HOW STABLE ARE WORKING LIVES? Occupational Stability in West Germany 1945 – 2005*

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Abstract

In recent years, a growing number of empirical studies have challenged societal diagnoses of increasingly flexible work life patterns. The paper presents the first long-term cohort trend analysis of early career occupational mobility for West Germany that covers the entire period from the mid-1940s up to 2004. Drawing on the retrospective surveys from the German Life History Study, cohorts 1930 to 1971, we investigate whether male and female employees have in general become more occupationally mobile across cohorts, and to what extent educational expansion, changes in skill demands, and labor market restructuring may account for the mobility patterns observed. We tackle occupational mobility from two theoretical perspectives, first, as a form of social mobility that is associated with matching persons to positions at labor market entry (direct mobility; based on individual characteristics) and as a reaction to shifts on the demand side of labor (direct and indirect mobility; based on firm and job characteristics, and responding to labor market deregulation for the younger cohorts); second, from the perspective of dispositions to acquire and to maintain occupational identities. We investigate whether individual experiences of 'waiting loops' after apprenticeship and employment interruptions weaken the binding power of occupational pathways, and how this has changed across cohorts, with lessening commitments of firms to their apprentices and increasing unemployment risk. We find that the transition from occupational training to work seems to be pretty much intact. The majority enters the labor market by taking up the occupation they were trained for, and this share has increased rather than declined across cohorts, and despite the spread of gaps. For those who have entered the labor market, the binding power of occupation seems to be bound up with employment continuity. While direct occupational mobility has actually declined across cohorts, occupational mobility that follows any kind of employment interruption has increased.

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1. Introduction

In recent years a growing number of empirical studies have challenged almost hegemonic and highly influential societal diagnoses of increasingly flexible work life patterns. These diagnoses were supported by different strands of thought. The theoretical discourse in Germany has been dominated by first the individualization thesis and then the globalization thesis over the past 25 years (Beck 1992; Beck and Beck-Gernsheim 1994). The individualization thesis postulates that working lives have become much less stable and standardized, because individuals follow individual life designs (Brückner and Mayer 2005). The globalization thesis implies that due to increasing international economic competition employers impose an increasing risk burden on workers (Mills and Blossfeld 2005) and therefore declining job stability. In its most emphatic form this debate on the "new capitalism" claims that all kinds of work continuity, stability and identity and, as a consequence, the very basis of social personality are threatened (Sennett 2000). It is further assumed that new waves of information technology lead to permanent restructuring of the skill mix (Levy and Murnane 2003). Therefore one can expect increasing mismatches between early training and occupational demands. On the labor market side such trend projections find support by discussions on the 'erosion of the standard employment relationship' (Dombois 1999; Mückenberger 1989) and 'end of the work society' (Kurz-Scherf 1995; Offe 1984).

One problem in the empirical adjudication of the claims in this debate is that many different kinds of job instability and changes in working conditions have been indiscriminately lumped together, such as alleged rises in unemployment, fixed term contracts, part-time work, between and within-firm shifts as well as occupational tenure. Not only, as DiPrete et al. (2006) have shown in the comparison between the U.S. and Western Europe, can a decrease in job security be a substitute for lower wages; it is also probably not very useful to look for a single and unitary cause for all these outcomes. In this paper we will therefore concentrate on just one form of work life stability, namely occupational stability. We suggest that changes in occupational stability might be especially salient, because transaction costs in job changes are likely to be much higher when a significant change in the required skills is involved and because occupational qualifications frequently define definitions of self-worth, competence, social recognition and identity.

Recent empirical evidence points to rapidly increasing problems at labor market entry, resulting in "waiting loops" (*Warteschleifen*') and rising unemployment risks for younger cohorts in Germany, but apart from that rather suggest stability and continuity across cohorts as far as job stability, inter-firm mobility, and occupational mobility are

concerned (i.e. Erlinghagen and Knuth 2002; Hillmert 2000; Kurz, Hillmert, and Grunow 2006). The majority of studies have so far been concentrating on processes of *direct* labor market mobility, though, (direct shifts between firms/jobs/occupations), treating moves into and out of unemployment or other kinds of employment interruptions as separate transitions, or right-censored events. Others, in particular studies of occupational mobility, have frequently ignored phases of employment interruption, thereby assuming a similar occupational mobility risk for phases spent in and out of employment (Hillmert 2001, Hillmert 2002, Korpi and Mertens 2003). Mobility processes that are brought about by any type of employment interruption are, however, conceptually neglected (an exception for directional job mobility can be found in Buchholz and Grunow 2006; Grunow 2006). Most of these studies also only reach up to the middle of the nineties while some of the postulated changes might have become pronounced thereafter.

This paper presents the first long-term cohort trend analysis of early career occupational mobility for West Germany that covers the entire period from the mid-1940s up to 2005. Drawing on the retrospective surveys from the German Life History Study (Mayer forthcoming) their observations on cohorts born between 1929 and 1971, we investigate whether male and female employees have in general become more occupationally mobile across cohorts, and to what extent educational expansion, changes in skill demands, demographic changes, and labor market deregulation may account for the mobility patterns observed. We tackle occupational mobility from two theoretical perspectives, first, as a form of social mobility that is associated with matching persons to positions at labor market entry (direct mobility; based on individual characteristics) and as a reaction to shifts on the demand side of labor (direct and indirect mobility; based on firm and job characteristics, and responding to labor market deregulation for the younger cohorts); second, from the perspective of dispositions to acquire and to maintain occupational identities (Lappe 1993; MacKenzie, Stuart, Forde, Greenwood, Gardiner, and Perrett 2006). We investigate whether individual experiences of involuntary firm leaves after apprenticeship and unemployment weaken the binding power of occupational pathways, and how this has changed across cohorts, with lessening commitments of firms to their apprentices and increasing unemployment risk (Seibert 2007).

Our main questions are: Does the German occupational structure exhibit greater instability over time at the micro level? Are there differences between the members of different cohorts in their ability to establish a stable career and stick to their initial occupational track? Does the picture of stability that emerges from the previous studies hold, even if we account for the rise in unemployment the younger cohorts face? Do we find evidence of monotonic long-term cohort developments and other career interruptions or cohort-specific variation? How are forces of occupational flexibility stratified with regard to gender and formal qualifications?

The paper is structured in the following way: First, we give a brief summary of the current debate on flexible work lives and occupational identities in the German context and review the state of empirical research in this field. We then turn to describe the shifting German institutional setting from the mid-1940s to the mid-2000s, emphasizing the specific developments in the educational and occupational system, labor market

developments and demographic changes that affected the cohorts under study differently across historical context. In general, individual employment careers and related occupational job moves used to be tightly bound to certified prior achievements in the highly standardized German vocational and professional training system. The standardization of occupational titles and certificates was expected to enable flexibility and portability between firms and within the same occupation, while hindering interoccupational mobility (Kurz, Hillmert, and Grunow 2006: 78-79; Pollmann-Schult and Mayer 2004). The question is, however, whether occupational identities are as binding to those who experience an employment interruption¹, i.e. job loss, as they are to those who hold a job. Furthermore, early and mid-career job interruptions may have increased due to further occupational training and care giving. Drawing on the institutional description from a historical cohort perspective, we derive competing hypotheses on whether the coupling between occupational structure and work biographies might have loosened in recent decades, or rather maintained its binding power. Data and methods are presented in the subsequent section. Empirical findings are presented in detail thereafter. We conclude with a discussion of the most interesting findings with regard to the hypotheses presented.

2. Analytical perspectives/ Conceptual framework

Occupations are institutionally defined and regulated bundles of qualifications. In the German context they are mostly well-defined by state-licensed training and credentials as well as rules of access and performance. The most important expression of this aspect are the training regulations ('*Ausbildungsordnungen*') in the dual apprenticeship system which, among else, actually circumscribe the number of occupations in various sectors. When asked for their occupation, more than 99% in the GLHS spontaneously generate a job title.

Dispositions towards occupational continuity derive on the one hand simply from the extent to which persons invest in their occupational training and want to reap the returns matching these investments in time, cost and opportunity costs. Since in Germany these investments tend to be high by the nature of the vocational training systems (mostly 3.5 years) or the predominance of both institutionally and even more empirically long track tertiary studies (4-5 years at technical colleges *'Fachhochschulen'* and 5-7 years at universities). On the other hand a disposition towards occupational continuity derives from the additional benefits of an occupational identity which defines you as social person and which confers occupational prestige.

These employment characteristics are typical for traditional craft occupations (like baker, tailor, and blacksmith), industrial craft occupations (like welder, tuner, fitter, and electromechanic), the semi professions (like nurses, elementary school teachers, accountants) or the professions (like medical doctors, lawyers, architects, and professors). They are entirely absent for the unskilled segment and partly semi-skilled segment of the labor

¹ We use the terms "employment interruption", "non-employment phase" and "employment gap" interchangeably throughout the paper.

force, for parts of the sales personnel, and they are less pronounced for the lower clerical sector. They also were mostly absent in small and medium sized farming. With the decline of farming and the un- and semiskilled manufacturing sector we would expect an increase rather than a decrease of the overall labor market defined by occupations. Occupational typification and segregation should be more widespread among men than women as women work more often in the unskilled segment, as well as in lower sales and clerical occupations. Gender discrepancies in occupational ties should have declined across cohorts, though, as a result of educational expansion, an increasing share of women earning occupational degrees, and also as a reaction to the stepwise abolishment of legal occupational closure towards women²

Historically, the West German institutional setting is associated with long-term employment relationships ('Normalarbeitsverhältnis') and a flexibly coordinated economic system (Soskice 1999). Both features reflect an ideal of skilled employment, life-long occupational continuity and long-term commitment between employers and employees (Mayer 1997). The West German institutional framework was designed to create and maintain theses kinds of industrial relations, such as the long-term financing of firms, the collective bargaining system, co-determination legislation, and worker's councils, as well as the vocational training system (Kurz, Hillmert and Grunow 2006). To be sure, these features have traditionally been oriented towards the male life course, while women mid 20th century used to work more often in the low paid, unskilled and more precarious segment of the labor market, and predominantly in the private homes. Actually the latter was legally defined as married women's primary responsibility. It is also known that those seeking access to the labor market, among them youth, unemployed and mothers, have always had a quite different standing in the segmented German labor market, compared to the traditional mid-career male core-worker. In other words, historically, the ideal of the stable uninterrupted occupational track has always been a norm that was actually restricted to a specific subgroup of the labor market. Nonetheless, many of the features that contributed to maintain the ideal of the stable 'lifelong' standard-employment relationship have been object of severe changes during the past 60 years, among them the prolongation of education and training, sectoral changes, the upgrading of the occupational structure, and the frequency and nature of employment interruptions during the early and mid-career phase.

It should, thus, be recognized that the "lifelong occupation" has always been a myth, even in the most highly occupationally segregated labor market of Germany. There were always significant shares of the labor market where prior occupational training and experience was not required for entry. On the one hand, this was partially the case for unand semiskilled jobs in industry which relied heavily on prior artisanal craftsmen. But it was also a standard practice for access to the lower grades of the police, firemen and the military to require just some kind of prior (manual) apprenticeship (Mayer and Konietzka 1998).

² The final occupational ban of women was abolished in 2001 with their unconfined access to military service. Women gained access to the uniformed police 'Schutzpolizei' in 1979 and to the Federal Border Guard 'Bundesgrenzschutz' in 1987. The first professional female pilots were accepted as trainees in 1986 (Emma 2007). Only since 1992 women are allowed to work night shifts (Emma 2007).

Moreover, in the German vocational training system there always was and still is an inbuilt tendency for triggering occupational mobility. Small manufacturing firms and services (like hairdressing, medical practices and law firms) tend to train more personnel than they actually keep long term after the training. This is especially salient for men who are trained in manual occupations with little future perspectives. This means that a considerable number of persons have at least to change firms from a "training" to a "labor market" occupation and often also make an occupational shift after having stayed with their training firm for a while. The early career is thus a core phase for further career development. The more distant the recent occupation from the occupational training received, the greater the negative mismatch (Seibert 2007). A recent empirical study shows that between 1977 and 1984 the number of people who completed training in the dual system but had to switch occupations at labor market entry increased by approx. 7 to 8 percent, with numbers for men (approx. 18% to 26%) being in general higher than for women (approx. 15% to 22%) (Seibert 2007, 3). There is an important business cycle and demographic component to these dynamics between training and labor market entry occupations (Hillmert and Mayer 2004).

3. Historical changes in the labor market and occupational system: (West) Germany, 1950s-2005

During the historical period covered in this study, West Germany, like many other western countries, experienced huge sectoral shifts that have altered the occupational composition. In the empirical part of the paper we will investigate to what degree these shifts have indeed generated individual-level occupational mobility, as it is plausible to assume that part of the restructuring has taken place *across cohorts* with fewer people taking up certain 'no future'-type occupations right away. The alternative hypothesis would be that the occupational training system has not been flexible enough to react towards the shifts on the demand-side of labor, quickly. As a consequence one would observe higher *individual occupational mobility* out of the obsolete occupations and into other, more prosperous occupational segments as employees try to overcome mismatch of occupational supply and demand. With the shrinking of the agricultural sector, for example, farm workers and other agricultural ISCO68 type-6 occupations should have declined severely in the 1950s and 1960s. During this period other increasingly obsolete occupations, like i.e. tailor or baker (ISCO68 codes 7-9 and 7-76), might have been squeezed from the market by higher industrial wages.

The transformative sector, though undergoing cyclical fluctuation (since the early 1970s) and continuous staffing cutbacks (since the early 1980s), had remained relatively large with about 45% in Germany (Castells 2000; Kaelble 1997) and still is with about 35% considerably higher than in all advanced western societies (OECD 2006). With the increase in demand for services and the modest growth in the public sector the tertiary sector has been expanding, though moderately, due to the high labor costs in Germany. With the innovations and spread of information and communication technology used, one might expect a decline of occupational specificity by universalizing IT skill

components, especially throughout the 1990s. Both in the dual system as well as in university education, new standards of IT skill formation have quickly become part of existing training curricular. In other words, though skill requirements may have changed, occupational labels may have not. This should, on the one hand, have helped to maintain a high degree of occupational closure of the German system, but on the other hand, it should also have eased occupational mobility due to a larger degree of overlap in skill requirements.

The development towards occupational upgrading in association with the prosperous 1960s and educational expansion of the late 1960s and 1970s has led to higher overall levels of general schooling across cohorts. Especially the share without occupational training severely declined. While more than a fourth of men and half of the women born around 1930 had no occupational training at all, these numbers dropped below 4% for men and 7% for women in cohort 1971 (Pollman-Schult and Mayer 2004: 83). Earlier empirical studies have shown that shifts in the occupational structure from rather unskilled production and service jobs to skilled service and administrative occupations have been more pronounced for women than men (Blossfeld 1989; Blossfeld and Drobnic 2001; Mayer 1991).

4. Historical changes in occupational continuity and employment interruptions

While educational upgrading and shifts in the core sectors represent two major structural developments that distinguish the framework conditions for occupational (dis)continuity across cohorts, unemployment is another distinctive force impacting the cohorts under study in very different ways.

-- Figure 1 about here --

Figure 1 illustrates the historical trend in unemployment from 1950 onwards. The period immediately following World War II was marked by high unemployment rates, but these numbers dropped quickly during the second half of the 1950s. Throughout the 1960s and prior to the oil prize shock in 1973, unemployment had continuously been on a very low level (usually below 2%). From the mid 1970s onwards unemployment rates started to grow, reaching 9% in the mid 1980s. During this period both men and women have been affected by the changes within the production industries, where technological innovation has led to rapidly growing productivity rates over the last decades. As a result many unskilled ISCO68-type 999 positions in the industrial sector have become obsolete. This development was followed by decades of severe downsizing and outsourcing in the production sector, with cutbacks increasingly affecting the skilled manual and medium management positions. Unemployment rates decreased somewhat (8%) in the late 1980s during German reunification due to a short economic upswing. Since 1994 unemployment rates have continuously remained on very high levels (above 10%), reaching a new historical peak of 13% in 2005. Only in recent years has this trend been reversed.

Unemployment is considered one of the major threats for individual careers and occupational identities, since phases of unemployment are associated with human capital depreciation and social stigma. Due to the fact that unemployment has increased severely. a growing number of employees should have faced these kinds of occupational depreciation. It is still unclear, however, whether unemployment primarily leads to early retirement at later ages or leads to career interruptions with potentially detrimental consequences for individual occupational mobility. Previous studies of occupational mobility have either been concerned with direct occupational transitions from job to job, or have disregarded extended phases of employment interruptions.³ We argue that phases in involuntary employment interruptions (such as unemployment) likely trigger individual occupational mobility, as job loss - even more so extended phases of unemployment – may signal a person that their skill profile is not competitive on the market. Therefore the individual risk to change occupations should be higher during phases of non-employment than during phases in employment. If so this would have altered the nature of occupational mobility across cohorts, as unemployment increased. On the other hand it has been argued that the rather generous means-tested unemployment benefit system in Germany used to buffer the financial pressure to take up the next best job, thereby enabling unemployed persons to look for a job that matches their previous position (Gangl 2001). Still, the likelihood of finding a matching position certainly varies across historical periods, with occupational restructuring, increasing competition, rise in unemployment and business cycle.

Another source of career interruptions would be phases of further occupational training after labor market entry. Brückner and Mayer (2005: 39) demonstrate that the number of occupational training spells started and completed by age 27 have increased from cohort 1920 to cohort 1971, reaching a peak for those born 1955 and 1960. 35% of second training spells follow after a phase of paid work (see also Jacob 2004, based on analyses of cohorts 1964 and 1971). This means that these spells represent employment interruptions for those who already attained an occupational degree. Entry into further training might be a reaction to job loss or bad career prospects and the signalling effect described above. From this perspective, further occupational training would increase individual occupational mobility across cohorts. However, further occupational training may also have the opposite function of enabling occupational stability by improving ones competitiveness within a given occupational field. As Jacob has demonstrated in her analysis of first, second and higher level occupational training spells, further training often serves as a supplement to occupational skills already attained and these spells are therefore closely related (Jacob 2004: 84). According to her analyses - distinguishing 86 occupations - approximately one third of second training spells fall into the same occupational category as the first training spell (Jacob 2004). Our empirical analyses of interrupted occupational careers will generate evidence of which tendency is indeed dominating at return to paid work, occupational continuity or occupational mobility.

³ For example, in his study of labor market entry occupations, Hillmert (2001: 233; 2002: 686) ignores employment interruptions of up to 24 months, regarding employment episodes with interruptions of up to one year as uninterrupted. In the study design applied by Korpi and Mertens (2003: 606), all periods not employed are included in the occupational spell, but no distinction is made between phases in employment and phases not employed.

A third major kind of occupational career interruption is phases of full-time care giving – at least among women (Grunow 2006, 98). Recent empirical studies show clear crosscohort trends for female care giving: While the majority of women in the earlier cohorts used to exit the labor force finally (or very long term) either at marriage or childbirth. younger cohorts of women still interrupt at child birth, but for shorter periods (Grunow 2006, comparing cohorts 1955 and 1964 against cohort 1940; Grunow, Hofmeister, and Buchholz 2006, comparing cohort 1955 and 1940). With the normative and legal changes in German marriage and family legislation since the 1970s, the nature of re-entering processes has changed (for an overview, see i.e. Grunow 2006). In long-term perspective (comparing cohorts 1940, 1955 and 1964) employment interruptions have become more penalizing for women, as they are associated with a higher downward mobility risk for the later born cohorts (Buchholz and Grunow 2006, Grunow 2006). Among the later born cohorts, however, most employees - working mothers and fathers - are entitled to claim (partially paid) phases of parental leave, thereby enjoying legally protected occupational continuity upon reentry to employment. Between 1986 and 1992 parental leave has been expanded several times (up to a maximum leave period of three years). The majority of mothers claim the maximum duration they are entitled to, while full-time care giving among fathers is still very rare (between 1% and 4% of fathers are considered to take up parental leave) (Engelbrech 1997; Grunow 2006; Vascovics and Rost 1999). Since parents on leave are protected against dismissal while on leave and are granted a right to return to the same or an equivalent position with the pre-birth contract conditions, this policy was designed to facilitate occupational continuity upon return to the labor market. Cross sectional studies provide evidence, however, that considerable shares of women do not manage to return directly after parental leave (30% West, 15% East) (Beckmann and Kurtz 2001).⁴ Among those who do, only about 70% return to their former employer (Beckmann and Kurtz 2001). No more than 1/4th seem to return to their former job (Engelbrech 1997). Though these estimates are based on rather small samples, there is reason to expect higher occupational mobility upon return to the labor market following parental leave and other phases of full-time care giving.

Employment interruptions – also referred to as 'gaps' hereafter – potentially enforce or hinder occupational continuity. While there may be individual disposition to acquire and to maintain occupational identities (Lappe 1993; MacKenzie et al. 2006), the institutional and economic changes outlined above rather required occupational mobility, especially for those in interrupted employment. Against this background we investigate whether individual experiences of involuntary firm leaves after apprenticeship and unemployment weaken the binding power of occupational pathways, and how this has changed across cohorts, with lessening commitments of firms to their employees and increasing unemployment risk. Though expectations concerning individual occupational mobility

⁴ Among those who had their first child between 1992 and 1997 and had *not* returned by 2000, 10% (West) and 16% (East) reported that they had been offered a cancellation agreement, 5% (West) and 20% (East) had been dismissed and 42% (West) and 18% (East) reported that they resigned from their job. Among those who did return, but to a different employer, 5% (West) and 7% (East) reported that they had been offered a cancellation agreement, 12% (West) and 14% (East) had been dismissed and 37% (West) and 18% (East) reported that they resigned from their job (Beckmann and Kurtz 2001).

may vary according to type of employment interruption experienced, it is worthwhile noting that all three sorts of career interruptions addressed here actually overlap empirically and that various types of interruption often pass into one another. Imagine, for example, cases where further occupational training is taken up after job loss, or cases in which those seeking to return to employment from full-time care-giving actually end up in unemployment. We therefore consider it reasonable not to distinguish between types of career-interruption in the event-history analyses presented below. Our focus here rather emphasizes the duration dependence of occupational mobility in cases of employment interruption.

5. Hypotheses

In this section we sum up the arguments outlined above by formulating competing hypotheses of cross cohort occupational stability versus occupational mobility, and the factors that supposedly foster either of these. The base line expectation associated with the thesis of increasingly flexible work life patterns is that mid to late 20th century skill related shifts on the demand side of labor, including (1) occupational upgrading, (2) sectoral shifts and the spread of information technology and (3) the presumed increase in the demand for generalized, non-occupation specific skills, have triggered inter-occupational adaptation processes on the individual level.

Cross cohort: Such forces would increase occupational mobility monotonically across cohorts, accelerating for the most recent cohorts, and/or lead to changes in matching processes as a presumably outdated system of occupational titles produces increasing misfits between supply and demand.

Cross cohort/gaps: According to previous research, expectations of increasingly flexible employment in general and 'unbound' occupational mobility have been overstated in the case of Germany. Studying this phenomenon from a long term cross-cohort perspective and paying special attention to the impact of employment gaps (defined here as phases of employment interruption) for occupational (dis)continuity might shed light on the timing of changes in occupational fluidity and the dynamics currently underway. Our hypothesis is that employees should be more likely to become occupationally mobile during a phase of employment interruption than while holding a job. Since job interruptions due to unemployment, further training and in a sense also full-time care giving (for older cohorts of women transitions to full-time care-giving were more often final exits) have become more widespread across cohorts, indirect occupational mobility may have increased.

Gender/cohort: Women are traditionally concentrated in much fewer occupational fields than men and have therefore limited options to adjust to changes on the demand side of labor by being between-occupationally mobile. From this perspective one would assume women to be more mobile within than between occupations, compared to men. At the same time, women have always been more flexible workers, holding the more precarious and flexible types of jobs (Buchholz and Grunow 2006). As women show an increasing labor force attachment across cohorts, and given the legal abolishment of occupational

closure towards women since the mid 1970s, women's occupational trajectories might have become more similar to those of men. From this perspective one would expect to find declining gender differences concerning occupational mobility, especially when indirect occupational shifts are taken into account.

Educational and occupational qualification: The hypothesized historical shifts on the demand side of labor should affect employees with varying skill levels differently. While job creation and options of intra-occupational mobility may have increased for the highly qualified, job destruction and outdating of occupational training should be more pronounced in the semi and low qualified segments. For those without formal occupational degrees the implications of these developments for occupational mobility are hard to predict. On the one hand, those ISCO68 type-occupations that would not necessarily require an occupational degree have clearly been the ones in decline (i.e. farm workers, as well as industrial occupations with a 3rd digit for "not elsewhere classified", XX-9 types). On the other hand, many of those without an occupational degree would be expected to be found among the ISCO68 residual category 999, where a lot of actual turnover could happen within this occupational category, rather than between. Finally, as mentioned above, the group of employees without an occupational degree severely declined across cohorts. Among those with occupational degrees we expect to find different patterns of occupational mobility according to qualification level with highly skilled employees being less likely to be occupationally mobile than those with lower level occupational degrees. A more pessimistic view concerning the incorporation of new and more generalized qualifications in the German occupational training system would expect the highly qualified to adjust increasingly by means of (direct) occupational mobility, while lower qualified occupational groups being more likely to experience interrupted occupational mobility (job-interruption-job), i.e. after a phase of unemployment.

Dispositions towards occupational continuity: In addition to the assumption that skilled employees will enjoy more occupational stability due to their advantage of adjusting to shifting skill-demands, we have also pointed to the intrinsic (supply-side) boundaries of occupational trajectories, based on occupational identities and the socially created ascription of (self-)worth related to occupational prestige. While the latter association is already partly reflected in our measures of education, we further include Treiman's (1977) prestige scores as a proxy of intrinsic disposition towards occupational continuity. By doing so, we aim to incorporate those dimensions of occupational boundaries that go beyond the direct market value of an occupation and reflect its social appreciation in terms of honor and social prestige. We hypothesize that the supply-side boundaries of occupational mobility will be stronger within high-prestige occupations and expect to find a negative impact of occupational prestige on occupational mobility. Development of an occupational identity, in contrast, should limit individual occupational mobility per se (largely irrespective of the vertical status of the occupation), though it should become weaker during phases of employment interruption.

5. Data and Methods

Our analysis is based on the data from four surveys of the West German Life History Study (GLHS-West), which was carried out by Karl Ulrich Mayer and his research group in the DFG-Special Research Unit 3 and the Center for Sociology and the Study of the Life Course at the Max Planck Institute for Human Development in Berlin.⁵ The GLHS provides a rich set of detailed retrospective information on educational and employment histories as well as on household and family-related issues on a monthly basis. It covers a comparatively long time frame and consists of a set of singular retrospective interviews with persons belonging to specific birth cohorts. We compare the occupational mobility of seven cohorts, born between 1929 and 1971. The cohorts were interviewed between 1981 and 1983 (cohorts 1929-31, 1939-41 and 1949-51), in 1989 (cohorts 1954-56 and 1959-60) and between 1998 and 1999 (cohorts 1964 and 1971). The youngest cohort was furthermore retrospectively interviewed in 2005. This means the respondents were between 30 and 44 years old when reporting their life histories. The numbers of completed cases are 709 for cohort 1929-31 (referred to as 'cohort 1930'), 733 for cohort 1939-41 ('cohort 1940'), 729 for cohort 1949-51 ('cohort 1950'), 1033 for cohort 1954-56 ('cohort 1955'), 1026 for cohort 1959-61 ('cohort 1960'), 1499 for cohort 1964 and 1450 for cohort 1971 (776 persons in cohort 1971 could be re-interviewed in the follow up study). While our analyses of transitions from occupational training to first employment are based on the full samples, the longitudinal analyses presented for cohorts 1964 and 1971 draw on an 85% sample of the LV6471west study. We will include the full samples of LV6471west, as well as the data available for the 1971 follow up study for the longitudinal analyses in a later version of this paper. In order to account for the different age-ranges observed in the GLHS, we restrict our analyses to transitions observed up to a maximum age of 40, as has been done in earlier studies (i.e. Kurz, Hillmert and Grunow 2006).

Occupational mobility, our dependent process, is determined based on individual direct and indirect job-to-job changes that entail a change of three-digit ISCO68 codes. Our measure of duration in an occupation begins with the entry into a job and continues until a job with a different ISCO68 code is observed.⁶ In order to avoid picking up compulsive military service or civil service, which have shifted across cohorts, both in duration and shares of young men recruited, transitions into these states are right censored. Employment spells with origin-state military service are excluded from the analysis. Kaplan-Meier survival estimates are applied to illustrate general cross-cohort shifts in (1) direct occupational mobility (transitions from job-to-job), (2) indirect occupational mobility (transitions from job to job with an employment interruption in between), and (3) the combination of both types of mobility. For studying the process-time-dependent

⁵ Documentation for these surveys is found in Mayer and Brückner (1989), Brückner and Mayer (1995), and Hillmert et al. (2004). Mayer (forthcoming) gives an overview over the entire study. For information about the methodology in English language, see Brückner and Mayer (1998). A public-use version of these data and English-language codebooks for most cohorts are available through the Center for Research on Inequalities and the Life Course at Yale University (www.yale.edu/ciqle).

⁶ Descriptive statistics of the sample show that across cohorts the majority of employees experiences at maximum one occupational change on the 3-digit ISCO level. On average, 18% report two changes. Experiences of more than two occupational changes are rare throughout.

nature of occupational mobility for direct and indirect moves, we apply an exponential transition rate model that contains duration specific information on phases spent in a job and phases spent in non-employment. This approach draws on previous works by Sandra Buchholz, Karin Kurz and Daniela Grunow, who used this strategy in order to test effects of direct and indirect job-to-job mobility on upward mobility chances and downward mobility risks (cp. Buchholz and Grunow 2006; Grunow 2006). We apply a similar analytical scheme to the study of direct versus indirect occupational mobility. The simple exponential transition rate model is based on the assumption that the transition rate from origin state to destination state is *time-constant*. In order to model the *time*dependency of occupational change for both, phases in employment and phases in employment interruption simultaneously, we included individual-level duration specific information (dummy variables) on job durations and the duration of employment interruptions in the same model. Dummies for duration in a job distinguish phases up to 6 months (reference category), 6 to 12 months, 12 to 24 months, 24 to 36 months, and 36 months or more. Dummies in employment interruption distinguish gaps of up to 6 months, 6 to 12 months, 12 to 24 months and 24 months or more. The reference category for both time clocks, 'in employment' and 'in interruption', is the same, so that all durations in and out of employment are directly compared to those who spend their first 6 months employed in a new occupation.⁷

We test for significance of cross-cohort and gender differences, gross and net other explanatory factors. In accordance with the hypotheses outlined above, we test for the impact of educational attainment (5-point CASMIN scale), occupational prestige (SIOPS), and public versus private sector affiliation. In addition we control for labor force experience (in years, measured at the beginning of a job) and the number of previous jobs. Against the historical developments in male and female labor force participation in West Germany we analyze the shifting impact of these factors separately for men and women.

The longitudinal analyses of early and mid-career occupational mobility are complemented by a descriptive analysis of reasons for employment interruptions, exploring the shifting nature of employment interruptions for men and women across cohorts. Finally, we further studied occupational transitions between occupational training and first stable job (defined as a person's first job with duration longer than 6 months) since this phase potentially covers part of the occupational mobility we are interested in.

⁷ In addition, we estimated models of direct occupational mobility, applying cox proportional hazards models and exponential models with time-dummies for job duration. We also estimated models of occupational mobility, based on changes on the 2-digit ISCO68 level. While the switch from the 3-digit to the 2-digit level ISCO codes did not alter the findings for the independent variables substantially, we noted that estimates of significance for education and durations tend to be somewhat sensitive to the statistical model applied.

6. Empirical findings

Figure 2 graphs the survivor functions of men's occupational mobility across cohorts, from cohort 1930 to cohort 1971. We distinguish three analytical perspectives: direct job-to-job moves only (upper graph), indirect job-to-job moves only (middle graph), and any type of occupational mobility, capturing both, direct and indirect moves (lower graph). The earlier born cohorts, 1930 and 1940 are represented by dotted lines, the intermediate birth cohorts, 1950 and 1955 are represented by the dashed lines and the later born cohorts 1960 to 1971 are plotted as solid lines.

Upper graph: The upper graph includes men's direct job-to-job occupational mobility only. The process 'working in a given occupation' is right censored for all transitions to non-employment (incl. unemployment and further occupational training). For all cohorts of men, direct occupational mobility appears to be most likely within the first two to three years in a job. Further analyses show that these duration-specific differences are statistically significant (cp. Table 1). This dynamic indicates initial matching-mobility, which should be higher at the beginning of a job than in later phases, when higher jobspecific investments have been made. However, though less frequently, occupational mobility continues to occur later in a job as well. Although overall experiences of direct occupational mobility differ between cohorts, especially in the long run, with the members of cohort 1971 having the lowest rates of direct occupational mobility, there is no systematic cross-cohort trend. In cohort 1971 about 23% have experienced direct occupational mobility within six years, while the rates for cohorts 1930, 1940 and 1964 are about 10% higher at this point. After ten years, between 36% (cohort 1950) and 45% (cohorts 1930, 1940, 1960, 1964) have changed their occupation by moving directly from job to job. The finding of lacking cross-cohort shifts in occupational mobility is in line with previous studies that have looked at occupational mobility out of labor market entry positions (Hillmert 2001; 2002).

-- Figure 2 about here --

Middle graph: A clearly different pattern of cross-cohort occupational mobility can be observed for indirect occupational moves, as is shown in the second graph in Figure 2. This second graph considers events of occupational mobility when an employment interruption of 2 months or more occurred in between the two jobs. The members of cohort 1971 show the highest shares of indirect occupational mobility. Shares are lowest for the earliest cohorts, born around 1930 and 1940. Opposite of the duration-dependency observed for direct mobility, indirect occupational mobility tends to be lower within the first two years in a job. While this dynamic is basically similar for all cohorts, each birth cohort displays very different patterns and levels of indirect occupational mobility. The curves are flattest for the two oldest cohorts, where only slightly more than 20% (cohort 1930), respectively 15% (cohort 1940) experience this type of occupational mobility at all. The pattern for the earliest birth cohorts probably reflects the good labor market conditions during the 'golden age' period in the 1960s and early 1970s, with unemployment being practically non-existent and employment opportunities enabling occupational continuity as well as direct occupational shifts, rather than interrupted occupational shifts. Among the members of the two intermediate cohorts, 1950 and 1955, indirect occupational mobility is clearly more common with approximately one fourth of all male employees experiencing this type of mobility within ten years after having started a job. These middle cohorts experienced an increase in unemployment rates following the oil-prize shock, as well as the onset of educational expansion during their early and mid-career phase. Labor market conditions were clearly more difficult for the three youngest cohorts, whose curves of indirect occupational mobility are steeper than those of the earlier born cohorts. The members of cohort 1960 and 1964, the largest cohort ever born in Germany after World War II, entered the labor market in the early 1980s, when unemployment started to persist and to increase further. The members of cohort 1971 faced even worse conditions upon labor market entry with exceedingly high unemployment rates and additional competition from their East German peers during the 1990s. Even accounting for the fact that this youngest cohort (as observed here) was cut off very early (at age 27-28) in their careers, it is obvious that there is a historical trend of increasing shares of employees experiencing occupational mobility in association with an employment interruption. For the members of cohorts 1930 and 1940 this transition was rather exceptional. Among those born around 1950 and 1955, indirect occupational mobility has become clearly more common. For those born around 1960 and thereafter, shifting occupations at re-entry to employment is an experience that more than one-third have in common.

Lower graph: The lower graph in figure 2 illustrates overall rates of occupational mobility across cohorts, including both, direct and indirect moves. In general, even among the older cohorts more than half of all employees experience occupational mobility within ten years after having started their first job. While these estimates give a pretty accurate picture of the general level of occupational mobility experienced by the members in each cohort, the upper two graphs show that the curves in the lower graph actually result from two historically distinct processes: a cross-cohort staggering of direct occupational mobility, associated with an employment interruption.

-- Figure 3 about here --

Figure 3 shows the graphs of cross-cohort occupational mobility for women.

Upper graph: Looking at women's direct job-to-job occupational mobility across cohorts, we find that the oldest two cohorts, especially the members of cohort 1940, tend to be most occupationally mobile. A share of 35% in cohort 1940 (approx. 32% in cohort 1930) experience direct job-to-job occupational mobility within ten years after having taken up a job in a given occupation. Across later born cohorts, the curves look remarkably similar, reaching slightly below 30% of occupational mobility within ten years after having started a job, again interpreted here as indication for early career matching mobility.

Middle graph: Looking at indirect occupational mobility (the second graph in Figure 3) we find a reverse cross-cohort pattern for women's careers. These plots in part reflect the decline of the female homemaker in Germany (Grunow, Hofmeister and Buchholz 2006), with later born cohorts of women re-entering the labor market in much higher numbers after a phase of full-time care giving than cohorts 1930 and 1940. The female members of

cohort 1940 are least likely to experience interrupted occupational mobility, similarly to their male peers. Compared to women in cohort 1940, those born around 1930 and 1950 experience more indirect mobility. While the curves for these cohorts start out quite similarly, the curve for cohort 1950 continues to drop more steeply after a phase of eight years. Interrupted occupational mobility is clearly highest among cohorts 1955 to 1971. Among these cohorts we find no clear further differentiation, though.

Lower graph: The bottom graph in Figure 3 illustrates women's overall mobility experiences across cohorts. The cross-cohort differences identified in the upper and middle graphs above interfere with each other and thus nearly 'cancel each other out'. As a result, overall mobility rates appear to have remained pretty stable (the tails in the curves for cohort 1971 and 1960 are not interpreted, due to the rather low case numbers), even though the nature of mobility experienced has clearly shifted across cohorts. Within ten years after starting a job in a specific occupation, between 44% (cohorts 30-55 and cohort 64) and 50% (cohorts 1960 and 1971) of women change their occupation. These overall shares in occupational mobility remain clearly below the overall shares experienced by men (between 55% and 70%).

-- Figuer 4 about here --

The gain in analytical accuracy attained by distinguishing between direct and indirect occupational mobility becomes even more apparent when seeking to understand historical shifts in career differences between men and women, as is illustrated in Figure 4. For lucidity we only plotted the survival curves of three selected cohorts, 1940, 1955 and 1964, which had been selected for historical comparison in earlier career mobility studies (i.e. Kurz, Hillmert, Grunow 2006; Grunow 2006). The earliest birth cohort 1940 is represented by the dotted lines, the intermediate cohort 1955 is represented by the dashed lines and the youngest cohort 1964 is represented by the solid lines. The upper graph illustrates that the 'gender-gap' in direct occupational mobility has been widening across cohorts, since the later-born female cohorts are less likely to experience this kind of mobility, while there is basically no cross-cohort change for men. Looking at occupational mobility in the context of employment interruption (the lower graph in Figure 4), the picture looks very different. Here we find that both men and women experienced a historical trend of increased indirect occupational mobility. The withincohort between-sex-category differences have clearly been declining for the two later born cohorts. Even though we acknowledge that men and women still tend to interrupt their careers in part for different reasons, this picture is very informative. It might imply that the kind of gap experienced is probably less important as a trigger for occupational mobility than the sheer fact of interruption itself.

Overall, employment interruptions clearly seem to trigger occupational discontinuity, but the underlying dynamics are still unclear. In a next step, we therefore seek to explore the dynamics of occupational mobility and their association with cross-cohort differences in employment continuity more closely.

-- Table 1 about here --

Table 1 shows the estimates of selected exponential transition rate models for men's occupational mobility. Model 1 basically mirrors the findings of the survivor curves that the members of the later born cohorts have a higher likelihood of being occupationally mobile, compared to cohort 1940. The earliest born cohorts, 1930 and 1940, do not differ from each other in terms of overall occupational mobility.

Model 2 shows what remains of these general cohort differences once we control for the time dependent dynamics underlying occupational mobility. The differences between reference cohort 1940 and birth cohorts 1955, 1960 and 1971 are now far from being significant. We therefore do not comment on the switch in signs, either. Only the cohort difference between the reference category and cohort 1964 remains highly significant and positive. The cohort dummy for those born in 1950 is negative (significant on a 5% level), but this finding is sensitive towards further model specification. The period dummies indicate that being occupationally mobile becomes less likely after two years in a job (b = -0.15+), and even more so after three years (b = -0.46^{**}), thereby confirming the matching mobility argument stated above. In contrast, any phase spent in interrupted employment clearly increases the risk of being occupationally mobile. The duration-trend of being in a non-employment gap tends to be u-shaped. Separate analyses for each individual cohort confirm that the u-shaped dynamic for employment interruptions is similar for each individual cohort (models not shown). In other words, the impact of employment interruption phases on men's occupational mobility has not changed. Those in an employment interruption have always been more likely to change their occupation during the historical period under study. Occupational moves are most likely to occur after three years in employment interruption. This indicates that the longer the interruption, the lower the likelihood of maintaining one's initial occupational track. We control for labor force experience and the number of previous jobs, in order to account for the different observation windows for each cohort. In substantial terms these estimates reflect that being occupationally mobile is much more likely in very early stages of the career – more evidence in favour of matching processes – and that those who tend to switch jobs often also have a higher likelihood of switching between occupations.

In Model 3 we take a look at the hypothesized general differences according to educational levels. Introducing education into the equation does not alter the estimates of cross-cohort differences, nor the period trend, compared to the estimates in Model 2. The effects of the education dummies tend to be in line with the hypotheses stated in section 5. Among those with completed occupational training, men with higher secondary schooling and men with a university degree are less likely to change their occupational track, relative to the reference category, men with lower secondary degree with occupational training. In addition we find a higher occupational mobility rate for the low skilled employees with a maximum of lower secondary education without completed occupational training (b = 0.13^*), compared to the reference category, those with lower secondary schooling with an occupational degree. Cohort-separate analyses reveal that this effect is significant only for cohorts 1940 and 1950, therefore probably reflecting unskilled men's adaptation processes towards the sectoral shifts occurring during the 1960s and 1970s (models not shown). Among the later born and better qualified cohorts,

these unskilled men are actually least likely to be occupationally mobile, together with those who completed upper secondary schooling, but did not attain an occupational degree. Turning back to Table 1, Model 3, we indeed find that those who did *not* invest in an occupational degree, namely employees with upper secondary schooling without completed occupational training, have the lowest rate of occupational mobility ($b = -0.47^{**}$). Earlier studies have found that those without occupational training have a higher unemployment risk as well as worse re-entry chances from unemployment (Grunow 2006: 107f & 116). Against this background the estimates reflect worse overall employment chances for those lacking occupational credentials, rather than occupational continuity.

In Model 4 we include our measure of 'intrinsic dispositions' towards occupational continuity, Treiman's SIOPS scores. As hypothesized, the effect is negative and highly significant, even after controlling for educational and occupational qualification. The finding thereby lends support to the argument that those in high prestige occupations have an even higher motivation to stick to their initial occupational track, compared to those in lower prestige occupations. We acknowledge, however, that the way this concept is operationalized here does not allow for claiming a strong causal relationship. We also note that the prestige measure picks up the educational effects for the highly skilled and the unskilled. That is, the coefficients suggesting higher occupational mobility for those with lower secondary education without occupational training, and lower occupational mobility for those with technical college or university degree (cp. Model 3) are much closer to zero and not significant anymore in Model 4. This probably reflects the strong association between educational achievements and career outcomes in Germany, thus making it very hard to distinguish empirically between intrinsic motivations for occupational continuity and 'extrinsic' framework conditions supporting or hindering occupational continuity.

-- Table 2 about here --

Table 2 contains occupational mobility estimates for women. For comparability purposes, and based on the hypotheses stated in section 5, the models specified are identical to those presented for men. Model 1 gives the overall estimates derived for cross-cohort differences in women's occupational mobility. As discussed in the context of Figure 3, we do find cross-cohort differences when comparing successive cohorts of women to the reference category, cohort 1940. Apparently these estimates are dominated by the changes of women's indirect occupational mobility, as the cohort comparison of women's direct occupational mobility would suggest an opposite cross-cohort development (models not shown, but see Figure 3).

Model 2 in Table 2 contains information on the duration dependence of women's occupational mobility. Women holding a job appear most likely to be occupationally mobile during the first year in a job, whereas their mobility risk is even higher between six to twelve months in a job, than during the first six months. During later periods in employment, women's occupational paths are clearly more stable and the estimates are comparable to those of men. For the time periods spent in employment interruption, the

estimates for women indicate a pattern that is different from the one observed for men, at least for longer durations in interruption. During the first six months in employment interruption women are significantly more occupationally mobile than during the first six months in a job (ref.). During gap-durations between one and three years, women's mobility risk is still higher, but the size of the coefficient is clearly smaller than for the dummy representing the first six months in a gap. After three years of employment interruption women's occupational mobility risk is even lower; nearly as low as for those holding a job for three years or more. Does this effect indicate a stability-premium for women, or rather mirror the fact that long interruptions turn into final exits for older cohorts of women? The latter seems to be the case. Cohort-separate analyses of duration dependence on occupational mobility show that the significant negative effect for interruptions of three years or more can actually only be observed for women in cohorts 1930 to 1950 (models not shown). For those born around 1955 and 1960 the duration dummy 36+ is not significant and for the two youngest birth cohorts it actually switches signs and even reaches a 10% significance level for cohort 1971. In other words, as women's labor force attachment increases across cohorts, the long-term duration dependence of gap-phases becomes increasingly like men's. The effects for labor force experience and the number of previous jobs are similar to those observed for men, with increased employment experience lowering women's mobility risk and job mobility triggering occupational mobility.

Model 3 shows the estimates after controlling for educational and occupational attainment. Controlling for educational level increases the size of the cohort-dummy coefficients (compared to Model 2), indicating that women's occupational mobility clearly increased, even net of educational expansion. Women without completed occupational training appear to be the most mobile, while those with occupational degrees do not seem to differ significantly from each other in terms of occupational mobility. Studies of directional career mobility indicate though that there is educational differentiation upon directional mobility with skilled women being more upwardly mobile and unskilled women being more likely to move to a job with a lower prestige (Buchholz and Grunow 2006; Grunow 2006). Highly skilled women also tend to return faster to paid employment. These effects would interfere in the models presented here.

Including the vertical measure of occupational prestige, as is shown in Model 4, alters the education estimates, now suggesting a positive association between high qualifications and occupational mobility. The effect of the SIOPS coefficient is negative as hypothesized and with b = -0.02 as large as for men.

Having examined the duration dependence of occupational mobility in the context of employment duration and employment gaps, the question remains what the gaps studied so far actually mean in substantial terms for successive cohorts of men and women. In order to tackle this question we have analyzed the reasons for employment interruptions (supplemented by information on gap activities in order to lower the shares in the unspecified category), as framed by the respondents in the GLHS. There is variation between the surveys in how the information on reasons for employment interruptions and gap activities was collected and classified. Therefore cross-cohort variation in these categories might in part reflect changes in the survey design. We are aware of the fact that the observed shares in the categories distinguished in part also vary due to bias of social desirability. With this in mind, we still find it instructive to explore the nature of gaps responsible for triggering occupational mobility. As mentioned earlier in the paper, the categories distinguished here actually overlap empirically, since respondents could name more than one reason for employment interruption as well as several gap activities. In those ambiguous cases, indication of job loss (respectively unemployment) was given the highest priority, followed by further education and third, by indication of full-time care giving. The fourth category, 'other private or employment related reasons', represents a residual category for interruption causes that are pretty rare or difficult to classify elsewhere, for example "colleagues" or "wanted to do something else".

-- Figure 5 about here --

According to the information on gaps provided by male respondents, job loss only accounts for between 20% and 30% of the employment interruptions experienced. Please note though, that the residual categories 'unspecified' and 'other private or employment related reasons' are pretty high throughout. Especially for the two youngest cohorts, who entered the labor market in times of high unemployment, job loss is probably underestimated as a cause for employment interruption. For women, job loss clearly became a more prevalent cause for experiencing an employment interruption across cohorts. While among the earlier born cohorts 1930 to 1950 this category makes up less than 10 % of all interruptions observed, the share more than doubles among the later-born cohorts. Among men, further education appears to be a major source of employment interruption, accounting for up to 50% of all gaps for cohorts 1955 and slightly above 40% in cohort 1960. Among the female respondents further education plays only a minor role. Not surprisingly in the West German context, women report very high shares of fulltime care giving, while this activity is hardly of any relevance for men. Against the background that reasons for employment interruptions as well as gap activities seem to have remained quite distinct between men and women, even among the later-born cohorts, it is quite remarkable that the gendered duration dynamics of gap-related occupational mobility have become more similar for women and men.

Finally, we turn to the question whether the prevalence and nature of gaps observed for early and mid-career employment gaps across cohorts is as well reflected at the interface between occupational training system and labor market. In Figure 6 we therefore take a look at the binding between the occupational code of the first job held at labor market entry and the occupational code associated with the last training spell received prior to this job. For those who did not receive any occupational training prior to their first job, we look at the training spell they attained thereafter. Those with no occupational training are omitted from the analyses.

-- Figure 6 about here --

The comparison across cohorts reveals that training has become a more salient feature of the labor market. The number of first jobs without any prior training has declined dramatically for women from 62% in cohort 1930 to 40% in cohort 1940 and 20% in cohort 1950. For men the decline has been less dramatic with percentages dropping from 22% in cohort 1930 to below ten percent for those born around 1950 and thereafter. At the same time the number of direct transitions (no gaps) from training to the first employment has risen from 46% for cohort 1930 to 63% for cohort 1971. These trends have clearly been more pronounced for women than men. For both groups the figures suggest a growing prominence of occupational training as means for labor market entry.

Second, we also can observe a rise in the percent of respondents whose transition from occupational training into the first employment exhibits a delay by two months or more, which we denote as a gap. In fact, more than 20% of 1971 respondents experience a gap in between training and employment, a percentage which has steadily increased from the levels exhibited by older cohorts. For the younger cohorts, of those respondents who report a gap, approximately half are employed in an occupation that is different from the occupation in which the have received their training. By contrast, only a third of the respondents in the earlier born cohorts (1930 and 1940), who report a gap, managed to find a labor market entry position matching their occupational training. In general these findings suggest that it has become more difficult to obtain a first job directly after training, but the shares of those who finally manage to enter into the position they were trained for, has clearly increased across cohorts. Again this trend is more pronounced for women than men.

7. Discussion and Conclusions

The aim of this paper has been to study trends in occupational pathways in West Germany, mid-19th century to 2005. By means of analyzing cross-cohort shifts in men's and women's occupational stability we seek to contribute empirical insights that might inform and nuance the debate on rising employment instabilities and unbounded 'individualized' mobility. The questions addressed in this paper confront individual-level perspectives of intrinsic 'binding' tendencies of occupational stability with the (West) German institutional system against the background of changes in the labor market. The latter developments are assumed to require occupational adaptation processes and more flexibility for later born cohorts. Different from previous studies of occupational mobility we paid special attention towards the spread of employment interruptions (gaps) for later born cohorts, thereby questioning the assumption that the binding power of occupations operates irrespective of whether being in employment or not. Indeed we find that later born cohorts are less able to establish a stable career and stick to their initial occupational track. But the insights we gained by 'minding the gap' are more complex than that, as we elaborate upon in the remainder of this section.

As far as the binding power of occupations is concerned, we find that the transition from occupational training to work seems to be pretty much intact. The long-term view suggests that the 'standard' sequencing of labor market entry directly following one (or more) spells of occupational training seems to become even more common across cohorts (60% in cohort 1930, 70% in cohort 1940 and more than 80% in cohort 1950, more than

90% in cohorts 1964 and 71). As transitions from occupational training to work are increasingly marked by gaps, both, transitions into the same occupation after training as well as occupation changes have become more common for younger cohorts. Among those who do not manage to move directly from occupational training to employment, the share of persons finding a matching occupation upon labor market entry and the share of those who don't are about equal in size. In general, among both men and women, the majority enters the labor market by taking up an occupation they were trained for, and this share has increased rather than declined across cohorts.

However, for those who have already entered the labor market, the binding power of occupation seems to be bound up with employment continuity. Summing up with regard to our hypotheses concerning historical trends in occupational continuity versus mobility, we do find indication of historical increases in occupational mobility for both men and women, but for indirect, rather than direct occupational moves. The historical trend in indirect occupational mobility does not follow a monotonic cross-cohort pattern. It clearly distinguishes the earlier born cohorts from the middle and youngest cohorts, though. The findings support our thesis that historical changes in occupational mobility mid 19th century to 2005 are associated with increased phases of employment interruption across cohorts, rather than following a universal trend of 'rising turmoil' in individual careers. Overall occupational mobility rates increased only slightly and more for men than women. With regard to the gender-gap in occupational mobility, our evidence is twofold: While women still tend to be much less occupationally mobile than men when it comes to direct job-to-job mobility, the gender-gap for interrupted mobility has closed for the later-born cohorts. Our multivariate analyses indicate that the dynamic impact of women's employment interruption as a trigger of occupational mobility has become more similar to the pattern displayed by men. For men we find the hypothesized stratification of occupational stability according to skill level. Among those with completed occupational training, men with higher secondary schooling and men with a university degree are less likely to change their occupational track, relative to those with lower secondary training. Among women, the association between occupational continuity and education seems to be superposed by the fact that labor force attachment (the length of employment interruptions) is already stratified by education. For both men and women we find that those in high prestige occupations have a higher tendency to stick to their initial occupational track, compared to those in lower prestige occupations, net of educational effects and duration dependency. Our findings thereby lend support the thesis that intrinsic motivations of occupational continuity not only derive from occupational identity, but are furthermore stratified according to the social prestige attributed to an occupation.

The probably most instructive insights concerning historical change in early and midcareer occupational stability derive from the analytical distinction between direct and indirect occupational mobility. While direct occupational mobility has actually declined across cohorts (staggering for men and clearly decreasing for women), occupational mobility that follows any kind of employment interruption has increased. Apparently the increase in occupational mobility cannot sufficiently be explained by the rise in unemployment across cohorts, though. More frequently phases of further education (the predominant pattern for men) and of full-time care giving (still the predominant pattern for women) interrupt occupational pathways and trigger further occupational mobility. The question whether the type of gap experienced matters with regard to occupational continuity would deserve further empirical investigation. Our findings indicate that the kind of gap experienced may be less important than the sheer experience of interrupted employment and the duration of a gap per se.

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FIGURES AND TABLES



Figure 1: Historical trends in unemployment rates, Germany*

* until 1990 Former GDR and Berlin-West. Source: own illustration based on data from Bundesagentur für Arbeit, Nürnberg http://www.destatis.de/indicators/d/lrarb02ad.htm



Figure 2: Occupational mobility men

Kaplan-Meier survival estimates. Source: own illustration based on data from the GLHS-West.



Figure 3: Occupational mobility women

Kaplan-Meier survival estimates. Source: own illustration based on data from the GLHS-West.



Figure 4: Occupational mobility by sex category

Kaplan-Meier survival estimates. Selected cohorts. Source: own illustration based on data from the GLHS-West.



Figure 5: Reasons for employment interruptions by sex category

Source: own illustration based on data from the GLHS-West.



Figure 6: Transition patterns from occupational training to first job by sex category

Notes: transitions from/to first job > 6 months within a 10 year observation window for each cohort. Source: own illustration based on data from the GLHS-West.

Variables	Model 1	Model 2	Model3	Model 4
_				
Constant	-5.29**	-5.11**	-5.06**	-4.46**
Cohort 30	0.08	0.12+	0.09	0.05
Cohort 40 (ref.)				
Cohort 50	0.15*	-0.15*	-0.12	-0.10
Cohort 55	0.28**	-0.07	0.03	0.04
Cohort 60	0.49**	-0.05	0.04	0.04
Cohort 64	0.45**	0.17**	0.23**	0.23**
Cohort 71	0.49**	-0.11	-0.05	-0.07
In job up to 6 months (ref.)				
In job 6-12 months		0.03	0.03	0.03
In job 12-24 months		-0.10	-0.10	-0.10
In job 24-36 months		-0.15+	-0.16*	-0.15+
In job 36- months		-0.46**	-0.48**	-0.47**
In gap 0- 6 months		1.17**	1.17**	1.16**
In gap 6-12 months		0.68**	0.69**	0.67**
In gap 12-24 months		1.19**	1.23**	1.22**
In gap 24- months		1.27**	1.37**	1.35**
Labor force exp.		-0.07**	-0.08**	-0.07**
No. prev. Jobs		0.19**	0.15**	0.14**
Lower second. w/out occ. training			0.13*	0.03
Lower second. with occ. training (ref.)				_
Upper second. w/out occ. training			-0.47**	-0.48**
Upper second. with occ. training			-0.18**	-0.10*
Tech. college/University degree			-0.26**	0.04
SIOPS				-0.02**
No. of events				3323
-2*diff(logL)	116.34	1449.51	1523.637	1589.45

Table 1: Occupational mobility men, cohort compariso	n
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Significance: $+ \alpha \le 0.1$; $* \alpha \le 0.05$; $** \alpha \le 0.01$. Source: own calculations based on data from the GLHS-West.

Variables	Model 1	Model 2	Model3	Model 4
_				
Constant	-5.54**	-5.27**	-5.45**	-4.78**
Cohort 30	-0.31**	-0.26**	-0.33**	-0.36**
Cohort 40 (ref.)				
Cohort 50	0.20*	0.06	0.13	0.15+
Cohort 55	0.29**	0.14*	0.22**	0.24**
Cohort 60	0.53**	0.27**	0.34**	0.31**
Cohort 64	0.29**	0.10	0.27**	0.24**
Cohort 71	0.55**	0.26**	0.41**	0.38**
In job up to 6 months (ref.)				-
In job 6-12 months		0.17+	0.18+	0.18*
In job 12-24 months		-0.08	-0.08	-0.07
In job 24-36 months		-0.18+	-0.18+	-0.17+
In job 36- months		-0.47**	-0.48**	-0.45**
In gap 0- 6 months		0.99**	0.96**	0.95**
In gap 6-12 months		0.23*	0.20+	0.19
In gap 12-24 months		0.24*	0.20*	0.19+
In gap 24- months		-0.43**	-0.46**	-0.48**
Labor force exp.		-0.09**	-0.09**	-0.09**
No. prev. Jobs		0.15**	0.15**	0.14**
Lower second. w/out occ. training			0.38**	0.28**
Lower second. with occ. training (ref.)				-
Upper second. w/out occ. training			0.35**	0.42**
Upper second. with occ. training			-0.03	0.09
Tech. college/University de gree			-0.08	0.22*
SIOPS				-0.02**
No. of events				2429
-2*diff(logL)	181.99	666.13	741.39	809.65

Table 2: Occupational mobility	women, co	hort comparison
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Significance: $+\alpha \le 0.1$; $*\alpha \le 0.05$; $**\alpha \le 0.01$. Source: own calculations based on data from the GLHS-West.

APPENDIX

Figure I: Percentages experiencing occupational mobility within 10 year window after labor market entry



Notes: transitions from/to first job > 6 months within a 10 year observation window for each cohort. Source: own illustration based on data from the GLHS-West.

Table I: Occupational Mobility for West German Birth Cohorts 1930-1971

Rank	Birth Cohort 1930	1940	1950	1955	1960	1971
1	domestic helpers	unskilled workers	unskilled workers	office workers	office workers	hairdressers
2	farm workers	domestic helpers	sales	sales	sales	food workers
3	unskilled workers	fitters	office workers	accountants	fitters	computer personell
4	farners	accountants	electromechanics	fitters	electromechanics	mail workers
5	fitter	sales	domestic help	electromechanics	accountants	miners
6	electromechanic	farmers	accountants	soldiers	maschinists	tailors

Six Most Frequent Sending Occupations

Six Most Frequent Receiving Occupations

Rank	Birth Cohort 1930	1940	195	1955	1960	1971
1	unskilled workers	unskilled workers	soldiers	office workers	office workers	hairdressers
2	tailors	office workers	office workers	accountants	fitters	miners
3	masons	transport workers	typists	soldiers	accountants	metal workers
4	domestic help	maschinists	teachers	administrators	soldiers	farmers
5	fitter	sales	accountants	maschinists	maschinists	carpenters
6	transport workers	soldiers	sales	transport workers	sales	cretaive artists

Source: own illustration based on data from the GLHS-West.