages and pensions were fixed at a rate of one-for-one.

In terms of policy, the currency union was designed to create a situation which would render unification inevitable and signal to the East German people that migration to West Germany solely for economic reasons was no longer a worthwhile alternative (Figure 1).

The currency union had three economic targets. First, the change in wages was to generate or enhance competitiveness in the East German economy. Second, the change in currency was to capitalize the economy of the unified territory at the proper amount of
liquidity. Third, the change in outstanding accounts was to provide East Germans with an appropriate basis for economic activity within the unified Germany (Sinn and Sinn 1992).

Figure 1: Migration between the Old Federal Territory and the Former GDR (1950-93)


2. The trustee agency (Treuhandanstalt). The central task of the trustee agency was to restructure and transfer nationalized concerns to private ownership, so that they are able to compete with other, similar concerns elsewhere. The trustee agency became responsible for more than 8,000 nationalized concerns and much property. It had the unique historical task of transforming a centralized economic system into the social and market-oriented economic system of West Germany (see, for instance, Weidenfeld and Korte 1992). The staff of the trustee agency dealt with many different legal, economic and political questions and problems in business administration. The agency had to face difficult legal issues regarding property, complicated situation analyses and analyses of market opportunities, and significant financial engagements to overcome the economic and ecological burden of the past (accumulated toxic waste, for example) and to provide the machinery necessary for the transitional period. The clear strategy of the trustee agency in reaching decisions about the future of concerns was to prefer transfers to the private sector rather than to focus on internal
reorganization. In any case, in the view of many East Germans the trustee agency destroyed a significant portion of the industrial base and was therefore responsible for the loss of many jobs and the elimination of many workplaces.

3. **Differences in purchasing power.** The former GDR allocated subsidies equivalent to over 66 billion DM every year for basic foodstuffs and other essential items like housing or clothes, but, on the other hand, put special taxes on luxury goods equivalent to 43 billion DM. Thus, a television set cost three times more in the GDR than it did in West Germany, while bread only cost one-sixth as much. In the housing sector, the relative price differences were extremely wide. Before unification West German households spent 26 percent of their income on gross rents, while the corresponding figure in East Germany was only 5 percent. Naturally, quality varied appreciably; however, even if accommodations of similar quality are compared, the level of gross rents in East Germany was only 24 percent of the amount in West Germany. Since 3 October 1990, most price subsidies and general taxes on consumption have been abolished. All prices, except rents, have been liberalized (Sinn and Sinn 1992).

Figure 2 shows clearly the differences in purchasing power between East and West Germany in 1993. It is remarkable that the poorest district in West Germany is richer than the richest counties in East Germany (for example, East Berlin, Potsdam and Leipzig).

4. **Changes in wages.** Initially, in the Treaty of the State, the level of wages in East Germany was provisionally fixed at one-third of those in West Germany. However, there was strong resistance against this plan. In particular, West German labour unions forced through a policy of high wages, and at the beginning of the unification process no employers, not even the most powerful, were able to resist these demands. In fact, there were several good reasons for the implementation of a policy of high wages. High wages would act as a disincentive against the further migration of East German workers to the west; low wages would tend to produce restrictions in consumption, and labour unions wanted to prevent the creation of a wage-split at the Elbe river that would tend to erode their bargaining power (Table 4).

**A Brief Description of the Situation a Few Years after Reunification**

At least until now, as measured by nutrition, health care, or purchasing power, the living conditions of no particular social group in East Germany have worsened because of
reunification. Nonetheless, the changes in the relative welfare positions of the respective
groups have been dramatic. For example, the "winners" have been people over 60 (who have

Figure 2: THE DIFFERENCES IN PURCHASING POWER IN EAST AND WEST GERMANY*
(1993)

Source: Based on the regional databank of the German Youth Institute, Munich, and on data
of the Society for Consumer Research, Nürnberg.
* The map represents an index. "100" is the average purchasing power in Germany. The
"dark" counties (West Germany) have more than average purchasing power, and the "light"
districts (East Germany), less. The number of districts in each group is shown in parentheses.
Table 4: Income Changes in East Germany (1989-3)

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<tbody>
<tr>
<td>Gross wages</td>
<td>DM</td>
<td>1322</td>
<td>1360</td>
<td>1817</td>
<td>2469</td>
<td>2797</td>
</tr>
<tr>
<td></td>
<td>1991=100</td>
<td>73</td>
<td>75</td>
<td>100</td>
<td>136</td>
<td>154</td>
</tr>
<tr>
<td>Memo item: West</td>
<td>DM</td>
<td>3343</td>
<td>3501</td>
<td>3708</td>
<td>3846</td>
<td>4020</td>
</tr>
<tr>
<td>Net wages</td>
<td>DM</td>
<td>--</td>
<td>--</td>
<td>1369</td>
<td>1739</td>
<td>1960</td>
</tr>
<tr>
<td></td>
<td>1991=100</td>
<td>--</td>
<td>--</td>
<td>100</td>
<td>127</td>
<td>143</td>
</tr>
<tr>
<td>Weighted per-capita income*</td>
<td>DM</td>
<td>830</td>
<td>830</td>
<td>--</td>
<td>--</td>
<td>1230</td>
</tr>
<tr>
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<td>1990=100</td>
<td>100</td>
<td>100</td>
<td>--</td>
<td>--</td>
<td>148</td>
</tr>
</tbody>
</table>

* Household members weighted by age, based on the German Social Support Law.

benefited from pensions gauged according to the western system and based on a life-long work record). The "losers" have been, for example, employed women, who have been the first to be dismissed from the workplace, and, especially, single mothers who had already been divorced according to the laws of the GDR. These last are at the greatest risk of unemployment, have nearly no chance of being reemployed and receive no support from their former spouses, since the laws of the GDR did not recognize special rights for a parent who is not a breadwinner (and who is normally responsible for the education of the children).

The short-term losers but, probably, the long-term winners of the process are the children in East Germany. They are losers because of the breakdown in child-specific infrastructures such as kindergartens, daycare centres and youth clubs. They may be the long-term winners, because the drastic decline in the birth rate will mean greater opportunities in the future in terms of more places in classrooms, more available jobs and so on (see later).

1. **The economic situation.** Since 1 July 1990, the date of the monetary, economic and social union, a transformation crisis has been occurring in East Germany, a profound crisis of adaptation and a profound structural crisis. The crisis has been aggravated by a general recession in the countries of the Organization for Economic Cooperation and Development.
In 1990 and at the beginning of 1991 East German production fell off; the East German GDP dropped; consumer prices increased rapidly, and domestic demand rose, mainly for goods from the west that were becoming more widely available (Tables 5 and 6).

Table 5: GDP in East and West Germany  
(In Billions Of DM At Current Prices, 1989-94)

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</thead>
<tbody>
<tr>
<td>GDR</td>
<td>335.9*</td>
<td>95.2</td>
<td>180.9</td>
<td>233.4</td>
<td>274.2</td>
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<tr>
<td>FRG</td>
<td>2,224.4</td>
<td>2,425.2</td>
<td>2,635.0</td>
<td>2,794.2</td>
<td>2,832.9</td>
<td>2,979.4</td>
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</tbody>
</table>

* In Ostmarks.

Table 6: Annual Inflation in East and West Germany  
(Consumer Price Index: 1990=100, 1990-3)

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</tr>
</thead>
<tbody>
<tr>
<td>GDR</td>
<td>100</td>
<td>108.3</td>
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<td>131.0</td>
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<tr>
<td>FRG</td>
<td>100</td>
<td>103.5</td>
<td>107.6</td>
<td>112.1</td>
</tr>
</tbody>
</table>


Private consumption in East Germany has been expanding since unification because of the boost in real wages and the financial transfers from West to East German households. In 1991, from all public institutions, these transfers reached approximately 150 billion DM, which, relative to the East German GDP of about 180 billion DM in that year, is extremely high. Since the first six months of 1992 the East German GDP has again been increasing. The cost of living is still going up, because rents and Federally administered prices have climbed rapidly.

The monetary union with the overvaluation of the Ostmark by about 200 percent to 300 percent, the sudden onset of competition and the opening to world markets were like a shock to the former GDR and led to a dramatic breakdown of the economy. The decline in trade with the other Eastern European states and a slump in the East German market caused
by the availability of West German goods were also responsible for the economic crisis (Engelen-Kefer 1995). All these factors led to a drop in industrial production.

Priewe and Hickel (1992) find three reasons for the transformation crisis.

- The desolation of the economy of the former GDR and the lack of competitiveness with other economies caused by poor product quality and obsolete, worn out machinery.
- The fiscal union and the resulting large upward revaluation of the GDR currency.
- The economic policy, which misjudged the consequences of the fiscal union and underestimated the problems of the transformation process.

2. The development of labour market and manpower policies. No special labour market policies have been developed to cope with the problems of the transformation process. The economic and political crisis has also had the consequence that since 1989 the number of the employed has fallen. The East German population has declined by two million since 1989. At the beginning of the transformation, many people emigrated with their families to West Germany, and many workers who lived near the frontiers with West Germany began to commute. A labour market policy was implemented in an attempt to regulate this development, so that only a portion of the drop in the employment rate would become "open unemployment". Scarcely 300,000 individuals went on early retirement in 1992, and nearly 500,000 individuals accepted the "old-age transitional allowance" ("Altersübergangsgeld"). About 425,000 persons were in full-time vocational education and retraining programmes (Engelen-Kefer 1995). Short-term employment and job-creation measures also had the result that the number of the employed remained relatively high. However, the official unemployment rate rose constantly (Table 7). In December 1993 in the new Federal Länder 1.175 million people were unemployed, and the unemployment rate was 15.8 percent (Engelen-Kefer 1995).

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</thead>
<tbody>
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<td>14.8</td>
<td>15.8</td>
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<tr>
<td>FRG</td>
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<td>7.2</td>
<td>6.3</td>
<td>6.6</td>
<td>8.2</td>
</tr>
</tbody>
</table>

In East Germany nearly 45 percent of all workplaces disappeared between 1989 and 1992. The number of workplaces plummeted from 9.6 million in 1989 to 5.7 million at the end of 1991 (Priewe and Hickel 1992). In some new Federal counties the unemployment rate was even higher than 15.8 percent, and the two parts of Germany can clearly be divided according to the unemployment rate (Figure 3).

**Figure 3: The Annual Registered Unemployment Rate**
(In Percentages, 1992)

Source: Based on the regional databank of the German Youth Institute, Munich.
* The number of districts in each percentage group is shown in parentheses.
However, the decrease in production and the loss of workplaces were not accompanied by a similar decline in the supply of goods. The real consumption of goods and services and the real consumption of private households climbed about 10 percent between 1989 and 1991 (Engelen-Kefer 1995). Viewed from this angle, material living conditions in East Germany constantly improved. This improvement was made possible by enormous transfers of external resources from West Germany.

The development of the labour market had negative consequences for East German women (the "losers" in the transformation process). The unemployment rate was worse among women than it was among men. The female unemployment rate was 9.6 percent in January 1991 (male rate: 7.6 percent), 14.7 percent in December 1991 (male: 8.9 percent) and 18.6 percent in December 1992 (male: 9.7 percent) (Engelen-Kefer 1995). With the exception of adolescents under 20 years of age, the unemployment rate became the worst among women, among whom the unemployment reached 21.9 percent in October 1993 (male: 10.6 percent). Even the duration of the unemployment period is longer in East Germany than it is in West Germany. In 1991 the duration of unemployment was 38 weeks on average in the east and 24 weeks in the west (Engelen-Kefer 1995).

The structural problems in the labour market, the transformation crisis and the tendency toward recession have made structural changes difficult. The labour market is not homogeneous; it consists of many submarkets. Submarkets for men and women, professional submarkets and regional submarkets all present different opportunities and risks.

- Elderly employees are being dismissed more and more frequently.
- The decline in employment has affected men and women almost equally. However, women have fewer chances on the job market than do men and tend to remain unemployed. Thus, among the more than 1.2 million unemployed in March 1992, 750,000 (62 percent) were women.
- The portion of the young population that possesses job skills has been able to ride out the structural transformation. The rest are having difficulty acquiring professional training, since places in training establishments are very scarce.
- Important regional differences exist on the labour market in terms of the risks of unemployment or employment opportunities.

The analysis of the income situation and the growth of income is much more difficult in East Germany than it is in West Germany. To calculate the share of labour in national income or even the average real wage rate adjusted according to labour productivity in East
Germany is nearly impossible statistically because of the existence of an employee quota (Engelen-Kefer 1995).

3. **Social assistance in the new and old Federal Länder.** Social assistance is emphasized in this paper because it is an indicator of poverty and of the income situation of households. Long-term unemployment is often the reason a household is receiving social assistance. More and more children are being affected by unemployment and social assistance. In the new Federal Länder, 363,800 individuals received social assistance regularly in 1991, and 167,400 individuals received occasional assistance inside and outside institutions. Among the individuals receiving social assistance regularly outside institutions, 93.8 percent were Germans, while only 6.2 percent were foreigners. The share of women amounted to 53.3 percent and was smaller than in West Germany. Of the people receiving social assistance, 55.5 percent were under 25 (Figure 4). This level is considerably higher than it is in the old

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**Figure 4: Welfare Recipients by Age in East and West Germany**
(Per 1,000 Population, 1980-92)

Source: *Wirtschaft und Statistik* (July 1994).
Federal Länder (46.5 percent) (Wirtschaft und Statistik April 1993). Nearly 30 percent of all households receiving social assistance are single-parent households composed of mothers and children. For 63.6 percent of the households living on social assistance, unemployment was the main reason for the dependence on this public transfer. This is more than twice as high as the corresponding figure for West Germany.

Poverty analysis in Germany has focused mainly on so-called "old-age poverty". Nonetheless, it is necessary to investigate more exactly the other end of the age pyramid: the poverty of children and youth. It seems that families with infants face especially great difficulties in covering the cost of living. The social safety net (for example, the child allowance and the child-rearing allowance) is not able to overcome the need for social assistance. Single-parent families very often depend on social assistance because of the lack of a breadwinner and an insufficient income. These are the overproportionally frequent reasons households with children under 15 years old depend on social assistance (Figure 5). The same trend can be expected in the new Federal counties. In this sense, single-parent families and families affected by unemployment—this also means children—belong to population groups which are the "losers" in the transformation process.

III. DEMOGRAPHIC DEVELOPMENTS IN EAST GERMANY

Since the foundation of the GDR, the demographic situation has changed enormously. Between 1950 and 1993 the population decreased by about 2.8 million, and between 1970 and 1993 by about 1.5 million persons (Dorbritz 1993). This steady and significant decline in population during the whole existence of a state seems to have been unique to the GDR among all countries.

The number of live births fluctuated appreciably, and the rate of migration was always negative, with the number of people leaving the country greater than the number entering (see Figure 1, page 10). From 1980 to 1993 the population was constantly on the decline, while in West Germany the population was constantly increasing (with the exception of 1985). The migration from east to west was caused mainly by people fleeing the regime and by the departure of elderly citizens of the GDR.
The Marital Status of the Population

Since the 1970s the marital status of the population has been in dynamic change in East Germany, as well as in West Germany. The proportion of unmarried and divorced
individuals has increased, while the proportion of married individuals has fallen. The reasons include shifting attitudes toward marriage and divorce caused by greater pluralism and a change in individual lifestyles. In the former GDR the number of marriages has been decreasing constantly since 1950. In 1991 the total number of marriages dropped to about one-half the number of the previous year (from 101,913 to 50,529). This was a reaction to the insecurity of the new economic and social situation. In 1993 the number of marriages in united Germany (442,401) reached the lowest point since the immediate postwar era (Wirtschaft und Statistik December 1994), although it was only slightly lower than the levels of the previous two years (Table 8).

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<td>6.4</td>
<td>5.9</td>
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<td>6.7</td>
<td>6.1</td>
<td>5.7</td>
<td>5.4</td>
</tr>
<tr>
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<td>9.7</td>
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<td>8.9</td>
<td>8.6</td>
<td>7.1</td>
<td>6.8</td>
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<td>3.0</td>
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</tr>
<tr>
<td>FRG</td>
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<td>6.6</td>
<td>6.3</td>
<td>6.2</td>
<td>6.0</td>
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</tbody>
</table>


In comparison to the other Central European states like the Czech Republic, Hungary and Poland, as well as to Russia, the fall of the marriage rate in the former GDR is unprecedented. The East German marriage rate dropped by more than 50 percent from 1989 to 1991. In the other states, with the exception of Poland and Russia, the rate was increasing in the first year of the transition and has been falling since 1991, but not to the same extent as it has in the former GDR. The inhibition against the formation of families in East Germany has been very dramatic since the onset of the transition to the market economy.
The average age at marriage in the two German states was always different. Men and women in the former GDR tended to marry at a younger age than they did in the former FRG. This was due also to the encouragement offered by the GDR for early family foundation. Since the onset of the transformation process, the average age at marriage in the new Federal Länder is slowly conforming to that in the old Federal districts.

Following German unification on 3 October 1990, the West German divorce law also became the law in the new Federal Länder. This led to a significant decrease in the number of divorces in East Germany. Before unification about 50,000 marriages ended in divorce each year. In 1990, 32,000 marriages ended in divorce. In 1991 the figure was only 8,976. In 1992 the number of divorces increased again, and it is assumed that a bottleneck of divorce petitions was generated in family courts that has now been slowly alleviated (Wirtschaft und Statistik December 1994). The radical change in social and economic conditions since German unification has reinforced the view among individuals that one should wait before filing for divorce.

The divorce rate in the former GDR in the 1980s was at a relatively high level—about three divorces per 1,000 population—and was higher than in West Germany, where only about two marriages per 1,000 population ended in divorce. At the time of the breakdown of the socialist system the divorce rate dropped dramatically, but it is again increasing. Eventually, the rate in the new Federal Länder is expected to conform to the level prevalent in the old Federal Länder (Table 9).

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<td>1.5</td>
<td>1.5</td>
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<td>2.4</td>
<td>2.4</td>
<td>2.1</td>
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<td>1.9</td>
<td>2.0</td>
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<td>2.1</td>
</tr>
</tbody>
</table>

Table 9: CRUDE DIVORCE RATES  
(Per 1,000 Population, 1985-93)

The evolution of the divorce rate in various Central and Eastern European states, including Russia, also supports the view that the former GDR represents a special case among all the societies in transition. The divorce rate has dropped to a much greater degree in the new Federal Länder than it has in the other societies. In Hungary and Poland the divorce rate is apparently not being influenced by the transition to a market economy (it is steadily falling), while in the Czech Republic and Slovakia the divorce rate increased shortly after the onset of the transition and then returned to "normal" again. Russia is the only case where the divorce rate has risen after a short decline in 1990.

In West Germany in recent years parents with minor children have been accounting for one-half of all divorces (exactly 50 percent in 1993). The situation in East Germany is somewhat different. Until 1989 parents with children of minor age accounted for 70 percent of all divorces. After the German unification this share fell to 57 percent (in 1991) and then, with the increasing number of divorces, rose back up to 70 percent in 1993 (Wirtschaft und Statistik December 1994). As a consequence of the higher birth rate in former years and the higher divorce rate in the new Federal Länder, the share of children becoming "orphaned" by divorce has been higher in East Germany than it has in West Germany (Table 10).

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<td>81.7</td>
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</tr>
</tbody>
</table>


The Birth Rate

In the former GDR since the 1970s the number of live births has been constantly decreasing. This has been caused by a decline in fertility.

As stated by Dorbritz (1990, page 23), "In the 1990s, furthermore, a decline in fertility is to be expected that might possibly be reinforced by the current economic and social instability, as well as by the anticipated structural transformation of society."
However, since 1990 the reality has exceeded this expectation by a great deal. During the transformation process the number of live births, marriages and divorces has dropped appreciably. Previous prognoses about the demographic trends have all proven wrong. The demographic reality in the new Federal counties is worse than anybody ever predicted. This reality reflects the radical changes and far-reaching problems in this new part of the Federal Republic. The high unemployment rate and the general social insecurity have led to a high rate of migration and an as yet unclear restraint on marriage and births.

Normally, dramatically falling birth rates (as for example in Bulgaria, Romania and Russia) have been interpreted as a consequence of the transformation process; they are said to be caused by the low level of welfare in the given state and by the lack of resources among the potential parents for the care of their children. However, the example of East Germany stands against this assumption. Although in the former GDR during the 1980s the decline of the birth rate by 1.91 percent on average was relatively high, the fall of the total fertility rate from 1.57 in 1989 to 0.80 in 1993 is unique among Central and East European states (Table 11); this is equivalent to a fall in the birth rate of 12.24 percent per year on average (Nauck 1995).

<table>
<thead>
<tr>
<th>Table 11: TOTAL FERTILITY RATES</th>
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</thead>
<tbody>
<tr>
<td>(Number Of Children Per Woman, 1985-93)</td>
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<tr>
<td>---</td>
</tr>
<tr>
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<tr>
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<tr>
<td>Romania</td>
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<td>Russia</td>
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<tr>
<td>GDR</td>
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<tr>
<td>FRG</td>
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</tbody>
</table>

This decline in the birth rate was more significant in the GDR than it was in any other state of the former Soviet Bloc. Indeed, there are no recent parallels anywhere else in the world. The decline in the birth rate in the former GDR was significantly greater even than the falling birth rate linked to both World Wars and the Great Depression. Therefore, it cannot be interpreted simply as a "process of adaptation" to living conditions in the west (particularly because of its extent).

More precisely, the example of the declining birth rate in East Germany demonstrates that social costs are accompanying the transformation to a market-oriented economy even when the welfare level is high. The significant amount of "insecurity in expectations" place a limit on the option of a family-oriented lifestyle, especially for women. The insecurity is caused by the shrinking labour market, the rising unemployment rates and the shortage in child daycare facilities, which were often made available by firms and enterprises in the former GDR. It has become much more difficult since reunification for East German women both to care for a family and to hold down a job.

In the united Germany 15 percent of children are born outside of marriage. Here, too, there are considerable differences between the old and the new Federal Länder. In the old Federal territory the share of births to unmarried mothers among all births was 11.9 percent in 1993. The 10-percent "boundary" was passed for the first time in 1988. In 1985 in the former GDR the share of illegitimate children already amounted to 33.8 percent, and in 1993 it was 41.1 percent (Table 12).

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<td>6.2</td>
<td>6.6</td>
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<td>8.2</td>
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<td>11.1</td>
<td>11.6</td>
<td>11.9</td>
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Again, it is obvious that the former GDR represents a special case among the countries in transition, first, because before the breakdown of the socialistic system the share among all births of births to unmarried women was always extremely high in the GDR (this appearing to be a result of East German family policy) and, second, because the rise in this share since the onset of the transformation is greater in the former GDR (8.1 percent from 1989 to 1991) than it is in any other transitional state. The upward trend in births to unmarried mothers was already observable in nearly every country of the former Soviet Bloc (for example, the Czech Republic, Hungary and Russia) in the 1980s. Perhaps the increasing pluralism in family forms may be an explanation, in that more children are being born in "nonstandard" families (single-parent families and families headed by unmarried couples).

In any interpretation of these results, one must bear in mind that birth rates were falling in the former socialistic countries (to an extreme degree in the former GDR) and that the absolute number of births to unmarried mothers was declining, too, so that there was a relative shift toward births to unmarried mothers during the transformation process.

The literature contains no convincing or plausible theory to explain this pattern of behaviour in a difficult and insecure situation. Perhaps this pattern of behaviour is a holdover from behaviour patterns in the former GDR (Dorbritz 1993). In many publications, this special pattern is explained by reference to the once dominant social-political situation, in which the function of marriage in society tended to be downplayed by the existence of an all-embracing social security system on the one hand and, on the other, by the fact that places in kindergartens and daycare institutions were offered first to the children of unmarried mothers, though nearly every woman was employed. This led to a new pattern of family formation by which a woman first had a child and then married so that she could gather the most benefit from the incentives provided by social policy. The criteria for providing places in kindergartens is different in the new Federal Länder, but employment among women is still relatively high, and places in daycare institutions and kindergartens are hard to come by because of closures, so that these places are once more being offered first to the children of unmarried mothers.

The legal abortion rate always was higher in the former GDR than it was in the old Federal Republic. In 1989 there were 37 abortions per 100 live births in the GDR; in West Germany there were 11.1. In 1992 the abortion rate jumped to 49.5 in the new Federal Länder (10.4 in the old Federal Länder). The rise of the abortion rate in East Germany, Bulgaria and Russia can also be interpreted as a special feature of the transformation crisis (Table 13).
Table 13: Abortion Rates
(Per 100 Live Births, 1985-93)

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<td>70.7</td>
<td>71.5</td>
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<td>201.0</td>
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<td>37.1</td>
<td>46.0</td>
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<tr>
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<td>11.1</td>
<td>10.8</td>
<td>10.3</td>
<td>10.4</td>
<td>11.0</td>
</tr>
</tbody>
</table>


Mortality

In every country involved in the transformation process the death rate rose during the first year (1989-90) of the transition. Even in countries like Bulgaria, Hungary and Russia the climb has not yet reached a peak, while in other countries like the Czech Republic, Slovakia and Poland the death rate has again been falling. In the former GDR the death rate increased from 12.4 percent in 1989 to 12.9 percent in 1990. Since 1991, however, it has again been declining (Table 14).

Table 14: Crude Death Rates
(Per 1,000 Population, 1985-93)

<table>
<thead>
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<td>11.7</td>
<td>11.5</td>
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<tr>
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<td>11.4</td>
<td>12.2</td>
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<tr>
<td>GDR</td>
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<td>12.4</td>
<td>12.9</td>
<td>12.7</td>
<td>12.1</td>
<td>11.9</td>
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<tr>
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<td>11.2</td>
<td>11.3</td>
<td>11.1</td>
<td>10.7</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Analysing the changes in the age-specific mortality of the population in the new Federal counties, one can see that the mortality of nearly all age groups has been influenced by the transformation. The increased mortality has not occurred because of a higher mortality risk among infants, the elderly or women. The mortality rate among the young and, especially, among middle-aged adults (40-59 years) has increased most since reunification (Table 15). The higher mortality risk among this group can be explained by a rise in mortality due to unnatural causes like accidents and suicide (Wirtschaft und Statistik December 1994).

### Table 15: Age-Specific Mortality Rates in East Germany (1985-92)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Under 5 years*</td>
<td>2.45</td>
<td>1.80</td>
<td>2.49</td>
<td>3.47</td>
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<tr>
<td>5-19 years</td>
<td>0.42</td>
<td>0.37</td>
<td>0.49</td>
<td>0.42</td>
<td>0.36</td>
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<tr>
<td>20-39 years</td>
<td>1.13</td>
<td>1.17</td>
<td>1.42</td>
<td>1.50</td>
<td>1.42</td>
</tr>
<tr>
<td>40-59 years</td>
<td>5.75</td>
<td>6.18</td>
<td>6.73</td>
<td>6.58</td>
<td>6.33</td>
</tr>
<tr>
<td>60+ years</td>
<td>62.80</td>
<td>56.92</td>
<td>56.45</td>
<td>54.71</td>
<td>51.00</td>
</tr>
</tbody>
</table>


* The under-5 mortality rate is per 1,000 live births. All other mortality rates are per 1,000 individuals in the relevant age group.

Before the collapse of the Soviet Bloc, relative to all Central and Eastern European states, the infant mortality rate reached the lowest level in the former GDR (where the infant mortality rate has been sinking continuously since 1950). Despite the emotional stress and all the changes in the welfare situation of individuals, one can see that, in Germany, the "hardest" of all "objective" social indicators of individual life chances—the infant mortality rate—has not been affected by the transformation process, unlike the case in all other states of Central and Eastern Europe, with the exception of Poland (Table 16).

### Life Expectancy

Life expectancy was steadily increasing, and the infant mortality rate was constantly decreasing in the former GDR. Life expectancy at birth can serve as an indicator of the higher
Table 16: INFANT MORTALITY RATES
(Per 1,000 Live Births, 1989-93)

<table>
<thead>
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</tr>
</thead>
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<td>FRG</td>
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<td>7</td>
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</tr>
</tbody>
</table>


level of welfare of the former GDR relative to all other Central and Eastern European states. The life expectancy of men and women was highest in East Germany among all these states before the transition. The profound crisis of all societies involved in a transformation process becomes very obvious when viewed from the perspective of the decline in life expectancy among all the states of the former Soviet Bloc.

In the new Federal counties life expectancy among men fell from 70.0 in 1989 to 69.5 in 1991, while life expectancy among women actually rose by about six months from 1990 to 1991. In Russia the consequences are most extreme. There, life expectancy among men dropped from 64.2 to 59.0 years and among women from 74.5 to 72.7 years between 1989 and 1993. The consequences in the Central European states seem to be less striking and more temporary. In the Czech Republic, Poland and Slovakia life expectancy is again increasing (Table 17).

Migration

Migration in the former GDR was characterized by a negative trend. In 1989 there were 5,135 immigrants from the old Federal territory, while 388,396 individuals left the GDR (Table 18,
Table 17: Life Expectancy at Birth
(In Years, 1989-93)

<table>
<thead>
<tr>
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<td></td>
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<tr>
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<td>72.9</td>
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<tr>
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Table 18: Migration Between the Old Federal Territory and the Former GDR (1980-93)

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<th>West-East Migration</th>
<th>East-West Migration</th>
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<td>1980</td>
<td>1,560</td>
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<tr>
<td>1985</td>
<td>2,039</td>
<td>28,439</td>
<td>-26,400</td>
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<td>1989</td>
<td>5,135</td>
<td>388,396</td>
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<td>1990</td>
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<td>1991</td>
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<td>249,743</td>
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<td>1992</td>
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</tr>
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<td>1993</td>
<td>116,000</td>
<td>172,300</td>
<td>-56,300</td>
</tr>
</tbody>
</table>

Figure 6). Most of the emigrants were young people. Under-40-year-olds accounted for 76.6 percent, while 23.2 percent were children, 73.8 percent were of working age, and 3 percent

Figure 6: MIGRATION IN GERMANY*
(1989-91)

Source: Based on the regional databank of the German Youth Institute, Munich.
* In the dark counties the difference in population between 1989 and 1991 was very high (a high level of east-west migration), while in the light counties the balance was negative (the number of migrants into these counties exceeding the number of emigrants). The number of districts in each group is shown in parentheses.
were pensioners. The proportion of males and females was nearly balanced. The migration movement outside the state frontiers and the abortion rate were among the issues which were taboo in the former GDR, because they were viewed as a sign of people's dissatisfaction with their lives in the country. The lack of a policy on the integration of foreigners also contributed to the negative trend in migration.

In a survey of migrants, the following reasons were given for emigration from the GDR (see Dorbritz 1990).

- The lack of the chance to express one's opinion and to travel (74 percent).
- To seek the opportunity to live one's life as one sees fit (72 percent).
- No prospects or only poor prospects for the future (69 percent).
- The state does not allow people to make their own decisions (65 percent).
- The material living conditions (56 percent).

Since 1991 there has been a definite slowdown in migration into the old Federal Republic (see Table 18). At the same time the influx of Wessis into East Germany is increasing (though it is not clear whether a large part of these people might really be Ossis who are remigrating). The slowdown and the influx are both caused by the support available for economic and administrative reconstruction in the new Federal Länder. Time will tell, however, whether the migrants will stay indefinitely in the former GDR, or only for a limited period. With the growing consolidation of economic and social conditions in East Germany, the numbers of immigrants and emigrants will tend to balance out. The more restricted labour market in East Germany is being further disturbed by the losses to migration. However, this effect will last only a short time. The manpower of the migrants will be missed later, because of their age, their know-how and job skills, and their relatively high mobility (Statistisches Bundesamt 1992b).

In a demographic sense, the enormous losses due to migration since the fall of the Berlin wall have contributed not only to a reinforcement of the imbalance in population between east and west, but also to a reduction in the numerical population base for marriage and family formation (the "marriage squeeze"), because of the age structure of the migrant population. They also explain the lower relative number of births in this part of Germany, as well as, at least partly, the significant current decline in the number of people willing to marry (Statistisches Bundesamt 1992b). Before the onset of the transformation process, the number of marriages was clearly higher in the former GDR than it was in the old Federal
Republic. On the other hand, since unification the number of people marrying in East Germany per 1,000 population is only one-half the corresponding number in West Germany.

**The Shift in the Age Structure of the Population**

In the former GDR during the period 1970-88 the most important population trends were the decrease in the population share of children and young people (from 31.0 percent to 25.8 percent) and the increase in the share of adults in the 20-to-40 age group and in the 40-to-60 age group (see Dorbritz 1990).

The consequences of the surplus of deaths and the losses to migration on the overall population are important. In recent years, these consequences have reinforced a deformation in the "age pyramid". The size of the population of working age (from 15 up to 65) fell by about 519,000 between 1989 and 1990, of children (under 15) by about 92,000 and of pensioners (65 and over) by about 36,000 individuals. In the new Federal Länder the population of working age accounts for a larger share than does any other age group in the decrease in the size of the overall population (Statistisches Bundesamt 1992b). This has implications for subsequent income transfers from West to East Germany, long-term population growth, long-term economic growth (GDP), the regional imbalance and the continued migration from east to west.

**IV. CHANGES IN THE LIVING CONDITIONS OF CHILDREN IN EAST GERMANY, 1990-3**

This paper has presented an interpretation of demographic time series in official statistics from East and West Germany and other Central and Eastern European states to show the differences and similarities in demographic behaviour in both parts of Germany and in the former Soviet Bloc before and after the political unification of Germany. The paper's analysis of the specific conditions among East German children during the transformation process is based on surveys of family situations, daycare facilities, the employment status of parents, housing, parental values and attitudes, and so forth from 1990 and 1993. The data from 1990 reflect living conditions in the former GDR at the time of the political unification, while the data from 1993 reflect the first (sometimes dramatic) consequences of the transformation.
Demographic Trends and Changes in Family Structure

The revolutionary changes in the political and economic systems of the states of Central and Eastern Europe have induced rapid social changes among families and in the living conditions of children. In the East German transformation process, there have been four main tendencies in individual behaviour patterns that have been having a direct impact on family structure. These are the decline in the marriage rate, the decrease in the divorce rate, the drop in the total fertility rate and the rise in the percentage among all births of births to unmarried mothers (see earlier). The decrease in the divorce rate might lead one to assume that in periods of economic crisis and rapid social change marriage represents a stabilizing factor. On the other hand, the decline in marriage and birth rates suggests that fewer new families are being formed; this is probably caused by an expectation of instability in the economic development of individuals. The proportional rise of out-of-wedlock births might point to temporary uncertainties about the new social norms, leading people to avoid the legalization of their partnerships. These possible interpretations refer only to the crisis of transformation as a dominant explanatory element in individual behaviour; they do not take into account other factors such as long-term changes in values, local environments or traditions.

Regardless the reasons, these developments have influenced family structure (Figure 7). While the number of married couples has declined rapidly, the number of unmarried couples and of one-person households (especially those composed of elderly men) has risen.

The total number of households with children under the age of 18 dropped, while the proportion of single-parent families rose. Figure 7 shows that there was an erosion in the incidence of the "normal" family (two adults married to each other and living together with their own children in a common household) and a proliferation of diverse types of households. If these trends are primarily a result of the transformation crisis, then it may be supposed that economic stabilization and growing familiarity among East Germans with the legal and social principles of the west will eventually lead to an increase in the formation of more "normal" families and to more marriages among unmarried couples with children.

Nonetheless, changing family structure is now determining the living conditions of children in several ways. The majority of children were still living in households with their own married parents in 1990 and 1993 (Figure 8). However, the proportion of children living in households headed by unmarried couples and in single-parent households grew by about
one-third between these two years. This may also have an impact on child daycare and on the economic well-being of children.

**Figure 7: FAMILY STRUCTURE IN EAST GERMANY**
(In Percentages, 1990 And 1993)


**Institutional Conditions and Childcare in East Germany**

The coverage of the network of childcare facilities is a classic area for the analysis of regional differentiation in the living conditions of children. The density of this network is determined by the demand for childcare institutions, which, for example, supplement family care for the preschool age group, as well as, to a large degree, by socio-political priorities. Whether these priorities should be set with a view to favour care exclusively in the family, to offer a qualitative supplement to family care in the form of temporary care in supervised groups of peers, or to replace family care (be it for political-ideological reasons, or economic reasons, or because of the constraints on the availability of parents, for example, single mothers who
Figure 8: SOCIAL CHANGE IN FAMILY STRUCTURE IN EAST GERMANY (In Percentages, 1990 And 1993)


are employed full time), has been debated back and forth for decades, and the responses have been different from region to region.

Figure 9 shows the coverage of kindergartens in 1986 (for West Germany) and 1989 (for East Germany) relative to the number of 0-to-5-year-olds. As the supply (and the demand) for this form of childcare is mostly limited to the smaller age group of 3-to-5-year-olds, the coverage is actually more extensive throughout, though this is not significant for an analysis of regional differences.

First of all, the degree to which coverage was determined by the political objectives of the two states is striking. In East Germany, the coverage was above 75 percent in almost all districts (apart from a very few exceptions, where coverage was between 50 and 75 percent) and in many cases even above 90 percent; this should be seen in connection with the more or less equal proportion of gainfully employed men and women. In West Germany, in contrast, the coverage was well below 50 percent.
Figure 9: THE SUPPLY OF PLACES IN KINDERGARTENS IN THE DISTRICTS OF GERMANY*  
(1986 And 1989)

Source: Based on the regional databank of the German Youth Institute, Munich.  
* The number of districts in each group is shown in parentheses.

Nonetheless, there are further regional differences which cannot be related to the two different "systems" or to political traditions peculiar to each Federal state. For instance, in many rural districts of Schleswig-Holstein, Lower Saxony and Bavaria the coverage of kindergartens is significantly lower (available in less than 25 percent of the districts) than it
is in, for example, Baden-Württemberg or Rhineland-Palatinate (with kindergartens available in more than 50 percent of all rural districts).

Regardless of how the quality of each kindergarten is to be assessed, the existence of such infrastructural units increases the choice for a family desiring to supplement childcare. If, even in the perception of those who rely on them, kindergartens have become established as educational institutions for 3-to-6-year-olds and are viewed as having unique child-rearing aims and opportunities for experience and if experts are requiring them as part of the regional social infrastructure in which—especially due to a decreasing number of peers in the environment of children—the "age-homogeneous" playing and learning experience has been developed as a directed arrangement (Pettinger 1991), then the lack of such infrastructural institutions for children may be considered a (relative) impairment of the quality of the lives of these children.

Are we now able to demonstrate the expected high degree of institutional care for children of preschool age in East Germany? Is there a decrease in these institutions since German unification? Was there any change in the care situation between 1990 and 1993?

In 1990 the majority of children of preschool age (3-to-6-year-olds) in the GDR were in kindergartens. In 1993 the situation was still the same: 54.9 percent of the children of preschool age were being cared for in kindergartens. In 1990 only 21.6 percent of these children were not in institutional care. By 1993, as one outcome of social change in the former GDR, 31 percent of all preschool-age children were staying at home. While in 1990 one-quarter of all preschool-age children were being cared for in daycare nurseries, by 1993 the proportion of children in such institutional care had decreased to 13.6 percent (Table 19).

In summary, the share of children in kindergarten in East Germany did not change, but the number of daycare nurseries fell with respect to the situation before the transition, and more children were therefore being taken care of within their own families. This result is in keeping with earlier predictions on the consequences of the transformation process.

Table 19: Daycare among Children of Preschool Age  
(In Percentages, 1990 and 1993)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daycare nursery</td>
<td>24.7</td>
<td>13.6</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>53.8</td>
<td>54.9</td>
</tr>
<tr>
<td>No institution</td>
<td>21.6</td>
<td>31.0</td>
</tr>
</tbody>
</table>

An analysis of the time preschool-age children were spending in institutions shows that 20.8 percent of them spent 20 or fewer hours per week in institutions in 1990, while 23.9 percent spent 21 to 30 hours in institutional care per week, 41 percent spent 31 to 40 hours in an institution each week, and 14.3 percent were in institutions for more than 40 hours per week. Relative to the corresponding figures for 1993, it is astonishing that the time children were spending in institutional care had not changed, contrary to expectations. Indeed, children were spending even more time in institutional care in 1993 than had been the case in 1990 (Table 20).

### Table 20: The Amount of Time Preschool-Age Children Spend in Institutional Care (In Percentages, 1990 and 1993)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 hours or less</td>
<td>20.8</td>
<td>14.1</td>
</tr>
<tr>
<td>21 to 30 hours</td>
<td>23.9</td>
<td>29.0</td>
</tr>
<tr>
<td>31 to 40 hours</td>
<td>41.0</td>
<td>41.2</td>
</tr>
<tr>
<td>More than 40 hours</td>
<td>14.3</td>
<td>15.7</td>
</tr>
</tbody>
</table>


**Macroeconomic Indicators and Changes in the Welfare Situation of Children**

The change in the economic situation of children in East Germany is ambivalent. On the one hand, children are participating in the general rise in incomes and the greater opportunities for consumption. Average gross wages increased from 1,360 DM in the year of the social and currency union to 2,797 DM in 1993. However, one must keep in mind that prices also rose significantly following the onset of the transformation (see Table 6, page 14).

The income situation improved for all household types following the onset of the transition to a market-oriented economy (Table 21). Particularly remarkable is the fact that the improvement among households composed of married couples with children was relatively greater than was that among households consisting of unmarried couples with children or of single-parent families. In 1993, 63 percent of all single-parent families still had less than 1,800 DM each at their disposal. In this context, it is important to remember that this type of family has become more widespread since the transformation of the former GDR.
Table 21: Net Income Distribution in Family Households
(In Percentages, 1990 and 1993)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married couples with children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1,800 DM</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>1,800-3,000 DM</td>
<td>64</td>
<td>42</td>
</tr>
<tr>
<td>3,000 DM or more</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td>Unmarried couples with children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1,800 DM</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>1,800-3,000 DM</td>
<td>50</td>
<td>47</td>
</tr>
<tr>
<td>3,000 DM or more</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Single parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1,800 DM</td>
<td>92</td>
<td>63</td>
</tr>
<tr>
<td>1,800-3,000 DM</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>3,000 DM or more</td>
<td>3</td>
<td>13</td>
</tr>
</tbody>
</table>


On the other hand, the data analysis shows clearly the increasing impact on children of unemployment since the transformation. Among all types of families the risk of unemployment grew enormously from 1990 to 1993 (Figure 10). However, children with unmarried parents are affected the most; one-third of these children live in households where one parent or both parents are unemployed.

One can also demonstrate that households with two active heads-of-household (due to the high female employment rate) are becoming less and less typical in the former GDR in favour of households with one economically active head or even households with no active head. In the period before the transition to a market economy 66.2 percent of all East German children lived in households with two breadwinners. By 1993 this share had decreased by 20 percentage points to 46.2 percent. The share of households with one breadwinner rose from 29.5 percent to 43.1 percent, and households with no member employed increased from 4.3 percent to 10.7 percent (Figure 11).

Furthermore, the number of children living in households which were receiving public transfers like unemployment compensation, social assistance or rent subsidies rose appreciably (Figure 12). The dramatic climb in rent subsidies is related to the significant increase in gross rents since reunification. Unemployment compensation was not necessary in the former GDR, since employment was guaranteed. The number of recipients of social assistance, which is mainly linked with long-term unemployment, will even rise in the new Federal counties.
Figure 10: Children in various types of families affected by unemployment
(In Percentages, 1990 And 1993)


Figure 11: Households with children by the number of active household heads
(In Percentages, 1990 And 1993)

In summary, economic and structural changes in the former GDR have led to a higher risk of impoverishment, especially among "nonstandard" families with children. At the greatest risk are children with unmarried parents or in single-parent households. The improvement in living conditions for children in the former GDR is developing into a greater gap between children in more typical families on the one hand and "nonstandard" families on the other. The share of single-parent families among the lowest income quintile rose from 37.3 percent to 42 percent following the onset of the transition to a market economy (Figure 13). The share of children living together with unmarried parents increased from 8.9 percent to 12.3 percent between 1990 and 1993. The share of children living in more "typical" families became smaller in the lowest income quintile.
Figure 13: CHILDREN IN LOW-INCOME (QUINTILE) HOUSEHOLDS BY FAMILY TYPE
(In Percentages, 1990 And 1993)

1990

53.8%
8.9%

37.3%

1993

45.7%
12.3%

42.0%

Family Types
☐ married couple ☐ unmarried couple ☐ single parent


V. DISTRIBUTIVE JUSTICE AND THE DEVELOPMENT
OF SOCIAL POLICIES FOR CHILDREN

The specificity of the former GDR relative to all other states in Central and Eastern Europe
that are involved in a process of transition from a central-state form of governance and
economic planning to pluralistic democracy and a market-oriented economy must be seen
in the fact that the transition in East Germany has coincided with the inclusion of the state
within another, the Federal Republic of Germany. This inclusion implies a rather "minimalist"
policy toward transformation as far as the number and the intensity of particular
Government measures is concerned. In most cases, improvements in the political and
economic situation in East Germany have been sought merely through the implementation
in the "Beitrittsgebiet" ("newly joined territory") of the established legal system and the social
and labour market policy measures existing in West Germany. This approach has been
accompanied by massive transfers of public expenditures and manpower from West to East
Germany. Even five years after reunification, only one-half of the public expenditures of the
local and regional authorities in East Germany is being derived from local and regional tax
revenue; the other half is financed through transfers from the west.
This economic dependency has been accompanied by a massive devaluation in the social and cultural capital of the East German population. The reconstruction of the political and legal system, economic enterprises and cultural and social institutions has meant that not only social networks and relationships, but also the expertise and job skills developed within the career system of the former state, have lost their significance and importance. This is especially valid for the segment of the population that accumulated most of the social and cultural capital specific to the GDR. For example, individuals in the second half of their professional careers have been more likely to suffer from the transition than have individuals in the first half of their careers. The "functional elites" in big enterprises and public organizations (for example, economists and managers) have suffered more than have professionals with a chance for self-employment (such as lawyers and doctors). Accordingly, the replacement of the functional elites by competitors from West Germany has been more massive in the top positions of complex, bureaucratic organizations of both the public sphere and private enterprises than it has in smaller craft enterprises, or in the services sector.

In common with the experience in other Central and Eastern European societies, the transformation process in East Germany has been accompanied by a breakdown in large numbers of state-run enterprises in the productive sector. This has happened partly because of the high interdependence among these enterprises in the former socialist bloc, so that the simultaneous breakdown of these enterprises in several countries has led to the collapse even of those enterprises which might otherwise have survived, but it has happened mainly because the products of these enterprises cannot compete on unprotected markets and because labour productivity was far lower among these enterprises than it was among competing enterprises in the western part of the country or in enterprises in the same market segment in other countries. The necessity for productivity improvements has resulted—if not in a total breakdown of the enterprises—in a massive rationalization and automatization of production and in a reduction in the number of workplaces.

Thus, two factors have affected the situation on the labour market simultaneously: the massive drop in the absolute number of workplaces and the competition with applicants who have been trained and "socialized" in the dominating political, economic and social system, that is, competitors from West Germany.

This second factor makes the situation in East Germany unique compared to that in the other transitional societies and has led to some remarkable changes in the social structure of East Germany, including the following.
1. The reduction in the number of workplaces has not affected all segments of the population equally. It has increased the percentage of the population subsidized by the old-age security system, and it has had direct effects on the social welfare of children. Mothers, especially those with many children, face the highest risk of unemployment, and mothers who live in "nonstandard" family situations (which are far more numerous in East Germany than they are in West Germany) find the fewest opportunities to reenter the labour market. This will inevitably increase the welfare dependency of children in coming years when these mothers no longer receive unemployment compensation, but social assistance instead.

   However, while the old-age security system exists nationwide and thus distributes the burdens over a large area, social welfare in Germany is financed at the community level. This means that the elderly in East Germany can expect to live comparatively comfortable lives, but that the budgets to finance social welfare measures and child-specific infrastructure like kindergartens and other childcare facilities will become more and more restricted.

2. The inclusion of the former GDR in one of the richest societies in the world, with a high level of productivity and social welfare, has led to changes in opportunity structures on the labour market that have resulted in regional and social mobility. Aside from the opportunities for upward mobility for West Germans in the upper reaches of East German society by way of replacing the former "functional elites" and through the emergence of new economic, social and cultural structures (see earlier), this inclusion has led to a massive migration from east to west of (comparatively) young, more well educated and economically motivated people desiring to improve their position. This will result in the long run in a second "brain drain" in East Germany that may be no less intense than that observed in the 1950s before the construction of the wall. This will affect the capacity of East Germany to modernize quite severely and, again, differentially in the various sectors of the economy. While in the productive sectors and in the private services sector modernization has been induced to a large extent by the replacement of personnel by (or downsizing to) younger, more well trained people, this is not the case in the public services sector.

   For example, the situation of children has been directly affected by the fact that the (according to West German standards) necessary reduction of personnel in the overstaffed kindergartens and schools is occurring only on the basis of downsizing among existing staffs. Perhaps for another generation there will thus be no opportunities to break into this occupational field, and, hence, no possibility to broaden the age composition of the available
pedagogical workforce or to implement new criteria for job qualifications on a more intense basis than the occasional retraining of already existing staffs.

This diminished capacity to modernize in the educational system through staff replacements is further affected by the demographic situation. Five years after reunification, the massive migration to the west of people ready to form new families and the extraordinary drop in the number of births among the remaining population are now starting to have an impact at the primary school level, as the number of school beginners has plummeted by more than one-half.

The demographic consequences of this specific type of transition in East German society are not yet fully understood. This is true not only for a valid explanation of the demographic transformation of the population, but also for an adequate description of demographic processes. The available data are still too limited in scope (although they are quite revealing as compared to the data available in the other societies in transition in Central and Eastern Europe). In particular, the time series are still too brief for any meaningful evaluation of ongoing developments. Many indicators show no stabilization in behavioural changes. Most of the curves do not yet show a "new" saturation point which might indicate that an adaptation to the changed conditions has occurred or that a new equilibrium has been reached. The curves for most of the most relevant indicators do not even show a turning point, which might indicate the beginning of a recovery from the critical event of reunification. However, some of the processes do seem to have reached a stage where "velocity" is beginning to fall. This has to be kept in mind because, until now, only some of the short-term demographic consequences of the transformation have come into view, while the mid- and long-term effects are still beyond the scope of scientific observation.

Although the economic situation in East Germany has at all times during the transition period been much more stable than is the case in the other former socialist societies, the overall demographic picture of East Germany shows that the population is paying high social costs. However, these social costs have had a differential impact on the respective demographic processes.

Nuptuality, fertility and mortality, in addition to in- and out-migration, are being influenced by the transformation of East German society. An unexpected result of the analysis of the demographic picture is the finding that infant mortality rates are not being affected by the political and economic transformation of East Germany. Unlike the other
former socialist societies, East Germany is showing no significant temporary or permanent rise in infant mortality.

According to the available data, a slight decrease in life expectancy has been observed only among males, because of higher male death rates, especially among men in the second half of their productive lives. In this respect, East Germany is similar to other former socialist societies, although the change is less intense. Women and, especially, children seem to be much less vulnerable to this kind of “macro-social” stress (although the factors tending to protect them are not yet fully understood).

Rather than the death rates, indicators of trends in family formation reveal the strength of the reaction of the East German population to the transformation. The fall in marriage rates and birth rates since reunification has been more dramatic than that following any other critical event in German history over the last two centuries (that is, since comparable data have been collected). The extent of the drop in East Germany exceeds that in any other ex-socialist society in Central and Eastern Europe, and after five years the trend shows no sign of changing. This demographic distortion will have a massive effect on the age structure of East German society even if the improbable happens and the trend turns out to reflect decisions to put off, rather than avoid, marriage and the birth of children. These results call into question all interpretations of the demographic consequences of the transformation of post-socialist societies that relate demographic changes directly to changes in economic welfare (or other "objective" factors affecting living conditions) on both individual and societal levels. Rather, "subjective" factors like unstable expectations for the future and shifts in life orientations seem to play an important role in individual coping strategies for dealing with macro-social stress.

One of the unintended impacts of the mode of transition by inclusion into West German society is that the benefits of East German children from the massive financial transfers are less significant than are the benefits of other social groups (especially the elderly). This is mainly an indirect effect of the federal structure of the German state. Cultural affairs (of which the educational system forms the major part) are the responsibility of the individual Federal Länder, while social welfare and the supply of child-specific infrastructure like kindergartens, daycare centres, playgrounds, libraries, sports facilities and youth clubs are mainly the responsibility of local authorities. Since the financial situation of the local communes is much more critical (sometimes near bankruptcy) and since the communal obligations in terms of rebuilding the entire infrastructure as a precondition for economic
investment in new workplaces are so demanding and in most cases, for political reasons, receive the highest priority, the financial means to undertake investments in child-specific infrastructure are almost nonexistent, and no political leverage in the interest of children can be mobilized for this at the local level.

The foregoing analysis of the changes in the living conditions of children in East Germany shows quite clearly that living conditions have not improved in the immediate period following reunification. All available indicators show instead that the situation has become more critical. A significantly larger number of children are being born out of wedlock, live together with unmarried parents or in single-parent families and are being raised in households which are dependent on unemployment compensation, social assistance or pensions.

The analysis shows as well that the risk of welfare dependency is much higher among children than it is among any other age group and that the risk of unemployment is much higher among mothers than it is for any other group. Both effects are leading to a phenomenon which in the social policy debate is called the "infantilization of poverty".

A significantly smaller portion of children, especially those children in "nonstandard" families, is benefiting from child-specific infrastructure, such as kindergartens, daycare nurseries and other public institutions which support families in their efforts to raise children, or from the general income improvements and consumption possibilities.

The decline in reliance on public facilities like kindergartens and youth clubs has been caused, on the one hand, by the fact that the number of these facilities has decreased more significantly than has the demand. On the other hand, the proportion of costs that has to be borne by the individual parents has risen steadily over time, rendering these facilities unaffordable for a growing number of parents, especially in the case of families with more than one child. Although this says nothing about the quality of childcare institutions and the possible changes in quality during the transition period, it may explain why an increasing number of parents perceive their situation as being more problematic since reunification and why an increasing number of potential parents are hesitating to marry or have children.

Again, these changes in infrastructure have had a much heavier impact on families with fewer economic, social and cultural resources. They will thus contribute to a polarization between children in families with few resources and those in families with many resources and to an even more dramatic polarization between individuals who take responsibility for their children and those who do not. This latter polarization has already been clearly
identified as a major deficiency in the basic concept of the German welfare system, which favours tax-reduction incentives and maternal leave over direct child-specific transfers and improved public services and which thus "privatizes the cost of children" (while the benefits of children are still collective). This well-known phenomenon has taken on a new meaning since reunification, because the unequal distribution of family resources is no longer mere "social inequality", but has become definitely regional as well. Thus, the purchasing power of the "richest" county in East Germany is still significantly lower than is that of the "poorest" district in West Germany. "Privatizing the cost of children" thus turns out to mean "strengthening the inequality between East and West Germany".

Social policy has to follow the criteria of distributive justice. The benchmark for the evaluation of the effectiveness of social policy is therefore whether equal social opportunities are available to all social groups. In the case of united Germany, this means that social policy must contribute to the establishment of equal living conditions for all age groups and equal living conditions for children in all regions.

However, five years after reunification, on the basis of the available data, the following seems to be the case.

- The inequality in living conditions among age groups has increased unfavourably for children. This is the continuation of a trend which began in West Germany at the end of the 1970s. However, unlike in West Germany, the risk of poverty among young people in East Germany has increased dramatically.

- The inequality in living conditions between children in East and West Germany has surely increased. Available information on the situation of families, household composition and economic resources support the conclusion that for a considerable part of this age group in East Germany living conditions have become more problematic and that households with children in any case are at greater risk of poverty than are those without children.

It is difficult to determine whether the overall policy approach toward the transition of East German society has been appropriate, and suggestions for modifications in the approach depend heavily on the political standpoint and the normative assumptions. These difficulties increase because of the uniqueness of the German case: comparative results are not available. Moreover, to be realistic, one must consider the complicated dynamics of the transformation process, the interdependency among all areas of policy in complex modern societies and the important role played by time pressures in the decisionmaking process for which the various authorities were neither trained, nor prepared. In short, a substantial
alteration in the German approach to the transition might have had rather unrealistic implications, including the following.

- A fundamental change in the federal structure of the entire German state in favour of greater political power at the centre in advance, in order to achieve a higher standard of distributive justice among all regions of Germany in terms of educational institutions and social welfare, but with all the risks of political centralization (if implemented among the old Federal Länder) or colonization (if implemented with respect to the new Federal Länder).

- A fundamental change in the basic principles of German social policy such as subsidiarity (a tendency to favour the individual or "local" level over higher levels in seeking solutions to problems), the preference for tax incentives rather than income-independent child allowances, and sponsorship for maternal leaves, but not for extrafamilial care for working mothers and its linkage to the individual employment record, giving those the most benefits who have worked the longest and are in the highest income groups, which puts children into a disadvantaged position as they have no work records. Again, one must reiterate that the German social welfare system is far from being a failure and that it has at least the advantage of being perceived by the majority—and especially by those who pay for it—as "just" because it offers strong incentives for participation in the labour force.

Policy assessments are much easier and much more uncontroversial if the situation of children is the focus. Distributive justice in the policies affecting children in East Germany implies that living conditions in this part of the country must permit potential parents to have children and offer these children equality of opportunity.

One benchmark for the success of such social policies will thus be a balance in the migration between East and West Germany, especially among young adults ready to found families. This can only be achieved through the attainment of a high, but uniform level of quality in the entire educational system, a high, but uniform level of competence among school leavers and equality of opportunity in the labour market. While there are signs that improvements in the quality of the education system in the new Länder can be achieved in the near future, the relative proportion of graduates from institutes of higher education is much lower in East Germany than it is in West Germany, while the opportunities available in the labour market are relatively fewer. As long as this situation persists, out-migration, the brain drain, a low birth rate among the population and an unfavourable balance between the number of wage-earners and the number of dependents will be almost inevitable.
Another benchmark will be the relative extent to which parenthood is chosen as an alternative as often in the east as in the west. As the decision to become a parent is usually connected with long-term commitments, social policy has to provide the conditions which render such long-term commitments as reliable as possible. This implies that the availability and the quality of daycare centres and places in kindergartens should be "constant" in the eyes of (potential) parents and that the fees for these institutions should not rise more rapidly than the prices for other consumer goods.

Reliability would increase considerably if potential mothers could be sure about the welfare of children (not necessarily their own) not only for the first three years, but for the entire period of child dependence. The most reasonable measure (because it is an understandable one even to nonexperts) would be to offer child allowances which are adequate to promote parenthood, but which offset any increased risk of poverty. Now, this is not the case, especially for single motherhood.

This implies that children must be "subsidized" directly and independently of the work records of their parents and that a child's rights depend on its identity as a child rather than on its relationship to an eligible parent. However, as long as the child allowance is a tool of politics that can be discarded whenever there is an economic crisis, as it is in Germany, and as long as extrafamilial care is an issue in ideological disputes, as it is in Germany, social policy will have no lasting effect on parenthood or childhood in general or on the inequality in the living conditions of children in East Germany in particular.
BIBLIOGRAPHY


*Statistisches Jahrbuch der Deutschen Demokratischen Republik* (various years). Staatliche Zentralverwaltung für Statistik (ed.). Berlin: Staatsverlag der DDR.

*Statistisches Jahrbuch für die Bundesrepublik Deutschland* (various years). Statistisches Bundesamt (ed.). Stuttgart: Metzler-Poeschel.


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