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Arbeitsberichte aus dem Projekt

Ostdeutsche Lebensverläufe im Transformationsprozeß

BACK TO LABOR MARKETS:

The Transformation of the East German Employment System after 1989

Martin Diewald, Heike Solga and Anne Goedicke

Arbeitsbericht 3/1999

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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.

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

BACK TO LABOR MARKETS:

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Employment System after 1989**

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Paper presented at the conference "The German Road from Socialism to Capitalism: Eastern Germany Ten Years after the Collapse of the GDR", Harvard University/Cambridge, Center for European Studies, June 18 - 20, 1999.

1 Introduction

Back to labor markets – what is the situation in East Germany 10 years after the unification? The purpose of the paper is to give some insights into this topic by looking at individual successes and failures in pursuing occupational careers after 1989 – careers that fit with pre- and post-transition investments and abilities. Before addressing this question empirically, however, it is necessary to introduce in a broader frame the perspective we will apply to study the restructuring of the East German employment system and, especially, of employment opportunities in a system undergoing dramatic change. We developed our perspective out of four linked lines of argumentation: (a) the general logic of post-socialist labor market transformation; (b) the specific opportunities and constraints created by the fact that the East German transformation was simultaneously a unification; (c) the differences between a system perspective and a life course perspective; and (d) the understanding of the transformation as a historical process with distinct phases.

From a *system perspective*, the general logic of the institutionalization of post-socialist labor markets can be characterized, in a quite straightforward manner, by a paradigmatic shift of basic institutions from redistribution and political control to exchange (Nee 1989). Despite the overwhelming role of state redistribution and political control, most researchers agree that even in socialist economies, labor allocation was connected with some monetary incentives for job shifts and returns to human capital investment (cf., Atkinson/Micklewright 1992; Diewald/Mach 1999; Domanski/Heyns 1995; Schwarze 1993; Solga 1995). However, in comparison to socialist allocations of labor, the institutionalization of post-socialist labor markets should have given rise to various processes of accentuation and devaluation: the importance of “human capital” considerations should be accentuated, whereas “political capital” should be devalued (Eyal et al. 1997).

From a *individual life course perspective*, individual assets acquired under the GDR regime may be confronted with a “windfall loss” because of the regime change (Bird/Schwarze/Wagner 1994: 395). But general human capital assets accumulated before 1989 may, nonetheless, become of greater importance because of the even larger degree of devaluation of other individual assets (e.g., work and social competencies and experiences). In this sense, more general human capital, like schooling and vocational training, may be less devalued than specific, more

socialist context-bound human capital, as it is represented by labor force experience and firm tenure. General human capital assets – seen as rather independent of political system – may remain as the only “signals” available for labor market matching and thereby experience a higher importance after 1989. A political decision favoring such a behavior has been, among other things, Paragraph 37 of the Unification Treaty (Kultusministerkonferenz 1992). It has stipulated that almost all East German certificates obtained at universities, technical colleges, full-time vocational schools or in form of apprenticeships have to be recognized and accepted as “equivalent” to corresponding West German certificates – and the public sector at least has been obliged to behave accordingly. It is, nevertheless, quite unclear whether and how such absolute differences become relevant in competition for jobs where all or most people in the labor market have the same problem of windfall losses.¹

This leads us to the specific opportunities and constraints created by the fact that the East German transformation was, at the same time, a German unification. We know from institutional and structuralist approaches that human capital does not in itself shape job mobility and career processes (cf., Kalleberg/Sørensen 1979; Rosenfeld 1992). Therefore, even if one accepts the general logic of labor market transformation as accentuation and devaluation of human capital resources, one need not necessarily endorse the assumption that it applies in the same way to all post-socialist countries in transition. Due to the “accession” of the German Democratic Republic to the Federal Republic of Germany, we have to acknowledge the special situation in East Germany. From the very beginning, here the clearly defined target has not only been any one capitalism but the Western German model in particular. Since its institutions have “proved” to be the better ones in the system competition (cf. Ettl/Wiesenthal 1994; Mayer 1994; Lutz 1997: 435), it was assumed that they could be easily transferred from West to East as “ready made state” (Rose 1991). Thus, more than other post-communist transformations, the East German case was seen as the prototype of the post-communist transformation being a “simple” adaptation process.

This fast institutional transfer seemed to provide a smooth version of necessary “shock therapy” – in which the old institutions are displaced with enormous speed by new institutions in

¹ We will discuss this in greater detail later when developing our hypotheses (section 4).

order to favor profit-seeking private economic activities (Sachs 1991a; Sachs 1991b², Balcerowics 1995). Where else should it have been possible to rather rapidly pass through the unavoidable “valley of tears” (Sachs 1991b), if not in East Germany where the hardships of the “shock therapeutic” liberalization of the market could be mitigated by huge financial and personnel transfers from West Germany (called “Aufbau Ost”). Moreover, in East Germany the implementation of the “rules of the game” should have been realized more completely with fewer inefficient “bastards,” recombinations of old and new institutions. Thus, David Stark’s claim (1994: 130) that because of a simultaneous reorganization and reconfiguration of existent resources, organizational forms, and institutional legacies, the ongoing processes in Eastern Europe cannot be appropriately captured as results of simple adaptation to the established capitalist order, may *not* hold true for East Germany. In contrast to other Eastern European transformations, here we may indeed find a “designer capitalism” as claimed by modernization theory. But maybe not!

In our own work on the East German labor market transformation, we have argued that even in this case, the institutionalization of market *cannot* be understood as a quasi administrative process independent of the forty years of state-socialist history and biographies of the people (Mayer/Diewald/Solga 1999; Diewald/Solga 1996; Solga 1997). First of all, new institutions can only operate through activities of individuals. But what are the resources and behavioral patterns individuals can apply to these activities? The individuals’ human capital resources and social competencies acquired under the old regime are one part – if not the most important part – of the resources for coping with new situations (Diewald et al. 1995; Diewald/Solga 1997; Schenk 1996; Wiesenthal 1998). They are not invalidated by the pure fact of the “fall” of the communist state. Life course research has shown that biographical continuities and behavioral routines are not simply destroyed by historical upheavals. Therefore, since the individuals’ life course is a “cumulative causal relationship” taking former events and development into account and adjusting them to new situations (Mayer 1987), especially in times of upheaval, individual characteristics acquired in the past remain of special importance for action, whereby these characteristics themselves are accentuated rather than completely changed or even invalidated.

² Arguments used by Sachs in favor of the “speed” in institutional post-communist change are, for example, the following: the necessity of parallel market-oriented structures to control the bureaucratic (still communist) apparatus, the necessity of rapidly introducing market structures in order to adapt to and fit into the established

The present paper will focus on one specific aspect of labor market transformation whose relevance follows from the specific type of “shock therapy” introduced in East Germany: the *historical time pattern* of the implementation of the new institutional order. Did it really lead to a sudden functioning without any remarkable delay, or are there distinct periods differing in the quality of the institutional setting they provided? And second, what are the consequences of such a periodical course of transformation? Are the “results” of preceding periods correctable in later periods, or do they irreversibly define processes and individuals’ opportunities in later periods, and why? In doing so the *cardinal questions of the paper* are:

1. Which periods are identifiable in the restructuring process of the East German employment system? Which structural changes have taken place in these periods and what are their consequences in terms of the *quantity of individuals’ labor market mobility*?
2. Are such differences in the frequencies of individuals’ labor market experiences accompanied by *different allocation mechanisms* specifically defining the individuals’ employment opportunities in each period? And what do these mechanisms have to do with the three interacting dimensions of the East German transformation: the logic of “market penetration,” the institutional legacies charted by the prior life histories and structural conditions, and institutional transfers?
3. Are experiences at earlier stages of the transition “correctable” later on? That is, are the East Germans faced with an “irreversible allocation of opportunities” (Lutz 1997: 441) in the later stages of transformation? Are the events in the beginning of the transformation *marking points stratifying the employment trajectories of East Germans*?

The remaining sections develop these questions. We proceed with the definition of two distinct periods relevant for the restructuring process of the East German employment system, followed by exploratory analyses of the frequencies of labor market mobility (question 1). The fourth section presents period-specific multivariate regressions on several mobility events (question 2 and 3). The final section restates the main conclusions in the broader frame of changes in social stratification in East Germany.

economic (world market) structures, and the assumption that a gradual economic development would lead to uncontrollable inflationary processes (Sachs 1991b: 238f., cf. discussion in Hübner 1992).

The empirical analyses are based on retrospective life history interviews of about 950 East German women and men belonging to three birth cohorts (1939-41, 1951-53, and 1959-61) – conducted at the Max Planck Institute for Human Development in Berlin. These interviews do not only cover individual work histories after 1989, but the entire work history starting with entry into the labor force. The GDR sections of these histories were collected in 1991/92, the post-GDR parts in 1997.³ It is obvious that, by selecting these three cohorts, we neither investigate transitions into early retirement nor entry into the labor market. But, these restrictions seem to be justifiable.⁴

2 The transformation of the East German employment system and its “window of opportunity” – a definition

In contrast to the transformation of other post-communist countries, East Germany's was an “incorporation” (Mayer 1994) or “colonization” (Stark/Bruszt 1998), legitimated by the accession of the GDR to the FRG on October 3, 1990. With enormous speed, the “political, economic and social institutions across the board were replaced with those of the former Federal Republic of Germany” (Stark/Bruszt 1998: 175). The following selected chronicle of the “institutional transfer” indicates this conclusively.

³ For more information on the “East German Life History Study” see the Appendix.

⁴ The story for birth cohorts born before 1937 is quickly told, although the experiences of the affected persons were not less dramatic: they mainly “had” to go – mostly involuntary – into early retirement (at the age of 55 years) in order to relieve the extremely loose labor market situation in East Germany, as we will see later. The story of the young generation in East Germany which had not entered the labor market before 1989 is really a special story which deserves special attention in a separate paper. Moreover, exploring the *legacy effect* of GDR human capital, including work experience, the empirical analyses necessarily is restricted to individuals who had entered into employment before 1989.

Selected chronicle of the “institutional transfer” – employment system:

March 1, 1990	“First foundation” of the Trust agency (<i>Treuhandanstalt</i>) set up by the GDR government to privatize and liquidate former state firms
1 st quarter 1990	Adaptation of the Labor Promotion Act (AFG) of the FRG by the GDR government
May 18, 1990	German-German Treaty on the Monetary, Economic and Social Union
June 17, 1990	Trust law (<i>Treuhandgesetz</i>) passed the GDR parliament, “re-foundation” of the Trust agency (<i>Treuhandanstalt</i>)
July 1, 1990	German-German monetary, economic and social union
July 1, 1990	Labor Promotion Act (AFG) of the FRG expanded to the New <i>Länder</i> (parts of the GDR-AFG adopted)
Aug. 3, 1990	Unification Treaty
Sept. 30, 1990	Dissolution of the FDGB (Free German Trade Union Federation)
Oct. 3, 1990	Accession of the GDR to the FRG (according to Article 23 of the Constitution)
Feb. 25, 1991	Introduction of wage cost subsidies in East Germany
June 1991	End of temporary job protection agreements in metal and electronic industry (negotiated by the unions in fall 1990)
Mid 1991	Strong expansion of full-time further training and retraining measures
July 1991	General agreement on the establishment of “Gesellschaften zur Arbeitsförderung, Beschäftigung und Strukturentwicklung” (ABS, Labor Promotion and Structural Development Enterprises) between the THA, employers’ associations, trade unions and the New <i>Länder</i>
June 30, 1991	Completion of the so-called “small privatization” (i.e., the privatization of small enterprises in retail trade, catering trade, and pharmacies, 65 % privatized, 35 % liquidated)
Fall 1991	Organizational expansion of the 16 unions that compose the German Trade Union Federation (DGB) was essentially completed
Dec. 1991	End of the “East German” short-time schedule (i.e., working hours could be reduced to “zero” but those workers were still on the their firms’ payroll; AFG section 63 par. 5)
Until end 1991	50 % of the new enterprises have been founded (mid-1996: 60 % of the enterprises in East Germany are new foundations)
Dec. 1992	End of the schemes on early retirement or retirement transition payments (originally age 57, since July 1, 1991 expanded to age 55)
Until end 1992	45 % loss of jobs held in 1989
Dec. 31, 1992	End of the special East German regulations of job creation measures
Early 1993	Introduction of the AFG section 249h (lump-sum wage cost subsidies to co-finance certain structural policy measures in East Germany)
Feb. 1993	End of starting new large-scale job creation measures (Mega-ABM program)
May 1993	Cut-backs in state expenditures for full-time further training and retraining: Shortening of the duration and the refund of expenditures
Until July 1993	78 % of the <i>Treuhand</i> enterprises have been privatized, restituted or communized, 17 % liquidated, 5 % were still in ownership of the <i>Treuhand</i> – 20 % of the managers were East Germans
Dec. 1994	Dissolution of the <i>Treuhand</i>

Changes in the institutional setting of the East German employment system were immediate in all areas: labor law, unions, and privatization. This “shock therapy,” given the favorable situation of large-scale redistribution of resources to mitigate the East Germans’ economic hardship, was supposed to result in a second economic miracle (*Wirtschaftswunder*), like the first one experienced in West Germany in the 1950s, and in rising prosperity in East Germany (Stark/Bruszt 1998: 175-6). Due to the *accelerated privatization strategy* of the *Treuhand* agency, compared with a state-controlled reconstruction strategy (Brückner 1995; Stark/Bruszt 1998), already in July 1993, 78 percent of the former state-owned enterprises were privatized, restituted or communized, 17 percent were liquidated, and only 5 percent were still owned by the *Treuhand* (Bialas/Ettl 1992: 13; *Berliner Zeitung* August 14, 1992). Moreover, by the end of 1991, 50 percent of all new enterprises had been founded.⁵

But this “exposure to market competition triggered not an economic miracle but an economic nightmare” (Stark/Bruszt 1998: 176). The unemployment rate increased rapidly. Already by mid-1990 – before Unification – the official unemployment rate was 3.1 percent (starting from zero percent!), and moreover 10 percent of the employees had already been on short-time work schedule and 80.000 persons were in job creation measures (Kempe 1990). These figures did not recover over the course of the transformation. Participation in state-financed training and retraining programs as well as work on short-time work schedule continued to increase extraordinarily. By April 1991, the number of short-time workers overstepped the 2 million mark. No wonder, since the economic recovery failed to appear. The number of employees in *Treuhand* enterprises and privatized *Treuhand* enterprises dramatically decreased *within just one year* from about 4 millions in July 1990 to only 1,6 millions in July 1991, and to only about 1 million in July 1994 (Brückner 1995: 452). And without the financial transfer of on average 200 billion DM per year from West to East Germany, making East Germany the most expensive economic stimulus program in the world, the situation would be far worse (Brückner 1995: 445)⁶. Not to mention the extensive “use” of the schemes on early retirement or retire-

⁵ Semlinger (1997) states that for a short period after unification there was an exceptionally positive ‘start-up window’ for new firms. One explanation was that these firms initially encountered a wide open market where they were able to establish themselves quickly. Subsequent new firm cohorts did not enjoy the same advantage; just like their western German counterparts, they had to compete against existing firms. In addition, the economic climate for the more recent cohorts deteriorated, which was also detrimental for these new firms’ survival and employment growth. By mid-1996, 60 percent of the enterprises in East Germany were newly-founded firms.

⁶ That might serve as one explanation why the East Germans’ reaction in spite of the dramatic change was quite moderate. Public transfers for the West *Länder* provided almost all East Germans, including the unem-

ment transition payments through which about one million persons “left” the labor market and thus remarkably “relieved” the precarious employment situation in East Germany.

All that makes it *not* surprising what 10 years of transformation research have found: in East Germany there was *not* linear progress in labor market transformation (with improving employment opportunities over time) but had at least *two distinct periods* with different quantities and qualities of labor market mobility (Diewald/Solga 1997: 187; Lutz 1996: 7, 134; Lutz 1997: 440). East German transformation literature increasingly agrees that there was a short historical period between 1990 and mid-1992 in which most of the restructuring processes of the East German employment system towards a labor market, including the intragenerational mobility necessary to accomplish such changes (DiPrete/Nonnemaker 1997: 389), has taken place. This period has been called the “window of opportunity.”⁷

-- Figure 1a: Employment trend in East Germany after 1989 --

-- Figure 1b: Distribution of economic sectors in East Germany after 1989 --

As one can see in Figure 1a and 1b and the Chronicle, the name “window of opportunity” is certainly well chosen.⁸ The institutional restructuring process of the employment system in this period asked for individuals’ mobility to an indeed unusual extent. The enormous number of plant shutdowns, firms with reduction in size and, at the same time, of business start-ups led to

ployed, with an real increase in the standard of living. A further explanation is that, though in 1997 GNP exceeded its 1988 level only by about 10 percent, the 1997 earnings were about 90 percent higher than in 1988 (Diewald/Mach 1999).

⁷ Mickler et al. (1996) favor a periodization consisting of four periods – related to the East German economic development, especially the firm restructuring process, and the state of “institutional transfer”: November 1989 – June 1990 “political reorientation of the GDR”; July 1990 – circa December 1991 “institutional transfer and basic enterprise revitalization”; beginning of 1992 – circa June 1994 “stagnation and ongoing enterprise restructuring”; and June 1994 until present “modernization in a stabilizing environment.” The periodization presented in the paper, clearly cuts the four periods down to two, yet the two schemes go well together. The advantage of the two-period scheme is that it points our attention to the major cutting point in the East German transformation process, aside from November 1989 and October 1990, helping us to reduce the complexity of this process and enables us to empirically investigate the implications of the transformation process for individuals’ employment careers – transmitting the restructuring process of the employment system.

⁸ Figure 1a starts with the end-1990 because figures between 1989 and early 1990 are very unreliable. Official statistics were almost established in East Germany at the end of 1990. The official number of employees in December 1989 is *9.6 million persons*.

voluntary and involuntary mobility of East German employees.⁹ In addition, the accelerated development of tertiarization accompanied by a large-scale destruction of the manufactory sector fostered either mobility across the boundaries of one's own occupational field, given an absolute expansion of the service sector, or, given only changes in the relative distribution of economic sectors, exclusion of industrial employees. Even assuming only the displaced employees would have to move, the latter seem to be the case. Although the relative share of the service sector increased from less than 50 percent in 1989 to the West German level of about 60 percent in 1996, the expected absolute growth of the overall service sector failed to appear. In some services areas there have been created new jobs, but they were too few to absorb the vast numbers of workers displaced by the radical de-industrialization.

On the other hand, the institutional renewal also provided persons with specific opportunities favoring immobility. One of them was short-time work which often meant reduction to "zero hour work". The East German short-time work schedule served two goals. First, it allowed firms to restructure their enterprises by "postponing" personnel decisions on how many employees to keep in the enterprise, on whom to fire and whom to keep. Second, it was a means to relieve the labor market situation. It reduced the number of officially unemployed and, thus, persons aggressively searching for new jobs. Yet this measure ended in December 1991, forcing additional mobility into unemployment or new employment in the beginning of 1992. All in all, it was a "moving" period which, on the one hand, favored an enormous extent of mobility while, on the other hand, partially providing means of remaining in the same place as in 1989. Moreover, it is a compelling assumption that mobility in the time *after* this rapid change has become less successful and, thus, more risky. Company restructuring stagnated, the personnel "renewal" was completed in many enterprises and, thus, the "doors were closed." At the same time, the "safety net" began to fail. Budget cuts reduced the number of job creations and, after the end of the special East German short-time work schedule, short-time work has been restricted to West German rules.

Given the agreement on the time span of the "window of opportunity" (January 1990 until about June 1992), two issues are still under debate. *First*, was it a period of "chances" in which

⁹ Cf. Diewald/Mach (1999), Diewald/Solga (1997); Diewald (1999): Taking Poland as a reference point, East German privatization and firm restructuring had a considerably higher speed. By the end of 1995 – one year after the end of privatization in East Germany –, only 1610 out of 5118 state-owned enterprises had been privatized (Balcerowics et al. 1997: 146).

mobility was rewarded and immobility punished? That is, was it a period in which *mobile* East Germans had a so-called *first mover advantage* and could improve their position in the labor market whereas inflexible, immobile persons “walked into a trap” by not taking up the “provided chances of improvement outside” – as stated by Lutz (1996; 1997). Or was it a period of “risks and chances simultaneously” – as stated by Diewald and Solga (1997) and Hahn (1997) – where mobility was not always connected with improvement but also with risks and, on the other hand, immobility not always with loss but also gains? A period where at the same time stability had been facilitated by institutional innovations – a stability which may have served as a precondition of the mobile persons’ success? Whereas the first perspective bears a positive connotation, the latter expresses doubts on the “goodness” of mobility per se. It agrees on the premise that the first period was a period with more mobility, but nevertheless views this mobility as “structurally enforced” with mixed results.

The *second* open question is: What are the long-term consequences of individuals’ labor market experiences during the first period? Up to now, it has not been explored whether the mobility and immobility “results” of the first period could be *corrected* or reversed later on, or whether an *irreversible allocation* of labor market positions has emerged. Based on cross sectional analyses, the latter seems to be the case (Diewald/Solga 1996; Lutz 1997). But it could be an artifactual conclusion. To properly answer this question, longitudinal analyses are required to measure this reversibility or irreversibility. Only such analyses are able to accurately capture the possibly causal impact of events which happened in the “window of opportunity” on events occurring later on. We attempt to contribute new evidence to these questions by exactly carrying out such longitudinal analyses in section 4.

3 Labor market mobility between 1990 and 1996: counting the ups and downs

The purpose of this section is exploratory, aiming to answer the first research question: what are the consequences of the restructuring process in terms of the *quantity of individuals’ labor market mobility* and what are the differences in terms of chances and risks between the two periods? Mobility, necessary to accomplish a restructuring of an overindustrialized, allocation-biased, centrally-planned employment system into a meritocratic, market system with service sector emphasis, includes mobility between enterprises, between economic sectors, between

occupations connected with upward as well as downward moves, and, unfortunately, transitions into non-employment. But re-entrances into employment should be also possible, though connected with higher risks of ruptures in individual's occupational trajectories.

Given the radical institutional and company changes occurring in the "window of opportunity," such mobility processes should have been more frequent in the first period than in the second one. In addition, according to Lutz's claim of the "window of opportunity" as a "window of chances," we should find a higher frequency of "profitable" labor market mobility in the first than the second period. Following his argumentation, an employment system under reconstruction should be less clearly segmented and structured and, therefore, lead to a situation which should be more open for unusual access to workplaces outside one's own usual career trajectory (e.g., in a new occupation or in a different economic sector), a situation in which it should be easier to escape unemployment, and, thus in general, a situation which should be favorable for searching for better jobs (in terms of better earning profiles and/or future employment perspective) (Lutz 1997).

Compared to the first period, *mobility in the second period* should not only be less frequent but also less "profitable" for the mobile persons than in the first period. The slowdown in firm restructuring (now consisting mainly of ongoing staff reductions¹⁰), the end of the short-time work scheme, and the end of the early retirement scheme (inducing persons older than 55 years to leave the labor market), should have increased the number of persons searching for new positions and worsened the chances of re-entrance in general and of re-entrance at the same or even a higher job level in particular.

In the following, these hypotheses are tested by means of rather simple measures. Just to get an impression on the *prevalence of mobility* after 1989, Table 1 (Panel A) present the proportion of East Germans who experienced a given mobility event between January 1990 and March 1996. These simple figures show how rare or universal they were. Among the 944 East Germans – interviewed in the East German Life History Study and analyzed here – about 40 percent experienced at least one unemployment episode, direct firm shift and/or occupational shift. Only 18 percent enjoyed at least one upward move, but about twice as much a downward

¹⁰ Analyses of data of *Treuhand* and *Ex-Treuhand* enterprises have shown that their personnel management consisted mainly in staff reduction and only to a small extent in staff recruitment (Schenk/Solga 1994: 455, 462).

move. Moreover, 17 percent were mobile within firms and about 30 percent left the occupational field of the preceding job. Lastly, about one third could manage at least one re-entrance after an episode of non-/unemployment. For German circumstances these figures indeed re-enforce the notion of exceptionally high mobility (cf. Diewald/Solga 1997).

-- Table 1 here --

Asking how many East Germans were affected by two mobility events, Panel B in Table 1 refines this picture to some extent by indicating that risks and chances were accumulated by a rather small number of persons. First of all, about 60 percent of the East Germans experienced neither an upward nor a downward move. Among the persons with upward move(s), 8 percent also had to bear a downward move. Among the persons with downward move(s), more than 20 percent did not enjoy upward mobility. Moreover, the figures also reveal that persons with re-entrance(s) had a higher than average risk of downward move(s) (52 percent) and an extremely high risk of shifting between occupations (72 percent). In contrast, persons who managed direct firm shift(s) had a considerably lower risk of downward (43 percent) and occupational mobility (53 percent). Yet, perhaps surprisingly, they were not more successful than persons with re-entrance(s) in terms of upward move(s) (30 percent to 26 percent).

Yet to really discover the character of the "window of opportunities," instead of counting the number of mobile persons, we have to sum the number of mobility events occurring in each of the two defined periods. In a first step, Figure 2a simply presents the *share of mobility events* occurring in the first and second period on all mobility events of the given type that had taken place between January 1990 and March 1996. We can witness that these two periods were indeed distinct in terms of their mobility frequencies, but not always in line with the "window of opportunity." Out of the 10 mobility types investigated, four types show a difference between the two periods by at least 10 percent and one by 8 percent (lateral mobility). Yet, only three of them had a higher number of events in the first than in the second period. These are direct firm shift, inner-firm shift, and upward mobility. And two of them, namely re-entrance into employment and lateral mobility, occurred more frequently in the second period than in the first. However, since the duration covered by the two periods is different, we may understate or even inappropriately model the period differences. Nonetheless, these findings suggest

that the differences between the two periods were not large enough that this simple measure would strengthen the interpretation of the first period as a distinct “window of opportunity.”

-- Figures 2a-b --

This measure does not fully satisfy the conditions of an appropriate proof since it fails to account for the respective “group at risk.” That is, a higher absolute share might be simply the result of a larger population being at risk that a given event will occur. Therefore, in the third step, we have calculated *historical mobility rates* (hazard rates). That is the number of events occurring in a given month divided by the number of persons at risk.¹¹ For the sake of space, we only present the curves for three mobility types and regard them as illustrative cases.¹² For the other mobility types, Figure 2b shows the *average monthly rate*. The interpretation goes as follows: In the first period, among the persons who were employed in $t-1$, about one percent (0.012) experienced a direct firm shift in the following month t , whereas in the second period only half of a percent (0.005) did so.

-- Figure 3: Historical rates of selected mobility types --

The three curves chosen present the range of curve shapes we have found among the 10 mobility types: (1) a decreasing shape after the end of the first period exemplified by the curve of direct firm shifts (similar curves are found for: inner-firm shifts, downward moves, upward moves), (2) a horizontally stable shape like “shifts between occupations” (similar curves: shifts between occupational fields, sector shifts, lateral moves, re-entrances into employment), and (3) the only curve with an increasing shape in the second period “transition into unemployment.” These differences in the curve shapes are, more or less, detectable by the average monthly rates presented in Figure 2b. Here, sharp differences in absolute terms can be discovered for direct firm shifts, inner-firm shifts and re-entrances into employment with a lower rate

¹¹ The *definitions of risk group* differ for the mobility types investigated. Persons at risk for transition into unemployment, direct firm shift, and inner-firm shift at time t are only “employed persons at time $t-1$.” Persons at risk for upward, downward and lateral mobility, shifts in economic sector, between occupations or occupational fields at time t are only “employed as well as unemployed persons at time $t-1$.” These kinds of mobility are defined to occur by entering into the “new status.” Finally, persons at risk for transition from non-employment into employment at time t are all “non-employed persons at time $t-1$.”

¹² The curves for the other mobility types can be obtained upon request.

in the second than the first period (as suggested by the decreasing curve shape). Moreover, taking the ratio between the two monthly rates as an evaluation criterion, the rate of upward moves is two times higher in the first period than in the second (as shown by the decreasing curve shape). For all other types the absolute as well as relative differences between the average monthly rates are rather small – as witnessed in the “stable” curve shape, with one exception. The only mobility type where the rate of the second period is higher than that of the first period is “transition into unemployment,” as depicted by the only increasing curve shape.

What story do these findings tell us in terms of our first research question? Was “mobility” a characteristic feature of the first rather than the second period, and, moreover, was “positive” mobility situated in the first period, whereas “negative” mobility was situated in the second period? Was the “window of opportunity” indeed a “window of chances”? To present a synoptic interpretation, (only) five important findings will be specifically outlined.

First, the findings presented in Table 2a-b mutually support that the two periods were indeed distinct in the frequency of mobility that had taken place within them, but not always in line with the “window of opportunity” assumption in general – regardless of whether one attributes a rather positive or negative connotation to it.

Second, the curves display that all types of labor market mobility investigated increased rapidly between January and October 1990, but afterwards the development of their rates went in different directions. There are some types of mobility that are indeed concentrated in the first period. These are the types with decreasing curve shapes – such as direct firm shifts, inner-firm shifts, and downward and upward moves. Here, the exceptional position of direct firm shifts in terms of level of mobility as well as the unequivocally decreasing curve shape certainly portrays the first period as a period especially bound to firm restructuring – whereas in the second period firm shifts could be, more or less, only realized indirectly through re-entrances after a period of non-employment. Yet there are also mobility types that took place throughout the entire time period investigated here (between January 1990 and March 1996). The correspondingly relatively stable curves – such as shifts between occupations, shifts between occupational fields, sector shifts, lateral moves, re-entrances into employment – indicate that these types of mobility were not bound, in particular, to the first period. In other words, these types of mobility were not only fostered by the firm restructuring process which especially charac-

terized the first period, but were to the same extent also caused by high labor turnover in both periods. As seen in Figure 2a, movements between non-employment and employment were, in absolute terms, more frequent in the second period. In addition, as revealed in Table 1, these re-entrances actually bore a higher probability of occupational shifts than direct job shifts (such as direct firm or inner-firm shifts). This provides evidence that whereas firm restructuring was achieved to a large extent in the first period, changes in the occupational structure continued to take place also in the second period.

Third, what the curves and Figure 2b show is that, compared to direct firm shifts, inner-firm shifts played a subordinated role in firm restructuring, especially in the first but also (though to a lower extent) in the second period. *Fourth*, the figures also display that the East German transformation cannot be characterized as a “success story” for many East Germans. Upward moves occurred to a much lower extent than did downward moves – and that in both periods. Moreover, recalling Table 1 Panel B, sometimes East Germans not only enjoyed upward mobility but also experienced downward mobility. The last two findings taken together suggest that the breakdown of internal labor markets, a specific feature of the East German transformation compared, for example, to Poland (Diewald 1999: chapter 8), increased the extent of firm shifts, transitions into unemployment and, unfortunately, also the risk of downward moves.

Finally, the slight increase of transitions into unemployment over the two periods – or, if one prefers, a more conservative interpretation of an irregular curve shape – indicates that there was not a strategy of fast exclusion whereby the “lemons” were sorted out within the first period and those who could remain employed during this period were on the safe side afterwards. The high slope in the beginning indicates that indeed the downsizing of workplaces in East Germany started very early and reached a dramatic extent. However, the continuously high level of the unemployment rate in the second period also shows that a high labor turnover was not restricted to the period of institutional transfer. This finding instead points to that fact that the East German labor market was not only in a short-term adaptation crisis but has actually entered into a long-term structural crisis.

All these findings support the hypothesis that the institutional and firm changes occurring within the period between January 1990 and summer 1992 indeed fostered a distinct mobility

experience of the East German population. Yet the higher mobility frequencies of the first, compared to the second, period may be the result of two different phenomena. On the one hand, they may depict that East Germans were more exposed to mobility due to structural change. On the other hand, they may also reveal that they had more opportunities for voluntary mobility. The two interpretations together seem to best describe the reality, especially as we were not able to discover a really clear cross cut between “advantageous” mobility types attributable to the first period and “disadvantageous” mobility attributable to the second period. This unfound distinction also makes it difficult to substantiate the position that the period from 1990 to July 1992 was a “window of chances,” as stated by Lutz. The findings so far rather suggest that the first period was a period of higher labor market mobility, so one may call it “window of opportunity,” but it was mobility open for “chances and risks.” This would have been even stronger the case without all the labor market policies supporting immobility in the first period and thereby “damping” the risks of unemployment and interruptions of occupational careers without any chance of adjusting to the new conditions while in employment. Imagining the first period without its several temporary job protection agreements (until mid-1991), the East German short-time work scheme (until December 1991) and the East German early retirement schedule (until December 1992) as well as the job protection clauses in *Treuhand* contracts of sale (cf. Chronicle above), one can infer how dramatic the risks in the first period would have been. Thus, what we can observe in East Germany is, without any doubt, a dramatic restructuring of the employment system but, nevertheless, it has been an institutionally *restrained* upheaval. “Artificially” encouraged immobility certainly increased the chances of “success” of those East Germans who were mobile. Not to mention that mobility was by no means always a rational thing to do – as suggested by Lutz. In some areas – such as the public service with its take-over regulation – mobility would even have been irrational.

To more strongly reject the viewpoint of the first period as a “window of chances,” Table 2 presents some empirical figures which explore whether mobile persons in the first period were indeed better off than those who were immobile. The first comparison between “stayers” and “movers” reveal that the latter were – in contrast to Lutz’s hypothesis – not better off in the second period in terms of their overall unemployment risk. Both mobile as well as immobile persons became unemployed to almost the same extent. The second comparison between those who had already been unemployed in the first period and those who only became unemployed in the second period indicates that those who became unemployed in the first period actually

did have a high probability of re-entrance within the first period, and if not, then in the second period. Only about one fifth could neither realize a re-entrance in the first nor in the second. Among the persons who became unemployed *only* in the second period (after mid-1992), a remarkable number (64 percent) could manage re-entrances, and that given the shorter time span available to them for re-entrance compared to those who became already unemployed before mid-1992. The difference between the two groups does not suggest that the East German labor market provided more favorable re-entrance opportunities in the first than in the second period. The findings of Table 2 depict that exclusion was not completed within the first period and, hence, substantiate the ambiguity of interpreting the first period as a distinct “window of chances.”

-- Table 2: Window of opportunity --

In sum, based on the findings presented so far, we conclude that the restructuring process of the East German employment system can be characterized by two distinct periods – distinct in terms of the frequency of mobility which took place in each of them. Furthermore, we attribute the higher frequency of the first period to the larger extent of structural change occurring within the time span January 1990 to mid-1992. But, the findings also suggest that the “negative” connotation of the first period as a “window of opportunity” in the sense of “chances and risks” – rather than the positive one as a “window of chances” – fits the East German situation better.

4 “Window of opportunity” – defining the winners and losers?

To further strengthen this interpretation, in the following we attempt to answer the second and third research questions of the paper: the investigation of the allocation mechanisms employed in the two periods (question 2) and the impact of the allocation results of the first period on individuals’ labor market fate in the second period (question 3). To answer these questions, we have estimated discrete-time logit models¹³ on several mobility events, separately for the two periods – based on the assumption that individuals’ mobility and its determinants serve as an

¹³ The description of the method can be found in the Appendix.

indication of labor market restructuring processes. Using persons' months as the unit of analysis, these models approximate continuous-time proportional hazards models. We are in fact modeling the time-dependent shapes of the mobility rates presented in figure 3 by using individuals' characteristics as indicators of structural determinants and mechanisms. The final models of a stepwise estimation procedure¹⁴ are presented in Tables 3 to 6. The tables report the odds-ratios for the independent variables¹⁵ included in the estimation. Odds-ratios equal to 1 (or not significant) indicate that there is *no* difference in the risk/chance compared to the reference groups. Odds-ratios between 0 and 1 indicate that persons with the given characteristic have a *lower* risk/chance than the reference group that the event will occur in the next month, and odds-ratios greater than 1 express that persons with the given characteristic have a *higher* risk/chance that the event will occur in the next month.

The following mobility events are studied: transition into unemployment (Table 3), re-entrances into employment (Table 4), career mobility indicated by upward and downward mobility, direct firm shifts without downward moves, and shifts between occupations (Tables 5 and 6). In our opinion, these mobility types cover the major labor market movements in the transformation. Moreover, cross comparisons of the findings allow us to infer the characteristics of those persons who were not mobile and, thus, continued their occupational careers after 1989. We start by answering our *second research question* on the labor market allocation criteria in the two periods and how they differ.

To structure the presentation of our estimation results, we proceed with a *short overview of hypotheses* on the impact of selected variables included in the models.

- All models include the *gender* as well as the *cohort* variable in order to test the common assumption of the discrimination against women and older people in labor markets, in general, and in a loose labor market as the East German one, in particular. Concerning age, the analyses can also show whether the career opportunities of different cohorts have been restructured. Whereas in the GDR, the older generations benefited from the foundation of state socialism in East Germany in terms of their career opportunities and the younger generations faced career blockades (cf. Mayer/Solga 1994; Huinink/Solga 1994), now the younger generations may benefit from system change.

¹⁴ Thereby we have checked for inter-correlation between co-variates.

¹⁵ For details definitions of the variables included in the models see Appendix.

- GDR legacies* are represented by different variables. The *political past* of East Germans is defined in its different facets, from being solely an SED-member to SED-membership plus holding an official function in one of the major political organizations of the GDR. This specifies the effect of political capital on post-socialist employment careers. The question addressed here is not only whether the influence of political capital – known for the GDR (cf. Solga 1994) – disappeared, but also whether it has negatively affected employment opportunities because of political discrimination or the loss of its network potential after 1989. “*Successful*” *direct firm shifts and shifts between occupations before 1990* – that is, shifts without income and status loss – are indicators of positive mobility experiences which could prove to be employable as an advantageous mobility competency.¹⁶ Complementarily, an *index of “self-initiative in job search before 1990”* intends to indicate a person’s flexibility and competence in job searches – a characteristic which should have become beneficial in a situation of high labor turnover. Finally, we have included two aspects of network resources which East Germans could utilize before 1989: *personal and instrumental support resources*. These resources may have lost their usefulness after 1989 because of their specific connectedness with the situation in the GDR (scarcity of consumer goods, scarcity of craftspersons hireable for private-sector jobs etc.). Moreover, we do not know whether persons still have connections to those networked persons and, thus, to these resources. What these two variables instead may indicate is a person’s social ability to establish such supportive relationships. If this assumption is correct, we should find an advantageous effect in case of mobility and, furthermore, an effect in both periods.
- The hypothesis on an *accentuation of general human capital and devaluation of specific human capital* is tested by three co-variates: the *vocational degree completed* before 1990¹⁷, the *match between job level and level of vocational degree* (status match) and the

¹⁶ In the transformation literature on East Germany, there is a debate whether East Germans could make remarkable mobility experiences in the GDR at all. Grünert, Bernien and Lutz (1996) stress the thesis that this should had been quite randomly as the East German employment system was, to a large extent, organized around internal labor markets. The *East German Life Course Project* (at the Max Planck Institute for Human Development, Berlin), on the contrary, substantiates with its empirical analyses somehow the counter-argument, namely that external labor market mobility (firm shifts) had not been random in the GDR (Uunk et al. 1998; Huinink/Solga 1994; Zühlke/Goedicke 1999). More than 50 % of the population in fact experienced at least one shift between firms in their employment career (before 1989) (cf. Uunk et al. 1998: Table 3). Yet, these analyses do agree that the extent of internal labor market mobility was larger in the GDR than in the Federal Republic, though not large enough to satisfy the thesis proposed by Grünert et al. (1996).

¹⁷ Only about 70 persons (in the sample) obtained a new vocational degree after 1989 and, due to the age groups considered, mainly in state-financed retraining systems. Moreover, analyses including the variable “acquisition of a new vocational degree” have shown that, because of its connection to participation in retraining measures during unemployment episodes, it serves as a signal of individuals’ unemployment experience rather than as one of “improved ability” – as assumed by signaling theory (Solga/Diewald 1998).

logarithm of *firm tenure in the last GDR employment episode*. The findings for vocational degree and status match indicate whether labor market allocation is driven along the “certified” qualification line – as predicted by the accentuation assumption –, whereas the findings for GDR-firm tenure report the devaluation of GDR-specific qualifications and competencies in labor market allocation after 1989.

- To capture *structural differences in employment opportunities* (e.g., due to de-industrialization, the health of the firm, and the general labor market conditions) which implicitly indicate the progress of institutional and firm restructuring, we have included: *economic sector* of a person’s firm (or, if theoretically more reasonable, occupational field as indicator of occupational instead of sectoral change), prevalence of *short-time work in the firm* (to indicate the economic problems of the firm), and the *monthly unemployment rate* prevalent in East Germany (as the general context in which the mobility of persons had to take place).

The findings for these ascriptive, achieved and structural determinants are presented in the following.

4.1 Allocation mechanisms in the first period (presented in Tables 3, 4, and 5)¹⁸

Gender: In accordance with many studies on labor market discrimination against women, we also find that women had a higher risk of becoming unemployed than did men, accompanied by lower chances of re-entrance into employment. Moreover, women had lower chances of realizing upward moves, but not higher risks of downward mobility. They were fostered less or encouraged to switch occupations and toward direct-firm shift without downward mobility. In sum, East German women were not discriminated against per se. The findings, so far, suggest that the labor market development defined (at least) two groups of women: those who could stay in employment without dramatic changes in their occupational career (as far as it is captured by downward and occupational mobility), and those who had lost their jobs and had, at the same time, lower chances of re-entrance than their male contemporaries. But remember that we only consider women who entered employment before 1989. The findings may not hold true for young women entering the labor market after 1989.

¹⁸ For the first period, preceding events (occurring after 1989) have not been controlled because the event of concern had often been the very first past-“Wende” event for many persons.

Age: Persons belonging to the older birth cohort (born between 1939 and 1941) – that is, around 50 years old in 1989 and thus just below the early retirement age – did not have a significantly higher risk of losing their jobs than the younger birth cohort. The social contracts between employers, unions and the *Treuhand* as well as short-time work options seemed to have been successful in avoiding an over-proportionally high displacement of this age group. However, when they did become unemployed they had remarkably lower chances of re-entrances than younger persons. Moreover, they were less mobile in terms of firm shifts and occupational shifts than younger persons, a result which could be caused by poorer mobility opportunities for older people in the loose East German labor market, but which could also simply reflect the “normal” career pattern that individuals become less mobile in older age, a pattern that was found for the GDR before unification and is known for many societies not undergoing a system transformation. So one may conclude, the only new age discrimination is found in terms of lower chances of labor market re-entry.

GDR legacies:

The results for *political participation* indicate that there was *no* general discrimination of overtly politically-involved persons. They did not have a significantly higher risk of unemployment, though especially the officials (both SED-member and non-members) had to pay more often with downward moves or shifts between occupations for remaining in employment. To some surprise, SED-members with leading functions in one of the major political organizations even had a higher chance of upward mobility in the first period than “politically clean” non-SED-members. There are two explanations for this counterintuitive finding. First, there may exist a qualification difference between the two groups which is not completely controlled for by including the vocational degree completed. On average, organizations’ officials held a university degree more often than non-members, and quite often the degree was in economics or engineering. Second, they may have had certain competencies and network resources which were important in restructuring the old GDR firms in the first period (so-called “situational rents”). This interpretation would earn some credit if this effect disappears for the second period, when the general firm restructuring process came to its end and these kinds of situational rents became less exploitable.

Successful shifts between occupations or firms before 1990 had been *less* influential for the labor market allocation than one might have expected (for many mobility types none of the two

co-variates is significant), and in cases where it was influential we see some surprising results. GDR-mobility experience in one or the other form increased, and did not lower, the unemployment risk. Yet in accordance with our expectations, it increased the chances of re-entrance into employment, perhaps indicating the ability of these persons to handle this difficult situation. Those persons faced a higher risk of shifts between occupations and downward mobility. This seems to be the price for their higher chances of re-entrances as the extremely high effect of prior unemployment in the “downward mobility” model might indicate. So, on the one hand, higher mobility before 1990 seems to indicate lower commitments to occupations and firms resulting in a higher unemployment risk after unification. On the other hand, the findings with respect to downward and occupational mobility suggest that mobility experiences in the GDR resulted in competencies which were beneficial for realizing re-entrances in the first period, though on a lower status level or in a different occupation.

The consistent findings for *self-initiative in job search before 1990* in all models are also surprising: The higher the index (meaning the more self-initiative persons had been in the GDR), the lower the risk of unemployment, downward mobility and shifts between occupations. However, the lower were also the chances of re-entrance when unemployed, of upward mobility and direct-firm shift without downward moves. This picture is not based on a hidden age effect, since age is controlled by cohort. What this consistent pattern may reveal instead is the fact that these people had found comparably good positions due to their self-initiated search in the GDR providing a higher chance of remaining in them and, thus, of stability in their employment career after unification. But when job loss occurred, those persons seem not to be better prepared for job search, given the conditions of a highly competitive labor market, than persons who had been shown no or less initiative in job searches before 1990.

Finally, *GDR-network resources* themselves or the thereby indicated ability to establish useful relationships played a rather subordinated role in labor market allocation after 1989. Both indicators are insignificant most of the time. The only significant effects are found for *instrumental support*: It lowered the unemployment risk in the first and also in the second period, it increased the chances of direct-firm shifts without downward mobility, but at the same time, it reduced the chance for upward moves. Together these three findings may point to some beneficial potential of their GDR network resources or to the projected social abilities. The disappearance of their significance in the second period, except for the unemployment risk, suggests

that this variable reflects the help of the GDR network persons themselves rather than the ability to establish new relationships.

Accentuation of human capital resources:

Employment and career opportunities in the East German labor market have been allocated by *vocational qualification*. First, persons without a completed vocational degree faced a higher risk of unemployment and, at the same time, suffered lower chances of re-entrance into employment than persons holding a skilled worker's degree. Moreover, they had higher risks of downward mobility indicating the re-allocation of their GDR placements in skilled workers' position without a degree or a semi-skilled workers' degree. Second, persons with a higher degree than apprenticeship or full-time vocational school degree had higher chances to realize direct-firm shifts (without downward moves) and upward moves, yet they also had a higher risk of downward mobility (after unemployment). In sum, one could conclude that the higher the qualification, the lower the risks and the greater the chances for upward moves or shifts into "better" firms without status losses.

The great emphasis on allocation according to persons' qualification seems also to be confirmed by the findings for *status match*. Persons who were *not* placed in the employment system according to the qualification they held had a higher risk of losing their jobs.¹⁹ They had lower chances to realize a direct-firm shift without downward mobility.²⁰ Moreover, persons who held jobs above their qualification level in the GDR faced a higher risk of downward mobility after 1989, whereas those who already worked below their qualification level in the GDR had lower risks for further downward moves but were also not privileged in terms upward moves (indicating a re-allocation into jobs according their higher qualification level). In sum, those who were allocated in jobs according to their qualification level in the GDR faced, on average, lower labor market risks after unification. Together with the allocative function of vocational certificates presented above, these findings confirm that, at least in the first period of the transformation, qualification and vocational certificates proved to be important allocation criteria, whereas political capital lost allocative power.

¹⁹ Though the coefficient for under-educated persons is insignificant, it goes in the same direction and is also greater 1.

²⁰ For over-educated persons the coefficient, though insignificant, goes in the same direction (less than 1).

On the contrary, specific human capital assets, as expressed by *firm tenure*, did not prove to be particularly beneficial in terms of managing mobility on the labor market. Most of the time, its coefficient is insignificant. So it did not support upward moves, re-entrances or shifts between occupation and downward moves. In this respect, specific human capital assets, as expressed by *firm tenure*, were not particularly valued under the new conditions.²¹ Yet, given that immobility in the first period was not disadvantageous in the second period – as claimed by Lutz – *firm tenure* proved to be advantageous, though less in terms of specific human capital assets than in *firm commitment*. That is, the longer the *firm tenure* in the last GDR employment episode, the lower the risk of unemployment, but also the lower the chances of upward moves or direct-firm shifts without downward moves.

Structural context:

Recalling the changes in the distribution of *economic sectors* in Figure 1b, the different labor market opportunities of East Germans coming from different sectors are not surprising. Employees of the public sector definitely had the lowest risk for unemployment, downward moves and occupational shifts. All other sectors, even private services, cannot at all be counted as “safe employment sectors.” Employees in agriculture and manufacturing/mining had the highest risks in these dimensions. On the other hand, the higher security of public-sector employees was paid for by lower chances of upward mobility, though that seems to be of secondary importance, recalling that there were rather few upward mobility opportunities at all and under this situation of dramatic change security seems to cut out risk-bearing career steps. The different results for private services, compared to the public sector, once more indicate that the overall tertiarization was not automatically connected with advantageous employment opportunities. The major privilege of the employees in the public sector was certainly the take-over clause in the Unification Treaty. The findings for *prevalence of short-time work in the firm* suggest that this policy measure had done its “job.” It encouraged persons’ immobility, indicated by odds ratios less than 1 for all kinds of career mobility. Finally, as expected, the higher the *monthly unemployment rate*, the higher the personal risk of becoming unemployed and the lower the chances of re-entrance. Perhaps surprisingly, the overall unemployment rate did not change the risk and chances of career mobility. Yet given the outstanding extent of structural changes in East Germany, it seems appropriate to infer that the job mobility necessary to accomplish these changes were encouraged independently of unemployment risks.

²¹ Yet, it is not decidable whether that means a devaluation or only a non-valuation of these assets.

4.2 Allocation mechanisms in the second period (presented in Tables 3, 4, and 6)

Gender: The discrimination against women in the labor market became greater in the second period. Now, women are not only faced with a higher risk of unemployment accompanied by lower chances of re-entrance, but also with a higher risk of downward mobility.

Age: The odds-ratios for the older cohort express that age discrimination has also increased over the two periods. In the second period, older persons have a higher unemployment risk and a lower chance of re-entrance than in the first period.

GDR legacies:

In the second period, a persons' *GDR political past* seems to have lost all its positive but also its negative meaning on the labor market. The coefficients capturing it were insignificant in all models. The still existing significant differences of *successfully mobile persons in the GDR* (successful shifts between firms and/or occupations) in terms of unemployment risk and career mobility strengthen the assumption made for the first period: they may have lower commitments to their GDR firms, but they are, to some extent, better equipped to handle a situation where mobility is required. The disappearance of almost all significant effects for *self-initiated job search before 1989* suggests that the job placements and/or the competencies connected with it were only a temporary advantage. The only remaining indicator of their particular competencies is the higher chance of realizing upward moves, which is, of course not meaningless in such a loose labor market situation as is found in East Germany. Finally, the *supportive GDR network resources* still play a subordinate role in labor market allocation. One suggestion for further research is to interpret these almost insignificant results for network resources as an indication that it has been very hard to establish useful relationships in a situation in which so many people need help to secure or increase the employment opportunities, even though one might have had the social ability to do so. To test this assumption we would need longitudinal network data.

Importance of human capital assets:

In terms of unemployment risk, we still find a *qualification effect*, though the threshold has changed. Whereas in the first period unskilled persons faced the highest risk, in the second period persons with an apprenticeship or full-time vocational school degree face it as well. Now the higher educated persons holding a technical college or university degree have a remarkably lower unemployment risk than unskilled and medium-skilled persons. That is by no means caused by an increase in the qualification structure of jobs in East Germany. On the contrary, it indicates that the competition for any job has become stronger and that displacement of comparatively lower-educated persons by higher-educated persons has not been exceptional. Yet, the findings for *over-educated persons* in terms of unemployment risk (odds ratio = 1.43) and re-entrance chances (odd ratio = 0.74) may also indicate that even being willing to work in a job below one's qualification level does not guarantee a "secure job" or a job providing valued job experience in later re-entrance. Lastly, *firm tenure in the last GDR employment episode* has lost all its impact. Now persons with long firm tenure face equal unemployment risks, which seems reasonable taking into account the large number of firms which closed or reduced their staff size. But the insignificant coefficients also suggest that firm tenure did not provide specific human capital resources which are specifically valued on the current labor market.

Structural context:

As can be derived from the time pattern of distributional changes in the economic and firm infrastructure in East Germany's transformation process (cf. sections 2 and 3), differences in *economic sectors* in providing employment opportunities have become smaller in the second period. East Germans who were still employed in the agricultural sector or manufacturing/mining in the second period faced a higher risk of becoming unemployed than persons employed in other sectors. But the difference has become remarkably smaller compared to those prevalent in the first period, and differences between public services, private services and construction existing in the first period disappeared. Moreover, now chances and risks in career trajectories seem to be distributed more equally between the sectors. Except for downward mobility, the coefficients modeling differences between the sectors in terms of upward mobility, shifts between occupation and direct firm shifts are insignificant.

The findings for *prevalence of short-time work in the firm* in the models for the second period correspond to the disappearance of the dominant role of short-time work measures in labor market policy in East Germany after 1991 (caused by the end of the East German short-time work schedule in December 1991 as well as the shutdowns of many firms using this schedule). The only significant coefficient for short-time work, which is greater than 1, is in the model of downward mobility. Considering this effect together with the fact whether those downward moves followed a period of unemployment (cf. variable “prior status = unemployment?”), the very high coefficients for unemployment longer than 7 months or even 1 year indicate that short-time work in firms in the first period *delayed* unemployment and the thereby connected risk of downward mobility into the second period (i.e., after 1991), but did not eliminate unemployment of those employees in the long run. In this sense, Lutz (see above) seems to be correct that immobility in the “window of opportunities” did not pay off in the long run. Whether that holds true in general will be discussed in section 4.3. Finally, the *monthly unemployment rate* in East Germany influenced, as in the first period, unemployment risks and re-entrance chances, but not career mobility itself (only mediated through unemployment and re-entrance placements).

To summarize, what did “Back to labor markets” mean in terms of allocation criteria and mechanisms? Inequality in employment opportunities based on ascriptive characteristics of individuals, such as gender and age, has increased. Labor market allocation is (still) been driven by individuals’ formal qualifications, whereas political capital and GDR-specific human capital assets have been devalued. Furthermore, structural context in terms of general economic development and the connected well-being of firms have become major determinants of structuring individuals’ labor market opportunities, not only with regard to unemployment, but also career mobility – that is certainly a feature which had been quite unimportant in the GDR employment system. Finally, GDR legacies had structured employment opportunities of East Germans in the first period, but did not by themselves continue to structure employment opportunities in the second period, although individuals’ labor market experience in the first period played an important role for the employment careers later.

4.3 *Impact of labor market allocation in first period on labor market opportunities in the second period (Tables 3, 4, and 6)*

The estimates of “preceding events in the first period” in the models for the second period clearly show that mobility events that happened earlier influenced individuals’ employment opportunities later. Still, the remaining questions are: Has mobility in the first period been rewarded by better employment opportunities later on, while immobile persons had poorer opportunities? And moreover, has labor market allocation in the first period produced a fixed result, not reversible later on? Both are certainly not the case!

Career mobility in the first period: Persons who were willing to make a downward move indeed lowered their risk of becoming unemployed in the second period. By doing so, these persons also increased their chances to realize direct-firm shift without further downward moves, and moreover, as the coefficient in the upward mobility model shows, some of the downward moves in the first period could even be reversed by following upward moves. A similar picture can be found for persons with upward moves in the first period. They faced a lower risk of unemployment in the second period, but some of their upward moves in the first period have been “corrected” by a significantly higher risk of downward moves in the second. Both findings together provide evidence that allocation in the first period did not produce a fixed result in terms of job placement, but in terms of remaining employed in the first place. In contrast to this rather positive result for mobile persons, persons who were willing to make an occupational shift in the first period, have *not* been rewarded for doing so. They have been confronted with an increased risk of unemployment in the second period. In addition, now they have less chances for direct-firm shifts without downward moves. Persons who could manage direct-firm shifts in the first period – who are actually the kind of persons Burkart Lutz had in mind when defining the “window of opportunity” as a “window of chances” – indeed have better employment opportunities in the second period. By joining probably healthier firms, they could reduce their risk of unemployment and downward mobility. However, we have to account for the fact that they were already “privileged” in the first period by being able to realize direct-firm shift, an advantage which might have disappeared or become less beneficial when a larger number of East Germans had done so.

Transition into unemployment and re-entrance in the first period: Persons who became unemployed in the first period but could reenter into employment (what is modeled by including

unemployed episodes of the first period without the current unemployment spell as “preceding event” in Table 3), are faced with an extremely high unemployment risk in the second period. To avoid unemployment in the first period, by means of short-time work, has *not* proven to be the worst strategy. Moreover, realized re-entrances in the first period seem not to provide advantages for realizing re-entrances (Table 4) and to influence career mobility in the second period (Table 6). Yet, persons who had become unemployed late in the first period and could not realize their re-entrance until the second period have been confronted to an extreme extent with career trajectory changes, though not always for the worse. The coefficients for “prior status = unemployment” for the categories 7 to 12 months and more than 1 year (in Table 6) indicate that they were faced with an extremely high risk of downward mobility and occupational shifts, but also comparably good chances of upward mobility (given that upward mobility was possible at all, which seems to have been hardly the case given the very low, though significant, coefficient of the intercept). Moreover, these coefficients reveal that, in the East German labor market, career mobility (downward, but also upward mobility and occupational shifts) has mainly been the consequence of unemployment and much less the result of (voluntary) inner-firm or direct-firm shifts (as proposed by human capital theory for career mobility in western industrialized societies).

Finally, *re-entrance chances in the second period* have not been structured by individuals’ mobility experience in the first period. Since mobility in the first period has structured the unemployment risk in the second period, those persons competing for new jobs in the second period are already a “selected group” which, as the insignificant coefficients suggest (Table 4), were not further differentiated by their mobility experience in the first period.

To summarize, mobility in the first period only proved advantageous when persons could realize direct job shift (without unemployment interruption). If they could not, immobility per se has not been punished in the second period. Persons who were (or had to be) mobile in the first period by changing their occupational field were not at all better off than immobile persons, in fact they faced a higher unemployment risk in the second period. On the other hand, to take into the bargain a downward move in the first period (to remain in or reenter employment) was not always a bad thing to do. Those persons had some advantages in the second period: a lower unemployment risk, higher chances of firm shifts without further downward moves and even higher chances of upward moves – reversing the downward moves. Besides that, risk and

chance allocation of the first period did not prove to be unchangeable. Not only downward moves, but also upward moves could be reversed in the second period. Yet, those who became unemployed in the first period, could reenter and became unemployed again in the first period seem to be, indeed, extremely vulnerable to the loose labor market situation in East Germany later on. This seems to confirm one of our earlier findings, namely that the restructuring of the East German employment system has resulted in a "trichotomy" (Diewald/Solga 1997; Mayer/Diewald/Solga 1999) consisting of about one third of the population which is extremely vulnerable to unemployment (either long-term or perforated), one third of the population which has had quite sharp changes in the occupational career in terms of status and occupation, and about one third which, in the long run, could get out of the restructuring process without severe losses in terms of status or occupational capital.

5. Conclusions

The paper addressed three research questions exploring general trends in the restructuring of East Germany's employment system. At an individual level, it also addresses which personal resources made individuals employable in the new situation and how resources shaped employment opportunities in the process of structural change.

The *first question* was whether the restructuring process of the East German employment system has been accomplished primarily by intragenerational mobility (and less by intergenerational mobility, the common pattern of social change in western industrialized societies) and whether it was a periodical, rather than a linear transitional process. The answer given in the paper is "yes." We witnessed unusually high labor market mobility rates in East Germany. Furthermore, the first period or the "window of opportunities" (December 1989 till June 1992) differed from the second period in terms of higher frequencies of vertical mobility (mainly downward mobility, and only to a smaller extent upward mobility²²) and mobility between firms, mainly caused rapid firm restructuring and de-industrialization process without corresponding absolute growth in the service sectors. This difference would have been even larger without the short-time work schedule delaying labor market mobility into the second period

²² Upward mobility after 1989, especially into professional and managerial positions, was generally limited in East Germany due to a remarkably import of elite personnel from West Germany (Solga 1997).

(and early retirement as an extremely successful policy to reduce the pressure on the labor market). Even more, it seems plausible to assume that without these policy measures the unemployment risks in the first period would have been much higher, and the mobility chances of those persons who had been successfully mobile in the first period would have been exposed to broader competition. As the extent of downward moves in the first period suggests, increased mobility would not automatically mean more successful persons.

The *next question* addressed in the paper is, whether the first period was a “window of chances” and those who did not take the advantage of mobility chances were worse off in the second period. First of all, mobility even in the window of opportunities did not always mean improvement in individuals’ careers, constituted as it was mostly by downward mobility or leaving one’s long-term occupation. Nonetheless, the findings reveal that mobility events in the first period influenced employment opportunities later on: Given success in finding a new place with lower risks of repeated unemployment or joining a healthier firm improved employment opportunities in the second period. But, in cases where these new jobs did not result in stable employment or where persons had to move into new occupation, individuals who avoided mobility (e.g., by short-time work) were better off in the second period than these mobile persons. So, first period mobility was also very risky and not always a beneficial thing to do voluntarily. Moreover, persons employed in the public sector were much better off than those employed in other sectors, though they “paid” by having fewer chances of upward mobility. For them, it would have been even irrational to leave this “safe port.” Finally, upward moves as well as downward moves experienced in the first period were not always the “final station.” Compared to persons who were immobile in the first period, persons who experienced upward or downward mobility in the first period had higher chances/risks to again experience upward and downward mobility in the second period, but unfortunately, in many cases just the reversed event.

As expressed by the paper’s title “Back to labor markets,” we also explored the *allocation criteria* used in the East German labor market after 1989 and the employability of individuals’ “investments” before 1990. The empirical findings show that general human capital such as formal qualification proved to be influential in labor market allocation, whereas specific human capital such as political capital and firm-specific skills acquired before 1990 had been devalued. Applying the job competition model by Thurow (1979) to the East German situation makes

that finding quite plausible: It is not the absolute level of skills and ability, but the relative position of applicants in the job queue that drives matches between persons and jobs. So, even when GDR certificates might not represent West German competencies usually connected with such certificates, they still are one of the observable signals to define individuals' places in job queues (and that in two senses: whom to fire and whom to hire). GDR certificates did not always ensure a status-matching job placement after 1989²³, but they have remained one of the major allocation mechanisms after 1989: the higher an individuals' vocational degree, the higher the chances of remaining in or reentering into employment, although sometimes at a lower level.

The question of how useful *GDR network resources and GDR mobility experiences* were in coping with the new situation, is difficult, if not impossible, to answer since it seems unrealizable to analytically differentiate between normal career patterns and transformation effects. The empirical analyses have shown that GDR legacies components did play a role for individuals' employment opportunities, but only in the first period of the restructuring process. What is as yet unclear is whether this is not caused by the simple fact that recently preceding events are more important in a current situation than far earlier events. This interpretation would suggest that in the first period GDR legacies (only) played an important role because they were the just preceding events, whereas in the second period the (recent) events of the first period counted instead of the (earlier) GDR events. While there is certainly some truth in it, the results show that GDR legacies were advantageous or disadvantageous after 1989 (although for a restricted time period), and not immediately invalidated by the fact of the state-socialist system collapse. Moreover, one could argue that they have continued to be influential through today since they structured the labor market placement at the transformation's beginning, which then influenced individuals' labor market opportunities.

Finally, what does all this mean for *social stratification*? The described restructuring of employment opportunities did *not* lead to an overall reversal of social inequality pattern prevalent in East Germany. Those who were in the higher strata of the social structure before 1990 could mostly remain there²⁴, while those in the lower strata remain there by having, additionally, to

²³ They mostly did before 1989 and that even to a larger extent than in West Germany (cf. Solga/Konietzka 1999).

²⁴ Analyses have shown that the vast majority of East Germans occupying professional or managerial positions after 1989 had been in upper service class positions already before 1989 (Solga 1997).

bear the greatest extent of the new risk of becoming unemployed. Thus, seen from the individuals' perspective, individuals' path dependency can be found in two dimensions: first, work histories and training acquisition before 1989 structured employment opportunities after 1990 and, second, success and failure in the labor market in the first period influenced the employment opportunities in the second period. In sum, the picture is probably best described as an *accentuation of already existing inequality in the GDR*, caused by the increasing impact of formal qualification and gender and simultaneous devaluation of GDR-specific human capital assets. Also visible is a new dimension of age discrimination, reversing the 1980s trend, in which the young generation had less career mobility chances than the older generations.

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Appendix: data, variables, and method

Data²⁵

East German Life History Study is a large-scale, multi-purpose survey collecting information on different areas of social life, such as employment and education, migration, household formation and dissolution, fertility, income distribution and consumption behavior, and values and attitudes. It is a retrospective study on individual life courses of men and women belonging to four birth cohorts (born between 1929-31, 1939-41, 1951-53, and 1959-61). It is part of the *German Life History Study* which was started at the Max Planck Institute for Human Development in Berlin in 1983 (conducted by Karl Ulrich Mayer). The East German life history data were gathered between September 1991 and October 1992, and include 2,330 men and women. The response rate was 52 percent. A comparison with official data sources for several characteristics has shown that there is no severe selective sample bias (Hess/Smid 1995). It is a random sample stratified by cohort and gender. Instead of being regionally clustered, it is based on 560 sample points (covering 427 cities and counties). Data on mobility (in all domains) are continuously measured (in event history form).

In 1996/97, using computer-aided telephone and face-to-face interviews (CATI and CAPI), about 1,400 of the participant of the 1991/92 survey were interviewed again (about 61 percent of the initial participants). These interviews focus on their life histories since December 1989. In addition, about 600 men and women born in 1971 were interviewed for the first time. This cohort was chosen to monitor entry into the labor market, family formation and fertility behavior under the extreme conditions of system transformation.

²⁵ For more information see Solga (1996).

Variables

Variable name	Definition
<u>Dependent variables:</u>	
<i>Mobility types*</i>	
Direct firm shift	Shift between two firms without employment interruption, regardless of changes in occupation or job level
Inner-firm shift	Shift between two positions within the same firm, regardless of changes in occupation or job level
Sectoral shift	Shift between two economic sectors (5 classes see below), in case of an employment interruption counted after re-entrance (into a new job)
Upward move, Downward move, Lateral move	Shift between occupational class positions (10 classes, see below) or "gain or loss of supervisory functions," in case of an employment interruption counted after re-entrance into a new job, the character of mobility of self-employed persons is based on income change and/or changes in the number of employees
Shift in occupation	Shift between occupations (34 different types), in case of an employment interruption counted after re-entrance into a new job
Shift in occupational field	Shift between occupational field (10 aggregated types), in case of an employment interruption counted after re-entrance into a new job
Transition into unemployment	Transition into "unemployment" as reported status by the respondents as well as training and re-training measures funded by the Labor office
Re-entrance into employment	Transition from any non-employment status into employment
<u>Independent variables:</u>	
Economic sector	<ol style="list-style-type: none"> (1) Agricultural sector (2) Manufacturing and mining (3) Construction (4) Private services (5) Public services
Occupational class position	<ol style="list-style-type: none"> (6) Upper-level managerial position (7) Middle-level managerial positions (8) Professional positions (including academic-level freelancers) (9) Qualified white-collar employees (10) Skilled blue-collar workers (incl. Foremen) (11) Unskilled white-/blue collar workers <p>Others:</p> <ol style="list-style-type: none"> (12) Farmers (13) Entrepreneurs (14) Self-employed (none or only 1 employee)
Vocational degree	<ol style="list-style-type: none"> (15) Without vocational training degree (16) Apprenticeship or full-time vocational school (17) Master's degree (18) Technical college degree (19) University degree
Status match	<p>Correspondence between level of job held at a given time point and level of the (latest) vocational degree obtained before entering the given job:</p> <ol style="list-style-type: none"> (1) Without vocational training degree – unskilled job positions (2) Apprenticeship/full-time vocational school – skilled blue-/white-collar positions (3) Master's degree – foremen (4) Technical college degree – qualified white-collar employee (5) University degree – professional position, managerial positions <p>No definition for farmers/entrepreneurs/self-employed.</p>
Personal support before 1990	<p>Coded from 0 to 4 by counting of whether a person got the following forms of help:</p> <p>(a) advice in difficult personal situations, (b) help to achieve personal goals, (c) appreciation of one's performances, (d) help in solving problems at the work place.</p>
Instrumental support before 1990	<p>Coded from 0 to 4 by counting of whether a person got the following forms of help:</p> <p>(a) help in provision of non-durable consumer goods, (b) help in provision durable goods (e.g., cars), (c) help by house construction or renovation work, (d) provision of scarce materials and replacement parts.</p>
Self-initiative in job search before 1990	<p>Index coded 0 to 3 constructed by using 3 information: Whether self-initiative played a major role in how persons got (a) their first job position, (b) their second position and (c) their position in 1989.</p>

* Employment in a job creation measure are counted as "employment."

Method

The findings presented in section 4 are based on *discrete-time logit models* (cf. Allison 1980; Yamaguchi 1991).²⁶ It is based on models of hazard rates. The hazard rate expresses the instantaneous risk of having a given event at time t , given that the event did not occur before time t and that a person belongs to the risk group. In *discrete-time logit models*, the hazard at time t_i is defined as conditional probability of having a given event at t_i given that the event did not occur in time t_{i-1} . The left side of the equation is, then, the logarithm of this conditional probability:

$$\log(P(t)/1-P(t)) = a(t) + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n$$

with $t = 1, \dots, 31$ for *first* period (Dec. 1989 to June 1992)
 $t = 1, \dots, 45$ for *second* period (July 1992 to March 1996)
 $a(t) =$ log-odds for the baseline group at t
 $b_n =$ estimated effects for the included time-constant and time-dependent co-variables
 $n =$ number of the co-variables.

By using these models, we actually attempt to estimate the determinants of the time shape of the hazard rates presented in Figure 3 (for a selected number of events). The models have been estimated for the two periods separately. This approach simplifies the comparison of the independent variables modeling the impact of different individual assets and structural factors on the hazard rates. The alternative approach would have been interaction effects for all independent variables, which can become easily over-complex and difficult to interpret. Moreover, our sample size (even though by including all events, instead of only the first event per person – as it is usually done with Cox regressions) is still small for this procedure.

The unit of analysis are *person months*, including all months in which a person is at risk for a given mobility event. The dependent variable is the occurrence of a given mobility event (coded as 1 for yes and 0 for not). The mobility types considered are transition into unemployment, direct firm shift (risk group: employed persons at time $t-1$); upward/downward mobility and shifts in occupational fields²⁷ (risk group: employed as well as unemployed persons at time $t-1$), and re-entrance into employment (risk groups: non-employed persons at time $t-1$).

²⁶ Under the assumption of a continuous time variable, this model provides an approximation of the continuous-time proportional hazards model (Blossfeld/Rohwer 1995, chapter 4; Yamaguchi 1991).

²⁷ These kinds of mobility are defined to occur when entering into the “new status.”

* The analyses considers *all* events of a given mobility type by controlling for prior events (if necessary²⁸).

²⁸ For the first periods, we have checked whether the investigated mobility type was, to a sufficient extent, preceded by events of the same type or other mobility types. If not, control for preceding events has not been included.

Table 1: Prevalence of labor market mobility in East Germany after 1989

Mobility type*	Proportion of persons with at least one event between January 1990 and March 1996 (%)	N (persons)
PANEL A		
Unemployment episode(s)	39,5	373
Direct firm shift(s)	37,6	355
Inner-firm shift(s)	17,4	164
Upward move(s)	18,0	170
Downward move(s)	30,0	283
Shift(s) in occupational field	30,2	285
Shift(s) in occupation	37,0	349
Re-entrance episode(s)	28,2	266
<i>N (all respondents)</i>		944
PANEL B		
No upward - no downward move(s)	59,8	565
No upward - but downward move(s)	22,2	209
Upward - no downward move(s)	10,2	96
Upward - downward move(s)	7,8	74
<i>Re-entrance and</i>		266
Upward move(s)	25,6	68
Downward move(s)	52,3	139
Occupation shift(s)	72,2	192
<i>Direct firm shift(s) and ...</i>		355
Upward move(s)	29,9	106
Downward move(s)	43,3	154
Occupation shift(s)	52,9	188

* For definitions see Appendix.

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

Table 2: Window of opportunity - chances and risks (in %)

	Risk of unemployment in 2. period		N	
	at least ones	multi-times		
Stayers in first period*	25,7	6,8	514	
Movers in first period**	21,4	5,3	262	
	Chance of re-entrance in ...			
	1. period	2. period	none of the 2 periods	N
Already unemployed in 1. Period	39,9	38,3	21,8	193
Not unemployed in 1. but 2. Period	-	63,9	36,1	180

* Persons without any direct firm shift and unemployment episode in first period

** Persons with at least one direct firm shift in first period

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

Table 3: Discrete-time logit models on "transition into unemployment" (odds ratios)

Co-variates	First period (12/1989 – 6/1992)	Second period (7/1992 – 3/1996)
ASCRIPTIVE CHARACTERISTICS		
Female (Ref.: male)	1.54	1.51
Birth cohort 1939-41 (Ref.: 1951-53/1959-61)	n.s.	1.40
GDR-"LEGACIES"		
Degree of vocational training completed (before 1990) (Ref.: skilled white/blue-collar worker's degree, incl. master's degree)		
No vocational degree	1.87	n.s.
Technical college	n.s.	0.48
University	n.s.	0.41
Membership in SED / Official of political organizations (Ref.: neither member of SED nor official of a political organization)		
SED-member	n.s.	n.s.
SED-member + official	n.s.	n.s.
Official, but not SED-member	n.s.	n.s.
Employment career in the GDR		
Successful shifts between occupational fields (1=yes/0=no)*	1.38	1 shift: 1.45 2 and more: 2.10
Successful firm shifts (1=yes/0=no)*	n.s.	n.s.
Index "Self-initiative in job search" (0 – 3)	0.81	n.s.
Log(Duration of firm tenure, in 12/1989, in months)	0.89	n.s.
Index "Personal support before 1990" (0 – 4)	n.s.	n.s.
Index "Instrumental support before 1990" (0 – 4)	0.83	0.91
SITUATION IN DECEMBER 1989		
Status match in Dec. 1989 (Ref.: match)		
Under-educated	n.s.	---
Over-educated	1.73	---
TIME-DEPENDENT CO-VARIATES FOR LAST EMPLOYMENT EPISODE		
Status match in the last job (Ref.: match)		
Under-educated	---	n.s.
Over-educated	---	1.43
Economic sector of the last job (Ref.: public services)		
Agricultural sector	5.99	2.50
Manufacturing and mining	4.54	1.57
Construction	2.34	n.s.
Private services	2.90	n.s.
Prevalence of short-time work in the firm (1=yes/0=no)	n.s.	n.s.
Mobility events in the 1st Period		
Upward moves	---	0.53
Downward moves	---	0.67
Shifts between occupational fields	---	1.41
Direct firm shifts	---	0.72
Unemployment (without current unemployment episode)	---	2.11
MACRO-STRUCTURAL CONTEXT		
Monthly unemployment rate in East Germany	1.34	1.14
Intercept (baseline group)	0.0007	0.002
MODEL INFORMATIONS		
Number of person months	26,133	33,090
Number of event months	205	326
Total number of persons	942	889
Number of persons with event(s)	122	135
Improvement of Fit (Chi-square)	183.39 (df=24)	206.71 (df=32)
Pseudo R ² (1-L ₁ /L ₀)	8.3 %	6.3 %

* "Successful": Neither status- nor income loss

Bold coefficients: $p < 0.05$; *Italics* coefficients: $p < 0.1$; n.s.: not significant; --- : not estimated

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

Table 4: Discrete-time logit models on "re-entrances into employment" (odds ratios)

Co-variates	First period (12/1989 – 6/1992)	Second period (7/1992 – 3/1996)
ASCRIPTIVE CHARACTERISTICS		
Female (Ref.: male)	0.24	0.51
Birth cohort 1939-41 (Ref.: 1951-53/1959-61)	0.58	0.61
GDR-"LEGACIES"		
Degree of vocational training completed (before 1990) (Ref.: skilled white/blue-collar worker's degree, incl. master's degree)		
No vocational degree	2.35	n.s.
Technical college	n.s.	n.s.
University	n.s.	n.s.
Membership in SED / Official of political organizations (Ref.: neither member of SED nor official of a political organization)		
SED-member	4.0	n.s.
SED-member + official	n.s.	n.s.
Official, but not SED-member	n.s.	n.s.
Employment career in the GDR		
Successful shifts between occupational fields (Ref.: none)*		
1 shift	1.80	n.s.
2 and more	n.s.	n.s.
Successful firm shifts (1=yes/0=no)*	n.s.	n.s.
Index "Self-initiative in job search" (0 – 3)	0.62	n.s.
Log(Duration of firm tenure, in 12/1989, in months)	n.s.	n.s.
Index "Personal support before 1990" (0 – 4)	n.s.	n.s.
Index "Instrumental support before 1990" (0 – 4)	n.s.	n.s.
SITUATION IN DECEMBER 1989		
Status match in Dec. 1989 (Ref.: match)		
Under-educated	n.s.	---
Over-educated	n.s.	---
TIME-DEPENDENT CO-VARIATES FOR LAST EMPLOYMENT EPISODE		
Status match in the last job (Ref.: match)		
Under-educated	---	n.s.
Over-educated	---	0.74
Occupational field of the last job (10-group classification) (Ref.: service occupations)		
No occupational field was significant	n.s.	n.s.
Duration of current unemployment episode (months)	n.s.	0.98
Preceding mobility events (1/1990 – current status)		
Upward moves	n.s.	n.s.
Downward moves	n.s.	n.s.
Shifts between occupational fields	n.s.	n.s.
Direct firm shifts	n.s.	n.s.
Re-entrances (without current re-entrance)	n.s.	n.s.
MACRO-STRUCTURAL CONTEXT		
Monthly unemployment rate in East Germany		
Intercept (baseline group)	0.16	0.87
MODEL INFORMATIONS		
Number of person months	1,907	6,978
Number of event months	81	263
Total number of persons	215	361
Number of persons with event(s)	70	150
Improvement of Fit (Chi-square)	63.82 (df=33)	113.15 (df=35)
Pseudo R ² (1-L ₁ /L ₀)	11.5 %	6.0 %

* "Successful": Neither status- nor income loss

Bold coefficients: p<0.05; *Italics* coefficients: p<0.1; n.s.: not significant; --- : not estimated

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

Table 5: Discrete-time logit models on "career mobility" in the *first* period (odds ratios)

Co-variates	Downward mobility	Direct firm shift without downward mobility	Upward mobility	Shift between occupations
ASCRPTIVE CHARACTERISTICS				
Female (Ref.: male)	n.s.	0.64	0.51	0.49
Birth cohort 1939-41 (Ref.: 1951-53/1959-61)	n.s.	0.64	n.s.	0.72
GDR-"LEGACIES"				
Degree of vocational training completed (before 1990) (Ref.: skilled white/blue-collar worker's degree, incl. master's degree)				
No vocational degree	0.16	n.s.	n.s.	n.s.
Technical college	n.s.	n.s.	1.96	n.s.
University	1.44	1.81	n.s.	n.s.
Membership in SED / Official of political organizations (Ref.: neither member of SED nor official of a political organization)				
SED-member	n.s.	n.s.	n.s.	n.s.
SED-member + official	1.62	n.s.	1.96	n.s.
Official, but not SED-member	1.72	n.s.	n.s.	1.74
Employment career in the GDR				
Successful shifts between occupational fields (Ref.: none)*				
1 shift	n.s.	n.s.	n.s.	1.62
2 and more shifts	1.52	n.s.	n.s.	1.81
Successful firm shifts (1=yes/0=no)*	n.s.	1.53	n.s.	n.s.
Index "Self-initiative in job search" (0 - 3)	0.69	0.59	0.67	0.57
Log(Duration of firm tenure, in 12/1989, in months)	n.s.	0.92	0.87	n.s.
Index "Personal support before 1990" (0 - 4)	n.s.	n.s.	n.s.	n.s.
Index "Instrumental support before 1990" (0 - 4)	n.s.	1.34	0.77	n.s.
SITUATION IN DECEMBER 1989				
Status match in Dec. 1989 (Ref.: match)				
Under-educated	2.51	0.35	n.s.	n.s.
Over-educated	0.23	n.s.	n.s.	n.s.
TIME-DEPENDENT CO-VARIATES FOR LAST EMPLOYMENT EPISODE				
Economic sector of the last job (Ref.: public services)				
Agricultural sector	3.30	2.76	2.61	3.30
Manufacturing and mining	2.40	n.s.	1.67	2.39
Construction	n.s.	n.s.	n.s.	n.s.
Private services	1.69	n.s.	2.40	1.53
Prevalence of short-time work in the firm (1=yes/0=no)	0.46	0.68	0.62	0.47
Preceding mobility events (after Dec. 1989)				
Downward moves	---	---	n.s.	n.s.
Direct firm shifts	---	---	n.s.	n.s.
Unemployment (without current unemployment episode)	3.37	---	n.s.	n.s.
MACRO-STRUCTURAL CONTEXT				
Monthly unemployment rate in East Germany	n.s.	n.s.	n.s.	n.s.
Intercept (baseline group)	0.005	0.003	0.016	0.006
MODEL INFORMATIONS				
Number of person months	27,769	25,939	27,769	27,769
Number of event months	173	186	102	215
Total number of persons	943	942	943	943
Number of persons with event(s)	171	185	102	207
Improvement of Fit (Chi-square)	93.84 (df=28)	95.44 (df=29)	63.40 (df=29)	128.84 (df=29)
Pseudo R ² (1-L ₁ /L ₀)	5.0 %	4.7 %	5.2 %	6.2 %

* "Successful": Neither status- nor income loss

Bold coefficients: $p < 0.05$; *Italics* coefficients: $p < 0.1$; n.s.: not significant; --- : not estimated

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

Table 6: Discrete-time logit models on "career mobility" in the second period (odds ratios)

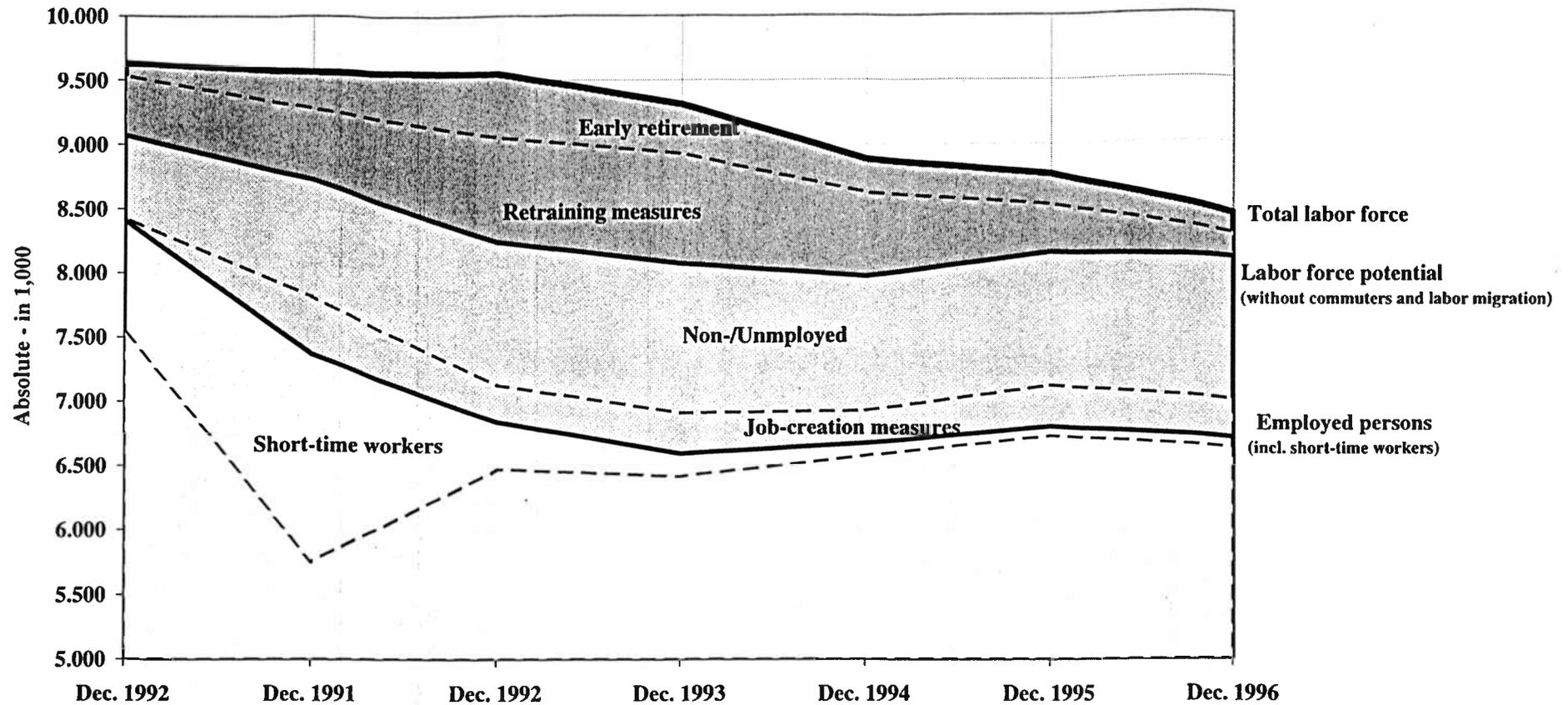
Co-variates	Downward mobility	Direct firm shift without downward mobility	Upward mobility	Shift between occupations
ASCRPTIVE CHARACTERISTICS				
Female (Ref.: male)	0.58	n.s.	n.s.	0.41
Birth cohort 1939-41 (Ref.: 1951-53/1959-61)	n.s.	n.s.	n.s.	0.73
GDR-"LEGACIES"				
Degree of vocational training completed (before 1990) (Ref.: skilled white/blue-collar worker's degree/master's degree)	n.s.	n.s.	n.s.	n.s.
Membership in SED/Official of political organizations (Ref.: neither member of SED nor official of a political organization)	n.s.	n.s.	n.s.	n.s.
Employment career in the GDR				
Successful shifts between occupational fields (Ref.: none)*				
1 shift	<i>1.46</i>	n.s.	n.s.	n.s.
2 and more shifts	<i>1.48</i>	n.s.	<i>1.75</i>	1.58
Successful firm shifts (Ref.: none)*				
1 shift	n.s.	n.s.	n.s.	n.s.
2 and more shifts	0.53	n.s.	n.s.	n.s.
Index "Self-initiative in job search" (0 - 3)	n.s.	n.s.	<i>1.26</i>	n.s.
Log(Duration of firm tenure, in 12/1989, in months)	n.s.	n.s.	n.s.	n.s.
Index "Personal support before 1990" (0 - 4)	n.s.	n.s.	n.s.	n.s.
Index "Instrumental support before 1990" (0 - 4)	n.s.	n.s.	n.s.	n.s.
SITUATION IN DECEMBER 1989				
Status match in Dec. 1989 (Ref.: match)				
Under-educated	n.s.	n.s.	n.s.	n.s.
Over-educated	0.50	n.s.	n.s.	1.38
TIME-DEPENDENT CO-VARIATES FOR LAST EMPLOYMENT EPISODE				
Economic sector of the last job (Ref.: public services)				
Agricultural sector	2.14	n.s.	n.s.	n.s.
Manufacturing and mining	<i>1.54</i>	n.s.	n.s.	n.s.
Construction	<i>1.87</i>	1.93	n.s.	n.s.
Private services	n.s.	n.s.	n.s.	n.s.
Prevalence of short-time work in the firm (1=yes/0=no)	<i>1.45</i>	n.s.	n.s.	n.s.
Prior status = unemployment? (Ref.: not unemployed)				
1 - 6 months of unemployment	7.57	---	3.07	9.31
7 - 12 months of unemployment	11.77	---	2.61	14.32
More than 12 months of unemployment	8.69	---	3.21	7.95
Mobility events in the 1st period				
Upward moves	3.33	n.s.	---	n.s.
Downward moves	---	1.84	2.14	n.s.
Shifts between occupational fields	---	0.62	---	---
Direct firm shifts	0.47	n.s.	n.s.	n.s.
Re-entrances into employment	n.s.	n.s.	n.s.	n.s.
MACRO-STRUCTURAL CONTEXT				
Monthly unemployment rate in East Germany	n.s.	n.s.	n.s.	n.s.
Intercept (baseline group)	0.004	0.002	0.001	0.003
MODEL INFORMATIONS				
Number of person months	39,420	33,385	39,420	39,420
Number of event months	142	103	84	207
Total number of persons	929	881	929	929
Number of persons with event(s)	134	100	80	187
Improvement of Fit (Chi-square)	205.34 (df=32)	46.24 (df=31)	59.92 (df=32)	341.77 (df=33)
Pseudo R ² (1-L ₁ /L ₀)	11.6 %	3.5 %	5.3 %	14.4 %

* "Successful": Neither status- nor income loss

Bold coefficients: $p < 0.05$; *Italics coefficients:* $p < 0.1$; n.s.: not significant; --- : not estimated

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

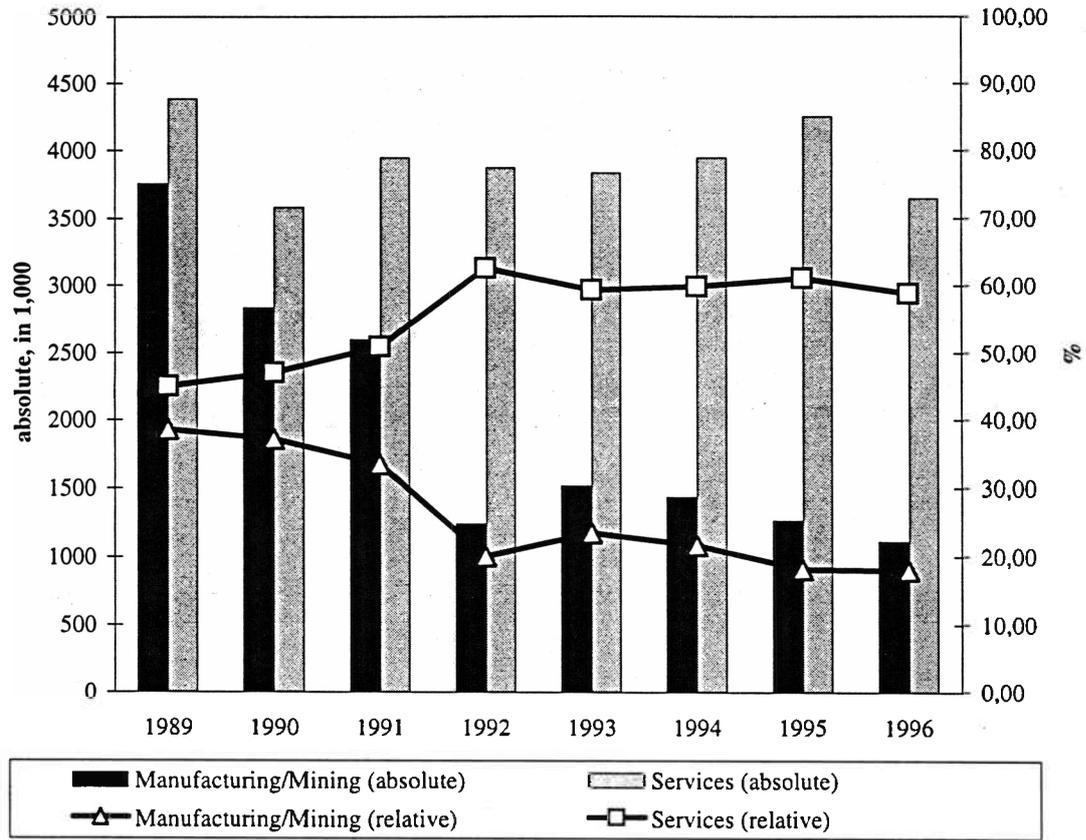
**Figure 1a:
Employment trend in East Germany after 1989**



Sources:

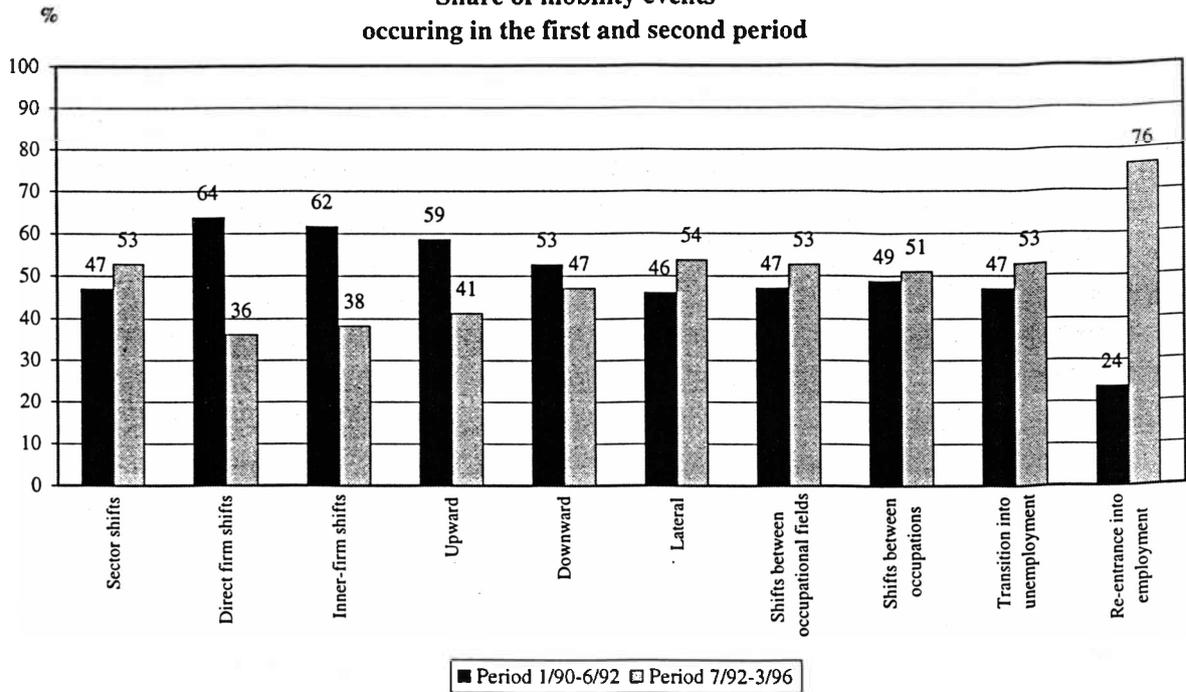
ANBA-Arbeitsmarkt 1993-1996, ANBA-Arbeitsstatistik 1993-1996; Bevölkerung und Erwerbstätigkeit Fachserie 1 Reihe 4.1.1. (Statistisches Bundesamt);
Tabellensammlung zur wirtschaftlichen und sozialen Lage in den neuen Bundesländern (Statistisches Bundesamt, 1995)

Figure 1b:
Distribution of economic sectors in East Germany after 1989



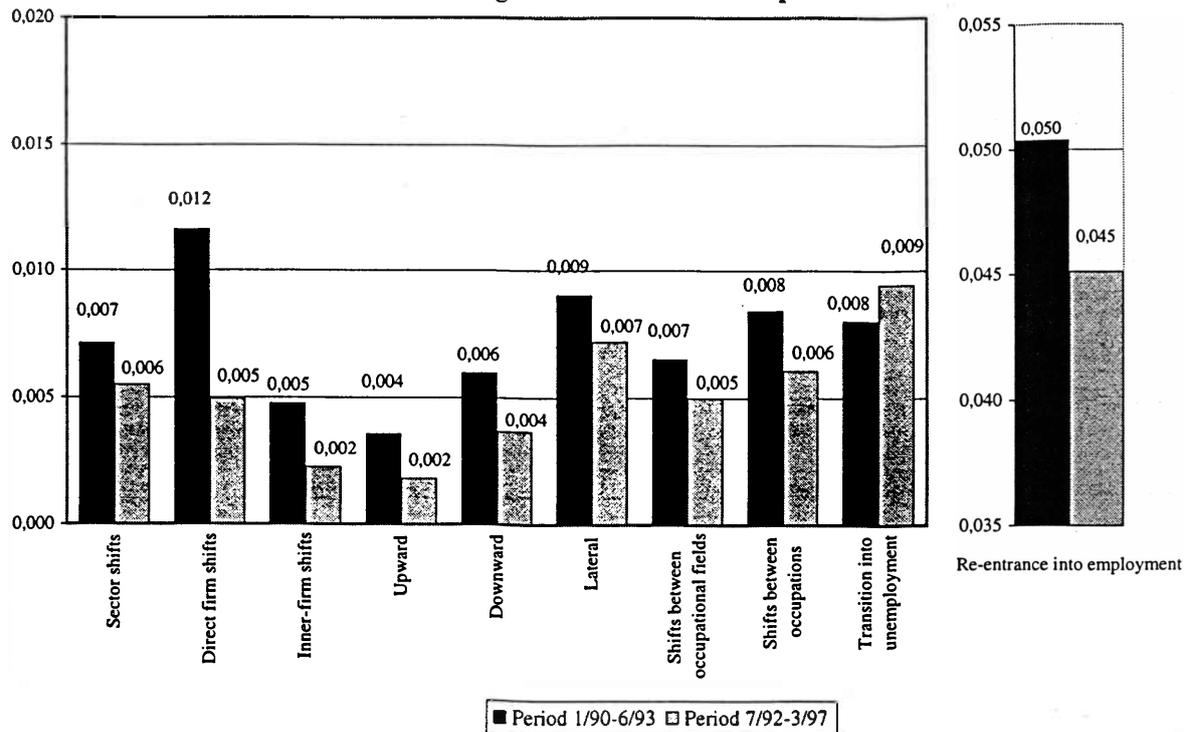
Source: Wirtschafts atlas Neue Bundesländer (1994); Lange Reihen zur Wirtschaftsentwicklung (1996).

Figure 2a:
Share of mobility events*
occurring in the first and second period



* Share of the given event type in the 1st and 2nd period, respectively, on all events of this type occurring between 1/90 and 6/96.

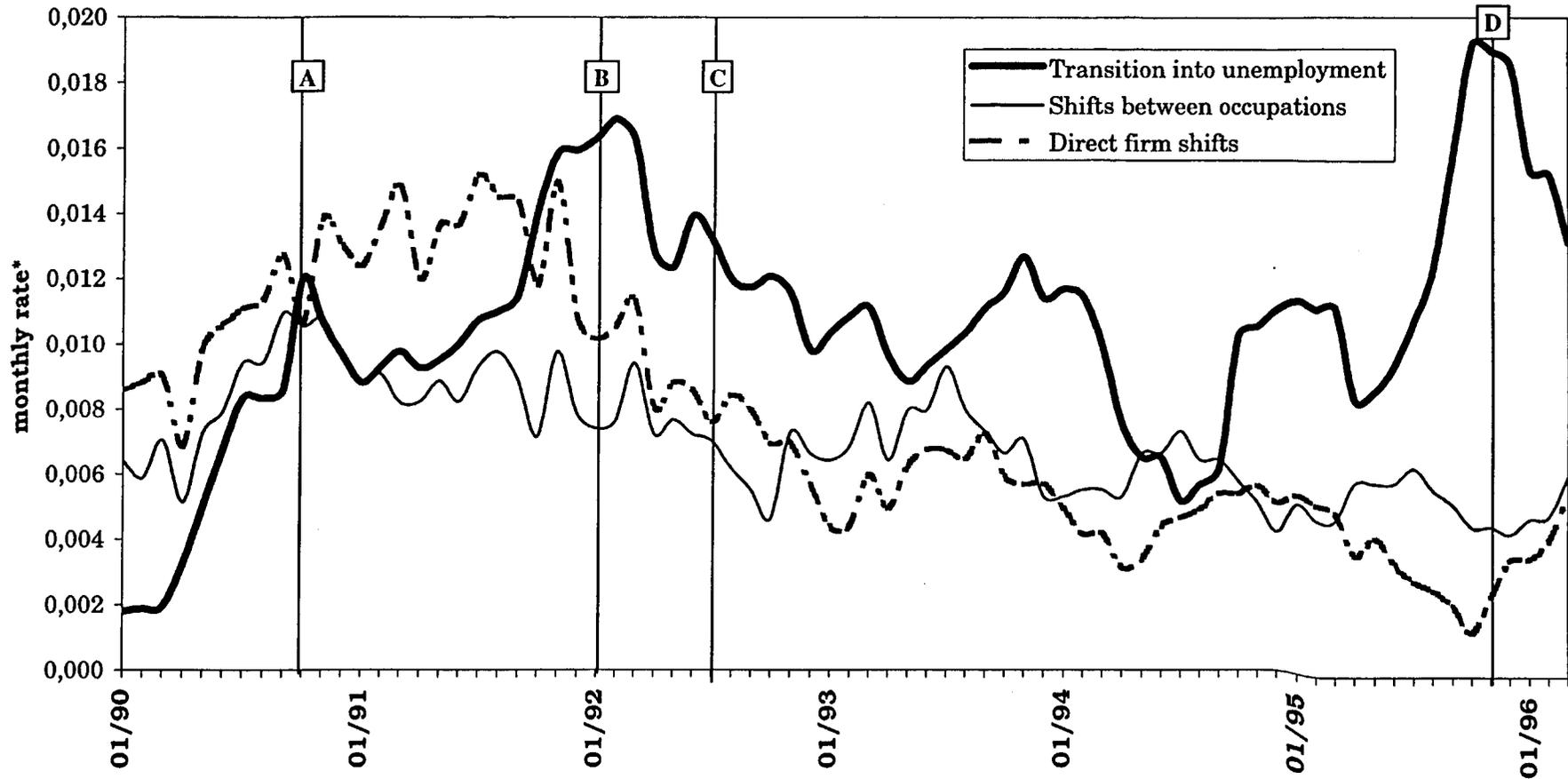
Figure 2b:
Average monthly rate of mobility*
occurring in the first and second period



* Average monthly rate = period sum of monthly rates of a given mobility type (i.e., the number of events occurring in a given month divided by the number of persons at risk) divided by the number of months per period.

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

Figure 3:
Historical rates for selected mobility types in East Germany



* **monthly rate** = number of events occurring in a given month divided by the number of persons at risk

A - Unification, October 3, 1990; **B** - End of short-time work schedule; **C** - End of first period "window of opportunity"; **D** - End of "bad-weather allowance" for construction workers

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

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