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Non-employment and the welfare state: UK and Germany compared

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**Anglo-German Foundation
for the Study of Industrial Society**

NON-EMPLOYMENT AND THE WELFARE STATE

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Executive summary

This research project focuses on the so-called labour market inactive, that is, people of working age who are neither employed nor unemployed. How and why did the size and composition of this group change in the UK and Germany during the 1990s? Concentrating on men and employing a longitudinal data analysis, we have estimated the impact which changes in welfare state regulations had on flows in and out of employment and different forms of non-employment.

The main findings:

- During the first half of the 1990s, unemployment amongst both prime-age men (25–49 years) and older men (50–64) was higher in the UK than in Germany, while the extent of male inactivity was fairly similar. However, in the second half of the 1990s unemployment within the older age group dropped considerably in the UK but rose in Germany. Amongst prime-age men, British unemployment also dropped below German levels, but the gap remained fairly small.
- Despite differing economic prospects after the mid-1990s, inactivity amongst German prime-age men remained well below British rates. The reverse is the case for the older age group, with inactivity strongly rising in Germany but British rates declining.
- In the UK, non-employment (inactivity and unemployment) declined steadily during the 1990s. However, after having lost (or left) a job, prime-age men continued to enter inactivity more strongly than in Germany. Moreover, despite the economy picking up, prime-age male inactivity in the UK was higher in the late than in the early 1990s, with a larger share of men flowing directly from employment into inactivity.
- Measures to stop the decline of labour market participation amongst older workers seem to have been more successful in the UK than in Germany. However, the improved re-employment of older workers in the late 1990s originated mainly from flows out of (disability-related) inactivity rather than out of unemployment.
- With the help of hazard models, the impact of welfare-state legislation and business-cycle effects on transitions to and from employment and different states of non-employment were analysed. For prime-age British men the improving economy after 1993 coincided with a stronger transition from unemployment to inactivity (long-term sickness/disability). The Jobseekers Allowance (JSA) legislation of 1996 reduced the likelihood of transitions from employment to unemployment – but it also had a strong positive impact on the direct transition from employment into inactivity. By contrast, there were no discernible effects on transitions from non-employment to employment for either age group.
- The results for the introduction of Incapacity Benefit in the UK in 1995 are more difficult to assess. The legislation seems to have reduced the flows into long-term

sickness/disability. However, simultaneous policies to reduce unemployment might have neutralised this by pushing more unemployed people towards long-term sickness/disability. It is thus difficult to gauge whether the legislation merely changed pathways into long-term sickness/disability (from employment via unemployment), or whether different groups of people were affected by different policies.

- The improved British employment and unemployment rates in the 1990s can be attributed to a more favourable economic situation, but also to stronger disincentives to become or remain unemployed for those in non-employment. In Germany, transitions in and out of inactivity seemed less affected by either the business cycle or legislative changes. In contrast to their British counterparts, and to their prime-age co-nationals, older German men did not benefit from the economic recovery in the late 1990s. The prospects of sustained re-employment did not improve and overall transitions into retirement did not decline, despite some (modest) legislative change. Findings thus indicate severe structural labour market disadvantages for older German workers.
- These results have policy implications, particularly regarding the introduction of the new unemployment allowance (ALG II) in Germany in 2005. Inferring from the impact of the JSA legislation in the UK in 1996, ALG II could potentially lead more long-term unemployed men over 50 to transfer into inactivity (early retirement) rather than back into the labour market, particularly if employment prospects do not pick up and the intensity of job placement services does not improve considerably.

1 Introduction

This research project is a contribution to understanding the ways in which working-age people enter and leave the labour market and how these movements are influenced by welfare state institutions and their changes. Given the argument that the detachment of large numbers of men from paid employment is one of the most significant social changes of the last 20 years (Alcock et al 2003:xiii) and the fact that presently, the attempt to determine causal factors for these movements is much more complicated for women,¹ our analysis has – as a first step – been restricted to the male part of the working-age population. The project concentrated on the so-called ‘inactive’, that is, men who are neither employed nor unemployed. How and why has the size and composition of this group changed since the early 1990s in Germany and the UK, and what were the impacts of changes in welfare state regulations on flows in and out of different forms of non-employment. Our analysis is mainly based upon secondary analysis of existing longitudinal data: the BHPS in Britain and the SOEP in Germany.

1.1 Unemployment and inactivity

Apart from implying a low level of welfare for the unemployed or a large burden for welfare states compensating for their income losses, high levels of unemployment are normally taken to indicate a low level of economic activity. However, for comparative purposes there are two major problems implied in the use of unemployment rates as such an indicator.

The best known is that unemployment is measured differently according to different national statistical conventions. This problem has – by and large – been overcome by the reporting of standardised unemployment rates determined according to ILO guidelines. The second problem is that unemployment rates do not unambiguously indicate the general level of non-employment in a given working-age population. In other words, the percentage of working-age non-employment officially measured as unemployment can differ significantly between countries and over time. Thus, the information provided by unemployment rates may be misleading if they are taken as an indicator of the level of economic activity. If there is a large share of the working age population that is non-employed, measured unemployment may be low, but the level of economic activity will be low, too (and vice versa).

One consequence of this observation has been an increasing policy concern with the ‘inactive’ part of working-age populations (OECD, 2003). To improve the general economic performance, to safeguard the feasibility of welfare programmes, and to adjust

¹ In terms of status, by moving into family care, women still have relatively easy access to a role alternative to participating in the labour market. This is less true for men, so their reasons for not participating in the labour market must be stronger – unless one refers to the small group of men who opt for a non-working life.

to foreseeable demographic changes, one major change required in many countries is an increase in employment that reaches beyond pulling or pushing the unemployed back into jobs. This can take different forms: first, one can reach beyond the conventionally defined working-age population by trying to recruit older workers. Secondly, one can tap the pool of the inactive: women, students, the early retired and the long-term sick and disabled.

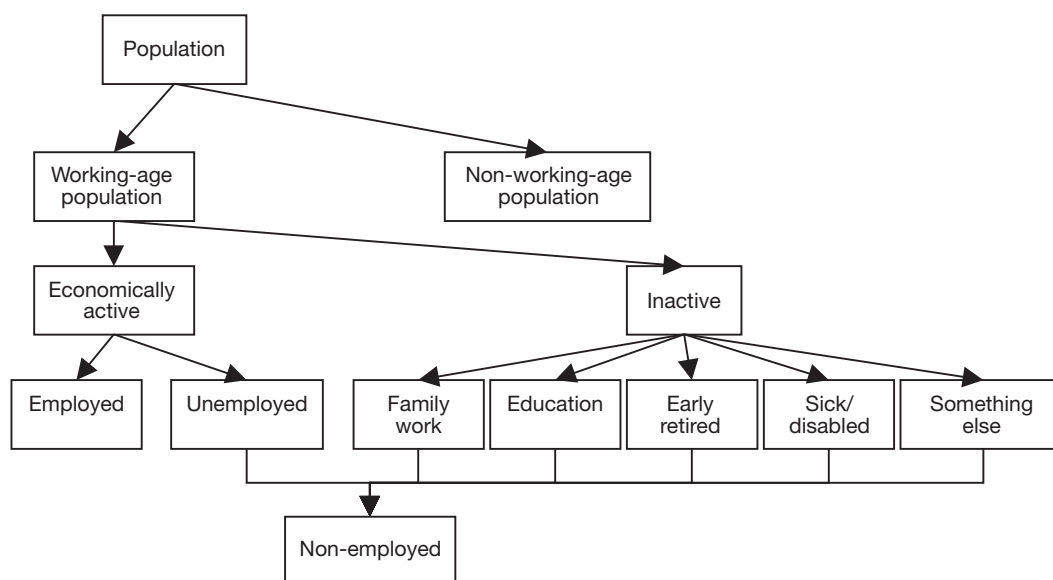


Figure 1
Definitions of employment and non-employment

1.2 Labour markets and welfare states

Welfare states are involved in the issue of labour mobilisation in manifold ways. First, welfare states rely on the employed for financing, implying that the non-employed normally and typically do not contribute to the costs of welfare state programmes. Second, a major part of the non-employed typically relies on income and services provided by welfare states: the unemployed receive unemployment benefits and the sick and people with disabilities receive health benefits and services. Most early retirement is subsidised by state pension programmes or tax exemptions, and much of education is state financed, too. In that sense, except for non-paid family workers, any person moving from non-employment into employment adds to the feasibility of the welfare state both by being obliged to positively contribute to welfare-state financing and simultaneously by reducing the number of beneficiaries of welfare programmes.² Comparative data on benefit recipients as a percentage of working-age populations are presented in Figure 2.

² Extending results from research for the Dutch Ministry of Social Affairs, the OECD has estimated benefit recipiency rates. In 1999, almost 22 per cent of the German working-age population received benefits, compared to 18 per cent in the UK.

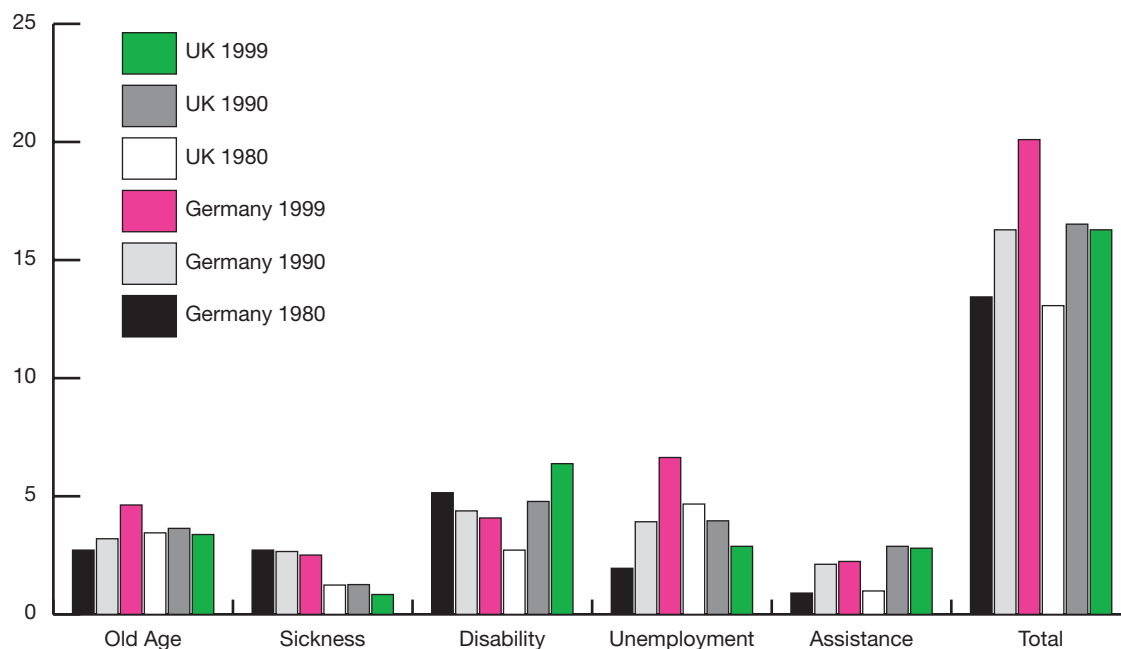


Figure 2
Reciprocity rates by type of benefit, working-age population (percentages of full-time equivalent)

Source: OECD (2003), pp. 222ff.

We can illustrate the contributors–benefit beneficiaries constellation with the help of the following budget constraint equation for the welfare state, albeit in a somewhat tautological and rough way:³

$$t(Y/H \cdot H/E \cdot E/N) = C/N \cdot B/C$$

(t is the welfare tax rate, Y national income, H working hours, E number of employed, N population, C number of welfare state clients, B benefits received from welfare state). As the left side of the equation shows, welfare state revenues depend on the tax (or contribution) rate, the productivity of labour (Y/H), average annual working hours (H/E) and the employment rate (E/N). Welfare state expenditures are the product of the welfare state clients' share of the population (C/N) and average benefits (B/C).⁴

³ A more sophisticated equation should include the wage/profit distinction on the revenue side and a distinction between welfare state clients (pensioners, the sick and disabled, the unemployed, etc.) on the expenditure side.

⁴ The mechanics of adjusting taxing and spending for welfare-state purposes can be illustrated using the example of an unemployment shock: the dependency ratio C/N increases while the employment rate E/N declines. The resulting imbalance can be repaired without changes in t or average benefits if labour productivity and/or working hours and/or the employment rate increase sufficiently. If, as has been the case especially in continental Europe, the response to increased unemployment consists of reducing average working time (with the idea of distributing the amount of work among more people) and supporting early retirement (with the idea of letting the young take over the jobs left by the old), the task of compensating for unemployment-induced imbalances between taxing and spending rests solely on increasing productivity Y/H . That increases in labour productivity are sufficient so that neither taxes/contributions nor average benefits (B/C) have to be adapted is the more unlikely the higher the decreases in working hours and employment.

As the equation demonstrates, the employment rate and working times are crucial factors for both economic potential and welfare state finance. Negatively speaking, if employment rates and working times are low, output will be low and the financing of welfare-state benefits will be more difficult because of a higher level of benefit receipt.

A third point is that welfare states are involved in labour mobilisation by influencing economic incentives. As neoclassical economists tend to emphasise, welfare benefits influence the motivation to work. The standard assumption is that the more generous benefits are, the less eager the recipients will be to search for a job or take up work.⁵ If this argument is complemented by the proposition that social security contributions to wage costs and high wages reduce employers' incentives to hire workers, welfare states are seen to be involved in a vicious circle: because beneficiaries are subject to disincentives to work, they are trapped into welfare state dependency, while welfare state financing becomes increasingly difficult because there are too few contributors and too many beneficiaries. Of course, one can argue against this, most importantly by pointing to so-called entitlement effects: if benefit receipt is contingent on substantial previous contributions, the possibility of acquiring entitlements to benefits will provide positive incentives. Regardless of that there is no doubt that welfare state programmes, especially unemployment benefits, statutory minimum wages and social assistance push up the reservation wage, that is, the wage required to make a job acceptable for workers. In turn, a higher reservation wage means that effective wages have to be higher, or, to put it the other way around: one way to lower wage levels consists of reducing reservation wages by reducing welfare benefits.

Given these considerations, a comparison of labour market developments in the UK and Germany should throw some light on the impact of different welfare state 'regimes' (Esping-Andersen, 1990), capitalisms (Soskice, 1999; Whitley, 2001) and employment systems (Marsden, 1999) on non-employment and its composition.

Welfare state programmes such as unemployment compensation, sickness or incapacity benefits and early retirement schemes are likely to be most important here. One of the questions underlying this research was whether the generosity of unemployment insurance can account for differences in the extent to which non-employment appears as unemployment, not in the sense of the standard argument that it provokes moral hazard (which it may do), but in its effect on the degree of attachment to the labour market. At the same time, sickness and incapacity benefits might also be of importance. Research has shown that job loss has resulted in recorded sickness rather than unemployment and that the diversion from receiving unemployment-related benefits into 'hidden' unemployment has particularly affected older and less healthy workers in the industrial parts of northern Britain (Alcock et al., 2003). Thus, apart from regional labour market factors, the way 'sickness' or 'incapacity' is defined within social security regulations is likely to have a significant impact on moves between labour market statuses and thus on the size of non-employment which is manifested as unemployment. Similarly, the ways in which incapacity and similar programmes are designed vis-à-vis unemployment support (contributory or means-tested; eligibility conditions, generosity, and so on) might influence the flows between different types of non-employment and the decline in open unemployment (Autor and Duggan, 2001).

⁵ For a typical and influential statement of this view see Lindbeck (1995).

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This project has focused on such interactions between welfare state programmes and the labour market. Experience in the 1990s suggests that it is not sufficient to simply reduce unemployment rates if the concern is with peoples' welfare or with increasing the activity level of the economy. Lower unemployment rates may not indicate such increases, but rather more moves into non-employment. In terms of the welfare of individuals, these moves may be unwanted, as is the case with discouraged workers who give up searching for paid work. Or such moves may be wanted by the individuals concerned, as is mostly the case with early retirement, but involve high social opportunity costs in terms of forgone production and additional strains on pension systems. In any case, unemployment rates provide only a partial indicator of labour market success or failure.

PART 1

2 Background

2.1 General labour market developments in the last decade

As Table 1 shows, British unemployment has declined continuously since 1993, with the exception of a small increase from 2001 to 2002. German unemployment reached its peak in 1997, then fell, but rose again after 2000. The difference between unemployment rates was more than three per cent in favour of Germany in the early 1990s, but more than three per cent in favour of the UK in 2002.

Table 1
Standardised unemployment rates, Germany and UK (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
G	4.8	4.2	6.4	7.7	8.2	8.0	8.7	9.7	9.1	8.4	7.8	7.8	8.2
UK	6.9	8.6	9.7	9.9	9.2	8.5	8.0	6.9	6.2	5.9	5.4	5.0	5.1

Source: OECD (2003).

Table 2
Employment/working age population, Germany and UK (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
G	–	67.7	66.4	65.1	64.7	64.6	64.1	63.7	63.9	65.2	65.6	65.8	65.3
UK	71.5	69.4	67.9	67.4	67.9	68.5	69.0	69.9	70.5	71.0	71.5	71.7	71.7

Source: European Commission (2002, 2003).

As far as employment is concerned, the German rate has been stagnating at about 65 per cent, whereas the British rate has increased by more than four per cent. Finally, average annual working hours declined by more than 10 per cent in Germany but remained stable at a much higher level in the UK.

Table 3
Average annual working hours, Germany and UK

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	1610	1604	1581	1511	1506	1489	1479	1463	1451	1444
UK	1715	1728	1735	1738	1737	1731	1719	1708	1711	1707

Sources: OECD (1998) for 1993–96, OECD (2001) for 1997, OECD (2003) for 1998–2002.

Table 4
Labour mobilisation, Germany and UK (%)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	50.5	50.0	49.3	46.9	46.3	46.3	46.4	46.1	45.9	45.3
UK	56.3	57.2	57.8	58.3	59.1	59.3	59.3	59.5	59.9	59.7

Source: Own calculations based on OECD data.

The combined effect of these developments is evident in the labour mobilisation index (see Table 4): whereas the British index has improved and reached almost 60 per cent of the total labour potential in 2002, German labour mobilisation has declined by five per cent.

2.2 The labour market for prime-age men

Although the employment rate of prime-age men in Germany has declined slightly and in the UK has increased by about three per cent, the difference in core working-age male employment remained relatively small.

Table 5
Employed/working age population, men 25–54 yrs, Germany and UK (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	90.3	89.4	87.9	87.2	87.0	86.1	85.7	85.8	86.9	87.2	86.8	85.5
UK	86.8	84.5	83.6	84.1	84.7	84.8	85.8	86.6	87.0	87.5	87.5	87.4

Source: European Commission (2003).

By contrast, unemployment rates amongst prime-age men differ strongly. In recent years male prime-age unemployment in Germany has been similar to overall unemployment rates (Tables 1 and 6). In the UK, prime-age male unemployment is lower than in Germany and the gap with overall unemployment has widened somewhat.

Table 6
Unemployment, men 25–54 years, Germany and UK (%)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	6.6	6.4	7.2	8.2	7.8	7.1	6.6	7.1	8.3
UK	9.8	8.5	8.0	6.7	5.4	5.4	4.8	4.1	4.4

Sources: OECD (1998) for 1993–96, OECD (2001) for 1997–98, OECD (2003) for 1999–2002.

One remarkable difference between the two labour markets concerns the degree to which non-employed prime-age men are counted as unemployed. While this share has increased in Germany to over 50 per cent, it has declined to less than one third in the UK. Are these differences due to different labour market trajectories after 1993? What is the role of welfare state institutions?

Table 7
Share of the non-employed counted as unemployed, men 25–54 yrs, Germany and UK (%)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	48.1	46.5	46.7	53.9	53.3	51.1	48.6	49.8	52.5
UK	56.5	52.0	47.4	42.0	36.3	37.2	35.3	30.2	31.4

Source: Own calculations based on OECD data.

One possible explanation could be that those men who are pulled into employment in the UK come predominantly from the sub-group of the unemployed, so that this group shrinks faster than the total number of non-employed. By contrast, men pushed out of employment in Germany might first enter the sub-group of the unemployed before moving into other non-employment groups. A contributory factor might be changes in the number of participants in labour market programmes (who are normally not counted as employed or unemployed). However, the volume changes were fairly modest in either country from the early 1990s (Table 8).

Table 8
Participant inflows into active labour market programmes, Germany and UK (as % of the labour force)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Germany	4.0	4.3	4.2	3.6	–	4.3	4.2	3.7	3.8
UK	2.5	2.6	2.3	2.4	–	2.3	2.4	2.5	1.9

Sources: OECD (1998) until 1997, OECD (2003) from 1999 onwards, UK data are 1993–94, 1994–95, etc.

Focusing on welfare state institutions, a possible explanation could run as follows: German unemployment benefits are more generous so that more of the non-employed remain or end up in unemployment, whereas British non-employed men are better off as beneficiaries of welfare state programmes other than unemployment compensation. In order to address this question, some background information on national benefit schemes is required.

3 Benefit schemes in the UK and Germany

3.1 United Kingdom

The major benefit schemes of relevance to non-employed working-age men in the UK are unemployment, sickness and disability, and (early) retirement transfers. Another cause of labour market absence is lone parenthood. However, given that the vast majority of lone parents are female and that this project is based on comparing labour market transitions of men, schemes directed specifically at lone parents were omitted.

3.1.1 Unemployment benefits

In the 1980s the two main transfer schemes for unemployed people in the UK consisted of the contributory Unemployment Benefit (UB) and means-tested Income Support (IS). In 1996 the two systems merged into a single Jobseekers Allowance (JSA), incorporating two variants: the contribution-based JSA can be received for a maximum of six months; to qualify for the income-based JSA, claimants must satisfy a means test. In practice, the vast majority of unemployed people in the UK have been reliant upon the means-tested variant for some time (Table 9).

Table 9
Beneficiary rates (recipients of benefits as share of registered unemployment; claimants divided by annual claimant unemployment)

	1980	1981– 1984	1985– 1989	1991– 1993	1994– 1996	1997– 2000	2001
UB or JSA (contributory)	48	31	28	30	24	14	16
IS or JSA (means-tested)*	40	53	60	60	69	73	70

Sources: Clasen (1994), p. 41; DSS, Social Security Statistics (various years) and DWP, Benefit Expenditure Tables, 2003, Table C1 (for 1993 onwards).

Note: * Supplementary benefit prior to IS.

Legislative changes in the 1990s

During the 1990s benefit eligibility became more conditional on employment-focused criteria, largely as a consequence of two major pieces of legislation: the Jobseekers Allowance (JSA) Act of 1996 and the introduction of New Deal programmes after 1997 (Clasen, 2004). The introduction of JSA halved the maximum duration of contributory benefit, introduced a stricter 'work test', widened the definition of 'availability for employment' and required claimants to sign a Jobseeker's Agreement, setting out the steps they should take to find work (Wikeley et al., 2002: 500). As part of a welfare-to-work strategy the Labour government introduced and subsequently modified several New Deal programmes which are targeted at different groups of working-age benefit

claimants, not only the unemployed (for details see Trickey and Walker, 2001; Walker and Wiseman, 2003).

3.1.2 Sickness and disability benefits

The current system of benefits for sick and disabled people in the UK includes a number of different schemes (Wikeley et al., 2002: 518). The principal benefit for those suffering temporary absence from work due to illness is Statutory Sick Pay (SSP), which is paid by employers for a period of up to 28 weeks for employees with a minimum work record (three months) and average earnings above a certain threshold (lower earnings level). Incapacity Benefit (IB) is a contribution-based benefit (currently paid at three rates, with age-related additions) paid after SSP has ended, or in some cases of ineligibility for SSP. Since April 2001 (for new claimants only) pension income has been taken into account for calculating IB.

Medical practitioners determine access to Incapacity Benefit; initially, the claimant's general practitioner (GP), but for claims beyond six months 'approved doctors'⁶ may be requested by the benefit decision-maker to carry out a 'Personal Capability Assessment' (PCA).

Where claimants meet the test of incapacity for work but not the contributory conditions for IB, means-tested Income Support (IS) – with a disability premium – may be payable. Eligibility for the disability premium may be triggered by other benefits, including the Severe Disablement Allowance (for those with at least 80% disability who made a claim before 2001), Disability Living Allowance (meeting the extra costs of care and mobility needs of people under the age of 65), Attendance Allowance or a mobility supplement. Finally, as a wage supplement, a means-tested tax credit is payable for people who are working at least 16 hours a week and have an illness or disability that limits their earning capacity.

Legislative changes in the 1990s

In the early 1990s, policy developments were driven by concerns about social security spending and the increased length of time people remained in receipt of benefit (Walker and Howard, 2000: 125). Later policies centred around three interrelated strands: improving incentives to work; helping people back to work; and tackling discrimination in the workplace (Smith and Twomey, 2002: 416).

One of the most significant legislative changes was the introduction of Incapacity Benefit in 1995. The legislation can be seen as having redrawn the boundary between capacity and incapacity for employment by tightening the test of incapacity for work – from the 'own occupation test' to the 'all work test'. It also curtailed the role of GPs in the assessment of incapacity for work and (after 28 weeks) 'all work tests' could be carried out by doctors employed by the Benefits Agency Medical Service.⁷

⁶ Jobcentre Plus contracts medical services to a private company. Approved doctors provide the benefit decision-maker with independent medical advice. However, the decision-maker is ultimately responsible for determining whether or not the incapacity threshold is met.

⁷ The all work test was replaced by the Personal Capability Assessment (PCA) in April 2000.

IB is less generous than its predecessor and the long-term (higher) rate of benefit became available only after 12 months (previously 6), effectively extending the definition of short-term sickness. Furthermore, the earnings-related element was abolished, reductions were made in terms of dependants and age-related additions and IB was made subject to tax in most cases (Invalidity Benefit was not).

The New Deal for people with disabilities (which is not compulsory) was introduced in 1998. A number of specific measures or 'work incentives' were further introduced in order to encourage those on IB to re-enter or remain in employment (Corden and Sainsbury, 2001). In 1999, the Disabled Person's Tax Credit became available which relaxed the conditions of entitlement.

3.1.3 Early retirement

The UK has no explicit state-funded scheme for facilitating early retirement. However, some social security provisions treat some categories of unemployed persons approaching pensionable age as effectively retired. This includes the award of a 'pensioner premium' to claimants of Income Support from the age of 60 and the exemption of such persons from the requirement to be available for employment (Wikeley et al., 2002: 600). Moreover, the UK has an extensive range of occupational and personal pension provision (Blundell et al., 2002), which may allow early exit from the labour market. Under Inland Revenue rules, occupational pension schemes qualifying for tax rebates must specify a normal retirement age between 60 and 75, and may provide for early retirement benefits to be paid from the age of 50 (for example, in the case of retiring on health grounds; see Wikeley et al., 2002: 599).

There has been an increased tendency to retire earlier, especially amongst men, since the 1980s and 1990s (Disney et al., 2004: 7). Thus, policy initiatives are currently aimed at bringing older workers back into the labour market. However, the rate of early retirement in the UK is still one of the lowest in OECD countries. In 2000, 12.8% of the inactive were out of the labour market due to early retirement in the UK, compared with 28.7% in Germany (OECD 2003: 85). However, there is evidence that invalidity benefits in the UK function as an equivalent to early retirement allowance, for some groups without, but for many others coupled with the receipt of an occupational (early) pension (Alcock et al., 2003). The role of occupational pensions is also likely to be one of the reasons why the 'no benefit, no work' rate amongst working-age people was higher in the UK than in Germany in 1999 (OECD, 2003: 175).

3.2 Germany

3.2.1 Unemployment benefits

The German system of unemployment transfers has traditionally been contribution-based and two-tiered. Fulfilling certain conditions, unemployed persons are entitled to *Arbeitslosengeld* ('unemployment benefit', ALG) and after a certain period of time the less generous *Arbeitslosenhilfe* ('unemployment assistance', ALH). ALH is means-tested and the maximum period of benefit receipt is in principle unlimited. Both benefits are earnings-related. Provided a minimum contribution period of twelve months (within the past three years) has been fulfilled, claimants are entitled to one month of ALG payment

for every two months of contributions paid – up to age-specific maximum entitlement periods (12 months for those younger than 42; up to 32 months for those older than 53).

Legislative changes in the 1990s

While the 1990s saw no radical changes, there was a general tendency to increase work incentives, extend definitions of suitable jobs and monitor job-seeking efforts more closely.

Replacement rates were lowered for both ALG and ALH in 1994, ALH entitlement was restricted and regulations sanctioning – through suspension of payments – self-induced unemployment and other forms of irresponsible behaviour were tightened.

The most significant piece of legislation in the 1990s was the Law on the reform of employment support of 1998. Since then, unemployed claimants have had to provide evidence of their efforts to find a new job. Job suitability criteria were broadened, with the rejection of a suitable job resulting in benefit suspension and repeated suspensions leading to total benefit loss. The age limits for receiving extended ALG payments were raised. The law also introduced several measures intended to ease the reintegration of the unemployed. So-called 'reintegration contracts' for long-term unemployed granted subsidies and allowed wages below collective agreement standards during the initial phase of employment.

3.2.2 Sick and disability benefits

Legislation passed in 1996 established that persons with diminished work capacity who were still capable of doing suitable full-time work in other jobs were no longer eligible for incapacity benefits. Thus, the '*konkrete Betrachtungsweise*', that is, the possibility to shift from partial to full incapacity due to labour-market reasons was restricted and applicable only to persons with diminished work capacity who are *not* capable of working full-time.

3.2.3 Early retirement

Early retirement schemes were the main means of reducing labour supply during the 1980s and 1990s. There are two groups of men to whom lower age limits than the normal retirement age of 65 apply. First, since 1972 men with a work history of at least 35 years of contributions have been entitled to regular pensions at the age of 63 (the so-called 'pension for long-term contributors').

Since 1957 people aged 60 or older have been entitled to retire after having been unemployed for at least 12 months, on the condition that they had been in contributory employment for at least eight of the ten years prior to unemployment (the so-called 'pension after unemployment'). In 1986 earlier exit from the labour market was made possible for people out of work and older than 57 who became entitled to extended unemployment benefit (without actively seeking work) if they declared that they would claim a pension as soon as they became eligible, that is, at the age of 60.⁸

⁸ They were then no longer registered as unemployed.

Legislative changes in the 1990s

With budget deficits rising and fears that demographic change would endanger the pension system, several laws aimed at reducing the scale of early retirement were passed in the late 1990s. Most important were several changes which raised the age limits for both groups mentioned above. As some of the provisions were scheduled to come into effect after considerable delay, their long-term effects are not yet observable.

In 1996 a new law on old-age part-time work was introduced. Designed to increase labour market participation, it provided subsidies for those aged 55 or over who were prepared to switch from full-time to part-time work, with employers supplementing earnings up to 70 per cent of the previous net full-time wage. It also allowed for more flexible working-time structures.

Correspondingly, a new pension was created for people over 55 who had worked part-time for at least 24 months. This new type of pension was integrated with the early retirement scheme for the unemployed described above by applying the same minimum pension age for both programmes. This minimum age was increased to 63 (and later to 65, which also became the minimum age for retirement for long-term contributors) in monthly steps for those born after 1936. However, earlier retirement (at age 60) remained possible, but was linked to reductions of pension payments (of 0.3% for every month between de facto early and regular pensionable age). This makes it difficult to judge the likely effect on pension inflows. On the one hand, the number of those eligible for pre-65 retirement was increased by old-age part-time workers; on the other hand, the number of those reaching retirement age was potentially halved by introducing the stepwise increase of the minimum age limit and increasing the cost of early exit.

4 Employment, unemployment and inactivity in the UK and Germany

This section summarises data on employment, unemployment and inactivity in the United Kingdom and West Germany in the 1990s. It highlights employment growth in the United Kingdom, stagnant employment in Germany and significant changes in the composition of the non-employed in both countries.

4.1 United Kingdom

4.1.1 Employment and unemployment

In the UK unemployment reached around 12% in the mid-1980s, then fell, before rapidly rising again after 1990 to a peak of 10.5% in 1993. Between 1993 and 2000, improvement in the British labour market was reflected in a steady decline of unemployment and a net gain of around 2.5 million jobs (Dickens et al., 2001: 1). In spring 2003, employment and unemployment rates were similar to those of the late 1970s. Figures 3 and 4 highlight employment growth which was particularly marked for older working-age men in the second half of the 1990s.

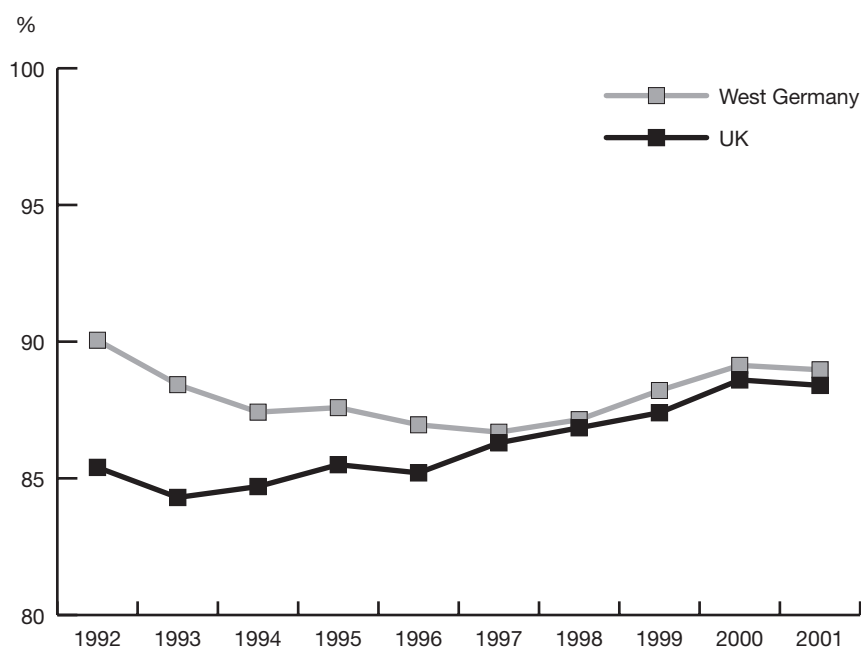


Figure 3
Employment–population ratio, men aged 25 to 49, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

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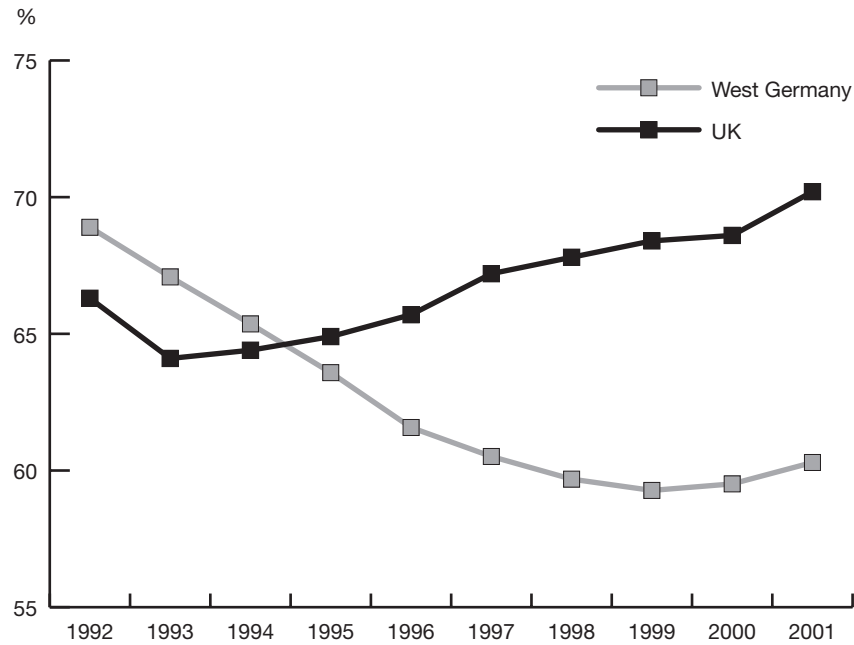


Figure 4
Employment–population ratio, men aged 50 to 64, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

Figure 5 (see also Table 6) shows that during the 1990s the unemployment rate of prime-age men dropped by more than half. This has been attributed both to the economic recovery and the drive to make unemployment-related benefits more 'active' (OECD,

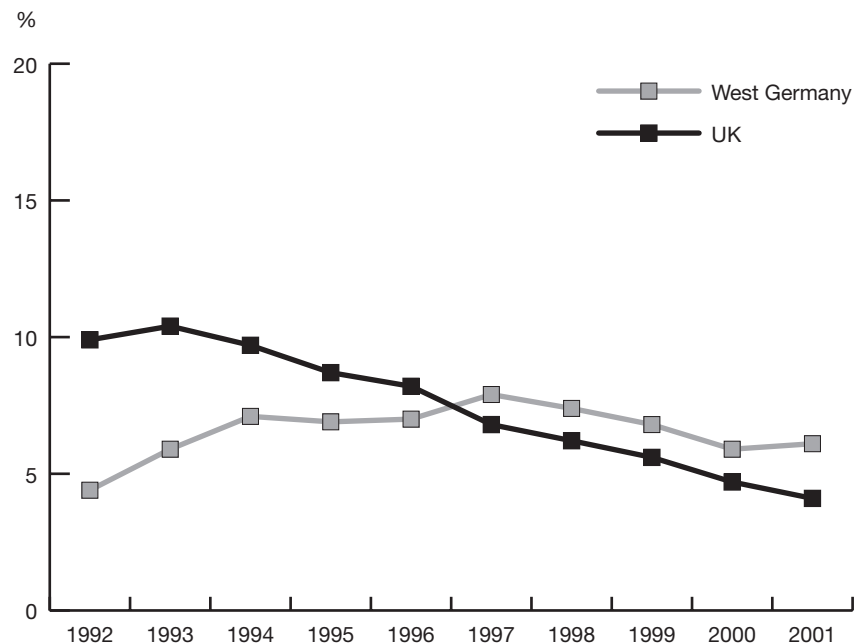


Figure 5
Unemployment rate, men 25 to 49, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

2003: 31). Flows out of benefit receipt increased strongly after the introduction of Jobseekers Allowance (JSA) in October 1996 (DWP, 2003). However, tightening eligibility to unemployment benefits may have resulted in movements within non-employment rather than towards transitions into employment (Alcock et al., 2003; Beatty and Fothergill, 1999a, b, c; Beatty et al., 2002; Dickens et al., 2001: 35; Webster, 2001, 2002).

4.1.2 Economic inactivity

In 2002, the Labour Force Survey categorised 21.5% of the working age population as inactive. Since the early 1990s the absolute level of economic inactivity (approx. 7.7 million people) has not significantly changed, but its composition has. Whilst there have always been more inactive women than men, women are participating in the labour force more than ever. However, the labour force participation of low-skilled women in the UK actually dropped during the second half of the 1990s and inactivity rose, albeit at a lesser rate than inactivity amongst low-skilled men (Table 10). On the whole, men in the UK have become increasingly inactive (Weir, 2003: 301; Dickens et al., 2001; Campbell, 1999; Bardasi and Jenkins, 2002; Humphrey et al., 2003). In fact, after the economic recovery starting in 1993, male inactivity continued to increase (Dickens et al., 2001: 1), a trend which came to a halt only recently.

In a European context, British male inactivity is not that high (and much below that of Germany), but the increase in the 1990s was very steep. More recently, inactivity amongst older men declined and employment rose (Disney and Hawkes, 2003). By contrast, inactivity rates of men under the age of 50 continued to rise long after unemployment levels began to decline in 1993 (Faggio and Nickell, 2003).

In the context of this research, key factors in understanding the rise in male inactivity are skill levels (see Table 10), disability and age. In the prime-age group (25–54) around 70% of inactive men report themselves as sick or disabled. In the older age group (55–64) the equivalent figure is approximately 50%, with another 35% being early retired (Faggio and Nickell, 2003: 44). Amongst men of prime age the low skilled are now between three to four times more likely to be inactive than others. From another perspective, between 50% and 60% of all inactive prime-age men are now in the bottom skill quintile.

The relevance of long-term sickness and disability for the scale of non-employment can be demonstrated with respect to the increase in associated benefit payments. In 1981, about 570,000 men and women of working age received sickness or disability-related benefits. Twenty years later the figure had risen to more than 2.5 million. Of this total, 1.6 million were men and 1.05 million were women (Beatty et al., 2002: 10). Since about 1997 the total number has remained fairly stable.

Three reasons for this growth can be distinguished (see McCormick, 2000). First, it could be argued that at least a proportion of disability benefit claimants would be employed in a more favourable (local) labour market (Beatty et al., 2002; Alcock et al., 2003). Some 20 years ago more jobs were available in heavy industry for (unskilled or low-skilled) manual workers after losing their job.⁹ Official (ONS) statistics imply that (older) manual workers

⁹ Deindustrialisation decreased the demand for unskilled workers. By international standards the UK has a very large group of very low-skilled workers (Faggio and Nickell, 2003: 50).

Table 10
Labour market participation of the low skilled,* aged 25–64, Germany and UK (%)

		Men		Women		Both sexes	
		UK	G	UK	G	UK	G
Employment/ population ratio	1994	61.0	67.9	52.0	40.2	55.5	49.0
	1996	61.7	63.9	51.1	39.9	55.2	48.0
	1998	59.1	61.1	48.1	37.8	52.9	46.1
	2000	60.0	64.0	48.5	42.4	53.7	50.6
	2001	60.9	64.7	48.1	43.9	54.0	51.8
	1994–2001	–0.1	–3.2	–3.9	3.7	–1.5	2.8
Labour force participation rate	1994	75.1	79.7	56.6	46.3	63.8	56.9
	1996	72.7	76.0	55.1	45.0	62.0	55.9
	1998	68.5	74.5	51.9	44.5	59.2	55.3
	2000	68.0	75.5	51.6	48.2	58.9	58.6
	2001	67.2	76.6	51.0	49.6	58.4	59.9
	1994–2001	–7.9	–3.1	–5.6	3.3	–5.4	3.0
Unemployment rate	1994	18.8	14.8	8.2	13.2	13.0	13.9
	1996	15.1	15.8	7.3	12.7	10.9	14.2
	1998	13.7	18.1	7.3	15.1	10.5	16.6
	2000	11.6	15.3	6.0	12.5	8.9	13.7
	2001	9.4	15.6	5.7	11.5	7.6	13.5
	1994–2001	–9.4	0.8	–2.5	–1.7	–5.4	–0.4
Inactivity rate	1994	24.9	20.3	43.4	53.7	36.2	43.1
	1996	27.3	24.0	44.9	55.0	38.0	44.1
	1998	31.5	25.5	48.1	55.5	40.8	44.7
	2000	32.0	24.5	48.4	51.8	41.1	41.4
	2001	32.8	23.4	49.0	50.4	41.6	40.1
	1994–2001	7.9	3.1	5.6	–3.3	5.4	–3.0

Source: OECD Employment Outlook 1996–2003.

Note: * Less than higher secondary education.

are more prone to long-standing limiting illnesses, making them eligible for sickness-related benefits after becoming unemployed (Beatty et al., 2000).¹⁰

Second, it has been suggested that previous governments encouraged a transition to sickness benefits as a way of reducing the numbers on the unemployment register. Research suggests that in the mid-1980s Employment Service staff advised claimants to sign off sick rather than register as unemployed (Adams, 1999; Bivand, 2002; Ritchie et al., 1993: 3). The more favourable long-term rate of Invalidity Benefit compared with basic unemployment benefit was another incentive for claimants to register as disabled, even if strictly speaking they were not unfit to work. Third, local GPs may have exacerbated this trend. Even after the introduction of the new incapacity for work test in 1995, some doctors continued to take account of the patient's age, caring responsibilities and perceptions of their 'employability', recognising that manual workers in particular would

¹⁰ For women, the reasons for the growth may be slightly more complicated. Whilst they may be affected by the decline in low-skilled jobs, their increasing presence in the labour market and sufficient contribution record means that they too are now eligible for sickness benefits.

Table 11
Average duration of claims for invalidity/incapacity benefit ('000)

Year	Number* of male claimants	Average duration in years
1990	1085.8	4.01
1991	1187.1	4.01
1992	1372.1	3.96
1993	1468.0	3.93
1994	1544.4	4.71
1995	1630.0	4.10
1996	1672.5	4.92
1997	1596.4	5.10
1998	1551.6	5.24
1999	1469.9	5.43
2000	1391.5	5.64
2001	1481.8	5.64
2002	1468.0	5.90

Source: Internal DWP data.

Note: * Figures pre 1995 refer to invalidity and sickness benefit. Figures 1995 to 2002 refer to Incapacity Benefit only.

struggle to find new jobs in areas of high unemployment (Legard et al., 2002: 2; Ritchie et al., 1993; McCormick, 2000).

Faggio and Nickell (2003: 50) suggest that the above factors may have 'pushed and pulled' those with low skills and/or some form of long-term illness or disability into a life on invalidity benefits. Push factors are the collapse in demand for unskilled labour, the role of the Employment Service and the medical 'gatekeepers', complemented by the pull factor of the relative generosity of invalidity relative to unemployment benefits.

But why did disability benefit receipt not decline (more) for men after the mid-1990s when the economy picked up, benefits became less generous and a stricter work capacity test was introduced? Changes in benefit inflow and outflow patterns provide (part of) the answer. As Table 11 shows, the average spell of disability benefit receipt increased after 1993, indicating that the rise in incapacity-related benefits and the slow decline in the second half of the 1990s might not have been (entirely) due to more people entering disability but to later benefit exit.

A second reason points to age-related differences. Internal DWP benefit inflow data for men show an increase of invalidity related benefit receipt until 1995/96. Thereafter, annual inflows for the over-55 age group started to decline, whilst receipt by younger age groups (20–49) continued to rise (Figure 6). This suggests that unlike younger age groups, the over 50s may have been more affected by improved labour market prospects, or the 1995 changes in Incapacity Benefit regulations, or by both.

The changing incidence of different types of long-term sickness may help to explain different age-related trajectories. Figure 7 charts the noticeable decline in the number of (on average older) claimants with diseases of the musculoskeletal and circulatory systems around the time when the 'all work test' superseded the 'own occupation test' in 1995. At the same time the number of claimants diagnosed with mental and behavioural disorders continued to increase.

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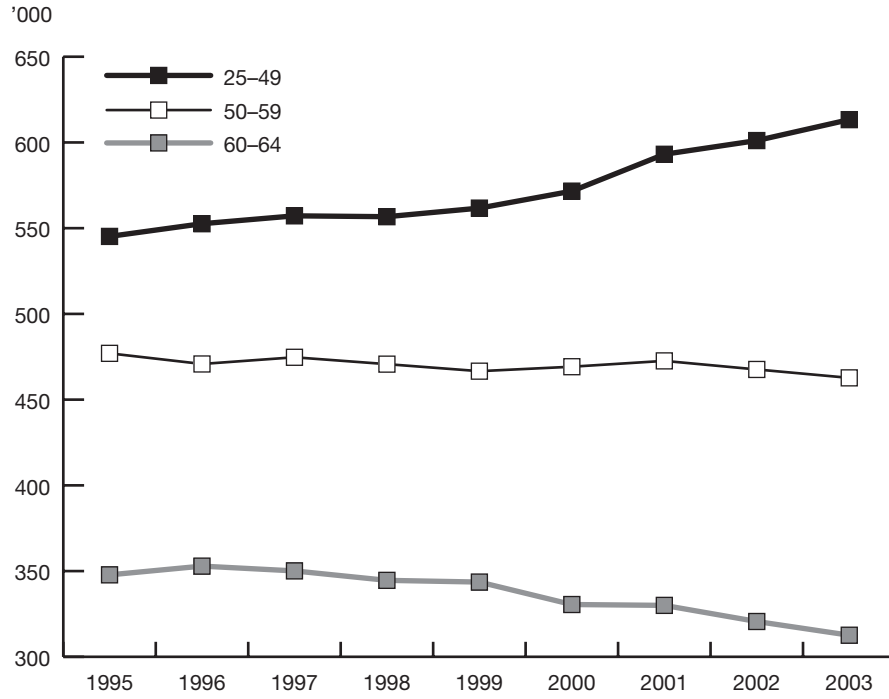


Figure 6
UK male incapacity benefit claimants by age groups

Source: DWP, internal data.

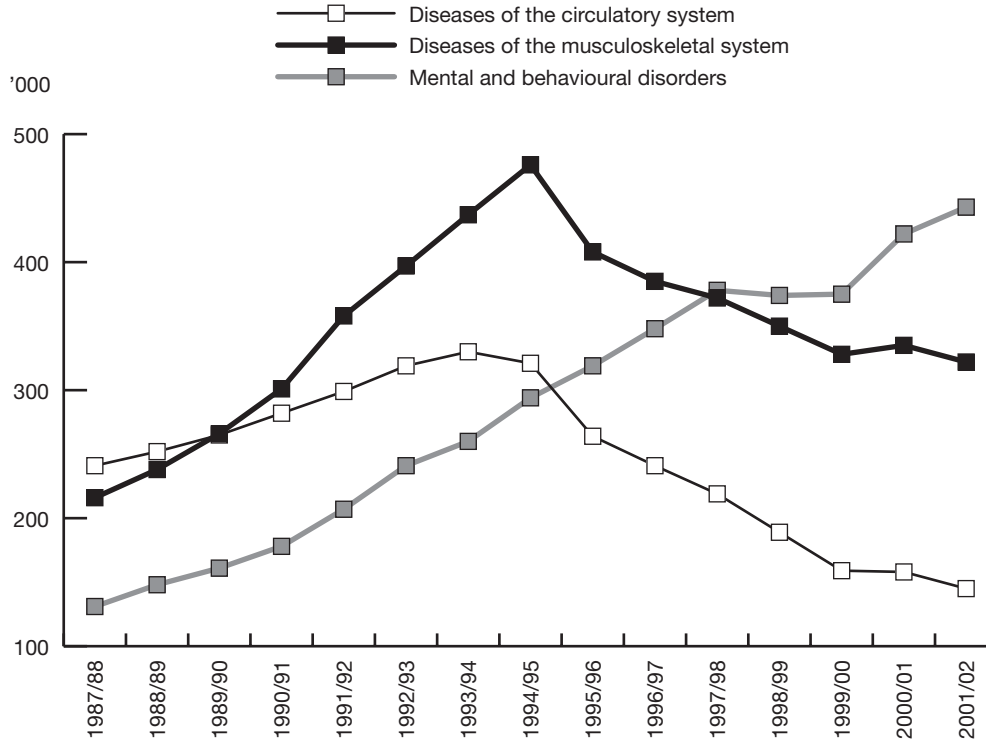


Figure 7
Number of male incapacity benefit claimants by diagnosis group, UK ('000)

Source: DWP, internal data.

4.2 Germany

4.2.1 Employment and unemployment

In broad terms, male employment in West Germany declined from 77.5% in 1990 to 74.2% in 2000, with the lowest employment/population ratio of 72.9% reported for 1997. In contrast, female employment for the same time period increased from 53.4% to 57.7%, most of which was after 1997. Thus, in the course of the 1990s, the slight overall employment gain was entirely due to the rise of female employment (Table 12). The employment evolution of low-skilled persons shows similar patterns. While male employment declined, female employment increased (Table 10).

A closer look reveals important differences between the prime-age group and men aged 50 years and older. The employment situation changed relatively little for prime-age groups during the 1990s, even though employment declined in the first half of the decade. By contrast, the employment/population ratio of older workers declined by roughly 9% in the course of the 1990s (see Figures 3 and 4).¹¹ For the prime-age group, employment rose again after 1997, while for older workers employment increased only slightly after 1999.

Table 12
Employment/population ratio, Western Germany, 15–64 years

	Men	Women	Both sexes
1990	77.5	53.4	65.4
1991	77.3	54.0	65.7
1992	77.0	55.0	66.0
1993	76.0	54.5	65.3
1994	74.5	54.3	64.4
1995	73.9	54.0	63.9
1996	73.2	54.6	63.8
1997	72.9	54.6	63.7
1998	73.1	55.2	64.1
1999	73.5	56.7	65.1
2000	74.2	57.7	65.9

Source: Stat. Bundesamt, FS 1, R 4.1.1, various volumes, own calculations.

In 1991, unemployment in Germany reached its lowest level since the early 1980s, but subsequently rose to 9.9% in 1997, declining thereafter to 7.9% in 2001. Throughout the 1990s, women suffered more from unemployment than men, even though in 2001 the difference was only 0.4% to the disadvantage of women, compared to 3.2% in 1992 (ANBA, 2002: 65). Despite declining employment, the unemployment rate of low-skilled men increased only slightly after 1994. Inversely, the unemployment rate of low-skilled women declined to a lesser extent than employment increased throughout the last

¹¹ Sources: Figures for the UK, D and EU-15 (or 12), see EUROSTAT (1993 to 2002); for western Germany, see Statistisches Bundesamt (1993 to 2001, own calculations).

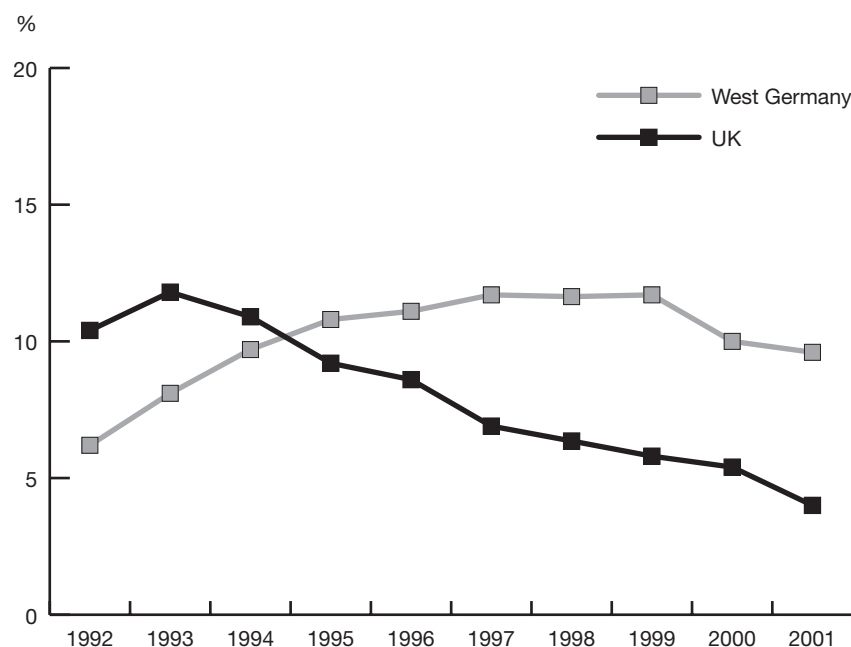


Figure 8
Unemployment rate, men 50 to 64 years, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

decade. In these cases, the unemployment rate seems to be of limited significance (Table 10).

Again, an age breakdown for men provides some deeper insights. Towards the end of the 1990s, unemployment was higher than at the beginning of the decade, both among prime-age men (Figure 5) and older workers (Figure 8). While for the prime-age group, a relatively small increase in unemployment (from 4.5% to 6.0%) can be observed for the 1990s, unemployment among older workers rose from 6.0% to 9.5%.

The 55 to 60 age group accounts for a large share of the increase in unemployment among older workers (Knuth et al., 2002: 4). This, and the strict employment protection legislation – especially for older workers – raises some doubt about attributing the rise in non-employment simply to growing unemployment amongst older workers. Instead, the misuse of early-retirement schemes by way of transitional unemployment rather than merely worsening employment prospects, or both, needs to be taken into account here (Knuth et al., 2002).

Time-series data on the composition of unemployment show a continuously increasing share of disadvantaged groups among the unemployed (Table 13). In particular, the share of older workers and persons with health constraints among all unemployed persons increased considerably, while the unemployment share of unskilled persons younger than 55 (without health constraints) declined in the late 1980s and remained unchanged during the 1990s. It is above all skilled older persons, with or without health constraints, for which the German Labour Office reports the largest increases. Their share of all unemployed persons nearly doubled between 1990 and 1998, with only a slight downturn afterwards (Table 13).

Table 13
Composition of unemployment, Germany,* men and women (%)

	1986	1988	1990	1992	1994	1996	1998	2000	1986–2000
Aged 55 and older (55+)	12.5	14.9	18.4	20.5	21.3	23.0	24.0	23.2	10.7
Unskilled (US)	50.8	48.8	46.8	47.7	46.4	46.6	46.2	46.3	–4.5
With health constraints (HC)	19.9	22.2	25.9	28.7	26.2	25.6	26.6	29.2	9.3
US + HC + 55+	2.9	3.6	4.9	5.6	4.9	4.7	4.6	4.6	1.7
US + HC	8.6	8.8	9.2	9.3	8.0	7.5	7.9	9.2	0.6
US + 55+	4.1	4.7	5.4	5.4	5.7	5.9	5.8	5.2	1.1
HC + 55+	2.1	2.6	3.5	4.6	4.6	5.1	5.5	5.6	3.5
US	35.2	31.7	27.3	27.4	27.8	28.5	27.9	27.3	–7.9
HC	6.3	7.2	8.3	9.2	8.7	8.3	8.6	9.8	3.5
55+	3.4	4.0	4.6	4.9	6.1	7.3	8.1	7.8	4.4
None of these	37.5	37.5	36.8	33.6	34.2	32.8	31.6	30.5	–7.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: IAB Zahlenfibel.

Note: *: 1986 to 1990 Western Germany, 1992 to 2000 Unified Germany.

4.2.2 Economic inactivity

The labour market participation of men declined more or less steadily throughout the 1990s, with the exception of 1999. By contrast, female labour-force participation – at least in West Germany – increased almost every year during the 1990s, from 58.4% in 1991 to 63.2% in 2001 (ANBA, 2001: 45). As Table 10 shows, inactivity declined for low-skilled women in the 1990s and the labour-force participation of low-skilled women responded more to business-cycle patterns. In this case, flows from employment directly to inactivity and vice versa seem to be of particular importance. This is also true for low-skilled men whose declining employment correlates more with rising inactivity than with rising unemployment.

Once again, the evolution of male inactivity varies considerably across age groups. Inactivity among prime-age German men is of little importance, with small changes induced by business-cycle effects (Figure 9). It is therefore not surprising that inactivity among prime-age men is not subject to much sociological or economic labour market research. It is more surprising that the rising inactivity of older workers (Figure 9) – that is, labour market-related early retirement – tends to be discussed merely in respect of the rising cost of old-age pension schemes, but hardly ever in respect of the problem of rising unemployment.¹²

As Figure 10 shows, inactivity among older workers in Western Germany increased from 26.5% in 1992 to 34% in 2000, with no change in the trend until 2001, be it business-cycle induced or not. This supports the suspicion regarding the misuse of unemployment protection mentioned above, especially when taking into account the inflows into early retirement of unemployed people (*Rente wegen Arbeitslosigkeit*). It rose very strongly after 1992 and did not decline when the economy improved after 1997 (Figure 11).

¹² Two exceptions are Schoemann et al. (1998) and Knuth et al. (2002).

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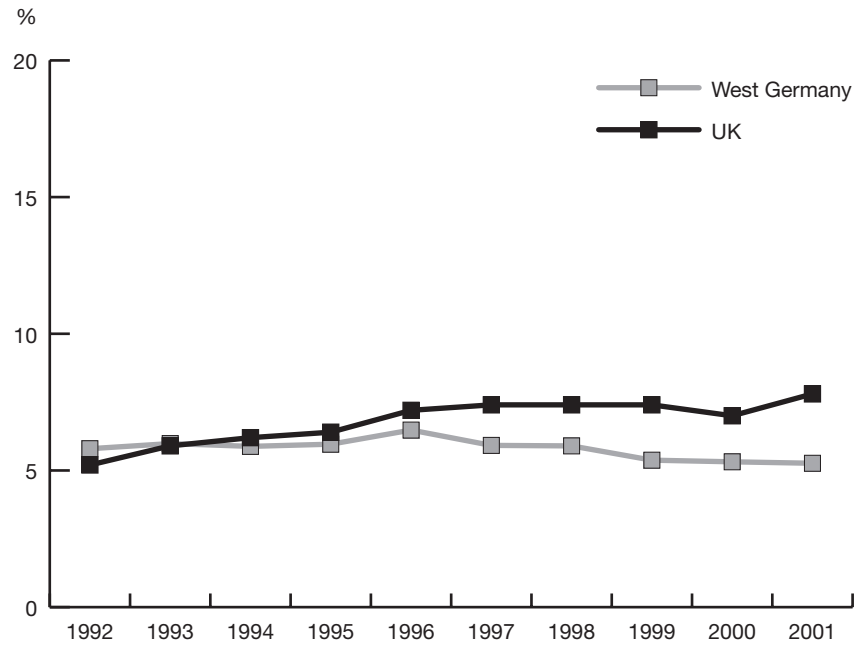


Figure 9
Inactivity rate, men 25 to 49 years, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

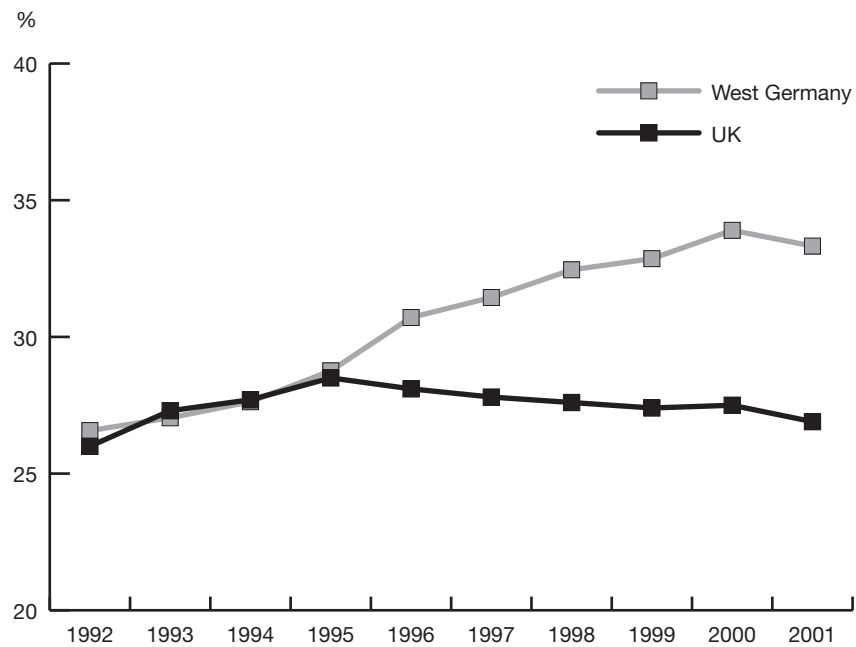


Figure 10
Inactivity rate, men 50 to 64 years, Western Germany and UK

Source: EUROSTAT Labour Force Survey and Stat. Bundesamt, FS 1, R. 4.1.1. Various volumes.

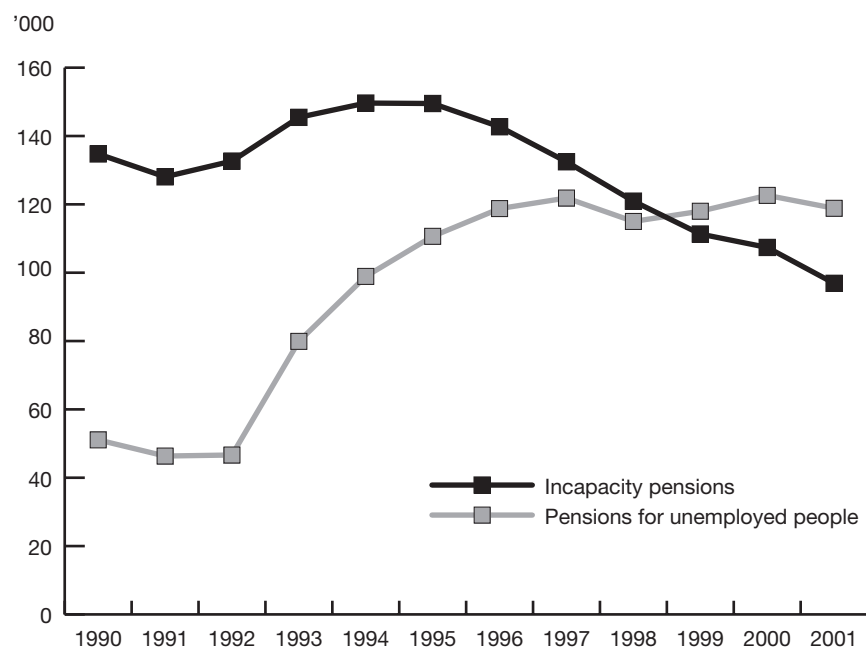


Figure 11
Flows into labour market-related pension schemes, men, West Germany

Source: VdR Time Series.

Legislative changes during the 1990s thus did not seem to contribute to a decrease in early retirement for unemployed people in Germany. With respect to the Old-Age Part-Time Act, Knuth et al. (2002) conclude: 'Gradual retirement [*Altersteilzeit*],¹³ which might possess some innovative potential with regard to extending employment over the lifetime is presently being perverted to replicate the established patterns of early exit'. Instead of working part-time during the last five years of their working life, most of the old-age part-timers opt for the so-called block-model with full-time work in the first half of the 'old-age part-time' period and early exit after two and a half years (Knuth et al., 2002: 35). On the other hand, the flows into early retirement due to incapacity declined considerably in the second half of the 1990s, apparently due to the tightening of eligibility criteria.

¹³ That is, the Old-Age Part-Time Scheme.

5 Hypotheses

5.1 United Kingdom

The improved economic and labour market prospects after 1993 should have resulted in more people making the transition from non-employment to employment and fewer moving into unemployment. However, employment growth was not distributed equally across the UK, with less improvement in areas of de-industrialisation. Employment growth also favoured higher skilled more than semi- or low-skilled workers. We would therefore expect transitions out of non-employment to be dependent on the presence or absence of labour market disadvantages with regard to skill, age, health and local labour demand.

Legislative changes enacted in this time period can be expected to have had further impacts on labour market transitions. Significant legislative changes included the Incapacity Benefit legislation in 1995 and the introduction of Jobseekers Allowance in 1996. The introduction of targets for employment staff put a premium on transferring claimants from unemployment to invalidity benefits in the early 1990s. This might have led some claimants to leave unemployment and enter long-term sickness at certain points in time, for example, at unemployment benefit review stages (13 weeks) or after entitlement to contributory unemployment benefit had expired (12 months).

The introduction of Incapacity Benefit brought with it a stricter test of incapacity for work. It can be expected that these regulations decreased the rate of transitions from unemployment to long-term sickness. However, as discussed, due to the changing nature of prevalent illnesses for the award of disability-related benefits (see Figure 7 above), this might not have been the case, particularly amongst prime-age groups and low-skilled persons living in regions of low labour demand. Older manual workers with a physical injury might not have passed the new, stricter work test introduced in 1995. However, rather than making the direct transition from employment to long-term sickness (as before), some might have moved to unemployment initially. Subsequently, perhaps not being able to find employment in low-labour demand areas (especially where they have low or redundant skills) they may become 'depressed' and diagnosed with a mental or behavioural problem, affecting their capacity to work. Thus, the path to long-term sickness might have become, whilst not blocked, essentially re-routed by the new work test via a period of unemployment. On the other hand, the decline in inactivity and the growth in employment amongst older workers in the second half of the 1990s might have obscured such developments.

The Jobseekers Allowance of 1996 can be expected to have reduced transitions from employment to unemployment because of tighter eligibility tests and a stricter work test. Overall, we would expect the JSA to have decreased flows from employment into unemployment. However, it might be doubtful whether, as a purely supply side measure, it would increase the flow from unemployment into employment, especially in areas where the demand for labour is poor. Unlike previous unemployment benefit, JSA is financially less attractive for recipients of occupational pensions. Therefore, those leaving employment with early retirement packages might be inclined to become inactive (but

not necessarily to enter long-term sickness because of the 'all work test'). In sum, JSA might have stemmed transitions from employment into unemployment, but not necessarily those into inactivity.

5.2 Germany

Compared to most Western economies, the German reunification boom resulted in a 'delayed' business-cycle pattern. In the wake of the 1993 recession, more flows into non-employment and fewer transitions from non-employment into employment can be expected. With improving labour market prospects after 1997, more flows back into employment can be assumed, as well as diminished flows out of employment into non-employment. As in the UK, age, skill levels, health and unemployment duration may particularly influence transitions in and out of employment and non-employment (ANBA, 2001: 131).

Even if large in number throughout the 1990s, legislative changes to tighten eligibility criteria for unemployment benefits are unlikely to have a significant impact on transitions from employment into unemployment or inactivity. However, the Law on the reform of employment support of 1998 may be considered as a turning point towards 'activation' measures. However, as the implementation of this law coincided almost exactly with the overall economic recovery of the late 1990s, possible effects may be difficult to assess.

In the second half of the 1990s, legislative changes regarding incapacity benefits led to a declining number of incapacity benefit recipients. Among older workers, we would therefore expect fewer transitions from employment into inactivity or more transitions from employment into unemployment. Unfortunately, the employment history data provided by the German Socio-Economic Panel (SOEP) do not distinguish incapacity pensions from other early retirement pensions (see Appendix A).

As for early retirement, various legal changes both reduced (by raising age limits) and increased (old-age part-time work) the number of persons eligible for pre-65 retirement schemes. However, the number of 'old-age part-timers' was relatively low in the first four years after the introduction of the law (Hinrichs and Giebel-Felten, 2002: 12). If anything, the impact of all legislative changes taken together might have resulted in a slight decrease in transitions from employment or unemployment into inactivity.

Unfortunately, in the context of this research, relevant legal changes which are more likely to influence the labour market behaviour of older as well as of prime-age men were only enacted in or after 2000, or will be introduced in the near future, such as the so-called *Hartz* laws I to IV (2003 to 2005), further increases in the minimum retirement age (RRG, 1999) or the law on the reform of incapacity benefits (2001). Thus in the 1990s, the influence of effective welfare state legislative changes on labour market behaviour is likely to have been lower for Germany than for the United Kingdom.

PART 2

6 Results

In the empirical section, we confront our hypotheses with the empirical evidence of panel data. As in most cases, empirical analysis does not meet the complexity of theoretical reasoning. Thus, we address in more or less broad terms the question of the way in which legislative changes could have influenced labour market behaviour of prime-age men on the one hand and older workers on the other. The section provides findings based on micro-data analyses of the employment-history files of the GSOEP (German Socio-Economic Panel) (Haisken de New and Frick, 2002) and the BHPS (British Household Panel Study) (see Taylor, 2002; Halpin 1997, 2000). In the first, descriptive part, a cross-sectional approach to the data is taken: time series focused on employment histories after leaving or losing a job in Western Germany and the United Kingdom, broken down by age groups. To reveal any possible effects of legislative changes, differences between the early and late 1990s are of particular interest. Note that repeated cross-sectional snapshots in time series do not provide sufficient information about movements in and out of employment and non-employment. Furthermore, the descriptive findings are not controlled for business-cycle effects that are likely to mingle with those of legislative changes. In contrast, multivariate event-history approaches focus on transitions and are able to account for business-cycle effects and other confounding environmental and personal conditions. Thus, in the second part, discrete time hazard models are estimated to examine the influence of welfare state legislative changes on labour-market behaviour. Appendix A provides information on the data sources, how they were prepared and about the methods adopted.

6.1 Time series

Note that the time series in general are based on only a few cases, especially regarding the several inactivity states broken down by age groups and time. Thus, the results are to be considered as preliminary, indicating a possible outcome rather than providing statistically significant results.¹⁴

Figures 12 and 13 show the month-by-month distributions of labour market states among men leaving or losing their jobs between 1990 and 1997. The outcomes are, as expected, different according to age. In the UK, 54% of the prime-age group are back in employment¹⁵ after a year (57% in [West] Germany). This is the case for only about 25% of older people in the UK and 15% in Germany.

Note that the figures for older men are neither strictly comparable to those for the prime-age group nor comparable between Germany and the UK because it is not possible to

¹⁴ For the exact number of cases of the time series data and the Product Limit Estimations, see the Tables in Appendix B.

¹⁵ Regardless of whether they were re-employed and unemployed and again re-employed or not during the first year after leaving or losing their job.

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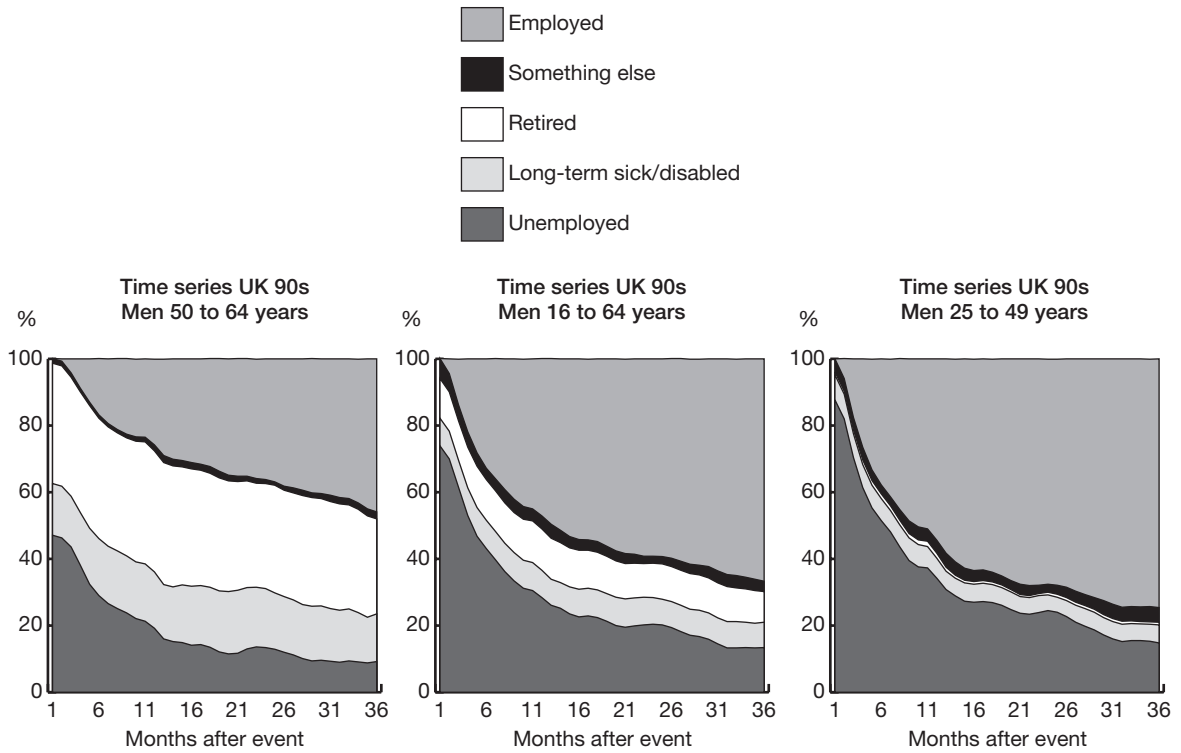


Figure 12
Men becoming non-employed between 1990 and 1997, UK

Source: BHPS.

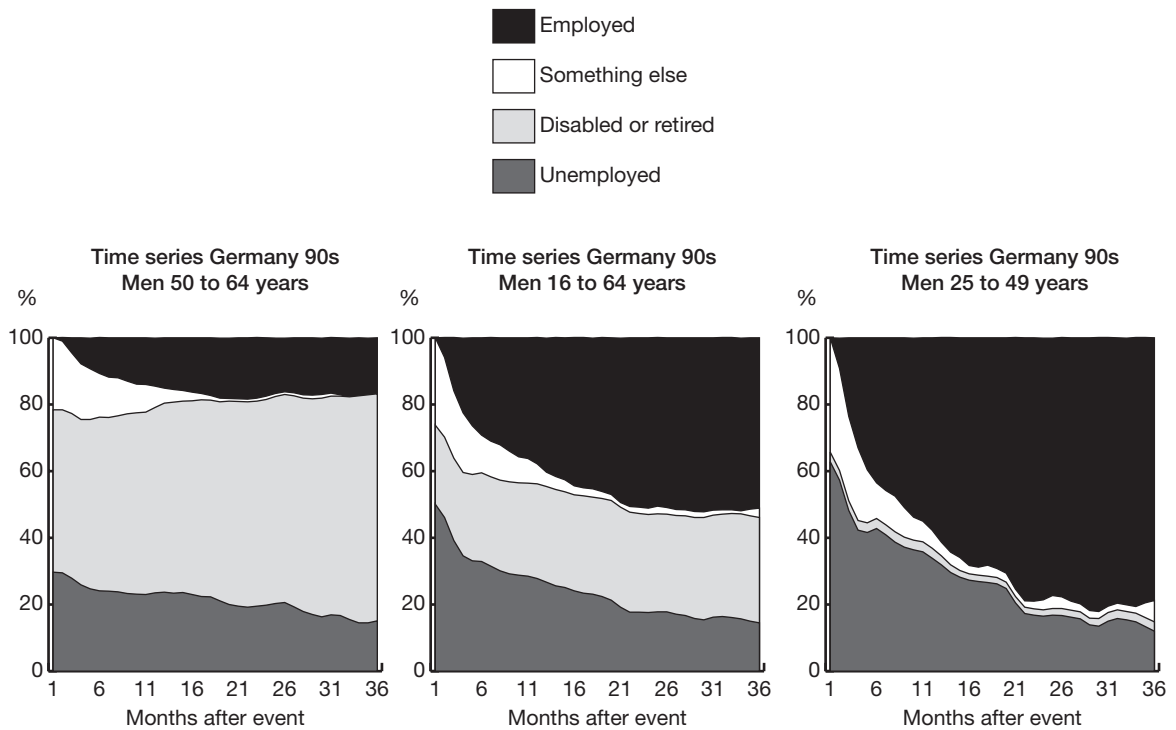


Figure 13
Men becoming non-employed between 1990 and 1997, Germany

Source: SOEP.

discard those older workers from the sample whose retirement is *not* due to labour market reasons. Thus it is the evolution over time that we have to focus on rather than the absolute levels of non-employment amongst older men.

Among older workers in Germany, the share of non-employed no longer changes much after the first year of being out of work, even if unemployment keeps on declining. Labour market-induced early retirement must be in operation. In the UK, the evolution is somewhat different, as non-employment declines steadily during the observation period of three years after job loss.

Among the prime-age group, the employment prospects of those who have lost or left their jobs seem to be slightly better in Germany than in the UK. In Germany, the share of people back in employment is about 80% after two years with no further increase during the third year of observation, as against 68% and 75% in the UK.¹⁶ Inactivity in the long run is more common among the prime-age group in the UK than in Germany.¹⁷ The large share of those doing 'something else' subsequent to job loss in Germany is probably due to different concepts of unemployment in the episode data files (see Appendix A). It seems that in Germany unemployed people either tend to register as unemployed only after a while, or do not register at all when out of work for only a short time.

To address the question of whether legislative change affects labour market behaviour, the evolution of employment and non-employment has to be examined in more detail by comparing the early 1990s with the late 1990s. Note that the following results are not controlled for business-cycle effects. Note also that during the 1990s business cycles in the UK and Germany did not correlate very closely (see Appendix A).

Figure 14 shows, on the left hand side, the evolution of employment and unemployment, and on the right hand side the evolution of different inactivity states among prime-age men in the UK who have lost or left their jobs.¹⁸ Within limits (which will be discussed below), the relation of unemployment and employment is, as expected, quite symmetrical. The higher the share of re-employment, the lower the share of unemployment. In the late 1990s, re-integration into the labour market happened faster than in the early 1990s. In the long run, the employment rate among prime-age men who have lost or left their jobs was not higher in the late 1990s than in the early 1990s. The corresponding evolution of unemployment was quite similar, with the important exception that the initial share of those who were unemployed after having lost or left their job fell from 90% in the early 1990s to 80% in the late 1990s.

Accordingly, the share of those doing 'something else' increased by almost the same rate, perhaps suggesting fewer transitions from employment to unemployment because of tighter eligibility tests. Furthermore, long-term sickness/disability for prime-age men

¹⁶ This does not necessarily mean that prime-age men find jobs more quickly in Germany, but may be due to them staying longer in the subsequent job.

¹⁷ The increase of inactivity among the prime-age group at the end of the observation period is transitional and simply caused by case weights problems.

¹⁸ The share for the different employment states sum up to 100% across the two sides. Note that the scales differ in most of the following figures. However, the horizontal lines always represent 10%-steps to provide better orientation.

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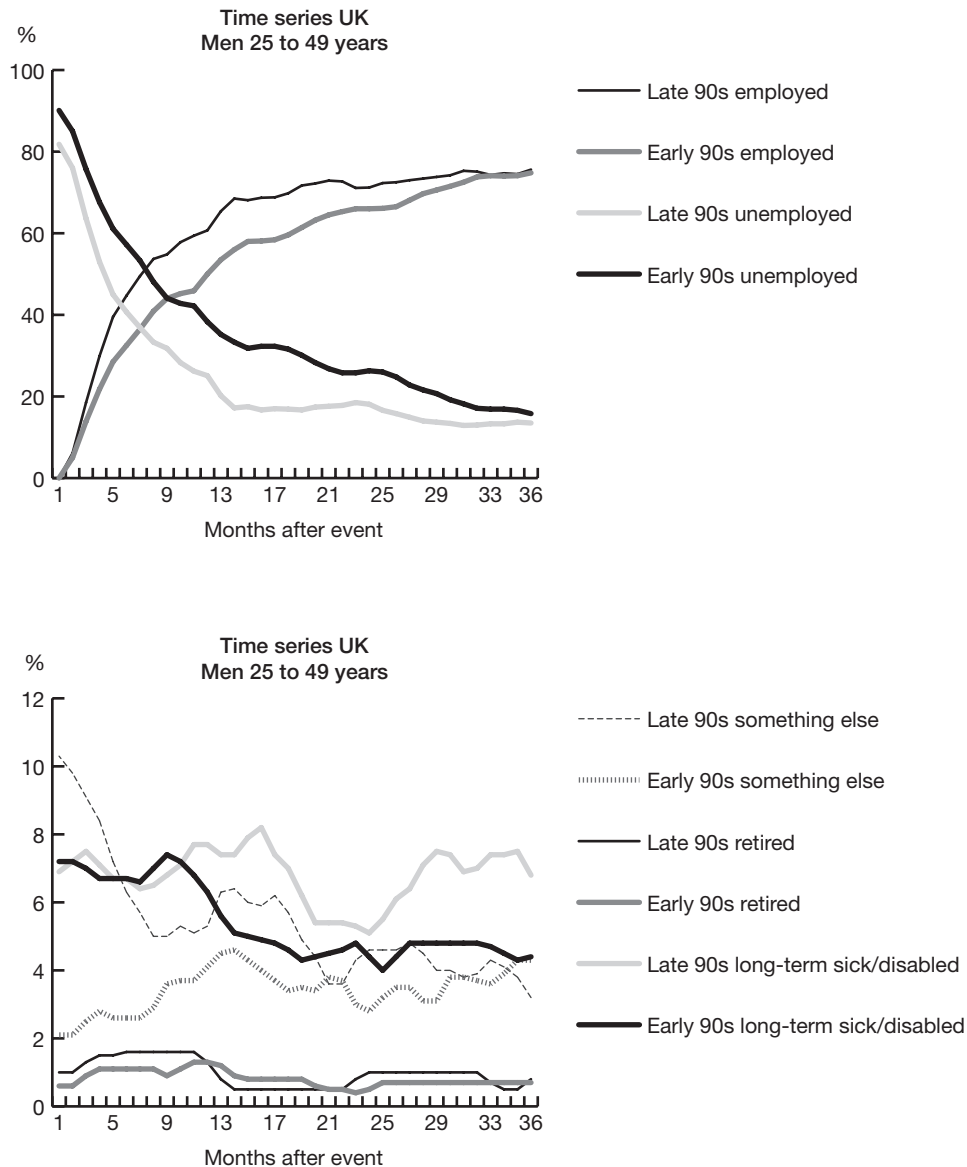


Figure 14
Men becoming non-employed, early 1990s vs late 1990s, men 25–49, UK

Source: BHPS.

became more important in the late 1990s than the early 1990s, beginning with the second year after leaving or losing a job. These findings are all the more striking, as – all else being equal – we would expect a business cycle–induced decrease of inactivity in the late 1990s.

Among older workers a more substantial rise in re-employment can be observed for the late 1990s. However, this is not reflected in proportionally lower unemployment shares (Figure 15). Thus, the improved labour market integration of older workers who have left or lost their job seems to have taken place at the expense of long-term sickness/disability. While the share of the long-term sick/disabled increases over time in the early 1990s, it

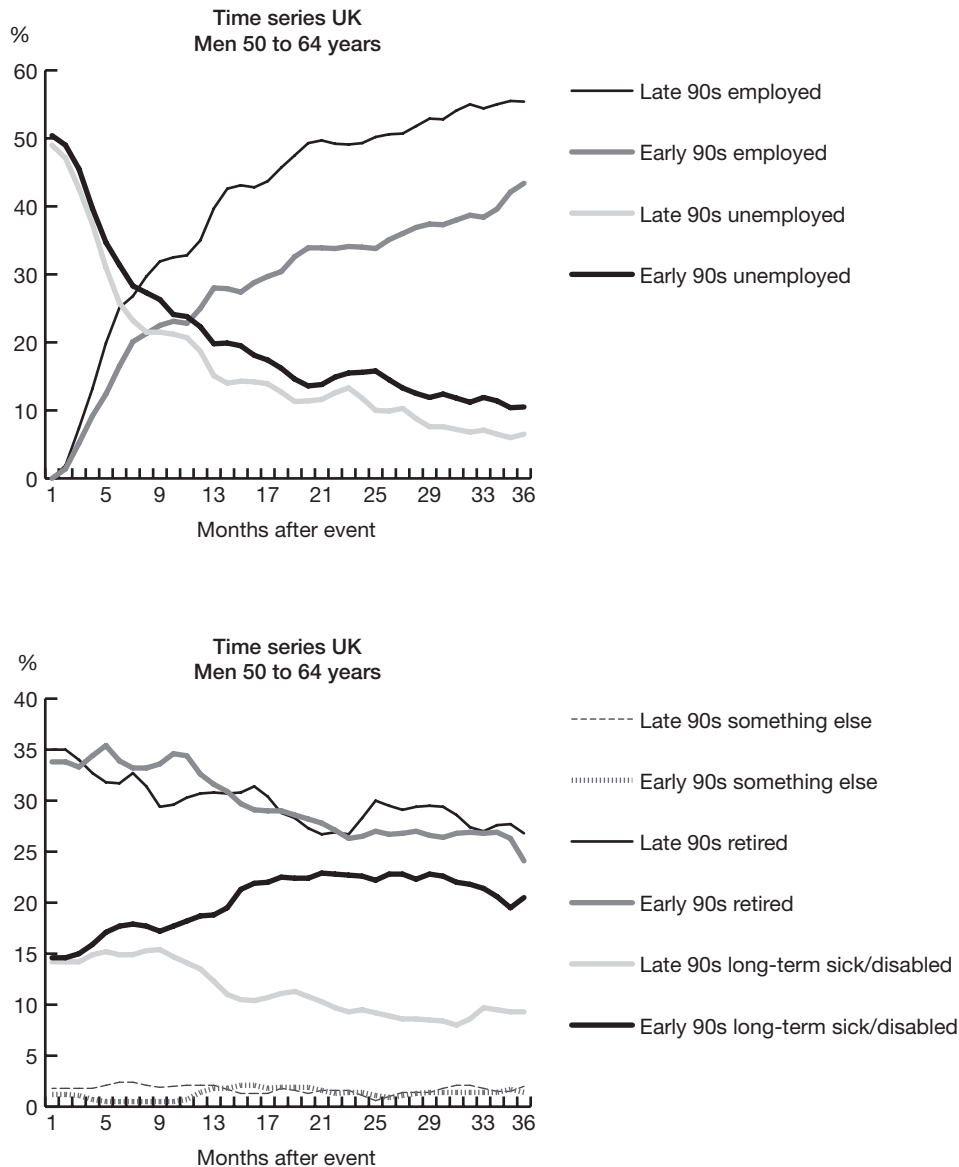


Figure 15
Men becoming non-employed, early 1990s vs late 1990s, men 50–64, UK

Source: BHPS.

decreases in the late 1990s. For the remaining two inactivity states, the evolution in the late 1990s does not seem to differ much from the early 1990s. Taken together, these findings for older British workers correspond quite well to what is to be expected when business-cycle effects are taken into account.

Among the prime-age group in Germany (Figure 16), re-employment determines unemployment almost perfectly, with no differences between the early and the late 1990s during the first one and a half years after having left or lost a job, but a higher share of re-employment thereafter in the late 1990s. With the exception of the high share of 'something else' during the first months, inactivity among the prime-age group seems not to be of great importance. Slightly more people in the late 1990s retired early (or became disabled).

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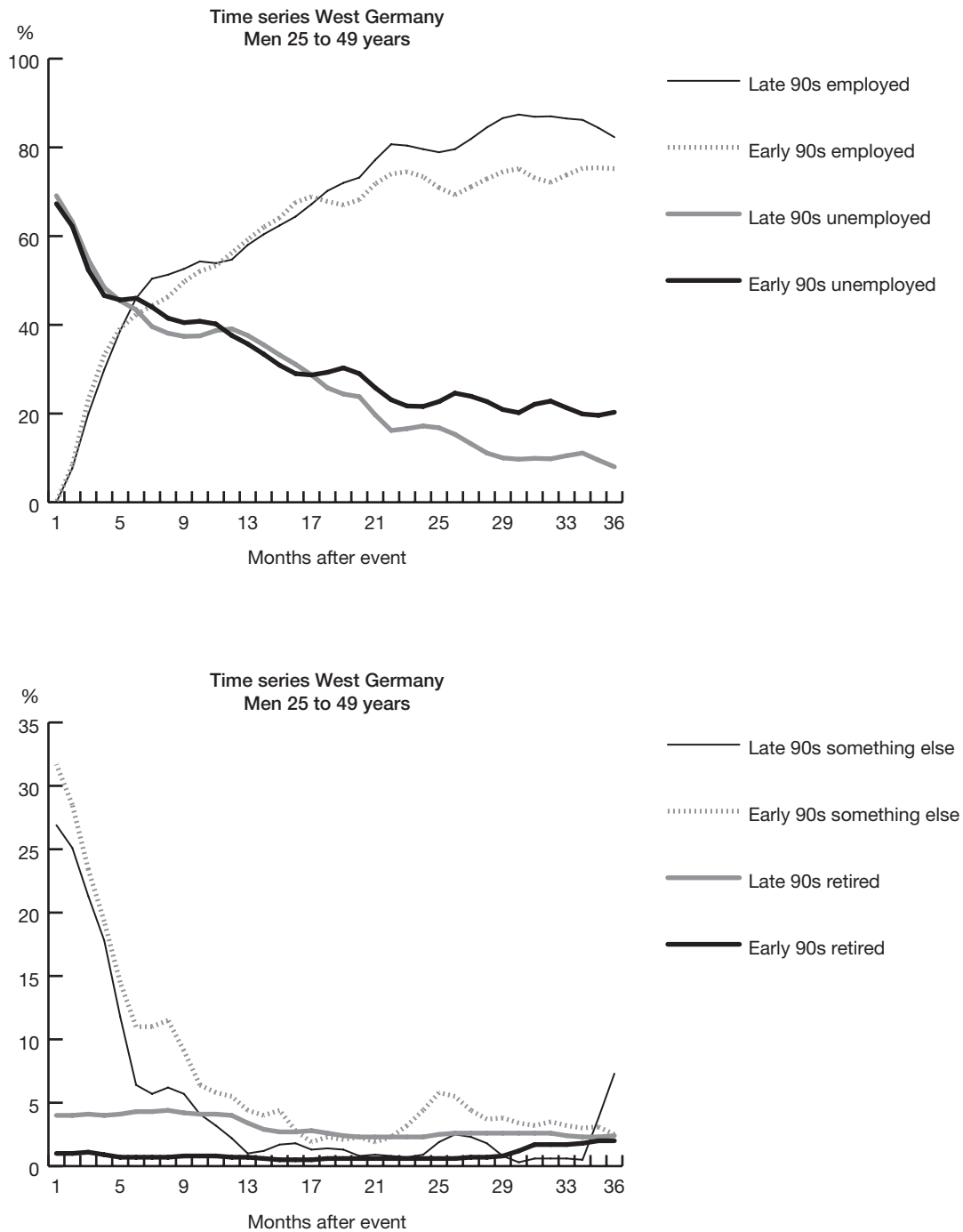


Figure 16
Men becoming non-employed, early 1990s vs late 1990s, men 25–49, West Germany

Source: SOEP.

In sharp contrast, inactivity is a very common problem among older workers in Germany. (Recall that in this case we are more interested in the evolution than the level of inactivity.) Figure 17 shows an important increase in the share of retired people over time. In the late 1990s, a lower share of older workers entered early retirement directly, but early retirement rises strongly two years after having left or lost a job. Accordingly, the

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Figure 17
Men becoming non-employed, early 1990s vs late 1990s, men 50–64, W. Germany

Source: SOEP.

share of unemployed older workers was higher in the late 1990s than in the early 1990s, declining after about two years. These differences may be due to either legislative changes or the deterioration of employment prospects for older workers in the late 1990s.

The employment share of older workers who have lost or left their jobs continued to increase for a longer time in the late 1990s than in the early 1990s. This suggests that German older workers became re-employed more quickly than in the early 1990s. On the other hand, it might simply reflect greater flows in and out of unemployment.

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By way of a summary, Figures 18 and 19 compare the aggregated shares of inactivity and non-employment in the United Kingdom and Germany. For prime-age men leaving or losing their job, remaining or becoming inactive is more common in the UK than in Germany, even though initial inactivity is higher in Germany (Figure 18). Comparing the early with the late 1990s, differences in inactivity amongst prime-age German men are negligible. By comparison – and in contrast to the expected business-cycle effect – inactivity after employment in the UK was more important in the late than in the early 1990s, with a larger share of prime-age men flowing directly from employment into inactivity. In contrast, measures to activate or to stop the decline of labour market

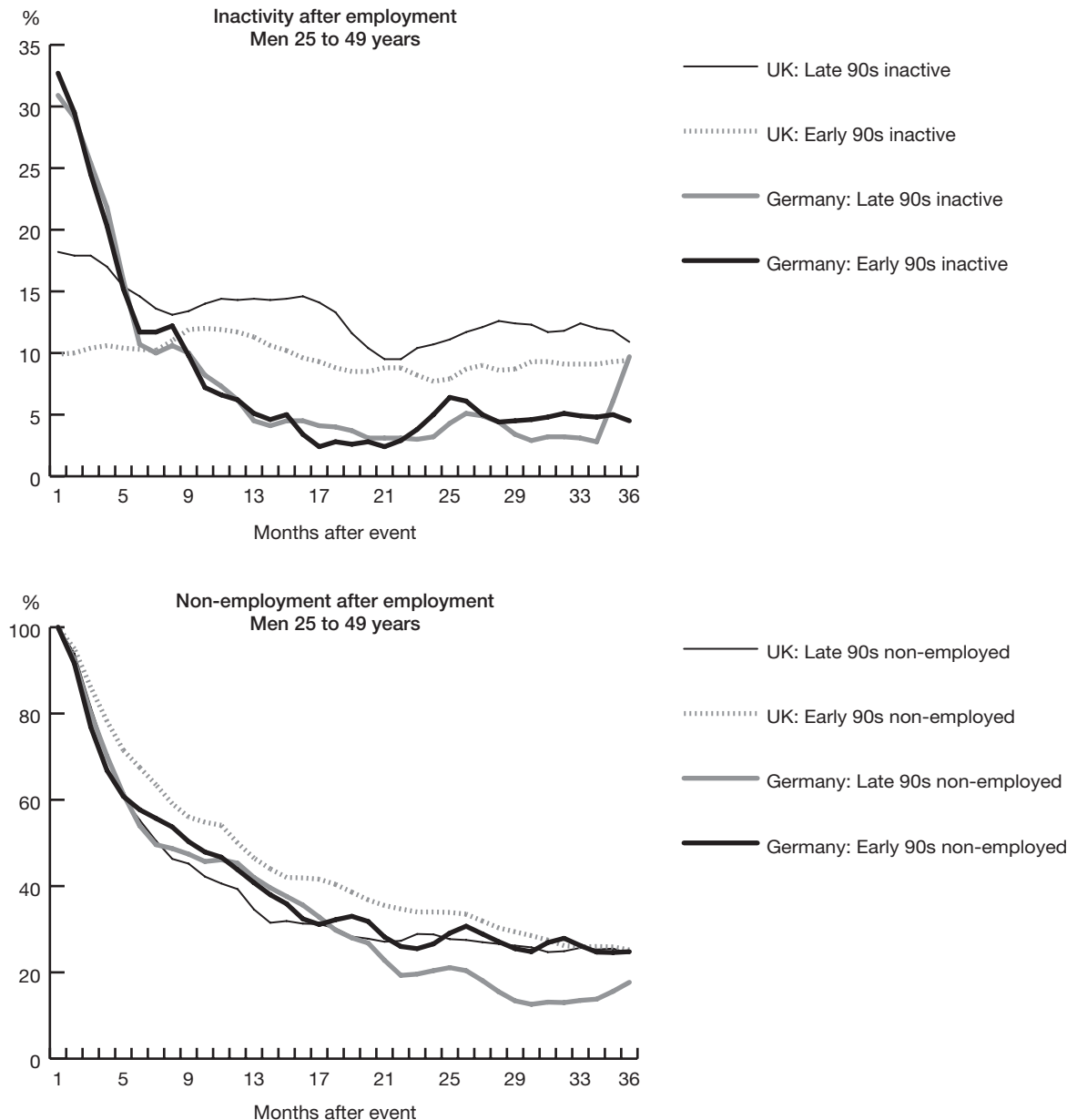


Figure 18
Comparison of inactivity and non-employment, men 25 to 49 years, Germany and UK

Source: BHPS + SOEP.

NON-EMPLOYMENT AND THE WELFARE STATE

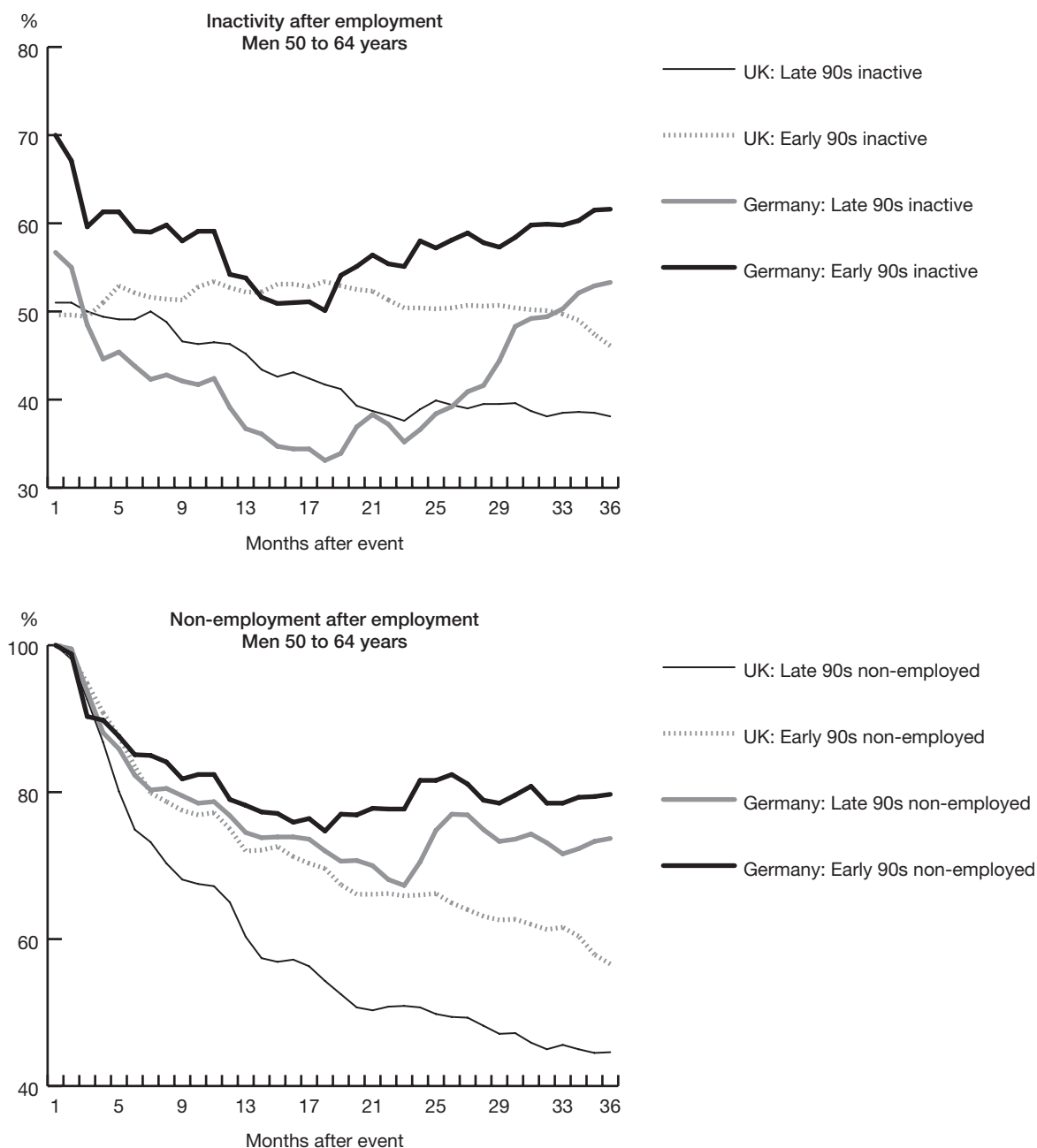


Figure 19
Comparison of inactivity and non-employment, men 50 to 64 years, Germany and UK

Source: BHPS + SOEP.

participation of older workers seem to have been more successful in the UK than in Germany (Figure 19).

However, in Germany, inactivity rates among older workers during the first two years after losing or leaving a job were considerably lower in the second half of the decade, albeit increasing sharply after two years. The lower share of inactive older workers translates into only a small decrease in overall non-employment. What remains open,

however, is whether these findings indicate a slight improvement of employment prospects, or merely more flows into unemployment and subsequently more flows from unemployment to retirement in accordance with the special pension scheme for the older unemployed. In the UK, non-employment has declined steadily over time, which may or may not be due to positive business-cycle effects.

6.2 Hazard models

To control for the influence of legislative changes on labour market behaviour, dummies which represent the months in which Incapacity Benefit as part of the Incapacity for Work Act 1994 (IWA, introduced April 1995) and the Jobseekers Allowance (JSA, introduced October 1996) came into effect were included in the hazard models for the UK. The models for Germany include only a dummy representing the two legislative changes regarding early retirement, that is, the law on old-age part-time work and the increase of minimum ages for early retirement (CER, August 1996). As the Law on the reform of employment support (AFRG, April 1997) coincided almost perfectly with the labour market improvement after 1997, no variable representing the AFRG has been included in the models.

In order to avoid misspecifications arising from neglected business-cycle effects and to minimise unobserved heterogeneity, the following (time-varying) covariates were added:

- Dummies to account for disadvantaged groups aged between 16 and 24, and 50 and 64 (reference group¹⁹: age between 25 and 49), low skilled and high skilled (reference group: neither low nor high skilled)²⁰ and non-white (reference group: white).
- Dummies for the household situation, which is likely to influence labour market behaviour.
- Especially where means-tested benefits apply (McGinnity, 2002), with 'single' and 'partner has job' (reference group: living with non-employed partner) and 'dependent children in household' (reference group: no children).
- Covariates controlling for business-cycle effects and regional economic differences. Controlling for business-cycle effects is the most difficult issue. For the UK, relevant legislative changes coincided with the economic recovery after the severe economic crisis of 1991–1993. In Germany, the CER also correlates more or less with the improvement of the economic environment in the late 1990s. Thus, time dummies to indicate the turning points of the business cycles seemed to be most suitable as covariates. Furthermore, the regional employment rate for men²¹ is introduced to capture regional differences as well as the medium-term labour market situation. Another variable completes the covariates controlling for business-cycle effects and regional differences: the regional compared to the overall UK annual employment

¹⁹ The coefficients of covariates refer always to a reference group, as the hazard models compare the risk of one group to that of another.

²⁰ The skill levels were classified according to the updated CASMIN schema provided by Brauns and Steinmann (1999). Low skilled refers to the CASMIN level 1a, high skilled refers to level 3a and 3b.

²¹ Source: DWP and Statistisches Bundesamt.

change is included to control for the short-term evolution of regional labour markets.

- Covariates to account for individual employment histories: former unemployment experience as the cumulated unemployment duration in earlier episodes as a percentage of observed time. Secondly, a simple count of former unemployment episodes observed is included.

Furthermore, dummies to control for seam effects (BHPS: interview date; SOEP: December), time dependence and, in the case of the BHPS, over-sampled regions were introduced into all hazard models.

6.2.1 Results for the UK

Table 14 shows the results for transitions in and out of non-employment in general, compared to those in and out of unemployment in particular. The results in the first part of the table include the whole working-age population, the second the prime-age group and the third, older workers from 50 to 64 years.

The hazard models for transitions from *employment to unemployment* in the UK provide meaningful results: younger workers become unemployed faster than the prime-age group, the low skilled are more vulnerable to losing their jobs, the high skilled less than others. If the spouse or the live-in partner is working, job loss for the partners is rarer. After 1993, transitions into unemployment are, as expected, less likely than before. The longer people were unemployed before the more likely it is that they become unemployed again, and if they moved out of employment more often before, they tend to lose their job again more quickly. After the introduction of the JSA, fewer people become unemployed.

For transitions from *employment into non-employment* things look similar, with the exception that older workers are more likely to flow out of employment than prime-age workers. Obviously, older workers retire more often than younger workers, be this hidden unemployment or not. When comparing the coefficients for the JSA, a less strong and more uneven effect is observed for transitions from employment to non-employment than for employment to unemployment, suggesting that the JSA not only influences job tenure positively but also has adverse effects on becoming unemployed subsequent to being in employment, as discussed later.

The effects shown for transitions from *unemployment to employment*²² are almost the reverse, with some interesting exceptions: the JSA does not seem to have had any influence on the duration of unemployment. Additionally, it is more difficult for the non-white unemployed to find a new job. In sum, overall transitions from non-employment to employment do not seem to differ very much from those from unemployment to employment.

Leaving aside younger workers, a more differentiated picture emerges when focusing on age groups and time-related dummy variables which represent the economic recovery, as well as the JSA and the IWA. As to the prime-age group (Table 14, II), the estimates of transitions in and out of unemployment and, more generally, out of non-employment

²² Including only those people who became unemployed after September 1990.

Table 14
Discrete time hazard models: from employment to unemployment and to non-employment, and vice versa, UK

From: To:	I – All age groups							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Age 16 to 24	0.217	0.000	0.260	0.000	0.300	0.000	0.298	0.000
Age 50 to 64	-0.096	0.159	0.568	0.000	-0.649	0.000	-1.109	0.000
Low skilled	0.415	0.000	0.346	0.000	-0.311	0.000	-0.310	0.000
High skilled	-0.300	0.000	-0.240	0.000	0.105	0.097	0.158	0.001
Single	0.033	0.601	-0.019	0.724	-0.051	0.475	0.105	0.061
Children under 18 in HH	-0.050	0.404	-0.128	0.014	-0.035	0.603	0.019	0.734
Partner has job	-0.433	0.000	-0.481	0.000	0.531	0.000	0.531	0.000
Nonwhite	-0.038	0.727	-0.084	0.381	-0.493	0.000	-0.188	0.037
after93	-0.279	0.000	-0.233	0.000	0.257	0.001	0.171	0.013
IWA (additional effect)	-0.065	0.454	-0.079	0.305	0.051	0.569	0.107	0.167
JSA (additional effect)	-0.245	0.000	-0.123	0.036	0.100	0.178	-0.075	0.207
Regional empl. rate	-0.001	0.645	-0.001	0.540	0.007	0.025	0.009	0.001
Regional-national employment change	-0.001	0.644	0.000	0.925	0.001	0.810	0.001	0.777
Unemployment experience	0.016	0.000	0.016	0.000	-0.007	0.000	-0.001	0.238
Number of episodes	0.104	0.000	0.067	0.002	0.073	0.002	0.057	0.005
N (person months)	424 387		27 996		424 387		71 640	

From: To:	II – 25 to 49 years							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.336	0.000	0.335	0.000	-0.368	0.000	-0.337	0.000
High skilled	-0.216	0.001	-0.251	0.000	0.077	0.332	0.187	0.003
Single	0.036	0.651	0.027	0.712	-0.057	0.543	0.076	0.313
Children under 18 in HH	-0.098	0.153	-0.125	0.042	-0.059	0.445	-0.033	0.613
Partner has job	-0.479	0.000	-0.450	0.000	0.508	0.000	0.443	0.000
Nonwhite	-0.211	0.196	-0.183	0.211	-0.668	0.001	-0.258	0.065
after93	-0.239	0.018	-0.200	0.035	0.287	0.006	0.200	0.039
IWA (additional effect)	-0.108	0.373	-0.088	0.434	0.030	0.807	0.060	0.584
JSA (additional effect)	-0.214	0.024	-0.083	0.338	0.101	0.329	-0.067	0.432
Regional employment rate	-0.005	0.104	-0.005	0.093	0.007	0.129	0.006	0.103
Regional – national empl. change	-0.002	0.423	-0.002	0.418	0.006	0.103	0.005	0.143
Unemployment experience	0.015	0.000	0.014	0.000	-0.009	0.000	-0.002	0.177
Number of episodes	0.073	0.029	0.052	0.096	0.047	0.148	0.023	0.414
N (person months)	282 577		282 577		14 226		27 952	

(continued)

Table 14
Discrete time hazard models: from employment to unemployment and to non-employment, and vice versa, UK (continued)

From: To:	III – 50 to 64 years							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.252	0.057	0.171	0.049	-0.272	0.119	-0.138	0.275
High skilled	-0.434	0.008	-0.082	0.385	-0.053	0.797	-0.110	0.402
Single	0.260	0.142	-0.072	0.509	-0.607	0.019	0.073	0.644
Children under 18 in HH	0.265	0.121	-0.173	0.167	-0.104	0.634	0.266	0.106
Partner has job	-0.148	0.274	-0.455	0.000	0.666	0.000	0.676	0.000
Nonwhite	0.566	0.034	0.120	0.582	-0.252	0.485	0.272	0.285
after93	-0.381	0.064	-0.107	0.423	0.236	0.345	0.230	0.259
IWA (additional effect)	0.037	0.879	-0.268	0.101	-0.081	0.779	0.068	0.757
JSA (additional effect)	-0.724	0.000	-0.217	0.094	0.290	0.234	-0.060	0.724
Regional employment rate	0.007	0.425	0.002	0.740	0.022	0.145	0.032	0.018
Regional – national empl. change	0.000	0.972	0.003	0.435	0.001	0.949	-0.005	0.591
Unemployment experience	0.009	0.189	0.005	0.417	-0.015	0.003	0.004	0.318
Number of episodes	0.231	0.005	0.100	0.123	0.317	0.001	0.301	0.000
N (person months)	83 177		83 177		5 125		29 185	

Source: BHPS.

Note: All models include time constants and dummies controlling for seam effects and oversampled regions.

confirm the above-mentioned intuitions on the effects of the JSA. On the one hand, the JSA reduces the likelihood of transitions from employment to unemployment, but not from employment to non-employment, thus promoting transitions from employment to inactivity (Table 15, I). On the other hand, the JSA does not have significant effects on the transitions of prime-age men out of un- or non-employment into employment. As we would expect, for the IWA no effect at all is observed for any transition shown in Table 14. In contrast, the time dummy flagging the end of the employment crisis shows the expected effects on all transitions from employment to un- or non-employment, and vice versa.

As for older workers, transitions from employment into unemployment tend to become less likely after 1993. This is not true for transitions out of employment in general,²³ however, which do not appear to have slowed down considerably before the IWA came into effect, as we might have expected. The same holds for the JSA, notwithstanding the fact that both effects lack entirely convincing p-values (Table 14, III). However, there is no doubt that transitions out of employment became less likely during the late 1990s compared with the early 1990s. For transitions back into employment, strong but not at

²³ Note that early retirement and transitions into disability which are not due to labour market reasons, but account for a relatively large share of transitions into non-employment among older workers, might superimpose business-cycle effects. Thus, comparing transitions in and out of non-employment as the most general aggregation provides more and better information for the prime-age group than for older workers.

Table 15
Discrete time hazard models: from employment to inactivity and vice versa;
from unemployment to inactivity, UK

From: To:	I – 25 to 49 years					
	Employment Inactivity		Inactivity Employment		Unemployment Inactivity	
	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.339	0.030	-0.593	0.001	-0.167	0.337
High skilled	-0.407	0.004	0.247	0.092	-0.211	0.304
Single	-0.001	0.994	0.552	0.003	-0.201	0.288
Children under 18 in HH	-0.230	0.102	-0.191	0.207	-0.101	0.572
Partner has job	-0.317	0.035	0.904	0.000	-0.381	0.062
Nonwhite	-0.019	0.954	0.704	0.016	-0.681	0.087
after93	0.021	0.938	-0.253	0.430	0.639	0.006
IWA (additional effect)	0.031	0.919	0.575	0.087	-0.197	0.461
JSA (additional effect)	0.453	0.035	0.058	0.787	0.310	0.185
Regional employment rate	-0.004	0.631	0.040	0.022	-0.014	0.105
Regional-national empl. change	-0.001	0.857	0.119	0.031	0.003	0.716
Unemployment experience	0.008	0.187	-0.008	0.172	0.002	0.603
Number of episodes	-0.030	0.716	-0.265	0.067	0.013	0.858
N (person months)	282 577		13 198		14 266	

From: To:	II – 50 to 64 years					
	Employment Inactivity		Inactivity Employment		Unemployment Inactivity	
	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.100	0.382	-0.382	0.088	0.066	0.744
High skilled	0.093	0.427	0.273	0.178	-0.013	0.964
Single	-0.261	0.061	0.423	0.080	-0.072	0.748
Children under 18 in HH	-0.535	0.004	0.263	0.377	-1.152	0.005
Partner has job	-0.636	0.000	0.751	0.000	-0.038	0.860
Nonwhite	-0.444	0.253	0.859	0.039	0.021	0.954
after93	0.107	0.540	0.469	0.233	-0.554	0.094
IWA (additional effect)	-0.510	0.021	0.064	0.872	0.881	0.013
JSA (additional effect)	0.141	0.433	0.157	0.585	-0.074	0.774
Regional employment rate	0.000	0.945	0.048	0.046	-0.007	0.529
Regional-national empl. change	0.006	0.298	-0.060	0.436	-0.006	0.531
Unemployment experience	-0.006	0.594	-0.020	0.169	0.006	0.163
Number of episodes	-0.030	0.772	-0.182	0.345	-0.093	0.516
N (person months)	83 177		26 938		5125	

Source: BHPS.

Note: All models include time constants and dummies controlling for seam effects and oversampled regions.

all significant effects are estimated, both for non-employment and unemployment as origin states.

The observed differences between transitions in and out of unemployment on the one hand, and non-employment on the other will be examined in more detail. Recall that the two main concerns of this project are to assess the influence of welfare state legislative changes not only on employment, but particularly on inactivity, that is, all the non-employment states except unemployment. As already mentioned, among the prime-age group, the JSA obviously has a quite strong positive effect on transitions from employment to inactivity, whereas neither economic recovery nor IWA have any influence at all (Table 15, I). The estimates for transitions from inactivity to employment show another expected, albeit slightly unstable, result: with the introduction of the IWA, transitions out of inactivity become more likely than before for prime-age men, suggesting more flows out of long-term sickness/disability after the IWA came into effect. While this finding surely conforms to the goals of the IWA, it has to be noted that this effect may be at least partly due to the rising probability among prime-age men of becoming inactive subsequent to unemployment, which is observed after 1993: that is, if inflows are higher, outflows may be higher, too.

In contrast – and as one would expect – after 1993 older workers are less likely to make transitions from unemployment to inactivity (Table 15, II). (Note that the error probability is not entirely convincing.) However, the most striking result is the estimated effect of the IWA, which is negative for transitions from employment into inactivity, but positive for transitions from unemployment into inactivity. Probably, this finding has to do with transitions into long-term sickness/disability, that will be discussed in more detail later. Regarding the JSA, among older workers no effects are observed on transitions in or out of inactivity.

To investigate the influence of legislative changes in more detail, we consider the components of inactivity in a final step. Because we have too few cases at our disposal, only transitions from employment and unemployment to long-term sickness, as well as to 'retired' combined with 'something else' are estimated, but not the reverse transitions. Retired and 'something else' are merged for the same reason, with retirement of no importance for prime-age men and 'something else' irrelevant for older workers (Table 16).

As the number of events is small, the results have to be handled with caution, but they do match the results for inactivity as a whole. For the prime-age group, no effect of the time dummies is observed for transitions from employment to long-term sickness/disability. In contrast, transitions from unemployment to long-term sickness/disability are more likely after 1993, with the error probability slightly above 5%. To account for the overall incidence of long-term sickness/disability, a third model is estimated, combining all states apart from long-term sickness/disability into a single origin state. In general, prime-age men are more likely to make transitions to long-term sickness/disability after 1993, with no additional effects estimated for the IWA and the JSA. Transitions from employment to retired/'something else', but not to long-term sickness/disability, become more likely with the JSA, while transitions out of unemployment seem not to be affected in the same way or to the same extent.

As for older workers, the above-described complementary effect of the IWA on transitions to inactivity from employment on the one hand and unemployment on the other, is also observed for the special case of transitions to long-term sickness/disability. The findings

Table 16
Discrete time hazard models: from employment, unemployment and any state to selected states, UK

From: To:	Employment		Unemployment Long term sickness/disability		Any state		Employment Retired/something else		Unemployment Unemployment or something else	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.
I – 25 to 49 years										
Low skilled	0.647	0.002	0.058	0.829	0.694	0.000	-0.063	0.801	-0.335	0.141
High skilled	-0.846	0.000	-0.427	0.230	-0.800	0.000	-0.145	0.407	-0.159	0.520
Single	-0.256	0.308	-0.291	0.334	-0.201	0.222	0.234	0.326	-0.104	0.667
Children under 18 in HH	-0.291	0.160	-0.500	0.093	-0.670	0.000	-0.179	0.350	0.120	0.590
Partner has job	-0.522	0.015	-0.226	0.477	-0.153	0.290	-0.116	0.587	-0.410	0.119
Nonwhite	0.361	0.397	-	-0.314	0.389	-0.417	0.415	-0.177	0.664	-
after93	0.281	0.388	0.728	0.086	0.432	0.059	-0.340	0.461	0.595	0.029
IWA (additional effect)	-0.076	0.838	0.379	0.371	0.332	0.146	0.276	0.593	-0.565	0.107
JSA (additional effect)	-0.129	0.657	0.223	0.506	-0.217	0.280	0.944	0.004	0.371	0.249
Regional employment rate	-0.013	0.173	-0.024	0.057	-0.017	0.007	0.011	0.460	-0.008	0.484
Regional-national employment change	-0.006	0.392	-0.002	0.889	-0.003	0.549	0.011	0.437	0.005	0.632
Unemployment experience	0.013	0.116	0.003	0.487	-	-	0.004	0.613	0.000	0.945
Number of episodes	-0.192	0.174	0.003	0.976	0.976	0.000	0.057	0.568	0.044	0.645
N (person months)	282 577		14 226		317 240		282 577		14 226	
II – 50 to 64 years										
Low skilled	0.544	0.018	0.487	0.176	0.529	0.000	-0.045	0.732	-0.143	0.544
High skilled	-0.435	0.141	0.014	0.979	-0.716	0.000	0.197	0.121	-0.066	0.850
Single	-0.411	0.207	-0.426	0.318	0.179	0.238	-0.227	0.140	0.111	0.669
Children under 18 in HH	0.643	0.016	-0.414	0.451	-0.433	0.002	-1.176	0.000	-1.662	0.006
Partner has job	-0.554	0.012	0.302	0.398	0.417	0.029	-0.658	0.000	-0.155	0.564
Nonwhite	-0.361	0.633	1.002	0.026	0.509	0.069	-0.444	0.330	-0.932	0.141
after93	0.460	0.170	-1.204	0.119	0.206	0.363	-0.014	0.947	-0.265	0.475
IWA (additional effect)	-0.912	0.051	1.571	0.050	0.117	0.591	-0.370	0.145	0.606	0.130
JSA (additional effect)	0.002	0.996	0.201	0.650	-0.399	0.046	0.172	0.389	-0.235	0.449
Regional employment rate	0.006	0.749	-0.021	0.066	-0.008	0.305	-0.002	0.827	0.027	0.157
Regional-national employment change	0.003	0.817	-0.017	0.059	-0.003	0.662	0.007	0.287	0.027	0.143
Unemployment experience	0.011	0.510	-0.003	0.691	-0.003	0.662	-0.018	0.315	0.011	0.021
Number of episodes	-0.129	0.569	0.098	0.639	0.526	0.001	0.011	0.929	-0.261	0.167
N (person months)	83 177		5 125		116 640		83 177		5 125	

Source: BHPS.

Notes: All models include time constants and dummies controlling for seam effects and oversampled regions.

From unemployment to long-term sickness/disability, no event was observed for nonwhite prime-age men, thus the variable was discarded.

for the overall incidence of long-term sickness/disability suggest that the IWA did not contribute to bringing down the transitions of older workers into long-term sickness/disability. As transitions into long-term sickness/disability are less likely to occur after the introduction of the JSA, the IWA may have developed the expected negative impact on flows to long-term sickness/disability only with a delay. Whether the IWA actually had the suggested adverse effects on the *direction* of flows to long-term sickness/disability – that is, fewer transitions from employment and more transitions from unemployment – is hard to say because the same (but not significant) effects are reported for transitions to retired/‘something else’.

Thus, it may be that the IWA, as expected, has in fact contributed to decreasing flows into long-term sickness/disability among older workers. However, this effect may be attenuated or entirely compensated for by the same push factors towards inactivity that were at work for unemployed prime-age men after 1993, be the destination long-term sickness/disability or retired/‘something else’. Finally, for older workers, the observed overall decrease after the introduction of the JSA may be, as mentioned above, explained as a delayed outcome of the IWA, but could also be due to other factors or legislative changes in the late 1990s that were likely to increase the overall labour market inclusion of older workers.

In summary, while some of the observed influences of legislative changes leave some doubt in terms of estimated probability errors, the results are nonetheless instructive and by and large confirm previous findings for the UK. Furthermore, they offer some deeper insights into changing flows in and out of employment and non-employment due to legislative changes.

Accounting for different origin states, the hazard models provide rather complex results for the IWA which are difficult to explain. Either the IWA only changed the paths of transitions into long-term sickness/disability, or (which seems the case at least for older workers) the legislation actually led to a decrease of the flows into long-term sickness/disability. On the other hand, simultaneous policies to reduce unemployment tended to neutralise this effect of the IWA by pushing more unemployed people towards long-term sickness/disability. This would not necessarily mean that the IWA merely changed the pathways into long-term sickness/disability, since different groups of people may be concerned. As to the JSA, this legislation undoubtedly pushed prime-age men towards inactivity after having left or lost jobs, while the effect on transitions from unemployment to inactivity is too unstable to support robust findings. For older workers as well as for the prime-age group, no positive effect on transitions back into employment can be attributed to the JSA.

In sum, the British employment ‘miracle’ in the 1990s seems to rest on the combined effect of a decline of unemployment due to better general economic prospects and stronger disincentives to become or remain unemployed in case of non-employment. This is true particularly for prime-age men and is apparently at least partly due to legislative changes, but also a result of changing administrative practices. Among prime-age men, transitions out of the labour force are affected by two factors: after 1993 from unemployment into inactivity (long-term sickness/disability), and since the JSA (1996) directly from employment into inactivity (retired/‘something else’). For older workers, nothing similar can be observed for the 1990s.

6.2.2 Results for Germany

Regarding the covariate structure, the hazard models for Germany differ in only two respects from those for the UK. Two time dummies for business-cycle changes are included: 'after92' to mark the end of the unification boom, and 'after97' to mark the beginning of the economic recovery in the late 1990s. Furthermore, ethnic background is replaced by nationality. For several reasons (not outlined here), in the case of Germany nationality is the more appropriate distinction with which to trace ethnic discrimination on the labour market.

Table 17 shows the results for transitions from employment into unemployment on the one hand and to non-employment in general on the other. For all age groups, the observed effects on transitions out of employment are similar to those for the UK, with the interesting exceptions that in (Western) Germany in the 1990s older men obviously face greater risks of becoming unemployed than prime-age men. In addition, non-citizens – so-called 'foreigners' – lose their jobs more often than those with a German passport.

Previous unemployment experience, skill level and the business-cycle dummies influence transitions out of employment in the expected ways. If the partner is working, men are less likely to lose or leave their jobs. The results for transitions out of employment into unemployment on the one hand and non-employment on the other do not differ at all, apart from the significant negative impact of children in the household on transitions into non-employment. Apparently, older workers retire later if they have dependent children.

As expected, the hazard models for transitions back into employment for most covariates show the reverse picture. Only young people are almost as likely to find work again as they are of becoming unemployed. Furthermore, regional differences are observed regarding transitions back into employment. The higher the regional employment rate, the better the re-employment prospects, with a stronger influence estimated for transitions out of non-employment than out of unemployment. Regarding the business-cycle dummies, transitions from unemployment into employment became undoubtedly less likely after 1992, as one would expect, while no significant inverse effect is observed after 1997, even if the coefficient has the expected sign. For transitions from non-employment into employment, the negative effect observed for the time after 1992 is less strong and more uncertain, while the positive effect observed for the time after 1997 becomes more reliable, even if not entirely convincing. For all age groups taken together, no particular effects of the CER are observed on transitions from employment into non-employment in general, nor into unemployment in particular, or vice versa.

Leaving aside the interesting results regarding, for example, the labour market behaviour of non-citizens, or the impact of spouses or partners in work, the following remarks on the hazard models broken down by age groups focus, as for the UK, on the time-related dummies. The estimates for the prime-age group confirm the results for the whole working-age population. Transitions out of employment into non-employment generally, and into unemployment in particular, became, as expected, more likely after 1992 and less likely after 1997. For transitions back into employment, the opposite is the case. The coefficients for the CER, which should not have any influence on the labour market prospects and/or behaviour of prime-age men, are of no particular interest, but point in the same direction as the first business-cycle dummy. This indicates that some additional – albeit very unstable – business-cycle effects may to some extent superimpose the estimated coefficients of the CER dummy.

Table 17
Discrete time hazard models: from employment to unemployment and to non-employment, and vice versa, Germany

From: To:	I – All age groups							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Age 16 to 24	0.326	0.000	0.297	0.000	0.281	0.001	0.113	0.104
Age 50 to 64	0.353	0.000	0.957	0.000	-1.762	0.000	-1.788	0.000
Low skilled	0.341	0.000	0.276	0.000	-0.211	0.044	-0.288	0.001
High skilled	-0.694	0.000	-0.657	0.000	0.294	0.015	0.319	0.001
Single	0.038	0.630	-0.068	0.273	-0.312	0.001	-0.270	0.000
Children under 18 in HH	-0.102	0.142	-0.231	0.000	-0.028	0.741	0.103	0.132
Partner has job	-0.275	0.000	-0.249	0.000	0.037	0.643	0.028	0.660
Not naturalised citizens after92	0.315	0.000	0.171	0.000	0.246	0.000	-0.095	0.081
Old-Age Part-Time Act (additional effect)	0.074	0.356	0.001	0.983	-0.141	0.120	-0.076	0.319
after97 (additional effect)	-0.382	0.000	-0.219	0.002	0.149	0.112	0.150	0.058
Regional employment rate	-0.001	0.901	-0.003	0.667	0.0005	0.000	0.040	0.000
Regional – national empl. change	0.012	0.815	-0.026	0.533	-0.053	0.363	0.001	0.981
Unemployment experience	0.014	0.000	0.010	0.000	-0.012	0.000	-0.007	0.000
Number of episodes	0.164	0.000	0.133	0.000	0.203	0.000	0.175	0.000
N (person months)	346 925		346 925		22 915		52 061	

From: To:	II – 25 to 49 years							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.334	0.009	0.269	0.019	-0.450	0.002	-0.426	0.001
High skilled	-0.721	0.000	-0.665	0.000	0.088	0.527	0.231	0.036
Single	0.200	0.062	0.185	0.048	-0.394	0.001	-0.404	0.000
Children under 18 in HH	0.004	0.961	-0.015	0.845	-0.098	0.310	0.058	0.463
Partner has job	-0.292	0.001	-0.108	0.137	-0.073	0.435	-0.192	0.014
Not naturalised citizens after92	0.412	0.000	0.371	0.000	0.273	0.002	-0.229	0.002
Old-Age Part-Time Act (additional effect)	0.323	0.001	0.231	0.007	-0.545	0.000	-0.266	0.005
after 97 (additional effect)	0.120	0.241	0.057	0.531	-0.174	0.122	-0.094	0.334
Regional employment rate	-0.491	0.000	-0.388	0.000	0.208	0.070	0.231	0.021
Regional – national empl. change	0.008	0.521	0.005	0.613	0.0004	0.003	0.034	0.002
Unemployment experience	0.044	0.538	0.030	0.624	-0.012	0.870	0.007	0.905
Number of episodes	0.014	0.000	0.012	0.000	-0.017	0.000	-0.011	0.000
N (person months)	238 306		238 306		10 507		14 899	

(continued)

Table 17**Discrete time hazard models: from employment to unemployment and to non-employment, and vice versa, Germany (continued)**

From: To:	III – 50 to 64 years							
	Employment Unemployment		Employment Non-employment		Unemployment Employment		Non-employment Employment	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.291	0.141	0.129	0.374	0.342	0.297	-0.137	0.564
High skilled	-0.694	0.001	-0.674	0.000	0.253	0.414	-0.011	0.959
Single	-0.327	0.101	-0.372	0.003	0.394	0.199	0.156	0.451
Children under 18 in HH	-0.312	0.040	-0.505	0.000	0.618	0.006	0.280	0.095
Partner has job	-0.246	0.039	-0.356	0.000	0.489	0.015	0.497	0.000
Not naturalised citizens after92	0.300	0.022	0.000	0.997	0.923	0.000	-0.004	0.976
Old-Age Part-Time Act (additional effect)	0.407	0.008	0.227	0.015	0.117	0.685	0.160	0.355
after 97 (additional effect)	-0.173	0.354	-0.202	0.093	0.036	0.895	0.228	0.203
Regional employment rate	-0.175	0.377	0.036	0.772	-0.210	0.451	-0.337	0.070
Regional – national empl. change	0.027	0.198	-0.005	0.718	0.001	0.000	0.074	0.001
Unemployment experience	0.055	0.630	-0.038	0.582	-0.129	0.495	-0.032	0.787
Number of episodes	0.015	0.000	0.006	0.004	0.000	0.730	0.001	0.119
	0.278	0.000	0.184	0.000	0.272	0.000	0.307	0.000
N (person months)	81 858		81 858		8 839		31 757	

Source: BHPS.

Note: All models include time constants and dummies controlling for seam effects.

For older workers, the results are quite different. While they are also more likely to become non- or unemployed after 1992, they do not seem to benefit from the economic recovery in the late 1990s. In contrast, the CER seems to influence transitions from employment into non-employment in general, since transitions into non-employment become less likely after the legislation had been implemented. As to transitions from unemployment to employment, no reliable effect at all is observed for the time-related dummies. If anything, re-employment prospects decline rather than improve after 1997. The estimates for transitions from non-employment into employment confirm this suspicion.

For the prime-age group, as suggested by the descriptive findings, inactivity is of no great importance (see Table 18). The estimates for transitions into inactivity, and vice versa, do not reveal any reliable business-cycle effect on flows out of or into the labour force, even if the coefficients have the expected signs, with slightly stronger flows from inactivity into employment when the overall labour market situation improved, and vice versa.

As for older workers, they are less likely to make transitions out of unemployment into inactivity after 1992. At first glance, this seems quite surprising, but may simply be due to rising unemployment. If higher flows into unemployment do not result in proportionally higher flows into early retirement (or 'something else'), the relative volume of flows into

Table 18
Discrete time hazard models: from employment to inactivity and vice versa;
from unemployment to inactivity, Germany

From: To:	I – 25 to 49 years					
	Employment Inactivity		Inactivity Employment		Unemployment Inactivity	
	B	Sig.	B	Sig.	B	Sig.
Low skilled	0.025	0.924	-0.339	0.230	-0.198	0.662
High skilled	-0.524	0.007	0.593	0.002	-0.279	0.648
Single	0.155	0.423	-0.462	0.022	0.685	0.125
Children under 18 in HH	-0.058	0.678	0.217	0.145	0.132	0.715
Partner has job	0.376	0.008	-0.242	0.127	0.858	0.015
Not naturalised citizens after92	0.244	0.075	-0.222	0.123	-0.249	0.388
Old-Age Part-Time Act (additional effect) after 97 (additional effect)	-0.173	0.387	-0.045	0.824	-0.320	0.437
Regional employment rate	-0.003	0.877	0.026	0.239	0.001	0.202
Regional – national employment change	-0.006	0.956	0.078	0.521	-0.565	0.019
Unemployment experience	0.006	0.045	-0.009	0.007	-0.005	0.087
Number of episodes	0.022	0.655	0.096	0.101	-0.080	0.552
N (person months)	238 306		4 417		10 507	

From: To:	II – 50 to 64 years					
	Employment Inactivity		Inactivity Employment		Unemployment Inactivity	
	B	Sig.	B	Sig.	B	Sig.
Low skilled	-0.044	0.838	-0.057	0.874	-0.016	0.952
High skilled	-0.662	0.000	0.084	0.804	-0.481	0.197
Single	-0.399	0.011	0.291	0.302	-0.079	0.764
Children under 18 in HH	-0.647	0.000	0.032	0.903	-0.784	0.004
Partner has job	-0.413	0.000	0.547	0.001	0.036	0.821
Not naturalised citizens after92	-0.214	0.067	0.197	0.327	0.435	0.008
Old-Age Part-Time Act (additional effect) after 97 (additional effect)	0.127	0.283	0.016	0.945	-0.508	0.036
Regional employment rate	-0.218	0.163	0.185	0.450	-0.317	0.161
Regional – national employment change	0.169	0.290	-0.394	0.124	0.019	0.932
Unemployment experience	-0.022	0.168	0.064	0.031	0.000	0.371
Number of episodes	-0.084	0.319	-0.040	0.797	0.199	0.166
N (person months)	-0.014	0.007	-0.035	0.001	-0.009	0.000
N (person months)	0.115	0.019	0.535	0.000	0.067	0.529
N (person months)	81 858		24 313		8839	

Source: SOEP.

Note: All models include time constants and dummies controlling for seam effects.

inactivity declines. The increasing number of claimants of unemployment benefits based on § 428 SGB III from 82,000 in 1992 to 146,000 in 1995 (Hinrichs and Giebel-Felten, 2002: 32) points in this direction (with flows into retirement taking place with a delay).

Among older workers, the CER, as one would expect, tends to lower the risk of transitions from employment into inactivity, even if the error probability is too high to allow for reliable conclusions. The estimated negative – albeit not significant – impact on transitions from unemployment to inactivity may have been caused by the stepwise increase of the eligibility age for pensions after unemployment.

Looking at the hazard models for transitions into retirement and ‘something else’ (Table 19) – the only two components of inactivity that have been distinguished for Germany – the results are similar to those for inactivity as a whole. This is especially true for the prime-age group, with the interesting exception that after 1997 transitions from unemployment into ‘something else’ became more likely, with an error probability lower than 10%. Apparently, the multiple changes of eligibility criteria associated with the AFRG contributed to more prime-age men dropping out of the labour force. However, inactivity among prime-age men remained rare, with estimates suffering from few events, and in the case of transitions into early retirement too few events to allow for meaningful estimates.

While early retirement is certainly of great importance among older workers, ‘something else’ is not. Thus, the almost stable negative effect on transitions from unemployment into ‘something else’ which is observed after 1992 has to be handled with caution, as it is based on 18 (!) events only. For this reason, the results for transitions from unemployment into ‘something else’ should be considered as illustrations rather than firm empirical evidence.

As to transitions from employment to ‘something else’, the number of events is sufficient for fairly strong conclusions. While the economic environment does not have any influence at all, the CER reduces the risk that older workers make transitions from employment to ‘something else’. However, the CER has no influence whatsoever on transitions from employment to retirement, and in sum does not have any impact on the overall incidence of early retirement among older workers.

To summarise, business-cycle changes in Germany have less impact on transitions in and out of inactivity than in the UK. For the prime-age group, inactivity is of no great importance and is not influenced by the ups and downs of the labour market. However, the business-cycle dummies show the expected signs (with more transitions into inactivity when unemployment rises, and so on), and after 1997, prime-age men became more likely to flow out of the labour force into ‘something else’ than before. This may be considered as a first, but small, step towards more hidden unemployment among the prime-age group.

For older workers, employment prospects remained depressed throughout the 1990s. In contrast to prime-age men, older workers seem not to have gained from the economic recovery in the late 1990s. If anything, their prospects of re-employment declined after 1997.

Regarding the CER, no immediate influence on transitions into retirement has been observed among older workers. Nevertheless, the CER seems to have contributed to a

Table 19
Discrete time hazard models: from employment, unemployment and any state to selected states, Germany

From: To:	Employment		Unemployment		Any state		Employment		Unemployment		
	B	Sig.	Long term sickness/disability	B	Sig.	Any state	Retired/something else	B	Sig.	Unemployment	
I – 25 to 49 years											
Low skilled	-	-	-	-	-	0.178	0.774	0.060	0.819	-0.009	0.985
High skilled	-	-	-	-	-	-0.696	0.190	-0.556	0.007	0.181	0.773
Single	-	-	-	-	-	0.577	0.226	0.127	0.526	1.386	0.020
Children under 18 in HH	-	-	-	-	-	-0.679	0.061	-0.003	0.986	0.714	0.132
Partner has job	-	-	-	-	-	0.587	0.145	0.348	0.017	1.241	0.006
Not naturalised citizens	-	-	-	-	-	0.346	0.308	0.277	0.047	-0.078	0.822
after92	-	-	-	-	-	0.669	0.110	-0.058	0.726	0.963	0.144
Old-Age Part-Time Act (additional effect)	-	-	-	-	-	-0.152	0.723	-0.166	0.427	-0.508	0.335
after 97 (additional effect)	-	-	-	-	-	-0.666	0.201	-0.001	0.995	0.887	0.090
Regional employment rate	-	-	-	-	-	-0.042	0.438	-0.001	0.950	0.001	0.080
Regional – national empl. change	-	-	-	-	-	-0.390	0.183	0.003	0.983	-0.557	0.060
Unemployment experience	-	-	-	-	-	0.008	0.012	0.006	0.049	-0.003	0.342
Number of episodes	-	-	-	-	-	-0.328	0.268	0.028	0.569	-0.060	0.684
N (person months)	238 306		10 507			253 986		238 306		10 507	
II – 50 to 64 years											
Low skilled	0.288	0.331	0.044	0.879	0.012	0.949	-0.343	0.280	-0.317	0.635	
High skilled	-0.582	0.001	-0.530	0.180	-0.752	0.000	-0.907	0.006	-0.226	0.848	
Single	-0.615	0.002	-0.029	0.915	-0.562	0.000	0.066	0.798	-0.442	0.688	
Children under 18 in HH	-0.814	0.000	-0.744	0.010	-0.903	0.000	-0.343	0.124	-0.819	0.302	
Partner has job	-0.589	0.000	-0.054	0.748	-0.544	0.000	-0.053	0.748	0.707	0.168	
Not naturalised citizens	-0.909	0.000	0.634	0.000	-0.372	0.000	0.700	0.000	-2.055	0.014	
after92	0.194	0.181	-0.372	0.156	0.119	0.275	0.003	0.989	-1.267	0.052	
Old-Age Part-Time Act (additional effect)	-0.020	0.914	-0.230	0.322	0.063	0.641	-0.632	0.025	-1.543	0.167	
after 97 (additional effect)	0.221	0.245	-0.036	0.875	0.097	0.475	0.088	0.765	1.024	0.359	
Regional employment rate	0.003	0.869	0.000	0.392	-0.012	0.403	-0.077	0.004	0.001	0.589	
Regional – national empl. change	-0.063	0.543	0.251	0.096	0.040	0.600	-0.118	0.410	-0.240	0.642	
Unemployment experience	-0.009	0.122	-0.010	0.000	-0.007	0.165	-0.019	0.027	-0.004	0.301	
Number of episodes	-0.128	0.138	-0.019	0.881	-0.044	0.690	0.315	0.000	0.666	0.004	
N (person months)	81 858		8 839		95 052		81 858		8839		

Source: SOEP

Note: All models include time constants and dummies controlling for seam effects.

slowing down of flows into non-employment. In general, however, the observed effects of the CER are too ambiguous and uncertain for us to draw any clear-cut conclusions.

In sum, the labour market attachment of older workers did not improve throughout the 1990s. While flows out of employment are (certainly) influenced by business cycles, re-employment prospects are not. For older men in Germany, these findings indicate severe structural disadvantages in the labour market. Furthermore, the overall transitions into retirement did not decline significantly throughout the 1990s, with the signs of the coefficients even indicating a slight rise.

No major changes regarding transitions in and out of employment and non-employment are observed for the 1990s in Germany, but are likely to be observable in subsequent years.

7 Conclusion and policy implications

Labour market trajectories in the UK and Germany have diverged since the early 1990s. In the UK, a steady decline in unemployment began in 1993, reaching levels of below 5% in recent years. By contrast, after the unification boom in the first two years of the decade, German unemployment rose steeply and remains stubbornly high, and not only in the new *Länder*. However, as we have emphasised, unemployment rates are a very partial indicator of the level of economic activity. Employment rates or, more broadly, levels of labour mobilisation draw attention to the scale of non-employment across countries and, as a subgroup, the scale and dynamics of labour market inactivity. Changes in the level of labour mobilisation are thus more meaningful parameters for an assessment of labour market performance, and thus of the feasibility and sustainability of large welfare states.

Gaining prominence in national (HM Treasury and DWP, 2001) and international debates (OECD, 2003), labour market inactivity has recently become a focus of attention in labour market policy initiatives in many European countries. A common trend over recent decades has been the decline of non-employment amongst women and the growth of male labour market inactivity. However, relatively little is known about the dynamics of inactivity or of the impact of national policies and institutions on movements between employment, unemployment and inactivity. Traditionally, research has focussed on conceptualising and measuring the scale of 'hidden unemployment' within a particular country, making use of cross-sectional data. This project has attempted to advance such investigations, adopting a cross-national perspective, employing panel data analyses and focussing on the interface between welfare state regulations and changes in non-employment.

Concentrating on prime-age men as a group traditionally most attached to the labour market, a starting point for this project was the different degrees to which non-employed men are counted as unemployed in the UK and Germany, as well as differences in the social composition and the dynamics of non-employment throughout the 1990s in the context of diverging economies. The position of prime-age working men, for example, contrasts sharply in the two countries, with low and stagnating levels of inactivity in Germany, but a growing significance of labour market detachment, especially for low-skilled British men. However, for older age groups the situation is different. Here, the more favourable economic context – but also recent policy changes – seem to have stopped and reversed the long-term decline of labour market inactivity in the UK. By contrast, the German labour market continues to structurally disadvantage older workers.

These cross-national differences need to be put into the context of different labour market structures and welfare state regulations. The project has shown that transitions to and from employment and non-employment, and movements within the latter, can be influenced by legislative change. In the UK, the introduction of Incapacity Benefit reduced the flow into long-term sickness or disability. However, it was difficult to assess whether the legislation merely re-routed the path from employment to inactivity, due to simultaneous policies aimed at combating unemployment. The implementation of the Jobseekers Allowance reduced the transitions from employment into unemployment, but also fostered flows from employment into inactivity amongst prime-age men.

In Germany, structurally less significant legislative change aimed at scaling down transitions into early retirement (via previous long-term unemployment) and seem to have had only modest effects. The business cycle seems to affect transitions between employment and non-employment much more in the UK than in Germany. However, our results point to tentative policy implications resulting from the imminent merging of unemployment assistance (*Arbeitslosenhilfe*) and social assistance (for employable claimants) into the new unemployment allowance (ALG II) in Germany in 2005. Although different in many ways, like the JSA the introduction of ALG II is likely to increase the proportion of the unemployed receiving benefits not related to earnings but based on household needs. In the present context this will affect about two million current recipients of *Arbeitslosenhilfe*. For them, the means test will become much more rigorous (Bäcker and Koch, 2004).

This shift towards a more means-tested and needs-oriented unemployment support regime has two implications. First, it could counteract policies aimed at reducing the volume of early retirement. About a third of unemployed men in Germany are over 50 years old and 60% of them have been out of the labour market for more than one year. Because of the introduction of stricter household means testing and despite some transitory arrangements (for example, supplements payable for up to two years after exhaustion of ALG) and higher income thresholds (especially for families and those with income from work), for most of them, the transition from ALH to the new ALG-II will result in lower benefit rates or the complete loss of eligibility, particularly for those with partners in work. Whether, as a result, an increase in transitions from unemployment into inactivity can be avoided by stepping up case management within the employment services (from 450 to 75 clients per case manager, as intended) seems doubtful. Even if placement services could be intensified on such a scale (which in itself is questionable), strong economic growth and improvements in labour demand would be required to counteract the pressure towards labour market detachment.

Second, the prevalence of (stricter) means-tested benefits for the unemployed could foster work disincentives within households and thus raise the number of workless households, that is, households with no adult in paid work. Earlier analyses for Germany and the UK (McGinnity, 2002; 2004) have shown that wives of German men who became unemployed have compensated for the loss of household income by finding a job. The fact that this 'added worker' effect was much less observable for British women has been attributed to the more means-tested benefit regime which reduces the incentive for partners to move from inactivity to employment. This problem contributed to high levels of inactivity and, in international comparison, very high levels of workless households in the UK in the mid-1990s. The fact that the distribution of paid work across households has become less unequal since then has been attributed to the economic recovery rather than policy changes such as the New Deal (Gregg and Wadsworth, 2003). In other words, British experience suggests that ALG II will lead not only to more transitions into inactivity amongst older long-term unemployed men but also to an increase in the share of households with no adult in work.

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Appendix A

Sources

Comparing the results of the GSOEP and BHPS episode data files has its limits. In the GSOEP, the respondents are asked to complete some sort of month-by-month calendar in order to check for every month of the year prior to the interview whether they were employed, unemployed, retired, in education, and so on. There is no requirement to check exclusively one item for each time point, so it is possible to specify different activities for the same month – that is, ‘looking after family’ as well as being ‘unemployed’. It follows that obtaining an employment history file with only one state per month hinges on the decision of the researcher on how to order hierarchically the different activity states. In contrast, for the BHPS it is the respondent who decides what kind of employment state best describes his or her current labour market situation. Additionally, the employment states in the BHPS are reported in episode form rather than in calendar spells, and from wave to wave there are overlapping periods so that one can better estimate the importance of recall error–caused seam effects.

Another difference is the slightly different definition of states: while in the GSOEP employment history ‘unemployed’ means ‘registered unemployed’, unemployment is subject to self-definition in the BHPS. Neither of the two episode data sets provides unemployment figures in terms of the ILO definition. This is simply not possible in a longitudinal perspective so comparable rates are only available at cross-sectional level.

Preparing the BHPS employment history file

With the file “newpan”, Halpin (1997; 2000) provides a combined employment history data set derived from multiple sources of the BHPS work-life histories. “Newpan” is modified and aggregated in the following way:

Changes from one job to another or from full-time to part-time employment without intermediate unemployment or non-employment are not divided into two different episodes, but treated as one episode, if no censoring occurs in-between.

‘On maternity leave’, ‘looking after family’ and ‘on government training scheme’ are recoded as ‘something else’ and therefore changes between these states are not regarded as different episodes, in the first two cases for conceptual reasons, in the case of government training schemes for practical ones: there are too few cases.

Hence, the employment and non-employment states distinguished are: employed, unemployed, retired, long-term sick/disabled, ‘something else’ and full-time education. Given the rules outlined every status change and only every status change results in a new episode-record.

Preparing the GSOEP activity calendar

In a first step, the reported employment states were hierarchically ordered as follows: 1. military service, 2. school/university, 3. vocational training, 4. unemployed, 5. part-time employed, 6. full-time employed, 7. retired, 8. 'something else', where the former states have priority in defining labour market status over the latter ones.

As respondents of the SOEP tend to keep checking 'employed' in the calendar even when they are short-term unemployed, 'unemployed' is given priority over 'employed' in order to avoid the overwriting of short unemployment episodes. The same holds for vocational training and part-time employment.

While the BHPS data are left truncated, the SOEP activity calendar suffers from left censoring. Roughly following Ernicke (1997), the starting times of the first episodes were determined as far as possible by matching the employment biography data file with the activity calendar. In doing so, the number of left censored employment spells starting

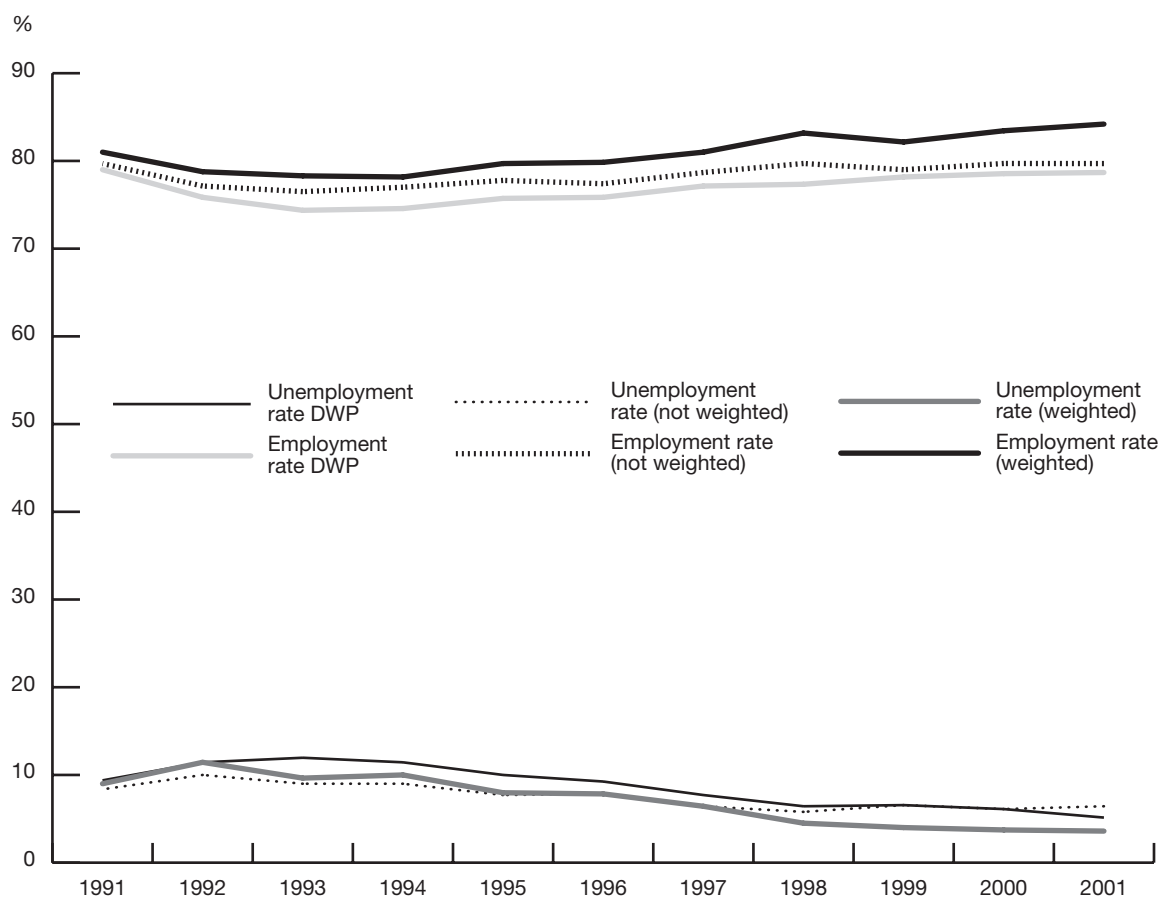


Figure A1
Employment–population ratio and unemployment rate, men 16 to 64 years.
BHPS episode data and DWP figures compared

Sources: DWP and BHPS.

Note: Unemployment rate DWP: ILO Definition – Unemployment rate BHPS: self-defined. Not seasonally adjusted, figures for Spring (DWP), April.

before and ending after 1990 has been reduced from about 60% to 6%. The remaining left censored cases were discarded from the data file.

Finally, the different states were merged and aggregated in the same way as the BHPS. As the SOEP activity calendar does not distinguish between retired and disabled/incapacity, the modified activity calendar includes only five different states: employed, unemployed, retired, 'something else' and education.

The quality of the data

To what extent do the recoded employment history data sets concur with official statistics? Figures A1 and A2 show employment and unemployment figures provided by the DWP (UK), the BA and StaBu (Germany) plotted against yearly snapshots derived from the employment history files.

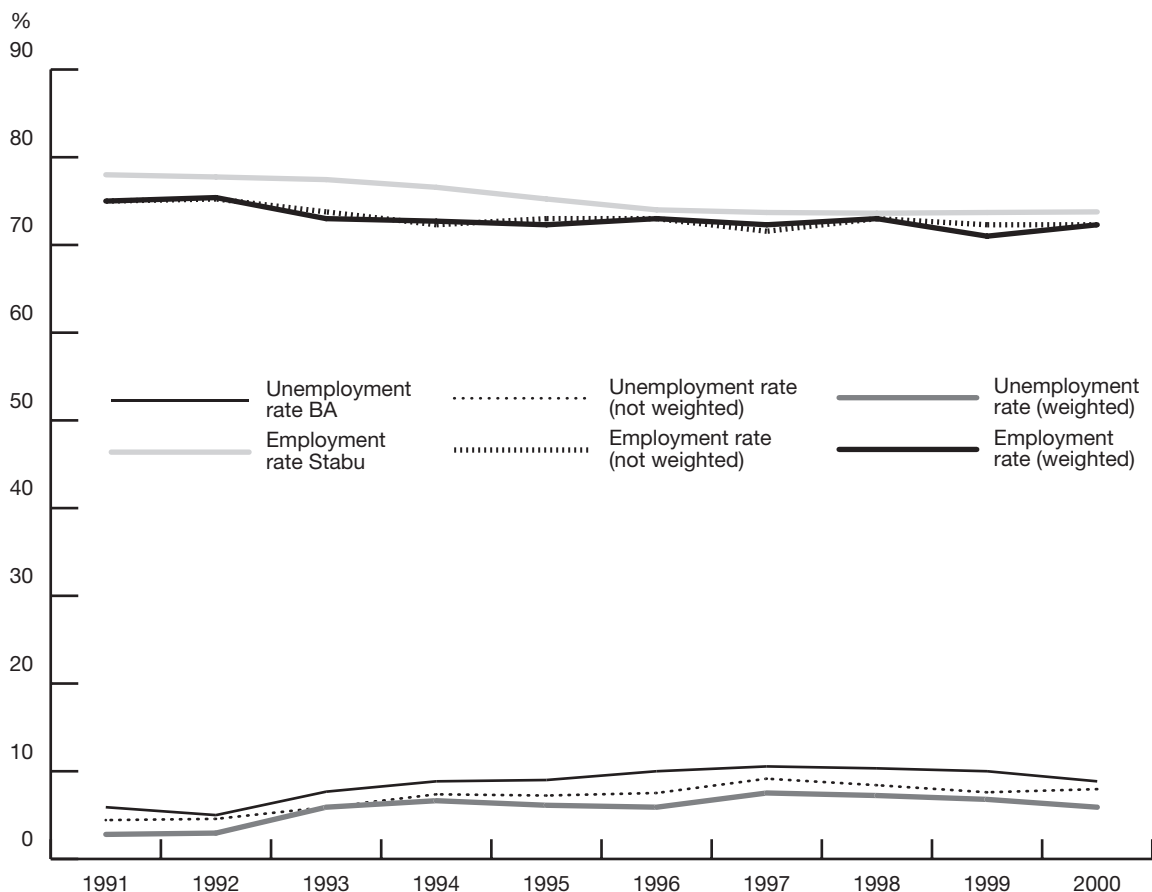


Figure A2
Employment–population ratio and unemployment rate, men 16 to 64 years,
Western Germany. SOEP episode data and StaBu/BA figures compared

Sources: Statistisches Bundesamt, Bundesanstalt für Arbeit, SOEP.

Longitudinal weights are used throughout the descriptive section while the hazard models were calculated without case weights. Despite slight differences regarding the levels, the employment as well as the unemployment evolution in the 1990s is well approximated by the BHPS employment history – the most important aspect for our purpose.

The SOEP data seem not to match official statistics as closely as the BHPS, even if the underestimation of unemployment in the SOEP is due to different measurement concepts (April vs annual averages). However, the overall evolution in time is sufficiently reproduced by the SOEP to provide meaningful results.

Methods

Time series

The time series are derived from spell data based on the above described episode data. They show month-by-month shares of employment and non-employment states *after* leaving or losing a job in the early 1990s, the late 1990s and the 1990s together. How the time spans were delimited is shown in Figure A3.

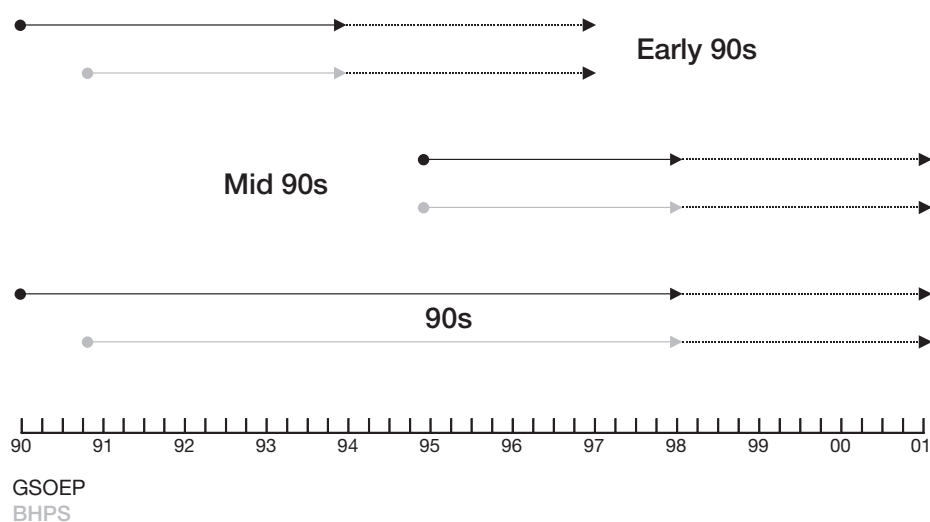


Figure A3
Time series: definition mid and early 1990s

As the observation period of the BHPS begins only in September 1990, the early 1990s time span for the UK covers September 1990 to December 1993; for Germany January 1990 to December 1993. The time series for the late 1990s include those people who lost or left their jobs between January 1995 and December 1997. The observations start after leaving or losing the job for the first time in the given time span and end three years after this event. Thus, the effective observation period ends up to three years after the end of the defined time spans, for the early 1990s in December 1996, for late 1990s and the 1990s as a whole in December 2000.

Transition rate models

Transition rate models are one of the most promising methods of addressing the question of causal influences (Blossfeld and Rohwer, 1995) of legislative changes on labour market behaviour, that is, transitions in and out of employment and non-employment states. However, the analysis of event history data faces multiple problems, such as left censoring, truncation and how to account for time-dependence and unobserved heterogeneity.

The data sets are left truncated in two respects: first, they provide information only on covariates beginning with the time of the survey; second, and more important, the first observed employment state of each individual is the current employment state at the beginning of the survey (BHPS: 9/90, SOEP 1/84). If not controlled for left truncation, the results may suffer from sample selection bias by overestimating employment durations, and so on (Guo, 1993: 221, Jenkins, 1995: 130).

As left truncation is an important issue, especially when examining transitions from employment to any other state, an estimation method accounting for left truncation is required. Thus, Discrete Time Hazard Models based on logistic regression were used for the multivariate event history analysis, following Guo (1993) and Jenkins (1995). Competing risk models can be calculated separately for every single destination state, with other events recoded as if censoring had occurred. The likelihood of the competing risk model is equal to the sum of the destination-specific probabilities.

Time dependence is controlled for by including time constants for every month during the first year of process time, and time constants for every three-month period after the first year. In contrast, no variable to control for unobserved heterogeneity is included.

By definition, event history models assume the independence of episode survival times from former episodes. This is actually not true. For example, having been unemployed previously has an impact on the probability of becoming unemployed again. As the sample consists of repeated events, variables accounting for the impact of personal employment history on the duration of current episodes are included in the models in order to achieve unbiased estimates as far as possible (Allison, 1985: 53).

Appendix B

Table B1
Number of observations, Figures 12 to 19

Time series		Source	
Age group	Period	BHPS	SOEP
16–64	90s	861	898
25–49	90s	371	358
	Early 90s	269	242
	Late 90s	148	205
50–64	90s	280	424
	Early 90s	165	258
	Late 90s	114	205