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Ostdeutsche Lebensverläufe im Transformationsprozeß

Social Change and Transformation – Findings and Lessons from the East German Case

Karl Ulrich Mayer, Martin Diewald und Heike Solga

Arbeitsbericht 4/1997



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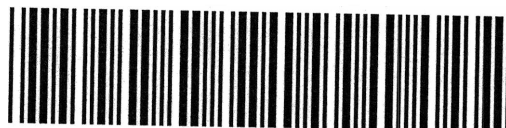


Das Projekt "Ostdeutsche Lebensverläufe im Transformationsprozeß" ist Teil des Forschungsprogramms "Lebensverläufe und historischer Wandel" (Leiter Karl Ulrich Mayer). Die wissenschaftlichen Mitarbeiter des Projekts sind: Martin Diewald, Anne Goedicke, Britta Matthes, Karl Ulrich Mayer, Heike Solga und Sylvia Zühlke.

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DAS FORSCHUNGSPROJEKT
"OSTDEUTSCHE LEBENSVERLÄUFE IM TRANSFORMATIONSPROZESS"

Inhaltliche Schwerpunkte:

- die (vergleichende) Sozialstrukturanalyse individueller Lebensverläufe in Ost- und Westdeutschland
- die Analyse individueller Handlungsstrategien im Transformationsprozeß
- die Analyse der gesellschaftlichen Transformation in Ostdeutschland und ihre Auswirkungen auf individuelle Lebensverläufe

Datenbasis

Grundgesamtheit:

Die deutsche Wohnbevölkerung der Geburtsjahrgänge 1929-31, 1939-41, 1951-53, 1959-61 und 1971 in den Neuen Bundesländern im Oktober 1990

Stichprobe:

Personenstichprobe aus dem infas-Master-Sample, das im Oktober 1990 aus dem zentralen Einwohnermelderegister der ehemaligen DDR gezogen wurde

Erhebungszeiträume:

Pilotstudie: Februar/März 1991
Pretest: Mai/Juni 1991
Probeinterviews: August 1991
Haupterhebung: September 1991 - September 1992
Panelbefragung: März - Dezember 1996
Erstbefragung Kohorte 1971: März - Dezember 1996
Non-Response-Studie: ab Januar 1997

Erhebungsmethode:

Persönliche (mündliche) Interviews auf der Basis eines standardisierten Lebensverlaufsfragebogens; Aufzeichnungen der Interviews auf Tonband
Postalische schriftliche Befragung
CATI (computerunterstützte Telefoninterviews); CAPI (computerunterstützte persönliche Interviews)

Realisierte Fälle:

Pilotstudie: 34
Pretest: 71
Probeinterviews: 81
Haupterhebung: 2331
Schriftliche Zusatzerhebung: 1254
Panelbefragung: ca. 1700
Kohorte 1971: ca. 700
Non-Response: ca. 600

1. Introduction

After 1989, after the breakdown of Communism in Eastern Europe, the reputation and legitimacy of the social sciences has been challenged from outside and from inside. This challenge rests on the observation that the social sciences did not foresee or predict the breakdown of the socialist regimes. Quite in contrast, it seemed, it was especially the social sciences which against crude anti-communist pictures of political repression and economic ineptitude postulated a widening popular support and the functional normalcies of these fairly modern industrial societies. It appeared as if the political affinities of the social sciences to the socialist-social-democratic-liberal camp were partially responsible for these analytical deficiencies. If the social sciences were unable to diagnose the inherent weaknesses of these societies and were unable to register their destabilizing tendencies, then something must be wrong with their theoretical and empirical tools. Moreover, empirical social research was especially singled out for charges of myopia and irrelevance (Beck 1991a; Mayntz 1994a, 1996; von Beyme 1995).

At the moment this debate about the social sciences and the debacle of 1989 is still unresolved. Not only can one find remarkable examples of - in retrospect - compelling analyses and successful predictions, but also of, let me only remind you, Andrew Walder's study on Communist Neo-Traditionalism (1986), Istvan Szelenyis' (1986/87) scenarios of the middle eighties (which included the transition to a market economy), Randall Collins' predictions of the early 80's or Lutz Niethammer's interviews with East German industrial workers in 1987 (Niethammer 1991). Furthermore, as early as 1965 Ralf Dahrendorf predicted the downfall of Soviet Communism within 40 years based on considerations drawn in an explicit manner from political sociology. The debate quite rightly focuses also on the epistemological implications for successful predictions. Probably such diagnoses of macro trends are in principle beyond the reaches of a systematic sociology which has given up on theories of history and interpretations of total societies and relies at best on situated actors and middle-range theory. If historical processes and - at any rate - historical events are by necessity contingent, then the very demand for predictability is mistaken and, in fact, there might be no necessity in the breakdowns of 1989 - as the case of China suggests - or there might even be reversals, if Ziganov wins the Russian presidential elections.

In all fairness, however, one has at least to concede that the socialist societies of Eastern Europe and Asia were simply not major areas of work of mainstream sociology or political sciences and, more often than not, Eastern European or Soviet studies were left to the academic fringes of government sponsored area research institutes. In addition, one could argue that many of the facts were not available since official statistics were not available or tampered with (with the notable exception, for instance, of the declining male life expectancy in the Soviet Union in the eighties). One might conclude, then, with some justification that the breakdown of the socialist societies in 1989 could not, therefore, possibly have been a test of the potential of sociology and the other social sciences because this potential was never applied to these problems.

Now such apologies and defense strategies surely do not apply to the process of transformation after 1989. For all post-communist societies, but especially for East Germany, these social changes were quickly seized by the social sciences as a “crucial experiment” (Giesen/Leggewie 1991). Hundreds if not thousands of research projects were carried out (Informationszentrum Sozialwissenschaften 1996) and major coordinated research programs were being launched (DFG-Schwerpunkt 1992; Kommission für Politischen und Sozialen Wandel). Only very few efforts exist to date to summarize these efforts (Zapf 1996a, b; Mayntz 1994b; Wiesenthal 1996), but it seems already apparent that it is not at all clear what the “experiment” transformation and unification could be considered to be designed for, what theories were to be tested, and which generalizations could be drawn for the stock of sociological theories of social change.

In the following presentation, I shall not make the heroic attempt to provide such an overview. Rather, I shall report about some of our own ongoing studies in reconstructing one part of the transformation process, namely how the former employment system and occupational structure of the GDR was being transformed into its current state. This is joint work together with Martin Diewald and Heike Solga and both are co-authors of this paper. My presentation proceeds in the following steps. First, I will sketch very briefly as a frame of reference how in the current social science and political debate the contexts of the particular aspect of labor market re-organization are being constructed, i.e., which models and concepts are being used for the society of origin, the former GDR, the society of

destination, the former or current FRG of the West, and of the unification process itself. Second, on this basis and with some additional heuristic categories, I shall derive a number of hypotheses about the mechanisms and outcomes of labor market transformation. Third, I will present empirical findings from our East German Life History Study and, as the fourth and last step, I will end with a number of observations on the state of the unification process and its implications for the overall topic of this conference.

2. Origin, destination and transformation: GDR, FRG and unification - current constructs

If we want to understand the social changes during the transformation of East Germany three major sources of explanation and attribution dominate the academic and political debate. Each of them is contested in itself and the three stand in an uncertain and largely unspecified relationship to each other. (Table 1 about here.)

The first point of reference is the old West German society. This was and is the society of destination for East Germany by political decision-making and popular consent. But which destination? A first model is the general one of modern Western society: a stratified and functionally differentiated social structure, pluralist party democracy with a market economy, mass higher education and mass media culture. This is the destination which a revived modernization theory suggests (Zapf 1996b). A second construct highlights the institutional specifics of what has been called the "German model": a neo-corporatist structure of industrial relations, labor market policies and social security provisions, highly developed and highly segregated vocational training and occupational labor markets, the banking control of industry, strong semi-public bodies in the professions and in health provision, a hierarchical educational system and a still high gender division of labor, a large public sector and 50% state-mediated GNP (Streeck 1995). A third model has been termed "reflexive modernization" and by this is meant a society confronted with the unforeseen, external and largely negative effects of its former successes: mass production, mass consumption and destruction of the natural environment. It is seen to be propelled forward by a series of social movements: educational and political participation, the women's movement and the ecological

movement. The locus of agency is shifted from strong institutions to individualized and self-centered subjects, class structure dissolves in a multitude of social milieus and family solidarity is replaced by hedonistic and egoistic orientations (Beck 1991b; Schulze 1992). The fourth model for the destination society is the one of post-industrial decline: the uncompensated loss of jobs in the primary and secondary sector, high levels of structural unemployment, a segmentation between high-tech cores and marginalized peripheries, a dualism between insider high wage career workers and outsiders on social wages, an increasing rate of poverty, widening income inequality, and an overburdened welfare system under attack.

The second point of reference is the society of origin, the former GDR before 1990. Here again, we are faced with contrasting constructs. On the one hand, there is the model of the dictatorial, repressive, de-differentiated, bureaucratic and centralist regime based on the tight political, ideological and behavioral control of the majority and the ideological commitment of a minority, passive subjects, an unproductive, wasteful and backward command economy, restriction and political bias of educational access, regulated manpower allocation, an immobile labor force, and a homogeneous standard of living (Kocka 1994). On the other hand, there is an alternate version of a society with resourceful actors making the best out of adverse conditions which broke down not primarily due to revolt against oppression, but because it relied largely on material incentives and welfare state provisions which it could no longer finance from the surplus extracted from the economy. In this alternative picture of the GDR we are shown large differences in opportunities between generations, surprising status distinctions and class privilege, and a high amount of labor fluctuation (Huinink/Mayer et al. 1995; Pirker et al. 1995). Finally, there is the version favored by the former East German cadres and some parts of the West German Left: a benign, progressive society with advanced institutions of gender equity, local and firm solidarity, full employment, comprehensive welfare provisions, and egalitarian living standards.

The third point of reference for explaining social change in East Germany is the transformation process itself. In its simpler versions the transformation constructs merely reflect the respective models for the destination and origin societies. Modernization theory views the transformation as an adaptive catching-up process in the direction of a pre-set goal

(Zapf 1996b). The German institutional "Sonderweg"- model emphasizes the incorporation of East Germany into the institutional setup of West Germany and the speedy and completed transfer of institutions (Lepsius 1994; Lehmbruch 1993; Mayer 1995). "Reflexive" modernization theory complains about the regression back to the old priorities of material production and consumption (Beck 1991b). And the post-industrial decline model views the transformation as an accelerative force through the depletion of Western public finance and East Germany as a precursor for conditions which we will soon also have in the West.

Likewise under the perspective of the models of the FRG as the society of origin, the difficulties of the transformation process are seen to lie either in the inherited burdens of the past regimes, e.g., in infrastructure, housing, production technology, environmental negligence and obsolete skills or in the catastrophes resulting from colonialization (Brie 1994) or the quite broad variety of biographical contingencies carried into the transformation process. Wiesenthal (1996) has characterized the transformation myths as effective orientations for the relevant political and economic actors. Economic backwardness of the East was initially interpreted as the opportunity for an economic boom (Kohl's "blühende Landschaften") and only later as an explanation for negative sides of the unification process.

There is surprisingly little theory-building focusing on the temporal dimensions and mechanisms of the transformation process itself irrespective of a desired or dreaded past or future (Zapf 1994, 1996a). In some of these theories (Sinn/Sinn 1992; Wiesenthal 1996; SPIEGEL 17.6.1996), specific mistakes of macroeconomic policy are made responsible for major deficiencies of the unification process, especially in regard to the volume of employment: wrong currency parities, too rapid privatization by the Treuhandanstalt, too little regulation and control of publicly financed investment, and a much too rapid approximation of Eastern wages and welfare provisions to the Western levels. Frequently these mistakes have been considered unavoidable due to the short time window open for making unification irreversible and for fear of mass migration to the West (for critical arguments, see Wiesenthal 1996). Other theories focus on the differential speed of a number of different processes (Zapf 1996a): migration in 1989/90, decline of the birth rate between 1990 and 1995, the loss of jobs and unemployment rate, the restructuring of firms, and the growth and collapse of new firms (SPIEGEL 17.6.1996). Finally, in contrast to initial

expectations, subjective orientations and attitudes seemed to have been either much more stable than objective conditions - and this is now interpreted as the self-protection of inner stability in a rapidly changing environment - or they have become not more similar to orientations and attitudes of West Germans, but even more dissimilar (Meulemann 1996).

At this point I want to introduce James Coleman's bathtub and I am sure that in this intellectual community I need not spend any time in explicating Coleman's schema for macro-micro and micro-macro causal relationships (Coleman 1990:8). The slide shows one of my own versions of the bath tub. Using the bathtub as a criterion it becomes easily apparent that transformation theory almost exclusively deals with macro-macro relationships. There are a few exceptions like Rolf Ziegler's study on the birth and death of new firms or the analyses on institutional transfer by Mayntz (1994a), Lehmbruch (1993) and Wiesenthal (1996).

In the following I would like to introduce two conceptional devices to get closer to the bathtub criteria: Smelser's and Lipset's typology for structural changes and mobility processes and an event history/life course model (Tables 2 and 3).

Smelser and Lipset (1966) specified the relationships between socially structured change and mobility processes. One can, first of all, imagine a structure of positions and the people within it and ask how resources (such as rewards, compensations and secured entitlements) linked to these positions are *redistributed*. Second, one can consider how people move between positions with specific resource provisions, within the life course or between generations. This corresponds to the classical paradigm of social *mobility* research. Usually we think of persons or families being mobile, but it can also be collectivities of persons who voluntarily or involuntarily change their positions. Third, positions, including the resources linked to them, can be redefined and reshifted. In this case, we may speak of a *change of the social structure*. Fourth, also the allocation criteria and mechanisms can change, for example, from more universal and meritocratic to more ascriptive or bureaucratic criteria. Finally, such changes can be institutionalized as permanent features of the stratification system establishing *new stratification and class structures*. In the case of the transformation

of the GDR, we have to assume that all these processes took place simultaneously but in such a way that they can only be analyzed separately and sequentially. One specific characteristic of the East German transformation process lies in the fact that the new stratification and class structures might be identical or proximate to the already existing stratification and class structures of West German society.

The empirical solution to the Smelser/Lipset schema would among else be a full multiple transition matrix moving people from year to year between changing positional structures. In a sense this would yield a detailed description, but would not go much in the direction of explanation.

As an alternative and complementary tool I want to introduce an event history/life course model for the transformation process (Mayer/Huinink 1994; Huinink 1995; Blossfeld/Hamerle/Mayer 1986; Blossfeld/Rohwer 1995). In the language of such a model we can distinguish between time variable opportunity structures on the one hand and biographical processes, situation-dependent and event-dependent factors on the other hand. On an individual level, biographical factors refer to characteristics which were ascribed or acquired in the GDR. Process-related factors, however, refer to the personal life history during the transformation. Situation-dependent and event-dependent factors refer to circumstances of the temporally immediate transition period. Here, the institutional conditions imposed by labor market policies and the use of labor market measures are of relevance. Several time-dimensions come into play: time since the fall of the Wall, since monetary union or state reunification, age, duration in employment, and firm tenure. Formally, we have to do with time-dependent processes, for example, the following transitions: a) exits from employment and reentry b) job shifts between companies, and c) mobility across professions and occupations.

3. Hypotheses about the transformation of the East German employment system

In correspondence with the frame of reference outlined above we want to separate GDR-specific, transformation-specific and FRG-specific effects of the restructuring of the

employment system. The employment system of the GDR and the available resources of the former East Germans define the supply side of the labor market, while the organization and the course of the East German transformation as well as the West German employment system and its structures define the demand side.

The employment system of the GDR has been described elsewhere in detail (Grünert/Bernien/Lutz 1996; Huinink/Mayer et al. 1995; Vosskamp/Wittke, 1991; Heidenreich 1992; Kohli 1994). It is, therefore, sufficient at this point to highlight selected aspects which are relevant for deriving hypotheses about continuities and discontinuities in East German working lives. The employment system of the GDR can be described by the following characteristics: employment security, full-time jobs also for women, relatively high levels of qualification (for men and women, blue-collar or white-collar), manpower planning and labor market regulation, companies or groups of companies which monopolized industries ("Kombinate"), regions and locations with an industrial monoculture as well as (in comparison to West Germany) much higher proportions of employment in the primary and secondary sector. With regard to income, it should be emphasized that the employment system of the GDR was characterized by a considerably flatter wage inequality. Beyond all of the centralism and regulation there was, however, also a considerable amount of voluntary job mobility. Labor mobility of East Germans was characterized by a frequency of changes between jobs and occupational activities on a level comparable with West Germany (Huinink/Solga 1994, p. 243). Also, changes between occupations and firms were not at all exceptional, but rather were perfectly typical movements in the East German employment system. Although mobility between and within companies declined over time, we still found such moves even for the birth cohorts born around 1960. Furthermore, it appears that, just like in West Germany, changes within a firm were often associated with upward mobility. Thus, in contrast to both Western and Eastern observers, the GDR labor market was a "mobile" and not an "immobile" system - and this despite much lower work incentives. That still leaves the question of the relative openness of this system unresolved. Our analyses show that job shifts were not always voluntary, but were rather in part also initiated by economic policies or enacted as individual reaction to regulative control, e.g., the assignment of certain jobs after university graduation. Prospects for upward moves in the GDR were selectively distributed and did not always conform to meritocratic standards but

loyalty to the party was frequently a decisive factor in upward mobility. Even when many of the former group of specialists or *Kader* had an educational degree which matched their corresponding position, the causal direction must be assumed to go from loyalty to certificates. When someone showed system loyalty (the emphasis is on “showed” here), he was in many cases “rewarded” with access to higher education. This, incidentally, does not make the GDR any different from other eastern European countries.

In a similar way, the target system, the West German employment system, can be characterized in the following short-hand manner: no employment security, but welfare state cushioning in case of unemployment; labor allocation regulated via supply and demand, but modified by state intervention and collective agreements; a dominant role of full-time work for men with a high acceptance of part-time work for women (especially mothers); qualified occupations with a high degree of match between vocational certificates and work position (the certificate of a skilled worker or *Facharbeiterabschluß* forms more of a barrier downwards rather than preventing job promotions, higher positions are clearly hierarchically ordered according to training levels); changes of the occupational structure are mediated less through mobility in the work life than via the changing work profiles of newly entering cohorts and through withdrawal (into unemployment or retirement).

In conclusion, we should mention a few of the most important characteristics of the East German transformation process: the rapid privatization through the *Treuhandanstalt*; the takeover of the West German welfare state system, above all the takeover of labor market policies and regulations; the recognition of the East German educational degrees (whereby the majority of the educational degrees and training certificates were recognized as equal or at least of the same standard) as well as the institutional transfer of the West German school and training system as well as the child care and health system (cf. also Wiesenthal 1996; von Beyme 1995; Zapf 1996a, b; Lehmbruch 1993).

Which hypotheses can we derive on the employment trajectories of East German men and women after the *Wende*? Which exogenous causes dominated the mobility process, and which role is played by individual mobility efforts? To what extent are labor market experiences influenced by the qualifications and resources people bring along in this process,

and to what extent are the employment trajectories after the Wende a selection process based less on individual characteristics but are rather the outcomes of structural disruptions such as the closure of firms or the total disappearance of local labor markets? (Table 4)

3.1 Polarization and the increase of socio-economic inequality

This thesis is oriented toward the aggregate outcome of transformation and is derived from the expectation of a growing similarity of East Germany with the much larger socio-economic differences of West Germany especially with regard to income, property and wealth. But there is also an individual-level mechanism involved. The transformation process should intensify or rather “accentuate” (Elder and Caspi 1990) the prior distribution of resources and assets. The expectation here is that systems under stress magnify the degree of inequality because people with rich resources are able to counterbalance and compensate while people with poor resources fall simply into a vicious circle. The polarization thesis becomes also plausible if one assumes “windfall” profits which should result from the extraordinary returns and career prospects in such a period of radical change.

3.2 The hypothesis of the status maintenance

The hypothesis of status maintenance postulates that the *relative* rank order of positions of people and households remained the same despite the change in the political and economic order. This, for instance, was largely the case in West Germany after 1945. It implies that the original distribution of resources, qualifications and skills remains decisive for the maintenance or change of positions. Such a thesis can be derived from the assumption (underlying convergence theory) that also the GDR was a complex, functionally differentiated society wherein qualifications served as the main criteria of status allocation. But also or even in cases where positions in the GDR were more likely filled with people who were politically loyal and did not hold the corresponding professional qualifications, they might have possessed resources which they could mobilize in the transition process, such as information, networks and possibly even financial capital which could be used to gain access to advantageous positions. Conversely, it could be assumed that people who were already in middle and lower positions during the GDR time found themselves again in such positions. Likely candidates for a reordering of status rank orders are the status losses for the state, party and military apparatus, but also the relative decline of the incomes of skilled workers

who in part had superior opportunities for earning production premiums.

3.3 Qualification hypotheses

Depending on which characteristics of the East German qualificational system one considers, three very different scenarios portray the way in which qualifications acquired in the GDR fare in the transition. The three following sub-hypotheses should be seen as complementary. They describe group-specific conditions in the use of qualifications during the transition.

3.3a Qualification devaluation hypothesis: It can be assumed that for those who had system-specific or merely company-specific qualifications labor market risks are highest. Some observers even claim that all or most of the GDR qualifications were quite different from West German ones (Andretta/Baethge 1995). We can presume that these qualifications, acquired and necessary in the socialist state economy of the GDR (whether in the processing industries, in administration, or in the service industries), are no longer useful under the new labor market conditions or in external labor markets. A rather age-unspecific loss of qualification or a relatively age-unspecific rate of unemployment should then be the observed outcome as long as it is not compensated by age-specific retraining measures and chances.

3.3b Qualification transfer hypothesis: The common inheritance of the German professional/vocational training system, which also applied to the GDR, and the legal regulations for recognizing the equivalence of the educational and training degrees would support the expectation that prior qualifications keep their value. To the extent that a sufficient demand for this kind of labor exists then the East Germans who have qualification certificates should have good chances to render their qualifications into adequate positions also in the new employment system.

3.3c Qualification unfolding hypothesis: Moreover and above that, it can also be plausibly expected that some East Germans had qualifications and capabilities that were suppressed and discriminated upon in the GDR. These could have, henceforth, special chances of unfolding now (such as, for example, among the self-employed in trades and services, in professions and pseudo-independents of the earlier cooperatives). There is another aspect which supports this rather than the qualification devaluation theory: East Germans had to adapt very

creatively to adverse conditions in production and consumption in the GDR. Such skills, termed as “chaos qualifications,” might be useful now in the turmoil of transition.

3.4 The hypothesis of political discrimination

The positions of the Party and the state apparatus disappeared quickly without being replaced. Hence, it can be expected that the combination of devalued management knowledge and political stigma led to quick job losses and bad job prospects for many of the former members of the nomenclatura. If one looks at the age structure of these persons, a disproportionate share of them belongs to the age brackets above 55. A large number of them were channeled into early retirement. In this respect, we can expect that the East German variant of early retirement not only served to relieve the labor market but also amounted to a political purge by quite harmless means. It is not only among the Kaders but also among public sector employees in general where one can find a similar phenomenon of negative political stigmatizing, i.e., without a clean slate from the Gauck-Behörde, East Germans would not be rehired. Prior party membership should not, however, have a negative stigmatizing effect for employment in the private sector.

3.5 The hypothesis of gender discrimination

Whether women are characterized as the passive “losers” of the Wende or as active “participants” in the transformation process, it certainly does not change the overall picture of increasing discrimination of women on the labor market in comparison with the former GDR. This differentiation is important, however, if one likes to assess the degree to which West German employment conditions of women are being transferred to the East.

3.5a “Losers” hypothesis: That women in East Germany in general belong to the losers of unification, or at least not to the winners, can hardly be questioned. Their higher unemployment quota, in comparison to the West German women, can be traced back to, among else, the much higher share of GDR women employed (Cramer 1994: 22). But also in comparison to East German men, it is generally known that East German women experienced much higher risks of unemployment and demotion. If the women will finally belong to the losers will depend on the realization of two assumptions: (1) that the structure of the demand for labor in West Germany will be transferred to East Germany, and (2) that

therefore also, women rather than men in East Germany will more likely belong to the “industrial army reserve”. In consequence, this would lead to an implementation of the West German practice that newly employed women are subjected to a “statistical discrimination” because employers assume a higher absenteeism and lower work commitment irrespective of their personal qualifications and work history.

3.5b “Active participants” hypothesis: At the same time, one can also argue that because of the GDR experiences, the gainful employment of women enjoys a high acceptance both among East German women and men. Aside from the East German women’s high tendency to work and their relative high qualifications, a higher employment tendency may be fostered by the experience and norm that women contribute a major part to the household income. This leads us to expect a high supply of labor by East German women.

3.6 Deindustrialization hypothesis

The process of deindustrialization in East Germany leads to an increased risk of job loss among the former industrial labor force. Compared to this, people in the service industries and above all in public service can be expected to have better chances in the labor market.

3.7 Hypothesis of region-specific labor market chances

Something similar applies to regions. Those employed in monostructural industrial areas in 1989 should have comparatively poor employment chances. For the time being, offset by zero short time and temporary occupational guarantees on the side of the new investors, they are finally forced to shift firms and in part also to move to regions with better labor market opportunities. On the other hand, those employed in the urban service sectors should have relatively good chances. The constitutional postulate and political goal to aim at roughly similar living conditions in all regions constitutes an unprecedented challenge to existing policies and institutions and will possibly lead to modifications and more flexibilities within the comparably rigid contract system of the German labor market.

3.8 The cohort and age hypothesis

Layoffs, job losses, job changes, and reorientation in the East German labor market are not only influenced by qualification, sector and occupational affiliations, gender, and local labor

market conditions, but probably also by age and labor force experience. Employers make decisions about employment contract extensions or hiring partly on the basis of assumptions about returns on investments in training, i.e., about training and trainability. Age is assumed to be a good “proxy” for such kinds of human capital. This should have a particularly strong effect in a situation, just like in East Germany today, where such characteristics as commitments of and commitments to companies, duration of employment, and job experience and the resulting legal rights, informal obligations and attributes do not constitute any positive assets. For employees, the remaining working lifetime and the incentives of transfer incomes competing with labor market participation are crucial parameters for their own labor market decisions - as long as they are at all possible. Insofar as different birth cohorts were “hit” by the transition in very different phases of their life, they face quite different employment chances. In general, younger people should have better opportunities, because retraining investments are still expected to pay off and also because their qualification levels should be higher (such as the more modern and more flexible vocational training) and they are less formed by the habits of the socialist planning economy.

There might also be a cohort effect in the sense that older cohorts lose their advantages compared to later birth cohorts, and that the blocked opportunities of the younger cohorts in the eighties are being compensated now.

Even more radical cuts can be expected if one assumes that East Germany follows the West German pattern according to which occupational restructuring largely favors new entrants into the labor market to the disadvantage of older workers. A plausible opposing argument to that would be, however, that occupational restructuring via cohort entry only functions in a relatively stable system like the Federal Republic since new entries and exits out of the labor force are the most amicable and efficient way to manage the necessary structural change. With a radical and sudden structural change like in East Germany, the cohort replacement solution might be less plausible.

3.9 Hypothesis of “individual development”:

Independent of the question of a (de-)valuation of occupational certificates, people who showed a comparably higher work orientation, more success in their job careers, and a

higher degree of activity within the formal as well as the informal economy should have been more successful in the transformation process. Though representing different political and economic regimes, the FRG and the GDR are both industrialized societies, and should therefore promote and reward in general the same abilities and personality characteristics (the difference between them being more a question of how and to which degree they were rewarded). The now established market economy should give the more active, more flexible, and more work-oriented people better opportunities than the socialist system, so that we would expect mainly continuities and accelerations of job careers after 1989 and an “accentuation” of social inequalities due to personality characteristics.

The counter-hypothesis argues instead that abilities to “muddle through” and to have success in the GDR are not the same as in a market economy. This holds true both for an engagement in the formal as well as the informal economy because the habits and mentalities learned there are situation-specific and hence more a handicap than an asset under the new current circumstances.

4. Data

In the following, findings from the East German Life History Study are being reported (Figure 1). In 1990 we extended the West German Life History Study (Huinink/Mayer et al. 1995). The main data collection took place between September 1991 and October 1992, whereby half of the interviews were completed by the end of 1991, that is, approximately two years after the historic events which together are referred to as the “Wende” today. The sample consists of 2,323 people born in one of four birth cohorts (1929-31, 1939-41, 1951-53 and 1959-61) who in October 1990 were living in what had up to then been the German Democratic Republic. These 2,323 people underwent an oral interview and answered very detailed questions about their life course, including family origin, education, vocational training, job history, and family events. In the spring of 1993 a follow-up survey was conducted by mail in which 1,254 of the original participants took part. Whenever the present paper refers to job careers after 1989, information based on the mailed follow-up survey is used. The sample of the realized interviews in this follow-up survey showed no

remarkable distortions compared to the original sample. Unfortunately, we do not have complete job histories for the time between 1989 and 1993 but just barely more than cross-sectional information concerning employment status and occupational position at the time of the interview. However, we just started a panel study of our respondents in which we are collecting very detailed job histories from 1989 on including changes in the companies where our respondents were under contract. In addition to the ongoing survey we also cover the full life courses of the birth cohort born in 1971.

5. Empirical findings

Unemployment

Clearly, the most severe labor market process in the East German transformation is the dramatic increase of unemployment. The number of people in the labor force is more than 40% less than in 1990. All women and almost all men in our oldest cohort (those born between 1929 and 1931) have left the labor force either by regular entry into retirement or by measures of early retirement, mostly in 1990 or 1991.

In all three younger birth cohorts, the share of those being excluded from the labor market is two to three times higher for women than for men (see Table 5). There are indications that mothers with young children withdrew from the labor market more often than other women. For both women and men, the risk of unemployment rises with increasing age.

Persons without any vocational degree face the highest risk of unemployment, and persons with a university degree the lowest. Vocational training pays off especially for men, whereas about every fifth woman with vocational training is unemployed. Skilled workers in industry do comparatively well. When comparing different sectors, having been employed within the state service sector in 1989 seems to lower the risk of unemployment during the transformation process. Even former party membership does not increase this risk.

When comparing women and men, the stereotype of women being the losers of the transformation is not confirmed for all occupational groups. Among professionals, semi-

professionals and clerks with vocational training, women could keep their job even more often than men. This astonishing result at first glance is an effect of women having been occupied within the relatively safe public sector more often than men: teachers, educationalists, and health care workers.

Occupational mobility

The first impression of those still holding a job is the astonishing amount of stability - if one takes into account that we consider here a system change (see Table 6). More than two thirds of our respondents having had a job in Spring 1993 are at the same level of occupational position as in November 1989 with two remarkable exceptions. The one exception are former (middle and higher) managers, of whom two-thirds have lost their former position and must face considerable downward mobility. The other exception are former members of farm cooperatives who - if they are at all in the labor force - have become workers, mainly in unskilled and skilled jobs. (We have to admit however that we do not have enough farmers in our sample to draw reliable conclusions.) A maybe surprising result is that the former self-employed could not, to a higher degree, keep their positions in comparison to other groups in the labor market - though in general the share of self-employed has risen considerably in East Germany after 1989. We are not able to analyse this phenomenon in depth, but we assume here that supermarkets and store chains were fierce competition for the bakeries, butcher shops, shoemakers, and car repair shops which flourished before 1989.

As can be seen in Table 7, the relatively high continuity of occupational positions has something to do with the dimension of "occupation". If one compares the occupations held in 1989 and 1993 on the basis of a four-digit code developed for the analysis of occupational careers during the GDR (1993), more than 60 percent of those having had a job in 1989 as well as in 1993 stayed exactly within the same occupation. Hence, we assume that it is occupational continuity in a narrow sense which steers the stability of occupational positions observed in Table 6. The fact that we could not identify any remarkable differences between sexes, occupational positions, or industrial sectors supports the assumption that occupational inertia is a general tendency in the labor market in post-communist East Germany. One can explain this by the institutional fact that most of the occupational certificates acquired in the

GDR were officially acknowledged in the unification contract. Yet this decision was not accidental. It can be traced back to the specifically German tradition of occupational levels and fields structuring the labor market which was shared by the two German societies. Occupational certificates could thus serve as guidelines in evaluating the relative - not necessarily the absolute - suitability of different East Germans for different kinds of jobs. We will look for more evidence for this explanation later on.

These results and their explanations are contrary to most if not all predictions, expectations, and hypotheses presented to describe the transformation in East Germany. Obviously, they are counter-intuitive. We would like to point therefore to three different arguments which support our explanation. (1) Though occupational certificates acquired in the GDR may not indicate the required skills of persons for jobs linked with these certificates, retraining on that basis is - in general - obviously more promising or cheaper than any other recruitment strategy. (2) In looking at processes of deindustrialization in East Germany, one should not forget that the public sector has been and still is by far the biggest employer, and in this sector most employees were not dismissed. And finally (3), the two occupational positions with a low level of continuity are exactly the only two which are not defined by "certified" occupations - managers and unskilled workers.

Yet, we do not want to deny at all that a considerable degree of mobility can be hidden behind such continuities measured only at two time points at the level of occupational positions. At least two-thirds of all men and women had to give up their job for at least one time between 1989 and 1993, and at least one-fifth lost their job for a short or longer time.

To provide an overview of occupational mobility in East Germany since 1989, we draw on four logit regression models of unemployment, downward mobility, stability of occupational position, and of upward mobility (see Tables 8a-c). For each of these outcomes representing different degrees of inclusion (stability and upward mobility) and exclusion (unemployment and downward mobility), we look at three types of explanatory factors:

a) ascribed and achieved assets which are considered to be important for occupational success as measured in 1989 before the Wall came down. As ascribed characteristics, we look at

gender and cohort membership. As achieved assets, we included the highest level of occupational qualification and party membership (see Table 8a);

b) several characteristics of occupational mobility and activities in the GDR during the 1980's: shifts between occupations, shifts between firms, upward and downward mobility, job shifts due to private reasons, self-initiated further education, having had a job on the side in the 1980's, and finally the active involvement in the informal economy (construction materials, bigger acquisitions, and small everyday commodities) to a degree above the average inhabitant of the GDR. These characteristics might be looked at to differentiate between persons who have a low or high job orientation, who are more active and more flexible than others, and who experienced at least more discontinuities than the average GDR employee. All these factors are added to the assets described above (see Table 8b);

c) structural factors targeting the coincidences of having worked in the "right" or "wrong" industrial sector or of having lived in the "right" or "wrong" region in 1989. (Unfortunately, we are not able to distinguish in our data between different Bundesländer or regions). Combined with the individual factors mentioned above, they form the models represented in Table 8c.

What can we learn from these models for our topic of inclusion and exclusion on the labor market? Let us first look at the significance of the formal occupational qualification. We see that any vocational degree - technical college and university degree even better than vocational training - protects against the risk of unemployment compared to people without any vocational training. Furthermore, the relatively restricted chances for upward mobility exist mainly for people with higher occupational qualifications (with technical college only being statistically significant). The message is: educational credentials obviously pay off, and the higher the degree, the better it protects against unemployment, and, at least as a tendency, the better the chances for upward mobility.

Whereas occupational degrees obviously pay off in the whole, another important asset for occupational success in the GDR is now found to be a risk in the labor market. Former party membership does not lead to a higher risk of unemployment but to a more than two

times higher risk of downward mobility. This is - looking closely at the data - mostly true for the former managerial positions but also for other occupations.

It would be misleading, however, to see processes of inclusion and exclusion only as outcomes of achieved assets. Gender is one of the sharpest criteria for inclusion and exclusion. Women face a higher risk of unemployment and of downward mobility, leading to a lower chance of stability of occupational position. Moreover, they have only half the chances of upward mobility as men. Though women did not fully have equal career chances during the times of the GDR, the situation has now quite another dimension.

Looking at the different birth cohorts, the most striking difference is between those born around 1940 and the other two cohorts. Those born around 1940 are in all aspects except upward mobility worse off than the two younger cohorts. The disadvantages of comparably old age seem to prevail the advantages of longer former investments into the occupational career. The youngest cohort in our study, those born around 1960, has the lowest risk of unemployment. Compared to the cohort which is eight years older, they have a slightly higher risk of downward mobility but much better chances of upward mobility. Compared to each other, maybe the cohort 1939-41 could be called the most "excluded" cohort. We should add here that those born around 1930 have completely left the labor market, mostly via forced early retirement, and are therefore included in our analysis.

Even controlling for personal assets, characteristics of the individual life course during the 1980's had an additional impact on the risks and chances during the transformation process, and as the improvement of chi-square statistics and the little changes in the coefficients for gender, birth cohort, occupational level and party membership show, these are additional factors to those in the first model (see Table 8b). Persons who changed their occupation during the GDR times had a considerably higher risk of unemployment and a lesser probability to keep their occupational position. Shifts between firms have no impact on either of the risks and chances regarded here when controlled for other factors.

Job shifts due to private, mainly family reasons, before 1989 can be regarded as an indicator for job orientation which is not career-oriented and which is assumed by some authors

(Grünert/Lutz 1994; Andretta/Baethge 1995) to be a typical characteristic of mobility in the GDR. Forty-three percent of our respondents reported to have had such job shifts (of which 81% were women and 19% men). As could be expected, these persons now face a double risk of unemployment, but not of downward mobility. Although insignificant due to the small number in this group, they also have lesser chances for upward mobility. We found no effect of having had a job on the side, of self-initiated further education, and of a higher involvement in informal practical support relationships during the time of the GDR. Such indicators of more general activity and abilities to “muddle through” do not seem to indicate a type of personality suitable to master the situation after the Wall came down.

Against first expectations, upward and downward mobility experiences before 1989 do not continue after 1989 but are reversed. Partly these are bottom and ceiling effects. But why does upward mobility before 1989 imply a higher risk of downward mobility after 1989, and downward mobility before 1989 a higher chance of upward mobility after 1989? Yet, at first glance, the explanation for this strange result becomes quite clear when we look more closely at the data. The former upwardly mobile and now downwardly mobile are driven back to the occupational level which fits their original qualification level. The same is true for the people who were downwardly mobile before 1989 and are upwardly mobile now. This latter effect is primarily caused by one single group and therefore cannot be generalized. People with vocational training who worked in quite well-paid unskilled level positions now return into skilled level positions. So particularly this effect does not reflect a general opening of formerly restricted career opportunities but, in a special segment, a return to the level of occupation which fits the qualification level and, of course, changes in the wage structure.

The explanation for this result was already given above: Certificates are perhaps the best signal to reduce uncertainty in the re-allocation of persons after the Wall came down - even if their significance is moderated by mismatches between the two educational systems and the content and character of specific tracks of occupational training. The political decision to acknowledge the educational and vocational system of the GDR in the unification contract is crucial in this respect and is culturally embedded into the East and West German tradition of a labor market segmented according to occupational lines. Even for these professions, like law or business administration (where one would expect otherwise), detailed analyses show

a surprisingly high level of occupational stability. However, due to the few cases for such specific occupational groups, we must say that the latter is no more than a preliminary impression.

This interpretation then leads us from individual to institutional factors and structural forces governing the transformation process in the East German labor market. We must admit that we cannot represent structural factors in our data with the same degree of adequacy as individual properties. We considered only two additional factors: whether our respondents lived in an urban area in 1989 or not, and in which industrial sector the respondents worked in 1989. As can be seen in Table 8c, having lived in an urban area provides much better labor market opportunities (in the sense of avoiding unemployment) than rural areas, though you could argue that people in rural areas could have moved to more promising regions in the meantime (what a certain part of the population surely did). The sector where our respondents worked in 1989 plays an especially important role for the risk of unemployment, too, but this needs some explanation. Especially having worked in the social service and public administration sector interacts significantly with technical college and university degrees as levels of occupational formation. When one removes the sector variable from the model, the two levels become significant predictors of unemployment, indicating that persons with a technical college as well as with a university degree have less than half the risk of unemployment compared to persons with vocational training only. In other words, the latter is mainly true for the public sector and much less for private business. The coefficients for stability of occupational position, too, stress the significance of the public sector as a domain of relative employment security. It provides by far the highest stability of occupational position, but on the other hand, it is also by far the smallest window for upward mobility.

As the stepwise inclusion of different factors shows, life course characteristics and personal assets had each independently a high impact on all four labor market processes after 1989. The structural factors considered here are especially important for unemployment versus stability of occupational position and have less impact on the processes of upward and downward mobility, with the one exception we just mentioned.

Socio-economic inequalities

In our own data, we have one indicator of changing social inequalities between 1989 and 1991 which refers to working conditions. Almost all occupational groups (with the important exception of professions and semi-professions) report that they now experience a higher degree of control of their work on one hand and an increased amount of responsibility, work autonomy, and managerial functions in a wider sense on the other. The latter is much more true for managerial positions at all levels. We interpret that as an indicator for an accentuation of the operational hierarchies within companies, with more gains for higher positions and gains and losses for the non-managerial positions.

Secondly, we can refer to cross-sectional analyses of household income with the data of the GSOEP (Hauser/Wagner 1994; Krause 1994, Hauser 1996). Almost all East German households experienced a considerable gain of equivalent income (nominally from 46 to 69 percent of the West German equivalent income, adjusted for prices from 66 to 78 percent). This gain was linked with an increasing inequality (Gini coefficient 1990: 0,185; Gini coefficient 1993: 0,216). This is much less than has been expected and less than many believe. Hauser and Wagner also report high stabilities of relative income positions over time (measured by quintiles of the equivalent income).

Conclusions

In sum, our analyses draw a picture which is more differentiated from the global assumptions mentioned in the beginning made us believe. When assessing the various hypotheses we formulated above, one has always to take into account that we talk about an ongoing process and hence all statements should be considered as preliminary.

Hypothesis of polarization: The general enhancement of the standard of living was accompanied by increasing inequalities, but until now these inequalities were less accentuated than in West Germany. On the one hand, incomes from public transfers have a considerable compensation effect. On the other hand, we do not yet have the very high incomes stemming from entrepreneurship and properties accumulated over generations. Compared to the inequalities existing in the GDR, this is still clearly a polarization which seems to be caused more by the institutional transfer of the FRG economic and social system than by an

accentuation due to individual resources at the beginning of the transformation process.

Questions of status maintenance and qualification use: Our prevailing impression is that the inequalities according to qualification, occupational position and occupation stemming from the GDR are preserved to an astonishingly high degree. Devaluations of qualification are selective and not a mass phenomenon, at least with respect to the redistribution of persons within the stratification system when they occurred more often by exclusion from the labor market than by downward mobility. Occupational credentials acquired in the GDR still pay off, and the higher the degree the better. They protect against status losses, but they seem to prevent occupational reorientations, too. Except former managers and persons without vocational training, most people work in the same occupations as they did before 1990. The prize for that relative stability of many was the partial exclusion of women from the labor market and the almost total exclusion of those having been older than 55 in 1990. The way to manage the necessary structural change in East Germany is therefore a combination of stability for a majority who stay in their GDR occupations and are trained by further education and a considerable minority being excluded and subsidized by public transfers. In other words, the “(West) German model” holds also true for the East German transformation, as ambivalent as it is.

Hypothesis of political discrimination: Discrimination of former members of the nomenclatura is mostly visible as massive status losses, not as exclusion from the labor market. Not visible in our data are, however, other aspects which should not be forgotten: the cut of supplementary pensions for persons who had worked in the state sector; the measures of early retirement which hit mostly the higher positions in the nomenclatura; and the liquidation of many institutions which were essential for the status and self-esteem of its members. Aside from that, the collective removal of former managers by early retirement and other measures did not lead to increased chances of upward moves for the younger East German cohorts (Solga 1994).

Hypothesis of gender discrimination: In sum, there is no doubt that the position of women in the labor market has weakened. This is partly a consequence of an approximation to West German labor market conditions, partly due to the stepwise abolishment of East German

measures and rules to support the labor market participation of mothers, and partly the consequence of economic crises in patriarchal societies treating women as a reserve army. One should not forget, however, that in some segments of the labor market women have now even better opportunities than men, because they have comparably secure professional and semi-professional occupations within the public sector which are now better paid.

Cohort and age hypothesis: Aside from early retirement, the older cohorts have to face more risks than younger ones. For our oldest remaining birth cohort, 1939-41, as well as for our youngest birth cohort, 1959-61, we find tendencies for an ongoing polarization between the risk of unemployment and chances for upward moves.

In our paper we looked at processes of labor market inclusion and exclusion only at the level of "objective" life events. In another study we focused on agency beliefs and perceived self-esteem which can be interpreted in this way (Diewald/Huinink/Heckhausen 1996). Without going into detail here, the labor market processes we described here proved to be the major determinants of these subjective dimensions. Above that, we want to highlight two additional results from the subjective perspective which focus on cohort differences: The oldest of our cohorts, those born between 1929 and 1931, who were almost completely excluded from the labor market by measures of early retirement, did not react with a lowered self-esteem and reduced agency beliefs. Instead we found these reactions for the cohort 1939-41 who fall, so to speak, between two chairs (Geißler 1996: 294). They are too young to retire and too old to change their occupation or to be further trained. Obviously, they clearly see few chances for themselves to cope with their unfavorable combination of a particularly high threat of devaluation of accumulated occupational resources, limited time and missing perspectives for an active, longer-term adjustment strategy bound with new orientations. Hence, it is no wonder that this group is most likely to doubt that own efforts make any sense, though they do not doubt their abilities - a particularly striking example of subjective exclusion. As could be proven by multivariate models, this feeling of being excluded is in this cohort not restricted to persons who at the time of the interview experienced unemployment or status losses. It seems to indicate a general loss of perspective for this cohort.

Let me make a number of comments at the end:

1. The obvious question to be raised at this point is whether the time point of comparison in 1993 is not already obsolete, since the transformation process has gone on 3 more years. My preliminary answer is that my co-workers Martin Diewald and Heike Solga have extended this analysis using the data from the Socio-Economic Panel up to 1994 and confirmed most of the findings I reported here. Basically this is the case because the major transformations on the labor market were over by 1993. I add one caveat, however, the temporary granting of tax subsidies and the reduction in other transfers from the West could soon initiate a new downswing especially in construction and the surrounding small firms.

2. What are the implications from our findings for the models for the origin and destination societies? What is most striking here is the strength and determination of the institutional collective actors of West Germany to impose their blueprints even when they did not fit and even when they were more costly than alternative solutions. The outcomes of the labor market transformation is above all the result of the application of ready made tools of labor market policies and measures to the East: wage subsidies, retraining, short hours, early retirement. The insider-outsider solution to the employment problem has been imported from the West, only in magnified proportions: keeping the older and younger workers and the women out rather than liberalizing the labor market on much reduced wages. Diewald and Solga have shown in their new study that the highest risk for long time unemployment were those who went on retraining schemes. Their risk is higher than for those who for some time remained on unemployment without going into retraining schemes (Diewald/Solga 1996).

In addition, we were impressed with what proved to be rather similar in the two societies and the effects of these shared institutional characteristics for the transformation, especially the education-training occupation link and occupationally segregated labor markets combined with a very strong credentialism. Here a common tradition and unification policy interacted forcefully.

3. Are our predictions for the transformation process better than for the breakdown of Communist societies and are they based on explicit theoretical models with empirical content?

My own predictions and future scenarios of early 1991 are in print (unfortunately in Italian and with a publication delay of several years) and they fare quite well in regard to their generally gloomy outlook, the role of the public sector, the perils of subsidized privatization, the low employment effect of construction, the differential opportunities for cohorts, etc., although I overestimated migration because I underestimated West German stagnation. But I must concede that they were based more on informed guesses than explicit models. It is also quite clear that apart from very few exceptions the political position of the academic observer is still the best predictor for his or her predictions. It is also apparent that the macro-micro relationships are much better understood and spelled out than the micro-macro relationships. In regard to the endogenously structuring and institution-making processes in East Germany sociologists vary from one extreme to the other. On the one hand the prediction of no endogenous structuring effects whatsoever (with fewer cultural lags in mentalities and orientations) (Lepsius 1994), on the other hand the prediction of partially completely different institutional outcomes (for industrial production and industrial relations see Baethge/Andretta 1995; for the reconstruction of farming, see Lehmbuch 1992).

4. Finally, on the topic of solidarity and inequality. The process of German unification is characterized by the fact that it relied exclusively on the institutionalized means of collective solidarity: the social security systems for labor market measures unemployment, retirement and social assistance. In the vain hope for the self-organizing market forces no attempts were being made to call on personal solidarity of the West Germans for the East Germans. As a consequence, system integration was achieved but social and cultural integration was not and even may have widened. For the time being this has ensured a rapid catching up in real incomes and a reduction in economic inequality between the two parts of Germany. There might be another positive aspect to this kind of transformation policy. It did not have to draw on nationalist sentiments and could allow European integration to go on business as usual without a temporary withdrawal from Germany's share in financing Europe.

References

- Andretta, G./Baethge, M.: Zur Analyse beruflicher Transformation in den neuen Bundesländern - Bezugspunkte für eine Suchstrategie zur Interpretation empirischer Daten. Papier zum SOFI-Forschungskolloquium am 15.2.1995. Göttingen: SOFI (manuscript) 1995
- Beck, U.: Opposition in Deutschland. In: B. Giesen/C. Leggewie (Hg.), Experiment Vereinigung. Ein sozialer Großversuch. Berlin: Rotbuch Verlag 1991a: 21-27
- Beck, U.: Der Konflikt der zwei Modernen. In: W. Zapf (Hg.), Die Modernisierung moderner Gesellschaften. (Verhandlungen des 25. Deutschen Soziologentages) Frankfurt am Main: Campus Verlag 1991b: 40-53.
- Beyme, K. von: Verfehlte Vereinigung - verpaßte Reformen? Zur Problematik der Evaluation der Vereinigungspolitik in Deutschland seit 1989. In: Holtmann, E./Sahner, H. (eds.): Aufhebung der Bipolarität. Veränderungen im Osten. Rückwirkungen im Westen. Opladen: Leske & Budrich, 1995: 41-68
- Blossfeld, H.-P.: Kohortendifferenzierung und Karriereprozeß. Frankfurt am Main et al.: Campus Verlag, 1989
- Blossfeld, H.-P./Hamerle, A./Mayer, K.U.: Ereignisanalyse. Statistische Theorie und Anwendung in den Wirtschafts- und Sozialwissenschaften. Frankfurt am Main et al.: Campus Verlag, 1986
- Blossfeld, H.-P./Rohwer, G.: Techniques of Event History Modeling: New Approaches to Causal Analysis. Mahwah, NJ: Lawrence Erlbaum Associates, 1995
- Brie, M.: Die Ostdeutschen auf dem Wege vom 'armen Bruder' zur organisierten Minderheit? (Arbeitspapiere AG TRAP 94/4). Berlin: Max-Planck-Gesellschaft, Arbeitsgruppe Transformationsprozesse.
- Coleman, J. S.: Foundations of Social Theory. Cambridge, MA/London: The Belknap Press of Harvard University Press 1990
- Cramer, U.: Projektförderung versus Zielgruppenförderung - Zur Notwendigkeit eines Paradigmawechsels in der Arbeitsmarktpolitik. In: Ministerium für Arbeit, Soziales und Gesundheit des Landes Sachsen-Anhalt (ed.): Innovative Ansätze in der Arbeitsmarktpolitik - Vom "zweiten" zum "parallelen" Arbeitsmarkt. (Forschungsbeiträge zum Arbeitsmarkt in Sachsen-Anhalt, Bd. 6). Halle, 1994: 21-28
- DER SPIEGEL v. 17. 6. 1996, S. 94 ff.
- Diewald, M.: Disruptions and Continuities. Occupational careers during the East German Transformation. Berlin: Max-Planck-Institut für Bildungsforschung (manuscript) 1995

Diewald, M./Huinink, J./Solga, H./Sørensen, A.: Umbrüche und Kontinuitäten - Lebensverläufe und die Veränderungen der Lebensbedingungen seit 1989. In: Huinink, J./Mayer, K. U. et al.: Kollektiv und Eigensinn. Lebensverläufe in der DDR und danach. Berlin: Akademie Verlag, 1995: 307-348

Diewald, M./Huinink, J./Heckhausen, J. 1996: Life Histories and Developmental Control in Times of a Macrosocial Rupture: The Case of Different Birth Cohorts in the East German Transformation Process. Paper to be presented at the Annual ASA meeting 1996, New York.

Diewald, M./Solga, H.: Ordnung im Umbruch? Strukturwandel, berufliche Mobilität und Stabilität im Transformationsprozeß. In: L. Clausen (Hg.), Gesellschaft im Umbruch. (Verhandlungen des 27. Kongresses der Deutschen Gesellschaft für Soziologie, Halle). Frankfurt am Main/New York: Campus Verlag 1996a: 259-274

Diewald, M./Solga, H.: Nach dem Sturm folgte zwar Ruhe, jedoch nicht der Sonnenschein! Mobilitätsprozesse und Allokationskriterien in Ostdeutschland nach 1989. In: C. Brinkmann (Hg.), Der ostdeutsche Arbeitsmarkt in Gesamtdeutschland. Opladen: Leske & Budrich 1996b.

Diewald, M./Sørensen, A.: Erwerbsverläufe und soziale Mobilität von Frauen und Männern in Ostdeutschland: Makrostrukturelle Umbrüche und Kontinuitäten im Lebensverlauf. In: Diewald, M./Mayer, K. U. (eds.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 63-88

Elder, G. H./Caspi, A.: Persönliche Entwicklung und sozialer Wandel. Die Entstehung der Lebensverlaufsforschung. In: Mayer, K.U. (ed.): Lebensverläufe und sozialer Wandel. Opladen: Westdeutscher Verlag, 1990: 22-57

Ettl, W./Wiesenthal, H.: Tarifautonomie in de-industrialisiertem Gelände: Analyse eines Institutionentransfers im Prozeß der deutschen Einheit. In: Kölner Zeitschrift für Soziologie und Sozialpsychologie, 46 (1994), 3: 425-452

Geißler, R.: Von der realsozialistischen zur sozialstaatlichen Struktur der sozialen Ungleichheit. Umbrüche im ostdeutschen Ungleichheitsgefüge. In: Diewald, M./Mayer, K. U. (eds.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 289-302

Giesen, B./Leggewie, C. (Hg.): Experiment Vereinigung. Ein sozialer Großversuch. Berlin: Rotbuch Verlag 1991.

Grünert, H./Lutz, B.: Transformationsprozesse und Arbeitsmarktsegmentation. In: Nickel, H./Kühl, J./Schenk, S. (eds.): Erwerbsarbeit und Beschäftigung im Umbruch. Berlin: Akademie Verlag, 1994: 3-23

Grünert, H./Bernien, M./Lutz, B.: Das Beschäftigungssystem der DDR: Funktionsweise, Entwicklungstendenzen und Folgewirkungen. In: C. Brinkmann (Hg.), Der ostdeutsche Arbeitsmarkt in Gesamtdeutschland. Opladen: Leske & Budrich 1996.

Hauser, R.: Die Entwicklung der Einkommensverteilung in den neuen Bundesländern seit der Wende. In: Diewald, M./Mayer, K. U. (eds.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 165-188

Hauser, R./Wagner, G.: Die Einkommensverteilung in Ostdeutschland - Darstellung, Vergleich und Determinanten für die Jahre 1990 bis 1993. Beitrag für den Ausschuß Sozialpolitik, Herbst 1994

Hauß, F.: Thesen zur sozialwissenschaftlichen Arbeitsmarktforschung im Transformationsprozeß. In: Ministerium für Arbeit, Soziales und Gesundheit des Landes Sachsen-Anhalt (ed.): Innovative Ansätze in der Arbeitsmarktpolitik - vom "zweiten" zum "parallelen" Arbeitsmarkt. (Forschungsbeiträge zum Arbeitsmarkt in Sachsen-Anhalt, Bd. 6). Halle, 1994: 12-15.

Hechter, M.: Theoretical Implications of the Demise of State Socialism. In: Theory and Society, 23 (1994): 155-167.

Heidenreich, M. (ed.): Krisen, Kader, Kombinate. Berlin: edition sigma, 1992

Huinink, J.: Warum noch Familie? Zur Attraktivität von Partnerschaft und Elternschaft in unserer Gesellschaft. Frankfurt am Main et al.: Campus Verlag, 1995

Huinink, J./Diewald, M./Heckhausen, J.: Wendesicksale nach 1989 und ihr Zusammenhang mit Kontrollüberzeugungen, Kontrollstrategien und dem Selbstwertgefühl. In: Diewald, M./Mayer, K. U. (eds.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 251-275

Huinink, J./Mayer, K. U. et al.: Kollektiv und Eigensinn. Lebensverläufe in der DDR und danach. Berlin: Akademie Verlag, 1995

Huinink, J./Mayer, K. U./Trappe, H.: Staatliche Lenkung und individuelle Karrierechancen: Bildungs- und Berufsverläufe. In: Huinink, J./Mayer, K. U. et al.: Kollektiv und Eigensinn. Lebensverläufe in der DDR und danach. Berlin: Akademie Verlag 1995: 89-143

Huinink, J./Solga, H.: Occupational Opportunities in the GDR: A Privilege of the Older Generations? In: Zeitschrift für Soziologie, 23 (1994) 3: 237-253

Jarausch, K.: Der Sturz in die Einheit. Die Wiedervereinigung als Herausforderung an die Zeitgeschichte. In: Wirtschaft und Wissenschaft (1994) 3: 20-27

Jarausch, K.: Die unverhoffte Einheit 1989-1990. Frankfurt am Main: Edition Suhrkamp, 1995

Kocka, J.: Ein deutscher Sonderweg. Überlegungen zur Sozialgeschichte der DDR. In: Aus Politik und Zeitgeschichte, 40, 1994:34-45

Kohli, M.: Die DDR als Arbeitsgesellschaft? Arbeit, Lebenslauf und soziale Differenzierung. In: Kaelble, H./Kocka, J./Zwahr, H. (eds.): Sozialgeschichte der DDR. Stuttgart: Klett-Cotta, 1994: 31-61

Krause, P.: Einkommensmobilität und Folgen unterschiedlicher Erwerbsverläufe. Diskussionspapier anlässlich der Tagung der Sektion 'Soziale Ungleichheit und Sozialstrukturanalyse': "Mobilität im Transformationsprozeß. Einkommen, Erwerbschancen, Klassenlagen". Berlin: Max-Planck-Institut für Bildungsforschung, 1994

Lehmbruch, G.: Die deutsche Vereinigung. Strukturen der Politikentwicklung und strategische Anpassungsprozesse. In: Kohler-Koch, B. (Hg.), Staat und Demokratie in Europa. Opladen: Westdeutscher Verlag, 1992: 93-115.

Lehmbruch, G.: Der Staat des vereinigten Deutschland und die Transformationsdynamik der Schnittstellen von Staat und Wirtschaft in der ehemaligen DDR. In: BISS Public 10 (1993): 21-41.

Lepsius, M. R.: Die Institutionenordnung als Rahmenbedingung der Sozialgeschichte der DDR. In: Kaelble, H./Kocka, J./Zwahr, H. (eds.): Sozialgeschichte der DDR. Stuttgart: Klett-Cotta, 1994: 17-30

Lipset, S. /Bence, G.: Anticipations of the Failure of Communism. In: Theory and Society, 23 (1994): 169-210.

Lötsch, M.: Die Hofierung der Arbeiterklasse war nicht wirkungslos. Ein Rück- und Ausblick auf die Sozialstrukturforschung in der ehemaligen DDR. In: Frankfurter Rundschau, 14. 11. 1990: 28

Marshall, T. H.: Class, citizenship and social development. Garden City, N.Y.: Doubleday

Mayntz, Renate: Die deutsche Vereinigung als Prüfstein für die Leistungsfähigkeit der Sozialwissenschaften. In: BISS Public, H. 13 (1994): 21-24.

Parsons, Talcott: Equality and Inequality in Modern Society or Social Stratification Revisited. In: E. O. Laumann, Social stratification: research and theory for the 1970's. Indianapolis: Bobbs-Merrill.

Mayer, K. U.: Soziale Ungleichheit und Lebensverläufe. Notizen zur Inkorporation der DDR in die Bundesrepublik und ihre Folgen. In: Giesen, B./Leggewie, C. (eds.): Experiment Vereinigung. Ein sozialer Großversuch. Berlin: Rotbuch Verlag, 1991: 87-99

Mayer, K. U.: Gesellschaftlicher Wandel, Kohortenungleichheit und Lebensverläufe. In: Berger, P. A./Sopp, P. (eds.): Sozialstruktur und Lebenslauf. Opladen: Leske & Budrich, 1995, S. 27-47

- Mayer, K. U./Huinink, J.: Lebensverläufe und gesellschaftlicher Wandel: von der Kohortenanalyse zur Lebensverlaufsanalyse. In: Hauser, R./Hochmuth, U./Schwarze, J. (eds.): Mikroanalytische Grundlagen der Gesellschaftspolitik (Bd. 1 Sonderforschungsbereiche). Berlin: Akademie Verlag 1994: 92-111
- Mayer, K. U.: Lebensverläufe und Transformation in Ostdeutschland - eine Zwischenbilanz. In: Diewald, M./Mayer, K. U. (eds.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 329-345
- Mayer, K. U./Solga, H.: Mobilität und Legitimität. Zum Vergleich der Chancenstrukturen in der alten DDR und der alten BRD oder: Haben Mobilitätschancen zur Stabilität und Zusammenbruch der DDR beigetragen? In: Kölner Zeitschrift für Soziologie und Sozialpsychologie, 46 (1994), 2: 193-208.
- Mayntz, R.: Die deutsche Vereinigung als Prüfstein für die Leistungsfähigkeit der Sozialwissenschaften. In: BISS Public, H. 13 (1964): 21-24.
- Mayntz, R.: Aufbruch und Reform von oben: ostdeutsche Universitäten im Transformationsprozeß. Frankfurt am Main: Campus Verlag 1994
- Mayntz, R.: Hauptfach Nabelschau. Sozialwissenschaft hält sich an Themen, nicht an Disziplin. In: Die Zeit Nr. 25 v. 14. 6. 1996, S. 37.
- Meulemann, H.: Werte und Wertewandel. Zur Identität einer geteilten und wieder vereinten Nation. Weinheim und München: Juventa Verlag 1996.
- Niethammer, L. et al.: Die volkseigene Erfahrung. Berlin: Rowohlt Verlag, 1991
- Pirker, T./Lepsius M.R./Weinert, R./Hertle, H.-H.: Der Plan als Befehl und Fiktion. Wirtschaftsführung in der DDR. Opladen: Westdeutscher Verlag 1995
- Reykowski, J.: Why Did the Collectivist State Fail? In: Theory and Society, 23 (1994): 233-252.
- Roller, E.: Ideological Basis of Market Economy: Attitudes Toward Distribution Principles. In: European Sociological Review, 20 (1994) 2: 105-117
- Rottenburg, R.: Der Sozialismus braucht den ganzen Menschen. Zum Verhältnis vertraglicher und nichtvertraglicher Beziehungen in einem VEB. In: Zeitschrift für Soziologie, 20 (1991): 305-322
- Schmidt, R./Lutz, B. (Hrsg.): Chancen und Risiken der industriellen Restrukturierung in Ostdeutschland. Berlin: Akademie Verlag, 1995
- Schulze, G.: Die Erlebnisgesellschaft: Kultursoziologie der Gegenwart. Frankfurt am Main: Campus Verlag 1992

Sinn, G./Sinn, H.-W.: Kaltstart. Volkswirtschaftliche Aspekte der deutschen Vereinigung. Tübingen: Mohr 1992

Smelser, N./Lipset, S. M.: Social Structure, Mobility and Development. In: Smelser, N./Lipset, S. M. (eds.): Social Structure and Mobility in Development. Chicago: Aldine, 1966

Solga, H.: Der Verbleib der Angehörigen der oberen Dienstklasse der DDR nach 1989: Heißt ihr Schicksal nach der Wende beruflicher Abstieg? (Expertise für den Abschlußbericht der Berichtsgruppe II der KSPW "Soziale Ungleichheit und Sozialpolitik"). Berlin: Max-Planck-Institut für Bildungsforschung, 1994

Solga, H.: Der Elitenimport nach Ostdeutschland. Transformationstypen und Veränderungen in der Elitenrekrutierung. In: Diewald, M./Mayer, K. U. (Hrsg.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 89-109

Streeck, W.: German Capitalism: Does it Exist? Can it Survive? Köln: Max-Planck- Institut für Gesellschaftsforschung 1995.

Szelenyi, I: The Prospects and Limits of the Eastern European New Class Project. In: Politics and Society, 7 (1986/87): 103-144.

Szelenyi, I./Szelenyi, B.: Why Socialism Failed: Toward a Theory of System Breakdown - Causes of Disintegration of East European State Socialism. In: Theory and Society, 23 (1994): 211-231.

Voskamp, U./Wittke, V.: Aus Modernisierungsblockaden werden Abwärtsspiralen - zur Reorganisation von Betrieben und Kombinatn der ehemaligen DDR'. In: Berliner Journal für Soziologie, 1: 17-39.

Walder, A.: Communist Neo-Traditionalisms. Berkeley: University of California Press 1986.

Walder, A.: The Decline of Communist Power: Elements of a Theory of Institutional Change. In: Theory and Society, 23 (1994): 297-323

Weber, Max: Wirtschaft und Gesellschaft. Grundriß der verstehenden Soziologie. Köln: Kiepenheuer & Witsch 1964, Studienausgabe, 1. Halbband.

Wiesenthal, H.: Sozio-ökonomische Transformation und Interessenvertretung. In: Diewald, M./Mayer, K. U. (Hrsg.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996: 279-288

Zapf, W.: Modernisierung, Wohlfahrtsentwicklung und Transformation. Berlin: Edition Sigma 1994

Zapf, W.: Zwei Geschwindigkeiten in Ost- und Westdeutschland. In: Diewald, M./Mayer, K. U. (Hrsg.): Zwischenbilanz der Wiedervereinigung. Opladen: Leske & Budrich, 1996a: 317-328

Zapf, W.: Die Modernisierungstheorie und unterschiedliche Pfade der gesellschaftlichen Entwicklung. In: Leviathan, 24 (1996b), 1: 63-77.

Zapf, W. /Habich, R.: Die sich stabilisierende Transformation - Ein deutscher Sonderweg?
In: Rudolph, H. (Hg.), Geplanter Wandel, ungeplante Wirkungen. (WZB-Jahrbuch 1995).
Berlin: Edition Sigma 1995: 137-159.

Figure 1: The German Life History Study Surveys and Birth Cohorts

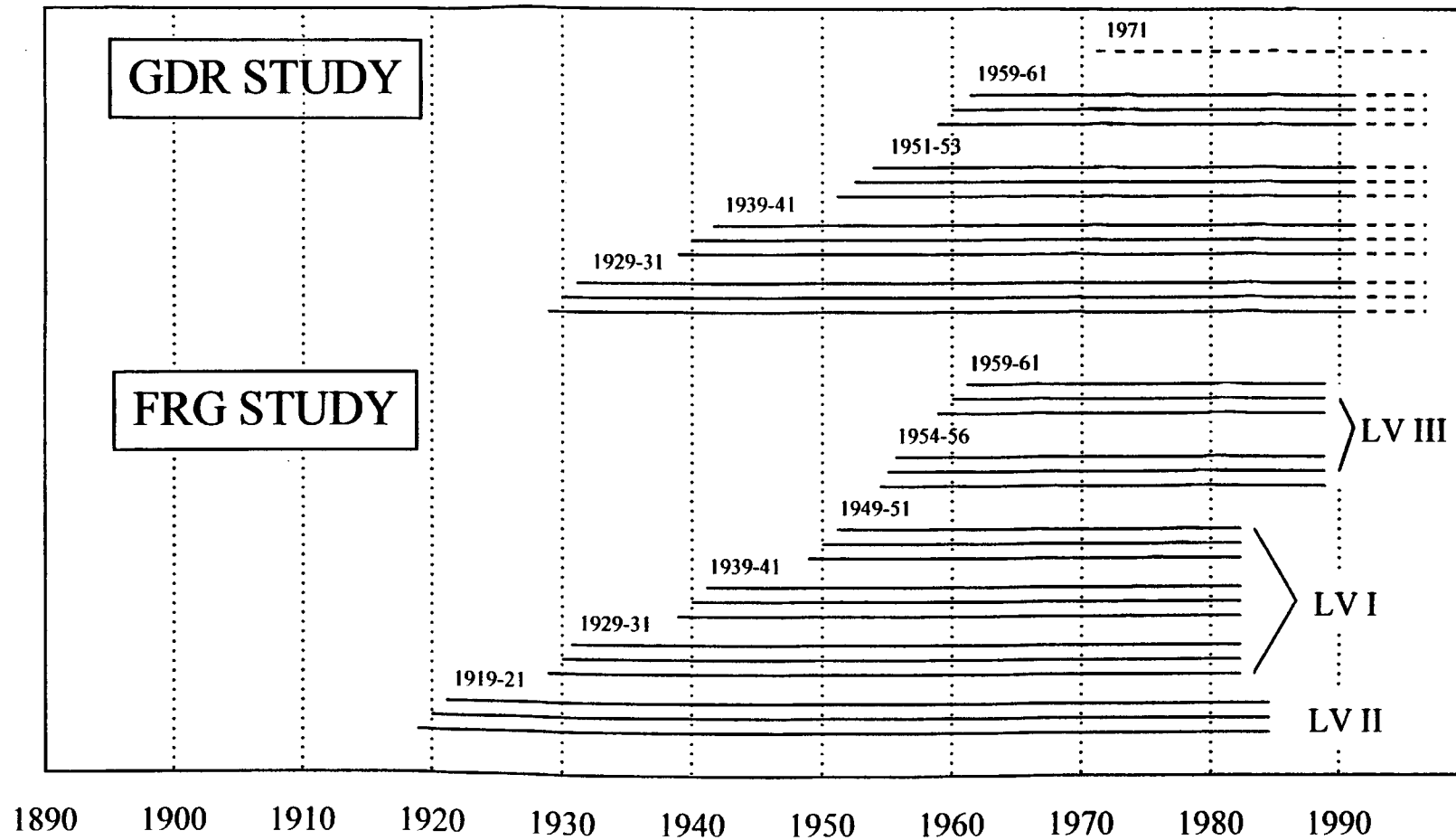


Table 1: Explanatory Schema for Labor Market Processes in East Germany

System of Reference:	System of Origin GDR	Transformation Process	System of Destination FRG
Hypothesis:	"Burden of the Past"	Transformation "Catastrophe"	Incorporation

Table 2: Social Structure, Stratification, Mobility and Transformation

- 1) Allocation and transfer of resources: redistribution of rewards among immobile persons in stable positions
- 2) Social mobility: allocation of persons to given positions and rewards
 - 2 a) mobility of persons between positions in a given hierarchy
 - 2 b) mobility of collectivities within a hierarchy
 - 2 c) collective mobility of total social classes
- 3) Redistribution of rewards and positions in a social structure: structural change
- 4) New systems of class and status

(Smelser/Lipset 1966)

Table 3: Employment Biographies During Transformation As Event
History Process

$$r(t) = f(T, A, K, K_j, B_i, C, B_{it}, C_t)$$

$r(t)$ = e.g. Exiting employment
 Job shift
 Occupational change
 Firm change
 Sector change

- T: Time since November 1989
 - A: Age
 - K: Cohort
 - K_j : Collective cohort characteristics
 - B_i : Individual characteristics acquired in GDR
 - C: Time-independent context characteristics
 - B_{it} : Time-dependent individual characteristics
 - C_t : Time-dependent context characteristics
-

(Mayer/Huinink 1994)

Table 4: Hypotheses for the Explanation of Labor Market Processes in East Germany

- 1) Polarization and increase of inequalities (accentuation)
 - 2) Status maintenance and reproduction of inequality
 - 3) Qualification changes
 - 3 a) De-qualification/De-skilling
 - 3 b) Qualification transfer/stability of certification
 - 3 c) Qualification development
 - 4) "Kader" discrimination
 - 5) Gender discrimination
 - 5 a) Women as the losers of unification (West adaptation/statistical discrimination)
 - 5 b) "Cultural lag"/women as labor market actors
 - 6) De-industrialization
 - 7) Regional labor markets
 - 8) Age and cohort differentiation
 - 9) Coping styles: control beliefs and self-efficacy
-

Table 5: Employment of Men and Women in Spring 1993
 (Cohorts 1939-41, 1951-53, 1959-61, only people having had a job in December 1989)

	Out of the Labor Force	WOMEN		MEN	
		Un- employed*	Downward Mobility**	Un- employed*	Downward Mobility**
	%	%	%	%	%
Cohort					
1939-41	7	24	26	14	16
1951-53	7	19	14	9	10
1959-61	11	15	11	4	14
Qualification Level of Job in 1989					
No Vocational Training	8	46	0	24	0
Vocational Training/ Master	10	20	8	9	19
Technical College	2	9	28	9	21
University Degree	2	6	23	4	13
Branch 1989					
Primary/Secondary					
Production	11	31	23	11	9
Industrial Services	4	28	30	16	19
Social Services	3	6	10	4	21
Occupation Career GDR					
Upward Mobility	2	21	39	14	28
No Upward Mobility	10	19	10	8	9
Party Membership in 1989					
Yes	8	16	14	7	30
No	9	21	17	10	7
Child younger than 12					
Yes	15	26	11	1	7
No	8	19	18	10	15

* of those being in labor force

** of those having had a job in Spring 1993

Table 6: Career Mobility 1989-1993 within the Birth Cohorts 1939-41, 1951-53 and 1959-61 (outflow percents)

Occupational Position in 1989	Occupational Position* in 1993								No Job in 1993**		n
	Managerial Position	Professional Position	Semi-professional Position	Skilled Level: White Collar	Skilled Level: Blue Collar	Farmers	Self-employed	Unskilled Level	Un-employed	Out of the Labor Force	
Managerial Position	37	17	28	11	2	0	3	3	9	5	71
Professional Position	7	72	6	6	1	0	9	0	5	1	92
Semi-professional Position	8	1(6)	75	10	1	0	2	3	11	6	164
Skilled Level: White Collar	1	0	4	77	3	0	4	11	10	12	135
Skilled Level: Blue Collar	2	0	2	5	76	0	6	9	12	10	222
Farmers	0	10	0	0	60	0	0	30	13	20	15
Self-employed	0	0	5	16	5	0	68	5	5	10	20
Unskilled Level	0	0	3	8	18	0	5	65	34	12	109
n	44	72	133	124	156	0	41	75	111	72	828
	Absolute Mobility = 31%								Structural Mobility = 18%		

* Percents refer only to those having had a job in 1993

** Percents refer to all having had a job in December 1989

Source: Own calculations, Project "Life Course and Historical Change in the Former GDR," Max Planck Institute for Human Development and Education

Table 7: Occupational Stability and Mobility in East Germany
(percent; only persons who were employed in December 1989 and June 1993)

	<i>Staying in the same occupation</i>		<i>Changing the occupation</i>		n
	same job	job change, but equal occupation	same substan- tive field*	change in sub- stantive field*	
Occupational position 1989					
Managerial/Professional personnel	27	32	7	34	147
Semi-Professions	41	22	10	27	134
Skilled blue- and white-collar workers	40	24	8	28	282
Unskilled workers	49	12	2	37	59
Others**	54	14	4	28	28
Gender					
Male	35	24	6	35	357
Female	43	24	9	24	293
Cohort					
1939-41	40	20	7	33	214
1951-53	40	25	7	28	236
1959-61	35	26	9	30	200
Economic Sector 1989					
Primary	35	25	4	36	92
Secondary	33	26	8	33	219
Private Services	39	21	7	33	95
Public Services	45	24	8	23	227
Sample Size	250	155	49	196	650
%	38	24	8	30	100

* We differentiate between 54 substantive fields. "Substantive field" is defined by the group of occupations which have to do with the same particular subject (such as physics, chemistry, construction, farming, teaching, administration, etc.)

** "Others" means self-employed and farmers

Source: Own calculations, East German Life History Study, Max Planck Institute for Human Development and Education, 1996.

Table 8a: Logit Regression of unemployment, downward mobility, stability of occupational position, upward mobility, and stability of occupation between 1989 and 1993

(odds ratios**; East Germans having had a job in 1989; birth cohorts 1939-41, 1951-53 and 1959-61)

	% of sample within the referring categories (N=765)	Unemployment 17%	Downward Mobility 13%	Stability of Occupational Position 63%	Upward Mobility 7%
INDIVIDUAL ASSETS in 1989					
Party Membership in 1989	25	1.05	2.23	.70	.68
Highest Occupation Degree in 1989: (ref: vocational training)	50				
No Vocational Training	4	1.98	.53	.77	.56
Master	7	1.15	.44	1.10	1.67
Technical College	25	.45	1.28	1.12	2.03
University Degree	15	.33	1.26	1.45	1.10
Gender: Female	49	2.72	1.25	.68	.45
Cohort: (ref: 1939-41)	35				
1951-53	36	.72	.55	1.92	.59
1959-61	29	.51	.62	1.64	1.49
chi-square (df=8)		49.4	25.5	30.0	19.4

* Coefficients printed bold have a significance level better or equal to 0.05

** Values equal or close to "1" indicate that there is no difference to the respective reference category. Values less or greater than "1" indicate the percentual decrease or increase, respectively, in the relative risk or chance of different kinds of mobility.

Table 8b: Logit Regression of unemployment, downward mobility, stability of occupational position, upward mobility, and stability of occupation between 1989 and 1993

(odds ratios**; East Germans having had a job in 1989; birth cohorts 1939-41, 1951-53 and 1959-61)

	% of sample within the referring categories (N=765)	Unemployment 17%	Downward Mobility 13%	Stability of Occupational Position 63%	Upward Mobility 7%
ASSETS in 1989					
Party Membership in 1989	25	.97	2.08	.77	.63
Highest Occupation Degree in 1989:					
(ref: vocational training)	50				
No Vocational Training	4	2.17	.47	.70	.78
Master	7	1.06	.36	1.17	2.42
Technical College	25	.46	1.07	1.17	2.41
University Degree	15	.42	1.04	1.28	1.41
Gender: Female	49	1.95	1.64	.63	.58
Cohort: (ref: 1939-41)					
1951-53	36	.63	.52	2.19	.50
1959-61	29	.39	.68	1.94	1.27
LIFE COURSE GDR					
Job changes in the 1980's:					
shifts between occupations: no	55				
1	23	2.54	.70	.57	1.53
2 or more	23	2.56	1.02	.55	.93
shifts between firms: no	49				
1	26	.66	.90	1.36	.64
2 or more	25	.80	1.18	.96	1.17
upward mobility	21	.66	2.56	.80	.89
downward mobility	14	1.60	.23	.66	5.99
job shifts due to private reasons	43	1.77	.53	1.17	.54
self-initiated further education	18	.86	.87	1.21	.73
informal help above average	34	.87	1.07	1.09	.71
job on the side in the 1980's	14	1.09	.88	1.05	.99
chi-square (df=15)		74.1	53.6	54.1	42.6

* Coefficients printed bold have a significance level better or equal to 0.05

** Values equal or close to "1" indicate that there is no difference to the respective reference category. Values less or greater than "1" indicate the percentual decrease or increase, respectively, in the relative risk or chance of different kinds of mobility.

Table 8c: Logit Regression of unemployment, downward mobility, stability of occupational position, upward mobility, and stability of occupation between 1989 and 1993

(odds ratios**; East Germans having had a job in 1989; birth cohorts 1939-41, 1951-53 and 1959-61)

	% of sample within the referring categories (N=765)	Unemployment	Downward Mobility	Stability of Occupational Position	Upward Mobility
ASSETS in 1989					
Party Membership in 1989	25	1.03	2.52	.64	.68
Highest Occupation Degree in 1989:					
(ref: vocational training)	50				
No Vocational Training	4	2.05	.27	.78	.90
Master	7	1.22	.26	1.08	2.46
Technical College	25	.68	1.08	.86	2.57
University Degree	15	.78	1.18	.71	1.98
Gender: Female	49	2.34	1.72	.56	.68
Cohort: (ref: 1939-41)					
1951-53	36	.54	.47	2.38	.51
1959-61	29	.29	.64	2.15	1.22
LIFE COURSE GDR					
Job changes in the 1980's:					
shifts between occupations: no					
1	55				
2 or more	23	2.52	.70	.64	.63
2 or more	23	2.80	1.02	.61	.32
shifts between firms: no					
1	49				
2 or more	26	.70	.90	1.20	.84
2 or more	25	.93	1.18	.82	1.13
upward mobility	21	.52	2.56	.91	1.16
downward mobility	14	1.67	.23	.60	1.30
job shifts due to private reasons	43	1.98	.53	1.08	.92
STRUCTURAL FACTORS					
Urban Area					
(ref: village and rural area)	45	.50	1.16	1.33	1.03
Economic Sector in 1989					
(ref: primary/secondary)	50				
Industrial Services	21	.65	1.11	1.07	1.38
Public Sector	29	.22	.91	2.76	.48
chi-square (df=18)		98.0	56.3	74.7	48.4

* Coefficients printed bold have a significance level better or equal to 0.05

** Values equal or close to "1" indicate that there is no difference to the respective reference category. Values less or greater than "1" indicate the procentual decrease or increase, respectively, in the relative risk of experiencing unemployment or downward mobility and the relative chance to experience stability.

Bisherige Veröffentlichungen der Projekte 'Lebensverläufe und historischer Wandel in der ehemaligen DDR' und 'Ostdeutsche Lebensverläufe im Transformationsprozeß'

- Diewald, M.: Informelle Beziehungen und Hilfeleistungen in der DDR: Persönliche Bindung und instrumentelle Nützlichkeit. In: Familie und Lebensverlauf im gesellschaftlichen Umbruch, Hrsg. B. Nauck, N. Schneider, A. Tölke, Enke, Stuttgart 1995, 56-75.
- Diewald, M. und J. Huinink: Berufsbezogene Kohortenschicksale und Kontrollüberzeugungen ostdeutscher Erwachsener nach der Wende. In: Gesellschaften im Umbruch. Verhandlungen des 27. Kongresses der Deutschen Gesellschaft für Soziologie in Halle 1995, Hrsg. L. Clausen, Campus, Frankfurt 1996, 259-274.
- Diewald, M., J. Huinink und J. Heckhausen: Lebensverläufe und Persönlichkeitsentwicklung im gesellschaftlichen Umbruch: Kohortenschicksale und Kontrollverhalten in Ostdeutschland nach der Wende. In: Kölner Zeitschrift für Soziologie und Sozialpsychologie (1996) 2, 219-248.
- Diewald, M. und K. U. Mayer (Hrsg.): Zwischenbilanz der Wiedervereinigung. Strukturwandel und Mobilität im Transformationsprozeß. Leske + Budrich, Opladen 1996.
- Diewald, M. und H. Solga: Ordnung im Umbruch? Strukturwandel, berufliche Mobilität und Stabilität im Transformationsprozeß. In: Gesellschaft im Umbruch. Verhandlungen des 27. Kongresses der Deutschen Gesellschaft für Soziologie in Halle 1995, Hrsg. L. Clausen, Campus, Frankfurt/M., New York 1996, S. 259-274.
- Diewald, M. und H. Solga: Convergence or Divergence? Structural Change and Occupational Mobility in East and West Germany after the Unification. Arbeitsbericht 2, Projektgruppe Ostdeutsche Lebensverläufe im Transformationsprozeß, Max-Planck-Institut für Bildungsforschung, Berlin 1997.
- Diewald, M. und H. Solga: Nach dem Sturm folgte zwar Ruhe, jedoch nicht der Sonnenschein! Mobilitätsprozesse und Allokationskriterien auf dem ostdeutschen Arbeitsmarkt nach 1989. Gutachten für die KSPW. Leske + Budrich 1997 (im Erscheinen).
- Huinink, J.: Lebensverläufe und historischer Wandel in der ehemaligen DDR. In: Soziologen-Tag Leipzig 1991. Soziologie in Deutschland und die Transformation großer gesellschaftlicher Systeme, Hrsg. H. Meyer, Akademie Verlag, Berlin 1992, 233-244.
- Huinink, J.: Familienentwicklung und Haushaltsgründung in der DDR: Vom traditionellen Muster zur instrumentellen Lebensplanung? In: Familie und Lebensverlauf im gesellschaftlichen Umbruch, Hrsg. B. Nauck, N. Schneider, A. Tölke, Enke, Stuttgart 1995.
- Huinink, J. und K.U. Mayer: Lebensverläufe im Wandel der DDR-Gesellschaft. In: Der Zusammenbruch der DDR, Hrsg. H. Joas, M. Kohli, Suhrkamp, Frankfurt 1993, 151-171.
- Huinink, J., K.U. Mayer et al.: Kollektiv und Eigensinn. Lebensverläufe in der DDR und danach. Akademie Verlag, Berlin 1995.
- Huinink, J. und H. Solga: Occupational Opportunities in the GDR: A Privilege of the Older Generations? Zeitschrift für Soziologie, 23 (1994) 3, 237-253.
- Mayer, K.U.: Soziale Ungleichheit und Lebensverläufe. Notizen zur Inkorporation der DDR in die Bundesrepublik und ihre Folgen. In: Experiment Vereinigung. Ein sozialer Großversuch, Hrsg. B. Giesen, C. Leggewie, Rotbuch, Berlin 1991, 87-99.
- Mayer, K.U.: Die soziale Ordnung der DDR und einige Folgen für die Inkorporation in die BRD. BISS public 11 (1993), 39-55.
- Mayer, K.U.: Wiedervereinigung, soziale Kontrolle und Generationen. Elemente einer Transformationstheorie. In: Gesellschaft, Stadt und Lebensverläufe im Umbruch. Hrsg. L. Bertels. Gildehaus-Verlag Metta Metten, Bad Bentheim 1994, 49-66.
- Mayer, K.U. und M. Diewald: Kollektiv und Eigensinn. Die Geschichte der DDR und die Lebensverläufe ihrer Bürger. Aus Politik und Zeitgeschichte 46 (1996), 8-17.
- Mayer, K.U., M. Diewald und H. Solga: Social Changes and Transformation - Findings and Lessons from the East German Case. Arbeitsbericht 4, Projektgruppe Ostdeutsche Lebensverläufe im Transformationsprozeß, Max-Planck-Institut für Bildungsforschung, Berlin 1997.
- Mayer, K.U. und H. Solga: DDR-adäquate Schemata für die Abbildung der beruflichen Stellung, der beruflichen Tätigkeiten und Ausbildungen. Arbeitsbericht 2, Projektgruppe Lebensverläufe und historischer Wandel in der ehemaligen DDR, Max-Planck-Institut für Bildungsforschung, Berlin 1993.
- Mayer, K.U. und H. Solga: Mobilität und Legitimität. Zum Vergleich der Chancenstrukturen in der alten DDR und der alten BRD oder: Haben Mobilitätschancen zu Stabilität und Zusammenbruch der DDR beigetragen? Zeitschrift für Soziologie und Sozialpsychologie, 46 (1994) 2, 193-208.
- Solga, H.: Systemloyalität als Bedingung sozialer Mobilität im Staatssozialismus, am Beispiel der DDR. Berliner Journal für Soziologie, 4 (1994) 4, 523-542.

- Solga, H.: Auf dem Weg in eine klassenlose Gesellschaft. Klassenlagen und Mobilität zwischen Generationen in der DDR. Akademie Verlag, Berlin 1995.
- Solga, H.: Klassenlagen und soziale Ungleichheit in der DDR. Aus Politik und Zeitgeschichte 46 (1996), 18-27.
- Solga, H.: Lebensverläufe und historischer Wandel in der ehemaligen DDR. In: ZA-Information 38 (1996), 28-38.
- Solga, H.: The Study of Social Change and Longitudinal Studies: A Comparison of Panel and Cohort Design. Arbeitsbericht 3, Projektgruppe Ostdeutsche Lebensverläufe im Transformationsprozeß, Berlin 1997.
- Solga, H.: Der Verbleib der Angehörigen der oberen Dienstklasse der DDR nach 1989: Heißt ihr Schicksal nach der Wende beruflicher Abstieg? In: Gutachten für die KSPW. Leske + Budrich, Opladen 1997 (im Erscheinen).
- Trappe, H.: Erwerbsverläufe von Frauen und Männern in verschiedenen historischen Phasen der DDR-Entwicklung. In: Familie und Erwerbstätigkeit im Umbruch. Referate der Herbsttagung 1991 des Arbeitskreises "Bevölkerungsökonomie" der Deutschen Gesellschaft für Bevölkerungswissenschaft, Hrsg. N. Ott, G. Wagner, Duncker & Humblot, Berlin 1992, 172-208.
- Trappe, H.: Emanzipation oder Zwang? Frauen in der DDR zwischen Beruf, Familie und Sozialpolitik. Akademie Verlag, Berlin 1995.
- Trappe, H.: Work and Family in Women's Lives in the German Democratic Republic. Work and Occupations 23 (1996), 354-377.
- Trappe, H.: Muster der Erwerbsbeteiligung ostdeutscher Frauen und deren gesellschaftliche Folgen. In: Wirtschaftliche Transformationsprobleme zwischen Markt, Staat und Drittem Sektor, Hrsg. M. Corsten, H. Voelzkow, Metropolis, Marburg 1996 (im Erscheinen).

and the frequency of the peak is related to the frequency of the excitation. The peak amplitude is given by

$$|x| = \frac{1}{\sqrt{(1 - \zeta^2)^2 + 4\zeta^2 \omega^2/\omega_n^2}} \quad (1)$$

where ω is the frequency of the excitation and ω_n is the natural frequency of the system. The damping ratio ζ is given by

$$\zeta = \frac{c}{2m\omega_n} \quad (2)$$

where c is the damping coefficient and m is the mass of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (3)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (4)$$

where ω_n is the natural frequency of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (5)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (6)$$

where ω_n is the natural frequency of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (7)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (8)$$

where ω_n is the natural frequency of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (9)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (10)$$

where ω_n is the natural frequency of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (11)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (12)$$

where ω_n is the natural frequency of the system. The peak amplitude is given by

$$|x|_{\text{peak}} = \frac{1}{2\zeta} \quad (13)$$

and the peak frequency is given by

$$\omega_{\text{peak}} = \omega_n \sqrt{1 - \zeta^2} \quad (14)$$

