Does Temporary Employment Help to Reintegrate the Unemployed? Evidence from British and German Panel Data.[1]

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Abstract

This paper investigates the integrative power of taking up a temporary job for unemployed youth compared to the situation of remaining unemployed and searching for a better job. Using comparable panel data from Germany 1984-2007 and the United Kingdom 1991-2007, we analyze the career patterns for a period up to four years after exiting unemployment to a temporary job. We find that temporary jobs can reintegrate young British unemployed into rather stable employment, but these positions are not accompanied by higher job qualities in terms of higher wages or higher permanent contract chances. In Germany, the advantages of starting a temporary job exist both with regard to the overall subsequent employment chances and with regard to wages. Thus, the integration perspective seems to describe better the German situation than the British situation. However, full integration advantages are also not secured in Germany because temporary jobs are not a better stepping-stone to permanent contracts than the strategy of off-the-job search.

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1. Introduction

Recent sociological research has identified temporary employment as the new social inequality dimension in Europe (DiPrete *et al.*, 2006). Temporary contracts have been promoted as an instrument of labour market flexibilization in order to cope with rising structural uncertainty and unemployment in the course of globalization and increased international competition (Esping-Andersen and Regini, 2000; Mills and Blossfeld, 2005). Through fixed-term contracts, employers are given the chance to lower their labour input adjustment costs because these contracts reduce the firing costs (Cahuc and Postel-Vinay, 2002).

Whereas the core workforce is still relatively well sheltered, young workers are most at risk of needing to accept those flexible employment forms (Baranowska and Gebel, forthcoming; Blossfeld *et al.*, 2009). Because the early career is such an important stage of the life-course, with far-reaching consequences for later life chances (Müller and Shavit, 1998), the politically significant research question about the consequences of temporary jobs for young workers arises: Does a labour market start in temporary positions really damage an entrant's future career chances? Or do temporary contracts help to integrate, particularly unemployed, young workers into the labour market?

These opposing perspectives mirror an ongoing scientific debate whether these jobs have an integrative function, providing a bridge to the labour market or whether they lead to an entrapment in unstable job with bad career prospects (Booth *et al.*, 2002; Gash, 2008; Giesecke and Groß, 2003; Kalleberg *et al.*, 2000). Most of the research has shown that temporary contracts are associated with (transitory) disadvantaged labour market position compared to permanent contracts (Gash and McGinnity, 2007; Giesecke and Groß, 2003; Giesecke and Groß, 2004). This applies specifically to young workers, although the disadvantages are also only transitory and no permanent scars (Francesconi and Golsch, 2005; Gebel, forthcoming; McGinnity *et al.*, 2005; Scherer, 2004).

While this literature compares temporary contracts with permanent contracts, there is hardly any research available that investigates the integrative power of temporary contracts for unemployed workers. This is surprising, as temporary contracts have been introduced as a flexibilization instrument in order to improve the labour market integration of unemployed workers into stable employment at all and as an entry port to permanent contracts. It has been expected that employers refrain particularly from hiring unemployed because of high expected firing costs. For example, DiPrete et al (2006) can show for the U.S. and France that for 29–37 year old workers unemployment, holding a contingent job, and holding a low-

tenure non-contingent job form a hierarchy in terms of their effects on future employment, i.e. unemployment has the most negative implications. Korpi and Levin (2001) analyze more explicitly the integrative power of temporary jobs for unemployed in their study on Sweden. Using a small sample of 800 initially unemployed of age 25 to 54, they compare the short-term (1-year observation window) career consequences of taking up different employment forms. The results indicate that in comparison to remaining unemployed, taking up temporary work is negatively related to subsequent unemployment risk, while this unemployment reduction is not related to labour force exits but increased employment. They can even show that permanent and temporary jobs obtained by unemployed differ relatively little in the employment security they offer. Hagen (2003) demonstrates in a very technical paper for West Germany that temporary contracts increase the future employment chances for unemployed by decreasing the inactivity risks but not the unemployment risks. However, he finds also evidence for cycles of temporary employment for those who entered a temporary job.

We complement the scarce existing literature, first through a comparative study of the integrative power of temporary contracts for young unemployed workers in West Germany and the United Kingdom. Our research question invites such a comparative perspective because we know from previous cross-national research that the specific national institutional setting may mediate individual-level causal relations (DiPrete *et al.*, 1997; Mayer, 2004). Choosing two countries representing two different labour and welfare regimes allows us to learn about the general individual level relationships and the attenuating or intensifying effects of the national context. Second, we investigate the mobility between unemployment and (temporary) employment in a dynamic perspective using longitudinal data from the SOEP and BHPS. We analyze both the exit dynamics from unemployment to temporary employment and the longer run risks of temporary workers of re-entering unemployment as well as the chances to find permanent or stable employment. Third, such a broad look at employment dynamics is accomplished by studying wage dynamics with the aim of drawing a picture of the quality of the subsequent jobs.

This paper is organized as follows: Section 2 discusses two opposing scenarios – the segmentation and the integration scenario – of the consequences of taking up a temporary job for unemployed workers. In section 3, we describe the mediating influence of the institutional context in West Germany and the UK. Section 4 describes the data set and variables used as well as the statistical methods. In section 5, results of the empirical analysis are discussed and we offer concluding remarks in section 6.

2. Micro-level theories and hypotheses

Here, we focus on micro-mechanisms that relate temporary employment to subsequent career outcomes. A convenient starting point in the literature on temporary employment is the confrontation of the entrapment and the integration perspective (Gash, 2008; Giesecke and Groß, 2004; Kalleberg *et al.*, 2000; Korpi and Levin, 2001). We will draw on these perspectives but complement them further with micro-theoretical behavioural foundations

2.1. Segmentation/"Entrapment" perspective

According to *labour market segmentation theory*, temporary work is precarious work located in the secondary labour market connected with no/low mobility chances into the primary labour market.[2] While the primary labour market segment offers well-paid, stable positions with structured career ladders, the secondary segment entails low-paid, short term work providing no career prospects leading to cycles of temporary contracts and recurrent unemployment (Doeringer and Piore, 1971). Furthermore, following signalling and statistical discrimination theories, unemployed youth who (re-)enter his or her professional life in temporary jobs might be viewed as a bad hire by future employers, inducing a stigmatizing signal. Hence, it might not be the optimal strategy for unemployed youth to take up a temporary job but to reject such offers and look for better permanent job. While young unemployed taking up a temporary job have to invest their time and resources into their job, unemployed youth who reject such offers can allocate all their time resources and efforts to off-the-job search in order to find a permanent position (Hagen, 2003; Korpi and Levin, 2001). Hence, the search intensity and, thus, the search success for better and permanent positions should be higher for those who wait instead of entering precarious temporary jobs in the secondary labour market that are associated with cycles of temporary work and unemployment but no career chances for permanent and well-paid jobs. Thus, one can expect that taking up a temporary job is associated with persistently worse labour market prospects compared to staying unemployed with the chance to find directly better, permanent jobs *(Hypothesis 1)*.

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[2] For example, upward mobility into the stable primary sector is hindered because secondary sector jobs offer poorer opportunities for acquisition of skills since temporary employees have a shorter expected job duration (Forrier and Sels, 2003).

2.2. Integration/"Stepping-stone" perspective

The alternative integration or stepping stone perspective emphasizes the potential integrative power of taking up a temporary job for young unemployed. First, taking up a temporary position gives the unemployed, at least for a short time, the chance of gathering labour market experience. Furthermore, while periods of unemployment clearly undermine or even depreciate the accumulation of human capital, entering a temporary job may put a halt to human capital depreciation. However, this argument applies only if employers invest into the human capital of temporary workers and if the work experience in temporary job has any labour market value for entering better and permanent jobs at all. In contrast, the segmentation perspective neglects these skill potentials of temporary jobs. Thus, in line with the segmentation perspective the opposite effect may also apply, i.e. unemployed who wait a bit longer for better and permanent jobs may profit from much higher skill accumulation opportunities in future periods (Hagen, 2003).

Second, young unemployed who enter temporary jobs may search more effectively on-the-job for better and permanent jobs than in unemployment because they get access to social networks (Granovetter, 1973). Similarly, job-shopping theory underlines the importance of actual work experience to gain expectations and information on better matching vacancies (Johnson, 1978; Korpi and Levin, 2001). In contrast to the segmentation perspective, it is assumed that on-the-job search might be more effective than off-the-job search. This should particularly apply in institutional settings, when the support for unemployed in terms of activation measures, search assistance, and unemployment benefits is less pronounced. Third, taking up a temporary job instead of staying unemployed may be a positive signal of employability, while remaining unemployed produces stigma effects. This directly contradicts the signalling argument that was related to the segmentation perspective. Thus, it depends on the precariousness and degree of segmentation, which signalling argument prevails.

Fourth, employers may use temporary contract arrangements as a riskless screening device to prospect and recruit workers for permanent positions (Loh, 1994; Wang and Weiss, 1998). This argument should be especially relevant for young unemployed with low/no working experience, whose skills are difficult to recognise by employers. The screening costs are expected to be transferred – as a form of insurance against poor matching quality – from the employer to the temporary employees by paying them less. However, if the young employee fulfils the employer's expectations, the employment relationship will be maintained or converted into permanent contracts inducing incentives for training and compensating wage

growth.[3] In sum, according to integration or stepping stone perspective, we expect that taking up a temporary job instead of staying unemployed is associated with persistently better labour market prospects in terms of subsequent overall employment chances, chances to receive permanent contracts and higher wages (*Hypothesis 2*).

3. The mediating institutional context in Germany and Great Britain

Whether the segmentation or the integration perspective finally dominates remains an empirical question but it can also be expected the nation-specific institutional setting may enforce or hamper these counteracting forces. In this respect, the country comparison between Germany and Great Britain may provide an interesting qualitative test of this reasoning because these two countries represent two different labour and welfare states, while the general structural conditions or rather similar. However, instead of antagonizing Germany and the UK as two opposing regimes such as coordinated versus liberal market economy or conservative versus liberal welfare state, we think that more can be learned from discussing differences in single institutional dimensions and its micro-theoretical foundations.

Welfare state support for unemployed has been more generous in Germany than in the UK during our observation period. Higher and longer unemployment benefits should allow German young unemployed to search more effectively for suitable better and permanent jobs. For example, Gangl (2004) and Pollmann-Schult and Büchel (2005) have shown that the more generous unemployment benefits in Germany assure a higher quality of subsequent jobs. Furthermore, the higher expenditures on active labour market programs in Germany compared to the UK (OECD, 2009) should also guarantee a more successful search of unemployed workers because such programs (such as job search assistance, training measures, etc.) may counteract human capital depreciation and make job search more effective. However, welfare state support for unemployed – either in form of activation measures or passive benefits – has been substantially reduce in Germany during the observation period (OECD 2009) such that this institutional difference between the two countries became less pronounced and, thus, less important.

Employment protection and, thus, firing costs for permanent contract holders is rather rigid in Germany but there are few procedural inconveniences in the termination of employment

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[3] For those who fail to measure up to their respective employer's expectations, the contract will not be renewed.

contracts in Great Britain (OECD, 2004).[4] Dismissal regulations and high firing costs for permanent jobs are believed to be the primary reason why employers in Europe opt for temporary contracts more frequently (Blanchard and Landier, 2002; Cahuc and Postel-Vinay, 2002; Kahn, 2007). Thus, German employers should be more reluctant to use permanent contracts that are associated with high firing costs and they should rely more on temporary contracts, especially when hiring unemployed workers whose skills are usually low and difficult to assess. During our observation period, Germany implemented a partial labour market deregulation that successively facilitated the use of temporary contract while leaving the protection of permanent contracts unchanged at relatively high level (Gebel and Giesecke, forthcoming).[5] German employers do not only have incentives but also increasing possibilities to use temporary contracts. Thus, it can be expected that young German have higher propensity of entering temporary jobs compared to young British unemployed (*Hypothesis 3*).

Strict protection of regular employment hinders also the mobility, which deepens the segmentation of the labour market (Lindbeck and Snower, 1988). Hence, the German labour market can be expected to be far more segmented with strongly protected primary labour market sector and an isolated secondary sector. While this reduces the chances of entering a permanent positions both for unemployed workers who take up a temporary job and unemployed who wait and search for better jobs, *strong unionism* as another labour market institution may introduce a segmentation also between the two latter groups (Lindbeck and Snower, 1988). According to insider-outsider theory, unions represent collective interests of employed workers – irrespectively of their contract status – as labour market insiders with the (unintended) consequence of hampering the labour market chances of unemployed, especially young unemployed workers, as outsiders, for example by enforcing high wage floors and securing positions and career progression of employed workers (Van der Velden and Wolbers, 2003). In contrast, unions may counteract the segmentation induced by employment protection between permanent contract holders in the primary and temporary contract holders in the secondary segment because they represent the interests of all employed workers irrespectively of their contract status. For example, unions may also get involved with better

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[4] The strictness of employment protection legislation can be summarised by the OECD EPL sub-index concerning regular employment, which ranges between 1 and 5 (OECD, 2004). The value of this index for permanent contracts in West Germany is estimated to be 2.7 and for Great Britain 1.1.

[5] In this respect, Gebel and Giesecke (forthcoming) can show that this partial deregulation has been accompanied by a strong increase in the relative incidence of temporary employment among youth compared to the core workforce.

employment conditions (e.g. wages) for temporary workers and may fight against dismissals of temporary workers.[6] Thus, it can be expected that, in Germany, where unions are stronger (Ebbinghaus and Visser, 2000), starting a temporary job instead of remaining unemployed and searching for better, permanent jobs is a more successful strategy for young unemployed workers in terms of subsequent employment chances and employment quality than in the UK (*Hypothesis 4*). However, the higher benefits in Germany should be only weakly pronounced because the supportive welfare state that allows for effective search strategies for those who remain unemployed and because the labour market segmentation between permanent and temporary jobs induced by stronger employment protection may counteract the benefits in Germany.

4. Research design

4.1. Data and variables

The empirical analyses are based on data from the British Household Panel Study (BHPS) for the period 1991-2007 and the German Socio-Economic Panel (GSOEP) for the period 1984-2006 that allow observing individual labour market entry processes over several years in a dynamic life-course perspective (Haisken-DeNew and Frick, 2006; Taylor *et al.*, 2007). The design of BHPS and GSOEP are rather similar guaranteeing a high degree of comparability. Both BHPS and GSOEP collect on a yearly base longitudinal representative micro-data, like education, employment and earnings for individuals. In addition to information collected annually, both data sets retrieve some retrospective information about family background and a detailed monthly calendar of economic activity (Halpin, 2000). For the purpose of comparability, the analysis is restricted to West-German citizens, because of economic differences between West and East Germany which call for a separate analysis.[7]

We use an inflow sample of young unemployed and follow these individuals over their subsequent employment career using data from the repeated monthly activity calendar information.[8] Particularly, we are interested in the exit from unemployment to temporary jobs

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[6] However, one could argue that unions only achieve better employment conditions (higher wages) and job security for permanent contract holders by explicitly allowing employers to use bad, insecure temporary jobs as a buffer stock against economic shocks.

[7] Furthermore, temporary contracts have a different nature in East Germany because of the large share of FTC employment that is subsidised by active labour market programmes (Rudolph, 2000).

[8] We observe unemployment spells of youth during their first 12 years of potential labour market experience, which start at the minimum institutional defined graduation age. Based on institutional knowledge of the national

and the career consequences of taking up such a temporary contract instead of remaining unemployed. Our central variable of exiting unemployment into temporary employment is a binary indicator that takes the value 1 for exits into temporary employment and 0 for remaining in unemployment. Temporary contracts are defined as written, formal contracts of limited duration that end automatically on expiry. Unfortunately, the question about the temporary nature of the employment is only available at the time of the interview, on a yearly base.[9] Hence, the information about the contract type should coincide with the contract type of the new job after exiting unemployment if there is no job or contract change between the month of unemployment exit and the survey month.[10] In order to reduce the degree of misclassifications we exclude cases with a large gap (more than 12 months) between the unemployment exit and the time of the interview). As we define it and in line with many previous studies (Giesecke and Groß, 2003; McGinnity *et al.*, 2005), fixed-term work does not include apprenticeships, which are always based on fixed-term contracts in Germany and which are seen as part of the German education and training system. The alternative exit routes from unemployment, such as receiving directly a permanent job, re-entering education/training, becoming inactive, or to go into business for oneself are also defined a

education systems (Schneider, 2008) we define the typical institutional defined graduation age separately for each country and each education program: in Germany Casmin 1ab (15yrs), 1c (18yrs), 2a (19yrs), 2b (16yrs), 2cgen (19yrs), 2cvoc(22yrs), 3a(23yrs), 3b(24yrs) and in the UK Casmin 1abc (16yrs), 2a (18yrs), 2b (16yrs), 2cgen (18yrs), 2cvoc (20yrs), 3a(20yrs), 3b (22yrs). While these graduation ages represent lower limits, the long perspective of 12 years of potential labour force experience will also capture enough observations for people who graduate at later ages due to grade repetition, drop outs, longer study durations and multiple educations.

[9] In the SOEP, the contract information is available for all new employment relationships since 1984 and for all current employment relationships at the time of the interview since 1995.

[10] The average time span between the unemployment exit date and the interviewing date is 5.5 (6.1) months in our German (British) sample. Due to this short gap, the number of misclassifications should be rather low because temporary contracts have on average longer lengths. Furthermore, there is a state dependence in the contract status making cycles of temporary contracts as well as employer changes without contract changes more probable. Moreover, changes from regular contracts to temporary contracts within the short interval between unemployment exit and interviewing date should be very rare events because it is forbidden for employers by law to make such a transformation. Nevertheless, on the one hand, we will underestimate the incidence of extremely unsuccessful temporary contracts that end in employment exits already before the interviewing data. On the other hand, we will underestimate the incidence of extremely successful temporary contracts that end up in permanent contracts already before the interviewing data. Thus, the remaining bias is expected to be low and sensitivity analysis of an subsample where the difference between the unemployment exit date and the interviewing date is less than 3 months reveal that the results do not differ from the results of the complete sample with maximum time spans of 12 months.

unemployment exits but treated as right-censored in the specific analysis of exit dynamics from unemployment to temporary employment, which coincides with the standard approach of competing risk duration models.

In order to get a broad perspective on the employment career consequences of entering a temporary contract compared to remain unemployed and to search for a better, permanent job, we look at different outcomes. On the one hand, we measure the probability of being employed, irrespectively of the contract type, as a proxy for subsequent employment stability and employability. On the other hand, we investigate the subsequent job quality because being employed at all does not tell anything about the quality of the jobs. The quality of future jobs is measured as the probability of holding a permanent contract[11] and the natural logarithm of real wages per hour worked. Related to the literature on scar effects of unemployment (Gangl, 2004; Pollmann-Schult and Büchel, 2005), these job quality measures reveal, whether taking up a temporary job instead of remaining unemployed and searching for better jobs increases or decreases the chance of having well-paid, permanent jobs in the years after unemployment. We investigate the outcomes at different subsequent time points: The overall employment probability is measured 6, 12, 18, 24, 30, 36, 42, and 48 months later. The two job quality measures are considered on a yearly base after 1, 2, 3, and 4 years later. Thus, for example, in contrast to the 12-months observation window of Korpi and Levin (2001) we can investigate not only the short-run but also medium-run career consequences of entering a temporary contract.

As determinants of the exit dynamics from unemployment to temporary employment as well as control variables when looking at the career consequences of taking up a temporary job we use a rich set of variables. Educational qualification of the respondent is measured by combining information about the highest school and vocational degree obtained following an aggregated CASMIN classifications (Müller and Shavit, 1998). As standard demographic controls we include gender, nationality and marital status. Furthermore, family background is measured by the EGP social class position of the father when the respondent was 15 as a proxy for parental permanent income and social networks, which might help unemployed youth to find employment.[12] Unemployment exit cohorts are formed in five year intervals in order to capture cohort differences. We control for potential labour force experience in a

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[11] For Germany, this analysis of the probability of holding a temporary job is restricted to the years after 1995 because the contract information is only available for new jobs in the years before.

[12] In Germany, we use a slightly different but rather detailed occupational scheme because the variable on fathers' EGP positions had many missing values.

rather flexible quadratic specification. Finally, we try to capture further differences in labour force experience by differentiating the activity status before entering employment, which differentiate between the entry from education, inactivity and employment to unemployment.

4.2. Methods

The consequences of entry into temporary work compared to remaining unemployed and searching for better jobs is assessed using the *dynamic propensity score matching approach* of Sianesi (2004) that estimates the propensity score in a rather flexible specification of a logistic hazard rate model. It is advisable to specify such a hazard model in order to capture the dynamics of exits from unemployment to temporary jobs versus the alternative of remaining unemployed and searching for better, permanent jobs. This coincides also with standard search theory that assumes that unemployed decide sequentially whether to enter a temporary contract in a given month of unemployment versus remaining unemployed (Mortensen, 1988).[13]

The central interesting event is entering temporary work after a certain elapsed unemployment time u.[14] Those persons are then compared to otherwise preferably similar individuals who remain unemployed for at least u months in the hope of finding a better job and in the knowledge that one can always join find a temporary job later.[15] This design coincides with a discrete hazard rate model, where the hazard rate estimates the probability of entering temporary employment in month t conditional on having been unemployed for at least u months. Sianesi (2004) argues that this is equivalent to estimate a series of logit estimates for each (group of) months of unemployment.[16] Outcomes $\left\{Y_t^{(u)}\right\}_{t=u+1}^T$ are measured for the months

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[13] In line with the standard independent competing risk framework of event history analysis (Blossfeld *et al.*, 2007), unemployed exits to other absorbing states such as permanent contracts, re-entering education, becoming inactive or going into business for oneself can be treated as right-censored events.

[14] Any subsequent temporary job is viewed as an outcome of that first temporary job.

[15] Choosing only unemployed people who never enter a temporary job are not the adequate control units because this would condition on future (Fredriksson and Johansson, 2003). Note also that while unemployed workers who enter temporary jobs and became unemployed may serve as comparison units for another unemployed person who enters a temporary job, unemployed who remain unemployed may enter temporary jobs at a later stage and serve as an interesting event (Hagen, 2003).

[16] Compared to a conventional logistic discrete time event history analysis, this series of logit estimates allows for the most flexible effects of the covariates: Not only the baseline hazard rate varies according to months intervals but also the effects of all other covariates may have different effects on the exit rate to temporary employment for different unemployment exit months.

after the specific unemployment duration u. Sianesi's (2004) matching procedure estimates the average effects of entering a temporary work after a certain elapsed unemployment duration u compared to remaining unemployed (and searching for better permanent jobs) for those who actually enter a temporary job:

$$ATT_t^u = E\left(Y_t^{1(u)} - Y_t^{0(u)}\Big| D^u = 1\right) \text{ for } t = u+1,\ldots,T$$

Specifically, this method compares unemployed workers who exit to temporary jobs in months u with otherwise equal individuals who remain unemployed for at least u months and search for better jobs. Thus, this innovative approach forms "statistical twins" in order to account for self-selection mechanisms (Morgan and Harding, 2006; Morgan and Winship, 2007). Statistical similarity is measured using the hazard rate propensity score of entering a temporary job. Like regression analysis, the matching approach relies on the conditional independence assumption (CIA) $Y_t^{0(u)} \perp D^u \big| X$ for $t = u+1,\ldots,T$ postulating that the potential subsequent career outcomes of remaining unemployed after u months is independent of the actual status (entering versus not entering temporary work) after controlling for a set of observed variables.[17]

However, we employ matching because it has several advantages compared to conventional regression analysis. Compared to conventional regression analysis, the flexible non-parametric technique outcome estimation avoids misspecification errors and guarantees a more appropriate weighting of covariates (Morgan and Harding, 2006; Morgan and Winship, 2007). Furthermore, linear regressions would extrapolate into the region of no common support, yielding potential bias, which is avoided with matching. Finally, an additional common support condition in matching, requiring the propensity score not to be equal 1, guarantees that only comparable persons are considered. Finally, dynamic approach unemployment exit dynamics, comparison of people with similar unemployment duration, while typical regression analysis would directly compare short-term and long-term unemployed despite large differences in terms of behavioural characteristics and chances to find employment.

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[17] Note, however, that focusing on previously unemployed individuals and comparing individuals with identical unemployment duration reduces substantially the heterogeneity in comparison to other studies dealing with the effects of temporary contracts.

5. Estimation results

We start our empirical analyses with some descriptive statistics on unemployment dynamics in Germany and the UK. We observe 5193 unemployment spells in Germany and 5036 unemployment spells in the UK during the respective observation periods. Average unemployment duration is with 8.36 months higher in the UK compared to 7.01 months in Germany. In both countries, the typical exit destination from unemployment is employment. About 59.18% (62.81%) of all unemployment spells end in employment in Germany (the UK). Thus, the majority of unemployed youth can be reintegrated into the labour market. A substantial share of unemployed youth re-enters education in both countries and other youth, especially in Germany, enters inactivity. Clearly, there is a gender-specific pattern of exits from unemployment to inactivity: these are especially young unemployed women who opt/are forced into the alternative role of motherhood and/or housework.

Table 1: Descriptive statistics on unemployment exits in Germany and the UK

	Germany		United Kingdom	
average unemployment duration (all spells)	7.01 months		8.36 months	
exit routes				
- to employment	59.18%		62.81%	
→ regular employment		62.96%		69.63%
→ temporary employment		30.07%		24.89%
→ self-employment/no-contract		6.97%		5.48%
- to education	12.15%		9%	
- to inactivity	13.11%		7.86%	
- right-censored spells	15.56%		20.12%	

Source: BHPS 1991-2007, SOEP 1984-2006.

Focussing on the exits to unemployment, we can observe a surprising similar pattern in Germany and the UK. As expected, the share of exits to temporary jobs among those unemployed who find a job is rather high at about 30% in Germany but also in the UK at about 25%. While the higher relative share of temporary employment exits among German unemployed youth compared to British unemployed youth confirms our hypothesis 3, the difference is unexpectedly small. While German employers have stronger incentives and more possibilities to use temporary contracts from an institutional perspective of employment protection legislation and unions' strength, British employers seem also to have incentives and seem to find ways to use these more flexible employment forms. Nevertheless, the majority of young unemployed who find a job still enters a regular employment. Thus, strong pessimistic

views of unemployed job seekers with almost no chances to find stable employment can be rejected in both countries. Exits to self-employment and non-contractual work play only a minor role in the employment reintegration patterns in Germany and the UK.

More detailed analyses of time trends reveal opposing trends in the incidence of temporary contracts in Germany and the UK. While the share of unemployment exits to temporary jobs decreases in the UK from 29% in the period 1990–1995 to 20% during the period 2002–2007, this share increases substantially in Germany from 25% in 1983-1989 to 39% in 2002-2007. This divergent pattern might be related to the partial labour market deregulation in Germany, which eased the use of temporary contracts in gradual reforms during the observation period. However, we cannot observe an analogous re-regulation in the UK such that slight decrease in the share of temporary contracts among unemployment exits calls for a further investigation, which is, however, beyond the scope of this paper.

After having gained these first interesting descriptive insights into the unemployment exit patterns, we will continue our empirical study with multivariate analyses. First, we go on with an analysis of the determinants of exiting unemployment to temporary contracts and, second, we complete the analysis by investigating the integrative power of temporary contracts for unemployed job seekers compared to the status of remaining unemployed and looking for another job.

5.1. Propensity to enter temporary employment

The determinants of entering fixed-term contracts compared to the status of remaining unemployment are investigated in a discrete time, piecewise constant logistic hazard rate model. All other destination states, such as exiting to regular jobs, self-employment, non-contractual work, education, or inactivity are treated as right-censored, absorbing states in line with a competing risk duration model.

Who makes the exit from unemployment to temporary work? Starting with the duration dependence pattern, we find that the overall chances of entering a temporary job compared to the status of remaining unemployed decreases the longer the unemployment duration is. Thus, it is harder for young unemployed to find a temporary job at all the longer they search. The negative duration dependence pattern is particularly pronounced in Germany starting already after 4 months of unemployment, while a significantly and pronounced lower propensity of entering a temporary job can be found in the UK only for long-term unemployed youth (more than 10 months of unemployment duration). The effect of highest education degrees is slightly more pronounced in Germany. Compared to the reference group of young

unemployed with lower secondary education without additional vocational qualifications, we find that all other groups with vocational qualifications have higher chances of entering a temporary contract instead of remaining unemployed. This is in line with many previous studies that show that additional vocational qualifications guarantee better labour market chances for young people (Müller *et al.*, 1998). The education groups with the highest chances of exiting unemployment to temporary jobs are people with upper secondary education and additional vocational and/or tertiary qualifications. In the UK, this higher propensity of entering temporary jobs can only be found tertiary graduates. In contrast to Germany, these are young unemployed with general education, which have higher chances to enter a temporary job. Obviously, vocational qualifications do not guarantee a quick integration into temporary jobs in the UK.

Table 2: Determinants of exiting unemployment to temporary employment; duration model

	Germany		United Kingdom	
unemployment duration (ref. 1 month)				
2 months	0.01	(0.06)	0.25*	(1.81)
3 months	-0.07	(-0.49)	0.15	(1.02)
4 months	-0.25**	(-1.99)	-0.08	(-0.63)
5-7 months	-0.48***	(-3.11)	-0.40**	(-2.25)
8-10 months	-0.50***	(-2.70)	-0.32	(-1.62)
11-13 months	-0.62***	(-3.71)	-1.01***	(-4.67)
14-24 months	-1.59***	(-4.34)	-1.85***	(-4.05)
Education (ref. DE: Casmin 1ab; UK Casmin 1abc)				
casmin1c	0.42***	(3.20)		
casmin2a	0.43***	(2.98)	0.13	(0.53)
casmin2b	-0.01	(-0.04)	0.28*	(1.70)
casmin2cgen	0.23	(0.84)	0.55***	(2.73)
casmin2cvoc	0.80***	(3.77)	0.33	(1.46)
casmin3a	0.94***	(3.77)	0.22	(1.21)
casmin3b	1.16***	(6.91)	0.97***	(5.61)
potential labour force experience				
experience	0.08	(1.33)	0.02	(0.36)
experience²	-0.01**	(-2.23)	-0.01	(-1.40)
Activity status before unemployment (ref. Employment)				
education	-0.32***	(-3.16)	-0.22**	(-2.03)
inactivity	-0.56***	(-4.07)	-0.46**	(-2.56)
Unemployment exit (ref. DE: 1983-89; UK 1990-95)				
1990-95	0.02	(0.16)		
1996-2001	0.20	(1.57)	-0.02	(-0.15)
2002-07	-0.02	(-0.13)	-0.23	(-1.64)
Demographics				
female	-0.13	(-1.38)	0.10	(1.02)
Northern Ireland			-0.20	(-0.69)
citizen	0.08	(0.76)	-0.00	(-0.01)
married	-0.02	(-0.20)	-0.16	(-1.29)
Father's occupational position (DE) (ref. Medium/high blue-collar)				
high white-collar	0.03	(0.17)		
low white collar	-0.01	(-0.09)		

self-employed	-0.34	(-1.58)		
low blue-collar	-0.11	(-0.79)		
not in labour force	-0.33*	(-1.90)		
missing information	-0.29*	(-1.81)		
Father's class position (UK)(ref. Skilled manual)				
higher service			-0.09	(-0.44)
lower service			0.01	(0.05)
routine nonmanual			-0.97**	(-2.27)
self-employed			-0.29	(-1.31)
foreman/technician			-0.35	(-1.51)
semi/unskilled worker			-0.16	(-0.81)
not in labour force			-0.50**	(-2.34)
missing information			-0.29	(-1.44)
Constant	-3.58***	(-14.62)	-3.37***	(-9.03)

Source: BHPS 1991-2007, SOEP 1984-2006.

With regard to potential labour force experience, a negative quadratic effect can be observed in both countries. Thus, the longer the time of leaving education dates back, the lower is the probability of entering a temporary job. Previous labour market attachment in form of having been employed instead of inactivity or education before having entered unemployment increases the chance of receiving a temporary contract. Surprisingly, the cohort effects are insignificant after having controlled for individual characteristics. Thus, the descriptive evidence on increasing shares of unemployment exits to temporary employment in Germany and decreasing shares of unemployment exits to temporary employment in the UK cannot be confirmed in the multivariate analysis. Demographic and family background control variables reveal almost no significant effects. We find only a negative effect of entering a temporary contract for young unemployed whose father has not been attached to the labour market.

While all these results reveal which groups are more likely to enter temporary jobs instead of remaining unemployed, the most important question, whether the decision of taking up a temporary job is better way of reintegrating young unemployed in the longer run, will be answered in the next subsection.

5.2. Career consequences of exiting to temporary employment

To answer these questions, we implement the dynamic propensity score matching approach of Sianesi (2004). We specify the propensity score, i.e. the conditional probability of leave unemployment into a temporary job, in an even more flexible discrete time hazard rate model as specified in table 1. By estimating a series of logit models for each unemployment exit

month interval[18], we allow all covariate effects to vary between different unemployment exit months, which should capture further unobserved heterogeneity between short-term and long-term unemployed. In the second step of the matching procedure, average treatment effects are estimated for each outcome and unemployment exit month u but aggregated again according to the distribution of unemployment exit months. In order to estimate the ATTs, we have to group similar individuals. We compared different matching algorithms and decided for Gaussian kernel matching because it outperforms the other algorithms in terms of balancing the observed covariates (Caliendo and Kopeinig, 2008).

Figure 1 presents the ATT with regard to the employment chances for unemployed exiting to temporary jobs compared to those who remain unemployed and look for another job.[19] Not surprisingly, the employment chances are much higher in the first months after starting the temporary job. However, initial advantages, for example after 6 and 12 months, should not be overstressed because these are typical "lock-in" effects: unemployed who entered a temporary job are already by definition in employment and it takes time until they may loose this initial advantage. This may happen if they are displaced very often or if unemployed who remained unemployed got access better and more stable employment positions. Thus, the persistence of this initial disadvantage over time and potential catching-up processes provide first answers to the question whether entering a temporary job has long-term benefits for young unemployed workers compared to the situation of waiting for better jobs. Regarding these catching-up processes, we can observe that the initial advantage quickly diminishes but it remains positive and significant in both countries even after 48 months. For example, after 36 months, young unemployed who took up a temporary job have a 17% (16%) higher employment chance in Germany (the UK) compared to the situation of remaining in unemployment in the initial months and looking for other job. Thus, in both countries, temporary employment seems to lead to a better and long-run integration into employment, which supports the integration perspective according to hypothesis 2. Furthermore, we find in line with our hypothesis 4 that these advantages are more pronounced in Germany. However, the country difference is quite small.

Figure 1: Employment chances for exits to temporary jobs compared to remaining unemployed (ATT)

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[18] Due to the limited sample sizes we had to group especially longer unemployment durations. Specifically, we estimate separate models for the following unemployment months and intervals of months: 1, 2, 3, 4-6, 7-9, 9-12, and 13-24.

[19] More detailed estimation results can be found in table A1 in the appendix.
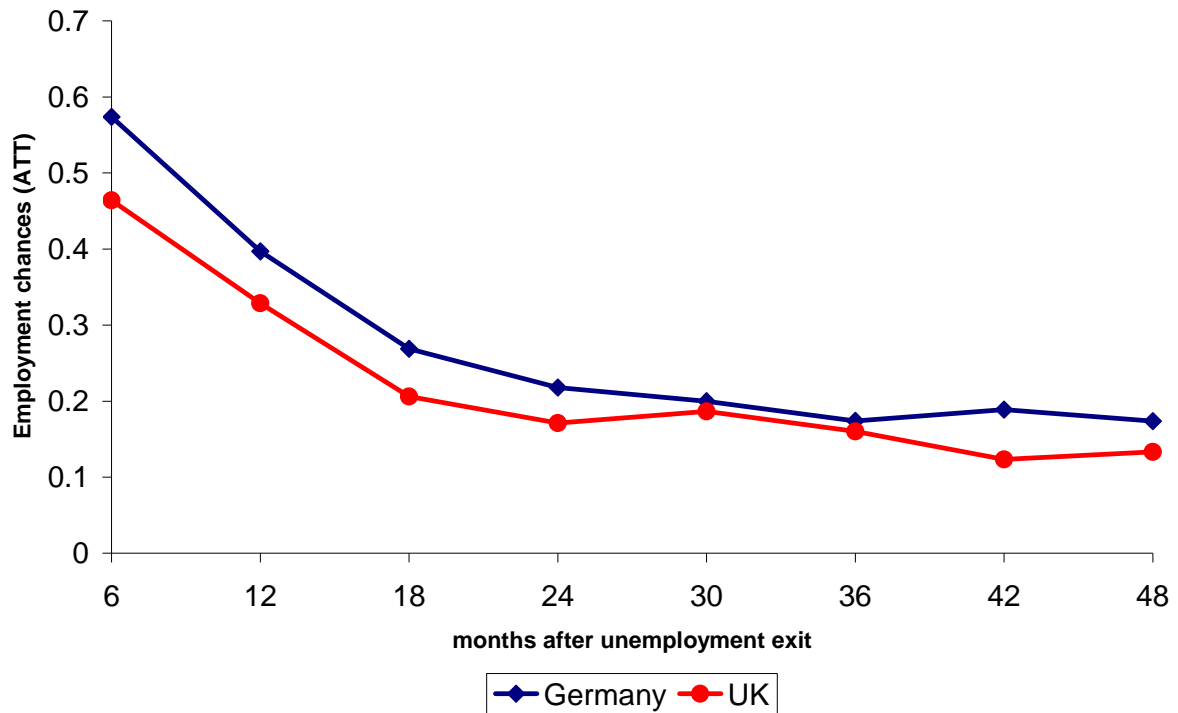
While the analysis of overall employment chances provides some first insights into the integrative power of temporary contracts for unemployed youth, it tells nothing about the quality of the positions. For example, higher employment chances for unemployed workers who take up a temporary job might be associated with more precarious jobs, whereas the counterfactual situation of remaining unemployed may have led to high quality jobs. Figure 2 provides a first measure of the job quality in terms of gross hourly wages of the subsequent employment positions. For Germany, we find higher wages for young unemployed who started in temporary jobs compared to the situation of waiting for better jobs. For example, three years after having entered a temporary job, the wages are about 15% higher compared to the alternative strategy of waiting for another job. Obviously, remaining unemployed and waiting for better jobs does not pay off in Germany. However, the advantage slightly diminishes from about 18% after 1 year to about 12% after 4 years.

Figure 2: Log wage differentials for exits to temporary jobs compared to remaining unemployed (ATT)
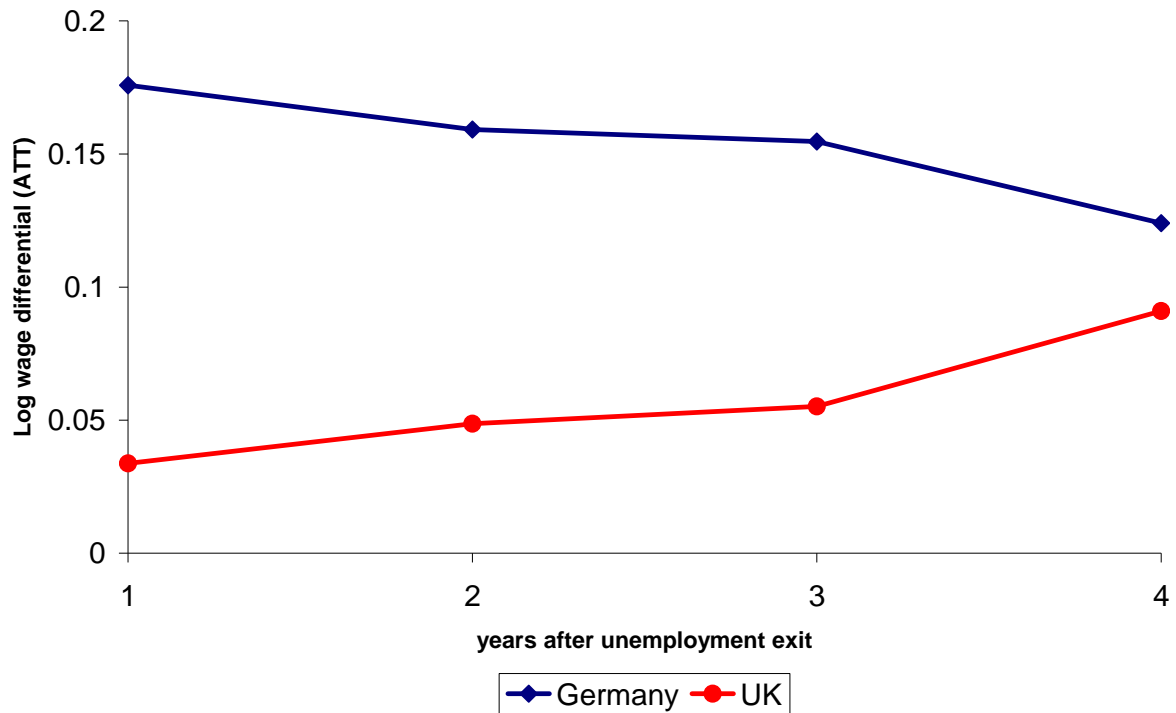
In contrast, the effects are positive in their point estimates in the UK but they are much smaller than in Germany and statistically not significantly different from zero. While figure 1 revealed the integrative power of temporary jobs for young British unemployed, figure 2 shows that these better employment prospects are not accompanied by higher job qualities. This supports hypothesis 4, which expects that starting a temporary job is a more successful strategy in Germany compared to the situation in the UK because the stronger insider-outsider cleavages in the German labour market disadvantage particularly the (longer term) unemployed.

Finally, figure 3 displays another job quality dimension: the chances of having a permanent contract in the years after the unemployment exit. After one year, we find in both countries a higher share of permanent contract holders among those former unemployed who took up a temporary job compared to the counterfactual situation of waiting for better jobs. Specifically, the probability of holding a permanent contract is 17% higher in Germany and 18% higher in the UK. However, this initial advantage diminishes sharply in both countries and becomes insignificant already after two years. Thus, while taking up a temporary contract seem to secure higher overall employment chances for unemployed youth, they do not provide a more secure bridge into permanent contracts compared to the alternative of waiting and looking for better jobs.

Figure 3: Chance of having a permanent contract for exits to temporary jobs compared to remaining unemployed (ATT)
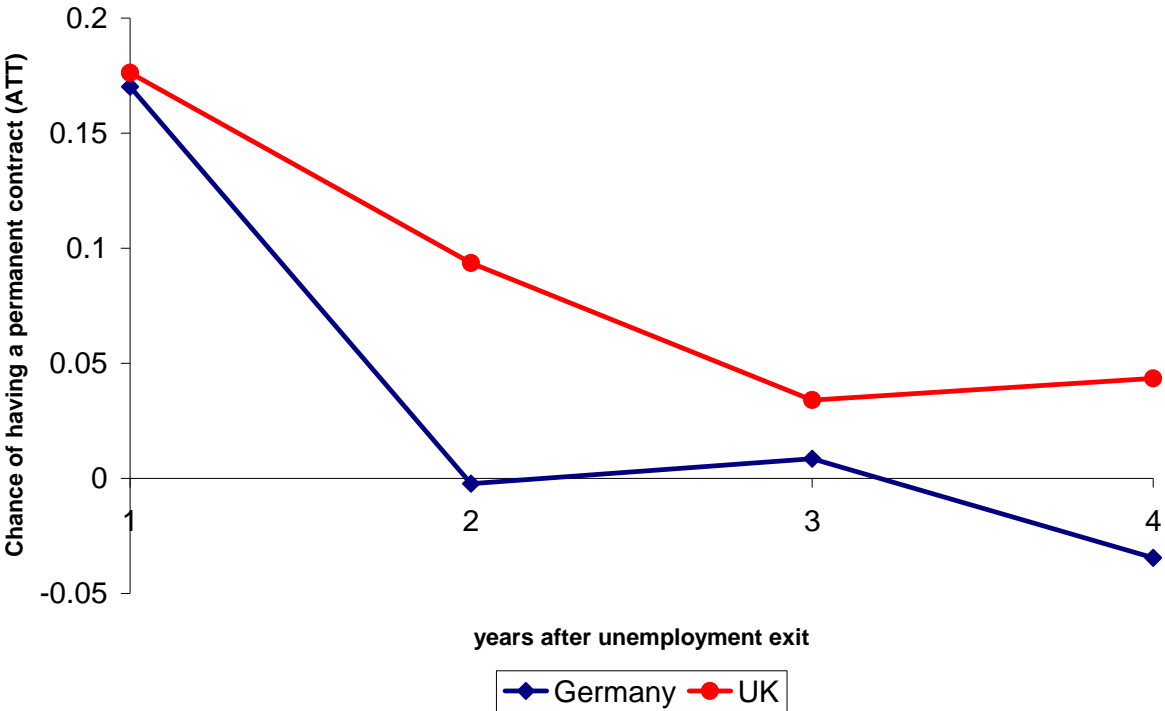
Source: BHPS 1991-2007, SOEP 1984-2006.

Regarding the country differences, we find no significant differences between Germany and the UK regarding this second job quality dimensions in terms of chances of having a permanent job. While the integrative power of starting a temporary job exists in Germany with regard to the overall subsequent employment chances and with regard to wages, this does not apply to the chance of integrating persons into permanent jobs. The pattern of better overall employment chances and higher wages may be related to the stronger insider-outsider cleavages in Germany due to stronger unions that secure rather stable and well-paid employment for all employees irrespectively of their contract status with the unintended consequence of hampering the labour market situation of (longer term) unemployed. However, the better situation of those who start temporary jobs is not achieved through integrating them into permanent jobs. Obviously, these permanent job positions are too protected through the strong segmentation between permanent jobs in the primary labour market segment and temporary jobs in the secondary labour market segment such that people with temporary jobs do not have better chances to enter permanent jobs than those who remain unemployed and wait for better jobs. In sum, in line with hypothesis 4, the long-run integration perspective of unemployed youth who enter temporary jobs applies more to

Germany than the UK. However, full integration advantages are not secured in Germany because temporary jobs do not seem to be a better stepping-stone to permanent contracts than the strategy of off-the-job search.

6. Conclusion

The aim of this paper has been to provide empirical evidence on the potential integrative power of taking up a temporary job for unemployed youth compared to the situation of remaining unemployed and searching for a better job. Using comparable panel data from Germany 1984-2007 and the United Kingdom 1991-2007, we compare the determinants and early career consequences of exiting unemployment to temporary employment in a two-country comparison in order to learn about the mediating role of the institutional context. Comparing the exit patterns from unemployment spells in Germany and the UK we find that the majority of unemployed youth can be reintegrated into employment. Among those exits to employment, the share of exits to temporary jobs is rather large in both countries and only slightly higher in Germany. Regarding the determinants of exiting to temporary jobs instead of remaining unemployed for at least one additional month, we can show for both countries that the overall chances of entering a temporary job compared to the status of remaining unemployed decreases the longer the unemployment duration is. They are higher for young German unemployed with vocational qualifications or university education, whereas in Great Britain the probability is rather high for young unemployed with high general qualifications. Furthermore, we find that the longer the time of leaving education dates back, the lower is the probability of entering a temporary job. Previous labour market attachment in form of having been employed instead of inactivity or education before having entered unemployment increases the chance of receiving a temporary contract.

Looking at the medium-run career consequences of entering a temporary job instead of continue off-the-job search as an unemployed, our analyses reveal diminishing positive effects on the subsequent employment chances, but the effects remains positive and significant in both countries even after 48 months. Thus, in both countries, temporary employment seems to lead to a better and long-run integration into employment, which supports the integration perspective and contradicts the segmentation perspective. These relative employment chances are slightly higher in Germany. With respect to the job quality we find that for Germany wages are higher for young unemployed who started in temporary jobs compared to the situation of waiting for better jobs. In contrast, the effects are positive in their point estimates in the UK but they are much smaller than in Germany and statistically not significantly different from

zero. Finally, we can show that in both countries temporary contract do not provide a more secure bridge into permanent contracts compared to the alternative of waiting and looking for better jobs.

Thus, while temporary jobs can reintegrate young British unemployed into rather stable employment, these positions are not accompanied by higher job qualities in terms of wages or higher permanent contract chances compared to the situation of remaining unemployed. While the integrative power of starting a temporary job exists in Germany with regard to the overall subsequent employment chances and with regard to wages, this does not apply to the chance of integrating persons into permanent jobs. The pattern of better overall employment chances and higher wages may be related to the stronger insider-outsider cleavages in Germany due to stronger unions that secure rather stable and well-paid employment for all employees irrespectively of their contract status with the unintended consequence of hampering the labour market situation of (longer term) unemployed. However, the better situation of those who start temporary jobs is not achieved through integrating them into permanent jobs. Obviously, these permanent job positions are too protected through the strong segmentation between permanent jobs in the primary labour market segment and temporary jobs in the secondary labour market segment such that people with temporary jobs do not have better chances to enter permanent jobs than those who remain unemployed and wait for better jobs. In sum, in line with theoretical expectation, the long-run integration perspective of unemployed youth who enter temporary jobs applies more to Germany than the UK. However, full integration advantages are not secured in Germany because temporary jobs do not seem to be a better stepping-stone to permanent contracts than the strategy of off-the-job search.

References

Baranowska, A. and Gebel, M. (forthcoming). The determinants of youth temporary employment in the enlarged Europe: do labour market institutions matter? *European Societies*.

Blanchard, O. and Landier, A. (2002). The perverse effects of partial labour market reform: fixed-term contracts in France. *The Economic Journal*, **112**, 214-244.

Blossfeld, H.-P., Buchholz, S., Bukodi, E. and Kurz, K. 2009. "Young workers, globalization, and the labor market." Cheltenham: Edward Elgar.

Blossfeld, H.-P., Golsch, K. and Rohwer, G. (2007). *Event history analysis with stata*. New York: Erlbaum, Taylor & Francis Group.

Booth, A. L., Francesconi, M. and Frank, J. (2002). Temporary jobs: stepping stones or dead ends? *Economic Journal*, **112**, F189-F213.

Cahuc, P. and Postel-Vinay, F. (2002). Temporary jobs, employment protection and labor market performance. *Labour Economics*, **9**, 63-91.

Caliendo, M. and Kopeinig, S. (2008). Some practical guidance for the implementation of propensity score matching. *Journal of Economic Surveys*, **22**, 31-72.

DiPrete, T. A., de Graaf, P. M., Luijkx, R., Tahlin, M. and Blossfeld, H.-P. (1997). Collectivist versus individualist mobility regimes? Structural change and job mobility in four Countries. *American Journal of Sociology*, **103**, 318-358.

DiPrete, T. A., Goux, D., Maurin, E. and Quesnel-Vallee, A. (2006). Work and pay in flexible and regulated labor markets: a generalized perspective on institutional evolution and inequality trends in Europe and the U.S. *Research in Social Stratification and Mobility* **24**, 311-332.

Doeringer, P. B. and Piore, M. J. (1971). *Internal labor markets and manpower analysis*. Lexington: Heath.

Ebbinghaus, B. and Visser, J. (2000). *Trade unions in Western Europe since 1945*. London: Palgrave Macmillan.

Esping-Andersen, G. and Regini, M. (2000). *Why deregulate labour markets?* Oxford: Oxford University Press.

Forrier, A. and Sels, L. (2003). Temporary employment and employability: training opportunities and efforts of temporary and permanent employees in Belgium. *Work, Employment and Society*, **17**, 641-666.

Francesconi, M. and Golsch, K. (2005). The process of globalization and transitions to adulthood in Britain. In Blossfeld, H.-P., Klijzing, E. and Mills, M. (Eds.), *Globalization, uncertainty and youth in society*. London: Routledge.

Fredriksson, P. and Johansson, P. (2003). Program evaluation and random program starts No. 2003:1. Uppsala: IFAO Institute for Labour Market Policy and Evaluation.

Gangl, M. (2004). Welfare states and the scar effects of unemployment: a comparative analysis of the United States and West Germany. *American Journal of Sociology*, **109**, 1319-1364.

Gash, V. (2008). Bridge or trap? Temporary worker's transitions to unemployment and to the standard employment contract. *European Sociological Review*, **24**, 651-668.

Gash, V. and McGinnity, F. (2007). Fixed-term contracts - the new European inequality? Comparing men and women in West Germany and France. *Socio-Economic Review*, **5**, 467-496.

Gebel, M. (forthcoming). Fixed-term contracts at labour market entry in West Germany: implications for job search and first job quality. *European Sociological Review*.

Gebel, M. and Giesecke, J. (forthcoming). Labour market flexibility and inequality: the changing risk patterns of temporary employment in Germany. *Journal for Labour Market Research (Zeitschrift für Arbeitsmarktforschung)*.

Giesecke, J. and Groß, M. (2003). Temporary employment: chance or risk? *European Sociological Review*, **19**, 161-177.

Giesecke, J. and Groß, M. (2004). External labour market flexibility and social inequality. Temporary employment in Germany and the UK. *European Societies*, **6**, 347-382.

Granovetter, M. S. (1973). The strenght of weak ties. *American Journal of Sociology*, **78**, 1360-1380.

Hagen, T. (2003). Do fixed-term contracts increase the long-term employment of opportunities of the unemployed? ZEW Discussion Paper No. 03-49, Mannheim: Centre for European Economic Research.

Haisken-DeNew, J. P. and Frick, J. R. (2006). *Desktop companion to the German socio-economic panel study*. Berlin: DIW.

Halpin, B. (2000). BHPS Work-life history files, version 2. ESRC Research Centre on Micro-social Change, University of Essex.

Johnson, W. R. (1978). A theory of job shopping. *Quarterly Journal of Economics*, **92**, 261-278.

Kahn, L. M. (2007). The impact of employment protection mandates on demographic temporary employment patterns: international microeconomic evidence. *The Economic Journal*, **117**, F333-F356.

Kalleberg, A. L., Reskin, B. F. and Hudson, K. (2000). Bad jobs in America: standard and nonstandard employment relations and job quality in the United States. *American Sociological Review*, **65**, 256-278.

Korpi, T. and Levin, H. (2001). Precarious footing: temporary employment as a stepping stone out of unemployment in Sweden. *Work, Employment and Society*, **15**, 127-148.

Lindbeck, A. and Snower, D. J. (1988). *The insider-outsider theory*. Cambridge, MA: MIT Press.

Loh, E. S. (1994). Employment probation as a sorting mechanism. *Industrial and Labor Relations Review*, **47**, 471-486.

Mayer, K. U. (2004). Whose Lives? How History, Societies and Institutions Define and Shape Life Courses. *Research in Human Development* **1**, 161-187.

McGinnity, F., Mertens, A. and Gundert, S. (2005). A bad start? Fixed-term contracts and the transition from education to work in West Germany. *European Sociological Review*, **21**, 359-374.

Mills, M. and Blossfeld, H.-P. (2005). Globalization, uncertainty and changes in early life courses. *Zeitschrift für Erziehungswissenschaft*, **6**, 188-218.

Morgan, S. L. and Harding, D. J. (2006). Matching estimators of causal effects. Prospects and pitfalls in theory and practice. *Sociological Methods and Research*, **35**, 3-60.

Morgan, S. L. and Winship, C. (2007). *Counterfactuals and causal inference. Methods and principles for social research*. Cambridge: Cambridge University Press.

Mortensen, D. T. (1988). Matching: finding a partner for life or otherwise. *American Journal of Sociology*, **94**, S215-S240.

Müller, W. and Shavit, Y. (1998). The institutional embeddedness of the stratification process. A comparative study of qualifications and occupations in thirteen countries. In Shavit, Y. and Müller, W. (Eds.), *From school to work. A comparative study of educational qualifications and occupational destinations*. Oxford: Oxford University Press, pp. 1–48.

Müller, W., Steinmann, S. and Ell, R. (1998). Education and labour-market entry in Germany. In Shavit, Y. and Müller, W. (Eds.), *From school to work. A comparative study of educational qualifications and occupational destinations*. Oxford: Oxford University Press, pp. 143-188.

OECD (2004). *Employment outlook*. Paris: OECD.

OECD (2009). OECD Social expenditure database (SOCX). Paris: OECD; http://www.oecd.org/els/social/expenditure.

Pollmann-Schult, M. and Büchel, F. (2005). Unemployment benefits, unemployment duration and subsequent job quality. Evidence from West Germany. *Acta Sociologica*, **48**, 21-39.

Rudolph, H. (2000). Befristete Arbeitsverträge sind bald neu zu regeln. IAB Kurzbericht No. 12, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung.

Scherer, S. (2004). Stepping-stones or traps? The consequences of labour market entry positions on future careers in West Germany, Great Britain and Italy. *Work, Employment and Society*, **18**, 369-394.

Schneider, S. (2008). *The International Standard Classification of Education (ISCED-97). An evaluation of content and criterion validity for 15 European countries*. Mannheim: Mannheim Centre for European Social Research (MZES).

Sianesi, B. (2004). An evaluation of the swedish system of active labor market programs in the 1990s. *The Review of Economics and Statistics*, **86**, 133-155.

Taylor, M. F., Brice, J., Buck, N. and Prentice-Lane, E. (2007). British Household Panel Survey user manual volume A: introduction, technical report and appendices. Colchester: University of Essex.

Van der Velden, R. K. W. and Wolbers, M. H. J. (2003). The integration of young people into labour market. The role of training systems and labour market regulation. In Gangl, M. and Müller, W. (Eds.), *Transitions from education to work in Europe. The integration of youth into EU labour markets*. Oxford: Oxford University Press, pp. 186-211.

Wang, R. and Weiss, A. (1998). Probation, layoffs, and wage-tenure profiles: a sorting explanation. *Labour Economics*, **5**, 359–383.

Appendix

Table A1: Subsequent career chances for exits to temporary jobs compared to remaining unemployed (ATT)

Months after unemployment exit	Employment chances, ATT (s.e. in parantheses)		Log wage differentials, ATT (s.e. in parantheses)		Chances of having a permanent contract, ATT (s.e. in parantheses)	
	Germany	UK	Germany	UK	Germany	UK
6	0.57	0.46				
	(0.04)	0.05				
12	0.40	0.33	0.18	0.03	0.17	0.18
	(0.05)	(0.05)	(0.06)	(0.07)	(0.09)	(0.07)
18	0.27	0.21				
	(0.05)	(0.06)				
24	0.22	0.17	0.16	0.05	0.00	0.09
	(0.06)	(0.07)	(0.06)	(0.07)	(0.10)	(0.06)
30	0.20	0.19				
	(0.06)	(0.06)				
36	0.17	0.16	0.15	0.06	0.01	0.03
	(0.06)	(0.07)	(0.06)	(0.08)	(0.09)	(0.06)
42	0.19	0.12				
	(0.06)	(0.07)				
48	0.17	0.13	0.12	0.09	-0.03	0.04
	(0.06)	(0.07)	(0.07)	(0.07)	(0.09)	(0.05)

Source: BHPS 1991-2007, SOEP 1984-2006.