Direct and indirect job mobility in Germany and UK

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Abstract

This paper investigates direct job mobility (job-to-job mobility) and indirect job mobility (job mobility via unemployment) at the beginning of the employment career in Germany and UK. While the rationale of predicting outcomes of direct job mobility might have similar implications for both countries, outcomes for indirect job mobility might be different in both countries. Using the German Socio-Economic Panel 1984-2006 and British Household Panel Survey (BHPS), we will address the following two questions. First, we will investigate the gains/losses for direct job mobility and mobility through unemployment. We are especially interested in whether job mobility via unemployment has long lasting consequences on future earnings. Second, we address the question of whether income development depends on voluntary or involuntary job termination.

The analyses show that, in German rigid labour market, only direct voluntary job mobility brings permanent income rewards. Indirect job mobility, on the other hand, has a long-lasting scar effect not only for involuntary but also for voluntary job movers. In contrast, in UK not only voluntary direct job mobility but also voluntary indirect job mobility is rewarded by income gains.

Keywords: direct and indirect job mobility, fixed effects models, scar effect, trigger event, wage mobility
Consequences of job mobility for the subsequent earnings at the beginning of the employment career in Germany

placing indirect and direct job mobility into institutional context

Introduction

While many studies consistently report a high job mobility at the beginning of the employment career, the implication of job mobility on wages for young people has been less investigated (Ryan, 2001). Many researchers emphasize the positive effect of job mobility on wages and occupational status referring to job-search, matching, and stepping stones models. From this “job shopping” perspective, searching on-the-job in the early employment career might guarantee income and status rewards (Johnson, 1978). While searching on-the-job is usually associated with wage increases (Burdett, 1978) there are competing hypotheses concerning job mobility via unemployment. On the one hand, search and matching models imply that at least a voluntary unemployment phase might be used for an active job search and might result in higher earnings (Kahn and Low, 1982). There is some support for search and matching models from studies, mainly in Anglo-Saxon countries at the beginning of the employment career (Kahn and Low, 1982, Antel, 1991, Boheim and Taylor, 2000, Gregory and Jukes, 2001). On the other hand, human capital theory predicts wage losses because of the devaluation of job specific human capital (Becker, 1962). Unemployment might also serve as a signal for employers to differentiate between ‘good’ workers and ‘bad’ workers (Gibbons and Katz, 1991). From this perspective, job mobility via interruption (e.g. unemployment, inactivity), especially for people caught in the secondary labour market or in mismatched positions, instead reflects job-hopping between insecure and poorly paid jobs. These theories have been framed and tested mainly in flexible labour markets, and there have only been a few studies conducted on job beginners in countries with rigid labour markets like Germany’s. Furthermore, these theories have been applied without paying attention to national institutions that structure the labour markets.

Thus, in this article we will (re-)formulate the hypotheses for direct job mobility and indirect job mobility by taking into account the institutional settings of the German and British labour markets. Direct job mobility refers to job moves without interruption gaps. The job moves with interruption gaps (unemployment or inactivity) are defined as indirect job mobility. These two groups are compared to the stayers (control group) who are employed by the same employer at consecutive interview waves. While rationale for predicting the outcomes for job termination reasons of direct job mobility is fairly similar for both countries, the search and matching models might have different implications on outcomes for voluntary indirect job mobility in liberal countries. Since young people in a rigid labour market might be more susceptible to unemployment than in liberal countries, we will investigate whether scar effect of unemployment is more pronounced in Germany than in UK and whether unemployment in Germany has long lasting consequences on future earnings. In the next step of our analysis we will address the

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1 The data used in this paper were extracted using the Add-On package PanelWhiz v2.0 (Sep 2006) for Stata. PanelWhiz was written by Dr. John P. Haiksen-DeNew (john@panelwhiz.eu). The following authors supplied PanelWhiz SOEP Plugins used to ensure longitudinal consistency, John P. Haiksen-DeNew (29), Markus Hahn and John P. Haiksen-DeNew (18).
question of whether income development for direct and indirect job mobility depends on the reasons for job termination. Before presenting the results, job mobility theories will be placed in the institutional context of the German and the British labour market. Then we will give a description of the data and descriptive statistics. Subsequently, statistical models will be discussed. After the discussion of the results, the findings will be summarized in the conclusion.

### Job mobility theories and the institutional context

While Germany is associated with an exceptionally tight linkage between individual education and job status, this linkage is rather weak in UK (Allmendinger, 1989, DiPrete et al., 1997, Gangl, 2004). The structure of the educational and vocational system, embedded in a coordinated market economy in Germany, creates a strongly skill- and occupation-based labour market (Soskice, 1999). Since in coordinated market economies the vocational training standards are partly arranged according to companies’ requirements, employers refer to these certificates as signals for the employees’ key qualifications. Employees use such qualifications as a basis for negotiations and claims to an apt starting salary. Both sides, employee and employers, are interested in a good match, which allows employees to amortize their training costs and save employers on-the-job training costs. Thus, in the German context, strongly skill-based allocation patterns provide relatively high starting wages. Stabilization of earnings trajectories is achieved not only through a highly skill- and occupation-based labour market, but also through the specific combination of labour market institutions (DiPrete, 2003, Gangl, 2004, Gangl, 2003b). Among other institutional factors, high employment protection legislation (EPL) combined with elaborate legal constraints on employers might play a substantial stabilizing role for earning trajectories because they reduce inter-firm mobility and foster internal job promotions. Recent studies consistently indicate that high EPL is associated with a low level of overall mobility and turnover in the labour market (DiPrete et al., 1997, DiPrete et al., 2001, Gangl, 2003b).

The British employment system can be classified as an uncoordinated market economy with decentralized and dualistic industrial relations. Low-trust relationships involve easily monitored and interchangeable workers who have limited scope for influencing firm-internal decisions (Soskice, 1999). Employment protection legislation (EPL) is the lowest in Europe, enabling employers to screen for promising workers and dismiss less promising workers (OECD, 2004). Because of low EPL and because of weak linkage between vocational and occupational system many job beginners start their first jobs in inadequate and precarious positions with the prospect of working their way up to better and more qualified positions (Oppenheimer and Kalmijn, 1995). Thus, starting wages are relative low for job beginners but increase with job tenure.

### Direct moves

There are well-known implications of human capital and job mobility theories for wage changes. Human capital theory predicts that workers accumulate general but also job specific human capital, part of which is not transferable (Becker, 1962). The implication of human capital accumulation is that real wages rise with experience and tenure, but at a decreasing rate. The assumption of returns to tenure implies the loss of the firm-specific human capital because of job
termination which in turn leads to wage losses. The human capital approach has been challenged on the basis of search and matching models. Both models imply that less favourable job characteristics induce workers for an active job search, which might result in voluntary job termination. Studies on voluntary job mobility report that unfavourable subjective and objective job characteristics initiate voluntary job mobility, which has positive rewards on the subsequent employment career (Gesthuizen and Dagevos, 2008, Kalleberg and Mastekaasa, 2001). However, the rewards of voluntary job mobility should depend on whether the job search occurs on-the-job or off-the-job. In its original version the search model was formulated for the off-the-job scenario and assumes a worker to define reservation wage before a job offer is received. The job offer is accepted if the offered wage is higher than the reservation wage. Burdett (1978) introduced in his model two reservation wages X and Y (with X < Y). An unemployed worker will accept a job offer if the offered wage is greater than X. If an unemployed worker will accept the job offer and the wage offer is less than the reservation wage Y, the worker will continue the job search on-the-job (Burdett, 1978). Given that career beginners might start in mismatched position with a wage offer above reservation wage X but below the reservation wage Y the on-the-job search model would predict positive outcomes.

The explanation for direct voluntary job mobility is therefore straightforward: searching on-the-job provides employees with information about the wages of the new job and they switch jobs only if the new job offers better earnings than their current job. Thus, compared to the stayers, the income of voluntary direct movers should increase. For involuntary direct job movers, it might be argued that the less productive and the less motivated workers might be subject to dismissals, which would imply lower wages in a new job. However, the fact that employees move to the next job without an interruption gap indicates that such job movers have applicable skills and are motivated to find a proper job within the time period of the notice given by the employer. Thus, involuntary direct job mobility might not necessary lead to a scar effect.

**Indirect moves**

Job mobility is often associated with a phase of unemployment, and there are competing hypotheses concerning job mobility via unemployment (Arulampalam *et al.*, 2001 for an introduction). While human capital and signalling theories assume a negative effect on post-unemployment wages, search and matching theories assume that an active job search might lead to the improvement of post-unemployment wages. At the beginning of the employment career, an unemployment phase might be a part of normal ongoing job relocations and have no or even a positive effect on subsequent earnings. The search and matching models assumes improving allocation via a voluntary unemployment spell. The proponents of this view argue that the search and mobility costs of unemployment are compensated by increased wage gains resulting from a more intensive job search (Kahn and Low, 1982). For instance, job termination by either side due to a poor match quality might improve the career opportunities of employees. A good job match between worker and job results in higher productivity and is reflected in higher wages. Abbring et al. (1998) found that post-displacement wages are higher than pre-displacement wages in the United States and the Netherlands. There is also some evidence that (voluntary) unemployment has a positive effect on re-entry wages for
young workers. Kahn and Low (1982) find in the USA that, for young workers, voluntary job exits result in 10% higher wages than on-the-job searches do. Antel (1991) found that, for young people in the USA, wages gains via a voluntary unemployment spell are double as high as for workers moving directly between jobs. Boheim and Taylor (2000) found that a prolonged off-the-job search in the UK is often rewarded with a better worker-firm match, and unemployment has less affect on future labour market behaviour for younger workers. Gregory and Jukes (2001) also found that in the UK, although the unemployment rate for younger employees is much higher than for older employees, unemployment has no effect on future earnings for people under 24, but becomes sharply pronounced for prime-age and older men. The investigation shows that, at least for higher-educated young adults in the UK, the first unemployment period improves their occupational status compared to the pre-unemployment status (Author A). However, none of the job matching models necessarily implies that job movers with interruptive gaps receive higher rewards in absolute terms than stayers. Matching models assume that workers starting in mismatched positions improve their positions with the increasing duration of employment.

*Human capital theory* argues that job termination is associated with income losses, not only because of the permanent loss of company-specific human capital, but because it also precludes the accumulation of work experience and leads to a deterioration of general skills. Unemployment might also be a *signal* of an employee’s low productivity. Lacking information about worker's productivity, employers seek signals which may convey information about the employee (Gibbons and Katz, 1991). The statistical discrimination models describe this phenomenon in terms of the costs of information. Since the productivity of an individual is expensive to evaluate, employers refer to signals and hire employees without unemployment gaps. For the unemployed this implies lower chances to re-start in adequate positions. While studies for liberal countries report high wage penalties (about 10-20%) upon job re-entry (Fallick, 1996, Arulampalam et al., 2001, Arulampalam, 2001, Gangl, 2006), the existing studies for Germany report earning losses between only 1 and 6% (Burda and Mertens, 2001, Gangl, 2006). Unemployment might also have a scar effect, not only on the re-entry wages, but also on the future wage development. In recent research, the events that have long-lasting impacts on one's subsequent life course have been described as *trigger events*. Marriage, divorce, childbirth or job loss might have a triggering event on the intra-generational mobility processes (Gangl, 2006, Budig and England, 2001, DiPrete and McManus, 2000). In the UK the 6% wage penalty upon job re-entry amounts to a 14% penalty after the first three years of leaving unemployment (Arulampalam, 2001). For Germany, estimated losses after several years in employment amounts to 5% (Burda and Mertens, 2001, Gangl, 2006). We should keep in mind that the reported results that support the human capital and signal models are based on a sample including workers of all ages, and the mechanism behind unemployment at older ages might be quite different than at younger ages.

Confronting *human capital and signal models* with *search and matching* models, we believe that in the British institutional context search and matching provide a useful tool for explaining income outcomes after unemployment while the explanatory plausibility of search and matching
models for Germany is rather limited. Since employment protection legislation (EPL) in the UK is weak and mismatches at the beginning of employment career are part of an ongoing relocation process, the stigmatization of unemployed workers should be less pronounced than in labour markets with strict EPL. Studies on the entrapment hypothesis illustrate that less tightly regulated and segmented markets lead to a lower risk of being entrapped in lower status positions than in less regulated labour markets (Scherer, 2001).

In contrast, human capital and especially signal models should already play an important role at the beginning of the employment career in Germany. First, because reliable educational signals prior to the first job in Germany guarantee a high amount of job matches between qualifications and job demand, the trial and error strategy for achieving an appropriate job is less common than in liberal countries. It implies that employers are more careful about hiring unemployed workers than in liberal countries. Second, since employment protection legislation (EPL) in Germany is strict, employers’ hiring practices are risk-averse. Therefore, the EPL has consequences for the stigmatization of employees on the micro level (behavioural level of employers) and aggregates to low employer-initiated turn-over in the labour market on the macro level (Gangl, 2006). Thus, the stigma attached to unemployment should be more pronounced in Germany than in countries with less strict EPL. Third, dual labour market and segmentation theories also challenge the explanatory plausibility of the off-the-job the job search and matching theories (Doeringer and Piore, 1971). The strict EPL and highly skill and occupation based labour market in Germany creates insider-outsider labour markets and hinders the mobility from low paid secondary to well paid primary labour markets for wrongly allocated workers (Blossfeld and Mayer, 1988).

Similarly, the ‘entrapment’ hypothesis argues that, once being entrapped in a ‘bad’ job, young people are unlikely to move to ‘normal’ career positions. Studies on the entrapment hypothesis illustrate that more tightly regulated and segmented markets lead to a higher risk of being entrapped in lower status positions than in less regulated labour markets (Scherer, 2004). Büchel and Mertens (2004) also show that over-educated workers in Germany have worse career prospects than correctly allocated workers.

Taking into account these considerations, we believe that voluntary job termination will improve post-unemployment earnings in UK but not in Germany. Like voluntary direct job mobility, voluntary indirect job mobility might be motivated by the wish to improve the current position, which should be visible in wage stagnation prior to unemployment. However, in contrast to direct job mobility, workers usually have no income information about their future jobs at the time of job termination. Thus, given the strong stigma of unemployment in Germany, voluntary job termination might be very risky and lead to a scar effect on post-unemployed wages. Because of the negative signalling effect of unemployment, job termination initiated by employers should also have a scar effect on subsequent earnings. Furthermore, we also believe that, in contrast to UK, the trigger event of unemployment is more than a transitory phenomenon and should have a long-lasting scar effect on subsequent earnings in Germany. The re-employed coming from the secondary labour market and/or from mismatched positions, as well as the re-employed who lost ‘good’ positions prior to unemployment, are outsiders and face difficulties achieving insider status upon re-entering the labour market.
Data and methods

The analyses of this study are based on representative longitudinal data from the German Socio-economic Panel (GSOEP) from the British Household Panel Survey (BHPS). At each annual interview, the respondents are asked about socio-economic aspects, including a variety of questions about labour market related issues. This information is collected if the person is employed at the time of interview. The sample is selected as follows: observations of respondents with at least two subsequent interviews in the period from 1984 (for East Germany 1990) to 2006 and from 1991 to 2006 for UK, employed at the time of interview, have been collected. The whole sample is restricted to people who completed general schooling, vocational training or tertiary education and started their first job within observation window. The marginally employed are also excluded from the sample (working on a 480 Euro basis or less and casual workers). Employment spells following the spell that refers to job mobility (for direct at measurement point T and for indirect at measurement point T+1) and that refer to self-employment are truncated from the sample. Because we are investigating the impact of direct and indirect job mobility at the beginning of the employment career we have restricted our sample to job moves within the first 10 years after starting the first job. The final sample consists of 3,172 persons with 18,560 person year observations for Germany and 1,070 persons and 1070 year observations for UK.

To investigate income mobility, six states of employment were identified: the same employment (stayers), direct job mobility, job mobility via unemployment, job mobility via economic inactivity\(^3\), job mobility via maternity leave, and job mobility via additional education. The stayers (control group) are workers who are employed by the same employer at consecutive interview waves. Direct job mobility \(T + k\) (with \(k = 0, 1, 2, 3... 5-7, 8-14\) years) refers to the most recent employer change at measurement point T. Employment interruptions \(T + k\) (with \(k = 1, 2, 3... 5-7, 8-13\) years) refers to the most recent measurement point T of a given interruption. Since wage information is only available if the person is employed at the time of the interview, the measurement point for unemployed persons is lagged by one year \((T+1)\) while for direct job movers wage information during the year in which the job change occurred is used \((T)\).

The ending time for counting the time points \(T+k\) for all states is an interruption of the employment career (because of unemployment, inactivity, maternity leave, etc.). The time points after the job mobility (direct or indirect) can be measured more than once. For example, an individual with two unemployment gaps, which are followed by three working years, has measurement points \(T+1, T+2, and T+3\) for each post-unemployment experience. When indirect job mobility is followed by direct job mobility, we allow the further counting of time points for indirect job mobility for Germany but not for UK. The theoretical reasoning behind this approach is that change of employer after an unemployment spell might reflect ‘job-hopping’ rather than ‘job-shopping’ career patterns in Germany. Since we hypothesised that in UK unemployment spell has no negative impact on future income, we stop counting for measurement points \(T+k\) for

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\(^2\) The marginally employed and casual workers are excluded from our sample due to many missing information on weekly hours and gross monthly income. Furthermore, the marginally employed very often provide unrealistic gross hourly wages.

\(^3\) Economic inactivity encompasses categories non-working and family care.
indirect job mobility. For instance, an individual who has been working for three years after an unemployment spell and changes to another job (direct job mobility) has measurement points simultaneously for unemployment \((T+3)\) and for direct job mobility \((T)\) in Germany. In the fourth year such a person has measurement points \(T+4\) for unemployment and \(T+1\) for direct job mobility. In the case of UK there are no such intersections: we stop counting measurement points for post-unemployment career at the year \(T+2\). To test our assumptions we will analyze both version for Germany and UK.

To construct a reliable control group we also control for job mobility via maternity leave and additional education. Table 1 reports the distribution of tenure for current employment by coming in employment from unemployment or by changing directly the employer.

Table 1 about here

The dependent variable is gross hourly wages constructed using the monthly gross income and the actual weekly hours (wages are deflated to 1991 prices). The following intervening variables, which are usually assumed to have an effect on wages, will be introduced as controls: age dummies, contractual weekly hours, permanent vs. fixed contracts, branch of industry (based on Singelmann 1978; modified by collapsing private market services), occupational class (based on Erikson and Goldthorpe 1992), company-size (four categories based on the number of employees), and region (for Germany: South Germany, North Germany, and East Germany; for UK: Middle, North, South England and Scotland). Note that these controls will be introduced for all models in the following tables. From the questionnaire, we have delineated the following reasons: voluntary, involuntary, left because fixed-term contract ended, and other reasons. Since job mobility between industries might have a negative effect on re-entry wages, we constructed variable for when individuals change the employer and/or branches of industry. Furthermore, the duration of unemployment and its quadratic term will be introduced in our models.

**Statistical Model**

To measure the effect of job mobility, we use a within estimator (Wooldridge, 2001) to control for constant unobserved worker characteristics while avoiding unmeasured factors that may affect both job mobility and wages. The within estimator demeans dependent and independent variables towards individual specific means. The within estimator estimates as to how the change in the mean value of the dependent variable depends on the change of the mean value of the independent variable.

For the \(i^{th}\) subject at the \(t^{th}\) measurement occasions, we use the following notation:

\[
\ln W_{it} = \gamma_t + X_{it}\beta + D_{itm}Z_{itm}\delta + \alpha_i + u_{it}
\]

\(\ln W\) is the natural logarithm of hourly wage at time (year) \(t\) for individual \(i\); \(X_{it}\) is a matrix of variables influencing a worker's human capital and earning potential. \(D_{itm}\) is a matrix of dummy variables, indicating the kind of job mobility \((m)\) at the time of job change \((T=0\) only available for direct moves), the years before \((T-k\) with \(k = 1, 2, 3, 4\)) and the years after the job change \((T+k\) with \(k = 1, 2, 3 \ldots 8-14\)). The matrix \(Z_{itm}\) stands for different characteristics of direct or
indirect job mobility (e.g. duration a person spent in the state \( m \), how often this person was already in this state, etc.). \( \epsilon_{it} \) is the measurement of error term. The vector \( \gamma_i \) captures the general effects of time since starting the first job. Finally, the term \( \alpha_i \) is a time invariant individual specific error term of unobservable characteristics. This term is a fixed individual effect and implies that there are time-constant differences between individuals. The introduction of this term rules out that a worker’s time constant unobserved characteristics affect the wages and the propensity of job mobility. However, term \( \alpha_i \) can’t control for the unobserved characteristics between individuals that vary over time.\(^4\) To account for the unobserved time varying characteristics we introduce part-time and full-time experience. Past studies were not always clear about which part of the unemployment penalty is explained by previous part-time or full-time work experience. Because such workers have less attachment to the labour market and are therefore less productive, their post-unemployment wages should stagnate compared to the wages of the stayers (in full-time jobs). For these reasons, the distinction between full-time and part-time experience (and their square) will be introduced. Note that though we have controlled for potential sample selection due to any stable unobserved characteristics, the dynamic factors around unemployment might have an effect on how quickly unemployed return to the labour market. Furthermore, dynamic unobserved characteristics for the pull or push factors into the labour market might differ across countries and make a comparative inference among countries less reliable. To deal with selection bias, we introduce estimator proposed by Wooldridge (1995).

**Results**

1 Direct and indirect job mobility

Model 1 in Table 2 reports the results for direct and indirect job mobility after the controls in the X matrix described in our data and method section. These controls will be introduced in all of the following models in X matrix. To start with indirect job mobility, compared to the stayers hourly wages drop about 8 percent one year before becoming unemployed for Germans workers while there are no pronounced losses for British workers (Model 1-4). Upon the re-entry of the labour market (at \( T+1 \)) the income losses amounts to 6 percent in Germany. When we follow persons the next eight years after unemployment interruption it becomes evident that the trigger event of unemployment has a long-lasting scar effect staying constant between 5-8%. We interpret bad restart and long-lasting consequences after unemployment interruption in terms of signalling effect in Germany. As discussed in our method part we also control for interruption states other than unemployment (coefficients not shown). Additional education reward workers by 4-7% in the following employment career but starting from the third year after leaving educational institutions. Economic inactivity penalizes workers

\(^4\) If term \( \alpha_i \) is not constant across individuals, the effect of unemployment is only consistent for the unemployed workers (average treatment effect for the treated) but can’t be generalized as an average effect for the population (average treatment effect), i.e. this effect might not be consistent for the group of workers, who were not unemployed, but in the case that they would become unemployed.
to a similar degree as unemployment (from 7-9%). Direct job mobility improves the subsequent wages approximately by 3-5% for the following seven years compared to the stayers. In UK workers changing their jobs indirectly gain about 14% compared to the stayers. These positive outcomes slightly decrease in the next 5 years but stay on high level. These results are in line with our argumentation: like on-the-job search an unemployment phase in UK is a part of ongoing job relocations. Indeed, the outcomes for indirect job mobility and the outcomes for direct job are not much different for all measurement points (compare direct and indirect job mobility in Model 1). Rewards of direct job mobility in UK are much higher than in Germany. These results are also in line with our argumentation keeping in mind that job shopping perspective is more appropriate to describe career patterns in UK than in Germany. It might be worth mentioning, that like in Germany the extra education rewards workers in the third year upwards after leaving educational institutions by 6-8% and economic inactivity punishes workers by about 6%.

In the following we address the question of different aspects of unemployment characteristics on subsequent income development. First, we introduced in Z matrix an additional variable for recalled workers. Neither in Germany nor in UK this variable provides additional explanation (Model not shown). In Model 2 we introduced a variable “no change of industry”. In Germany 32% of the workers change the branch of industry upon re-entering the labour market while in UK almost 45% percent change the branch of industry. According to this model specification, the dummy variables for indirect job mobility \((T+k)\) stands for \textit{indirect job movers who re-start employment in the new branch of industry}. The scar effect of unemployment by changing the branch of industry amounts to 10% at \(T+1\) and stays constant for the next eight years in Germany. The scar effect for those without changing branch of industry is about 5% smaller than for those staying in the same branch of industry and statistical significant (test not shown). In UK the change of industry has no additional effect on subsequent income development. These results should be also interpreted on the background of institutional context. In a strongly skill- and occupation-based labour market of Germany the change of branch of industry implies devaluation of human capital while in UK occupational and branch specific skills are less important than broad (academic) education.

Finally, we also introduced the duration of unemployment. First, at average young workers in UK spend about 6 months in unemployment whereas in Germany the duration of unemployment is almost as double as high (about 11 months). There are several reasons that might explain the differences between Germany and UK. First, economic boom in the last two decades in UK makes it easier for workers in UK than in Germany to find a new job. Second, lower unemployment benefits and weak EPL foster re-integration of unemployment into the labour market in liberal countries (Gangl, 2003a). In our context we are interested whether gains in UK and losses in Germany is a function of unemployment duration. To start with Germany, unemployment duration does not explain the income losses after unemployment spell (compare Model 2 with Model 3). These results imply that scar effect of unemployment in Germany can’t be explained in terms of devaluation of specific human capital (job specific skills). We explain these losses in Germany in terms of stigma attached to unemployment. For UK prolonged unemployment has slightly negative impact on income. We also introduced dummy variables for
duration of unemployment (between 0 to 3 months, between 4 and 8 months and 9 months and more). For the first 9 months the income gains amounts to about 18% and drop 10% for unemployment duration more than 9 months.

Table 2 about here

1.1 Voluntary vs. involuntary moves

Involuntary leave from previous employment is more pronounced for those coming from unemployment (28% for Germany and 26% for UK) than from those changing their jobs directly (18% for Germany and 6% for UK). In contrast, leaving a job voluntarily is dominated by those changing their job directly (35% in Germany and 50% in UK), rather than by those coming from unemployment (12% in Germany and 20% in UK). Job changes caused by fixed contracts are reported by 12% of employees who came from unemployment and only by 6% who moved directly for Germany and 26% and 7% for UK, respectively. In Model 1 of the results for voluntary and involuntary job mobility are reported for $T$ for direct and $T+1$ for indirect job mobility).

Beginning with direct job mobility, voluntary job change brings a 4% gain compared to the stayers in Germany and about 14% in UK (Table 3). These results are in line with matching and searching models that predict higher wages for an on-the-job search (Burdett, 1978). For involuntary direct job movers, there are no earning gains in the year of job change in Germany but about 9% in UK.

According to the off-the-job search and matching models, voluntary job mobility via unemployment might be a good strategy for improving one’s ‘bad’ position. Like voluntary direct job mobility, indirect voluntary job mobility is associated with a higher probability of being in a mismatched position. Indeed, voluntary job mobility in UK is rewarded by about 14%. As we argued in the theoretical part, in the German context, with a rigid labour market and low worker turn-over, the employer’s hiring practices are risk-averse, and the stigma attached to unemployment concerns all unemployed workers. Indeed, an unemployment spell penalizes the unemployed, irrespective of the reasons for job mobility (Model 1). Workers terminating their employment because of fixed contracts also suffer wages penalties compared to the control group and to their pre-unemployment income. Thus, in contrast to liberal countries like UK, voluntary job mobility via unemployment does not improve future careers in Germany. Therefore, for voluntary job moves via unemployment, search and matching models provide no valid explanation.

Table 3 about here

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5 To facilitate the interpretation of the covariates, the time period $T+1$ and $T-1$ for indirect job mobility and $T$ and $T-1$ for direct job mobility are omitted in the equation.
Conclusion
Our study contributes to the growing amount of literature on job mobility in several aspects. First, many studies do not differentiate at all or do not differentiate in a systematical way between job beginners and older workers (Gangl, 2006, Arulampalam, 2001, Gregory and Jukes, 2001). Since the mechanisms behind direct and indirect job mobility are different for job beginners and workers in their middle and later employment career, it is important to adjust labour market theories to the job beginners. Second, many theories have been framed and tested for liberal countries (Abbring et al., 1998, Kahn and Low, 1982, Boheim and Taylor, 2000). However, they have serious limitations for the German context with its strict labour market. Third, it is important to distinguish between the reasons why workers leave their jobs (Antel, 1991). Thus, direct and indirect mobility at the beginning of employment career in Germany and UK shed light on how job changes in the early career impact individual life courses in countries with strict labour markets.

To start with direct job mobility, the results show a quite optimistic picture for wage dynamics in both countries. Compared to stayers, direct job mobility improves wages, even seven years after the job change. Most of direct job mobility is initiated by voluntary job termination and voluntary job movers improve their positions over stayers and in terms of their previous income, which is in line with our theoretical argumentation. The results are especially pronounced for young people in UK.

Since indirect job mobility has a negative impact on the life course of individuals, job mobility via unemployment has been discussed in more detail. With respect to indirect job mobility we addressed two questions: does unemployment have long lasting consequences on income development and does voluntary job termination improve re-entry income. Regarding the first question, the trigger event of unemployment penalizes the unemployed not only upon re-entry into the labour market, but it also has a long-lasting consequence on subsequent earnings in Germany. These long-lasting wage losses in Germany clearly contradict the results in liberal countries. In UK unemployment phase serves young people to find a better job match and improve post-unemployment wages.

With regard to second question, indirect job mobility has a scar effect on re-entering the labour market, irrespective of the reasons of job termination (voluntary decisions, involuntary decisions or fixed contracts) in Germany. While wage gains in UK confirms search and matching models for UK, high wage penalties for voluntary movers in Germany, contradict the assumptions of the of search and matching models that predict higher rewards for an active job search when unemployed (Kahn and Low, 1982).
### Table 1

*Time Points for Current Employment by coming into Employment from Different States (Germany)*

<table>
<thead>
<tr>
<th>Employment tenure</th>
<th>After direct job change a</th>
<th>After unemployment interruption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (Col %) b</td>
<td>N (Col %) b</td>
</tr>
<tr>
<td>0 years</td>
<td>2,185 (12.72)</td>
<td></td>
</tr>
<tr>
<td>1 years</td>
<td>1,663 (9.68)</td>
<td>861 (5.01)</td>
</tr>
<tr>
<td>2 years</td>
<td>1,127 (6.56)</td>
<td>529 (3.08)</td>
</tr>
<tr>
<td>3 years</td>
<td>814 (4.74)</td>
<td>343 (2.00)</td>
</tr>
<tr>
<td>4 years</td>
<td>574 (3.34)</td>
<td>246 (1.43)</td>
</tr>
<tr>
<td>5 - 7 years</td>
<td>896 (5.22)</td>
<td>410 (2.39)</td>
</tr>
<tr>
<td>8 or more years</td>
<td>358 (2.08)</td>
<td>170 (0.99)</td>
</tr>
<tr>
<td>Total</td>
<td>(44.35)</td>
<td>(14.90)</td>
</tr>
</tbody>
</table>

*Source: German Socio-Economic Panel, 1984-2006*

*Notes:*

a For direct job mobility T+0 is the year when a person changed his/her job.
b Refers to the percentage of all year observations.

---

### Table 2

*Time Points for Current Employment by coming into Employment from Different States (UK)*

<table>
<thead>
<tr>
<th>Employment tenure</th>
<th>After direct job change a</th>
<th>After unemployment interruption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (Col %) b</td>
<td>N (Col %) b</td>
</tr>
<tr>
<td>0 years</td>
<td>1,567 28.74</td>
<td></td>
</tr>
<tr>
<td>1 years</td>
<td>669 12.27</td>
<td>519 9.52</td>
</tr>
<tr>
<td>2 years</td>
<td>356 6.53</td>
<td>327 6.00</td>
</tr>
<tr>
<td>3 years</td>
<td>193 3.54</td>
<td>212 3.89</td>
</tr>
<tr>
<td>4 years</td>
<td>114 2.09</td>
<td>154 2.82</td>
</tr>
<tr>
<td>5 - 7 years</td>
<td>128 2.35</td>
<td>265 4.86</td>
</tr>
<tr>
<td>8 or more years</td>
<td>32 0.59</td>
<td>112 2.05</td>
</tr>
</tbody>
</table>

*Source: BHPS, 1991-2006*

*Notes:*

a For direct job mobility T+0 is the year when a person changed his/her job.
b Refers to the percentage of all year observations.
### Table 2

Unstandardized Coefficients for the Effect of Direct and Indirect Job Mobility on Future Hourly Wage: Fixed Effect Models

<table>
<thead>
<tr>
<th></th>
<th>Germany Model 1</th>
<th>Germany Model 2</th>
<th>Germany Model 3</th>
<th>UK Model 1</th>
<th>UK Model 2</th>
<th>UK Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect job Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T minus 3</td>
<td>-0.022 +</td>
<td>-0.023 +</td>
<td>-0.032 **</td>
<td>0.022</td>
<td>0.024</td>
<td>0.017</td>
</tr>
<tr>
<td>T minus 2</td>
<td>-0.022 *</td>
<td>-0.023 *</td>
<td>-0.033 **</td>
<td>0.028 +</td>
<td>0.021 +</td>
<td>0.023</td>
</tr>
<tr>
<td>T minus 1</td>
<td>-0.077 ***</td>
<td>-0.075 ***</td>
<td>-0.083 ***</td>
<td>-0.015</td>
<td>-0.012</td>
<td>-0.023</td>
</tr>
<tr>
<td>T plus 1</td>
<td>-0.060 ***</td>
<td>-0.102 ***</td>
<td>-0.097 ***</td>
<td>0.145 ***</td>
<td>0.140 ***</td>
<td>0.164 ***</td>
</tr>
<tr>
<td>T plus 2</td>
<td>-0.054 ***</td>
<td>-0.094 ***</td>
<td>-0.090 ***</td>
<td>0.132 ***</td>
<td>0.128 ***</td>
<td>0.152 ***</td>
</tr>
<tr>
<td>T plus 3</td>
<td>-0.045 **</td>
<td>-0.080 ***</td>
<td>-0.076 ***</td>
<td>0.113 *</td>
<td>0.108 *</td>
<td>0.132 **</td>
</tr>
<tr>
<td>T plus 4</td>
<td>-0.072 ***</td>
<td>-0.101 ***</td>
<td>-0.099 ***</td>
<td>0.140 *</td>
<td>0.135 *</td>
<td>0.161 **</td>
</tr>
<tr>
<td>T plus 5</td>
<td>-0.073 *</td>
<td>-0.092 ***</td>
<td>-0.081 *</td>
<td>0.086</td>
<td>0.082</td>
<td>0.100 +</td>
</tr>
<tr>
<td>T plus 6-8</td>
<td>-0.081 ***</td>
<td>-0.114 ***</td>
<td>-0.114 ***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Direct job Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T minus 1</td>
<td>-0.035 ***</td>
<td>-0.031 ***</td>
<td>-0.030 ***</td>
<td>-0.008</td>
<td>-0.008</td>
<td>-0.008</td>
</tr>
<tr>
<td>Year job change</td>
<td>0.032 ***</td>
<td>0.036 ***</td>
<td>0.036 ***</td>
<td>0.124 ***</td>
<td>0.123 ***</td>
<td>0.126 ***</td>
</tr>
<tr>
<td>T plus 1</td>
<td>0.039 ***</td>
<td>0.044 ***</td>
<td>0.044 ***</td>
<td>0.141 ***</td>
<td>0.140 ***</td>
<td>0.142 ***</td>
</tr>
<tr>
<td>T plus 2</td>
<td>0.040 ***</td>
<td>0.045 ***</td>
<td>0.044 ***</td>
<td>0.130 ***</td>
<td>0.130 ***</td>
<td>0.132 ***</td>
</tr>
<tr>
<td>T plus 3</td>
<td>0.037 ***</td>
<td>0.042 ***</td>
<td>0.040 ***</td>
<td>0.153 ***</td>
<td>0.153 ***</td>
<td>0.154 ***</td>
</tr>
<tr>
<td>T plus 4</td>
<td>0.027 *</td>
<td>0.032 *</td>
<td>0.030 *</td>
<td>0.098 **</td>
<td>0.098 **</td>
<td>0.097 **</td>
</tr>
<tr>
<td>T plus 5</td>
<td>0.050 ***</td>
<td>0.053 ***</td>
<td>0.049 ***</td>
<td>0.085 *</td>
<td>0.086 *</td>
<td>0.085 *</td>
</tr>
<tr>
<td>T plus 6-8</td>
<td>0.065 **</td>
<td>0.065 **</td>
<td>0.057 *</td>
<td>0.156 +</td>
<td>0.157 *</td>
<td>0.153 +</td>
</tr>
<tr>
<td><strong>Unemployment characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change of industry</td>
<td>0.053 ***</td>
<td>0.059 ***</td>
<td>0.059 ***</td>
<td>0.023</td>
<td>0.031</td>
<td></td>
</tr>
<tr>
<td>Duration of unemployment</td>
<td>-0.006 ***</td>
<td></td>
<td></td>
<td>-0.004 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of unemployment (squared)</td>
<td>0.000 **</td>
<td></td>
<td></td>
<td></td>
<td>0.000 +</td>
<td></td>
</tr>
<tr>
<td>Number of subjects</td>
<td>3027</td>
<td>3027</td>
<td>3027</td>
<td>996</td>
<td>996</td>
<td>996</td>
</tr>
<tr>
<td>Number of observations</td>
<td>18548</td>
<td>18548</td>
<td>18548</td>
<td>6067</td>
<td>6067</td>
<td>6067</td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
<td>0.43</td>
<td>0.43</td>
<td>0.43</td>
</tr>
<tr>
<td>LL</td>
<td>2998.20</td>
<td>2935.22</td>
<td>2976.55</td>
<td>-1039.57</td>
<td>-1039.07</td>
<td>-1029.35</td>
</tr>
</tbody>
</table>

**Source:** GSEP: 1984-2006; BHPS: 1991-2006

**Notes:**
- Full set of control variables for Model 3: full-time contract, permanent contract, branch of industry, region, occupational class, educational achievements (for UK), company size, age variable (dummies), term lambda and dummy variables for other employment interruptions (maternity leave, education, economic inactivity).

- + p<0.10, * p<0.05, ** p<0.01, *** p<0.001
Table 3
Effect of job termination on Hourly Wage upon re-entering the labour market

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 1</td>
</tr>
<tr>
<td><strong>Indirect job mobility (T+1)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Voluntary                | -0.057  | ** 0.190   | ***
| Involuntary              | -0.056  | *** 0.024  |
| Because of fixed contract| -0.059  | ** 0.172   | ***
| **Direct job mobility (T+0)** |         |            |
| Voluntary                | 0.040   | *** 0.136  | ***
| Involuntary              | 0.024   | 0.096      | *
| Because of fixed contract| 0.080   | ** 0.129   | **

Source: GSEP; 1984-2006; BHPS; 1991-2006

Notes:
Full set of control variables for all models: actual job experience (+squared), full and part time experience (+squared), full-time contract, permanent contract, branch of industry, region, occupational class, educational achievements (for UK), company size, age variable (dummies), term lambda and dummy variables for other employment interruptions (maternity leave, education, economic inactivity).

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001
LITERATURE:


