

**Youth Unemployment:
Individual Risk Factors and Institutional Determinants.
A Case Study of Germany and the United Kingdom.***

Bettina Isengard
DIW Berlin
(German Institute for Economic Research)
Koenigin-Luise-Strasse 5
14195 Berlin

Tel. +49-30-897 89-284
Fax +49-30-897 89-109
email: bisengard@diw.de

* The paper will be published in *The Journal of Youth Studies*, Vol. 6, No. 4, 2003

Abstract

This paper deals with youth unemployment trends in Europe since the mid-1980s in general and regards individual risk factors in the mid-1990s for Germany and the United Kingdom in particular. The study of the two selected countries shows that the individual risk of (long-term) unemployment is not equally high for all young people, but rather depends on various socio-economic and structural factors like gender, education, nationality and region of residence. The individual level of education is an important determinant of occupational success, while the country-specific organisation of educational systems and labour market institutions also affects different occupational outcomes. In addition, the welfare state structures and policies may determine labour market outcomes. Germany and the United Kingdom responded to the increasing problems of youth unemployment with the active labour market programs 'JUMP' and 'New Deal for Young People', the concepts and results of these are discussed.

1. Introduction

Over the past 30 years unemployment in general and youth unemployment in particular have been a major problem in many industrial societies. Today the experience of being unemployed is a common component of the working biographies of a large portion of the young labour force. Here youth unemployment is understood to be the unemployment of young people under the age of 25, which occurs most often with the transition from the educational system into the labour market. However, layoffs are another possibility of becoming unemployed and are an increasing real problem in recent years (Sinnhold, 1990, p. 57). It seems to be an European phenomenon that young people are affected more severely by unemployment than people over the age of 25 in the majority of European Union (EU) countries (Russell & O'Connell, 2001, p. 2f.). Germany is one of the exceptions to this rule.

High youth unemployment rates in most European societies provide significant challenges for economic and social policy. If young people are excluded from the main labour market and relegated to the periphery of the social security system, then this system, which is oriented toward compensation across generations, is endangered (Harten, 1983, p. 22ff.). However, the negative consequences of unemployment affect not only individuals, but also society at large. Increasing joblessness is connected with negative impacts on the personal perspectives of life, political opposition and integration problems (Strasser, 1997, p. 29). Youth unemployment leads to social problems like a lack of orientation and hostility towards foreigners, which in turn lead to increased social expenditures. At the societal level, high youth unemployment endangers the inventory of social security systems, whose proper functioning depends

on a sufficient number of compulsory social insurance working contracts (Franz, 1998, p. 11).

In order to circumvent unemployment, many young people remain in the educational systems to improve their chances through further investment in their human capital, because it seems that 'education is the most important determinant of occupational success in industrialised societies' (Müller & Shavit, 1998, p. 1). However, this prolongs the process of becoming independent from one's parents and delays entry into the labour market. Those unemployed youths who have ended up on welfare are namely often among the long-term unemployed and the repeatedly unemployed later in life. For this group the unemployment risk increases due to the lack of regular work and the following downgrading. A concomitant phenomenon of unemployment is the increasing concern with the problem of social exclusion (Kieselbach *et al.*, 2001; Hammer, 2000; Kieselbach, 2000). Some groups like the long-term unemployed are detached from society such that the concentration of disadvantageous factors like unemployment, poverty and deficiencies in education can lead to their marginalisation (McGinnity, 2001, p. 1).

Although the basic tendencies of unemployment show similar patterns, such as a general increase or different degrees to which certain social groups are affected (e.g., persons with low qualifications or foreigners), there are country-specific differences with regard to the size and structure of the problem. In Germany, youth unemployment rates are relatively low in the EU context and do not constitute a special youth problem as compared to most other countries (Russell & O'Connell, 2001). To illuminate the causes of this, a comparison with the United Kingdom – a high-risk country for the disproportionate share of youth unemployment – is of special interest. Behind the

following analyses is the assumption that the individual risk is not distributed evenly among all young persons, but that differences arise according to the development of individual characteristics (Russell & O'Connell, 2001). Thus, while such influences are not independent of the general business cycle, the worse the economic situation, the stronger the competition for vacant positions, and the greater the likelihood that individual characteristics will affect employment outcomes.

This paper intends to show the institutional influence on the extent of youth unemployment in Germany and the United Kingdom and analyses the individual risk factors which determine unemployment for young people. It is organised as follows: the first section regards the aggregated (long-term) unemployment trends in EU countries for selected years during the period from 1985 to 2000, in order to reveal the structural differences between the two countries. The following section deals with the differences in the rate and structure of unemployment in Germany versus the United Kingdom, which can be explained by the specific organisation of their respective educational systems, labour markets and social security systems. The next section analyses the individual risk factors of youth (long-term) unemployment in Germany and the United Kingdom by using microdata from the two selected countries. The analysis of the German situation is based on anonymous data from the 1995 Microcensus, while the data for the United Kingdom are taken from the 1996 British Labour Force Survey. The last section provides a short overview of the active labour market programs 'JUMP' in Germany and the 'New Deal for Young People' in the United Kingdom.

2. (Youth) Unemployment Trends in the EU Countries

Like unemployment as a whole, youth unemployment fluctuated sharply in the EU countries in the last two decades (cf. table 1).¹ During the mid-1980s young people in

Belgium, France, Greece, Ireland, Italy, the Netherlands and the United Kingdom had a high risk of being unemployed. At the end of the 80s a cyclical boom led to a temporary improvement of the labour market situation in most countries, with reduced unemployment rates in 1990. Since the beginning of the 90s unemployment rates have returned to their original levels or risen even higher. From 1990 to 1995 the unemployment rates for young persons rose to fairly alarming levels in most EU countries. In particular, Finland had one of the most radical increases, with the rate rising from 6.4% to 41.2% during this period.

In 2000, an improved labour market situation can be observed in almost all EU countries. Finland, Ireland, the Netherlands, Portugal, Spain and Sweden, in particular, have managed to reduce their unemployment rates substantially since the mid-90s. However, the dimension of youth unemployment varies considerably from country to country. While Austria, Ireland, Luxembourg and the Netherlands enjoyed low youth unemployment rates in 2000, almost one in four were unemployed in Belgium, Finland and Spain, and no less than a third of young people were jobless in Italy. The youth unemployment rates in Denmark, Germany, Portugal, Sweden and the United Kingdom were below the EU average of 16%, but a comparison between youth unemployment rates and those of older labour market participants (aged 25 and over) demonstrates clearly why the labour market situation for young people is still considered a serious problem in many European countries (Russell & O'Connell, 2001, p. 1f.). As in Belgium, Finland, France, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden, young people in the United Kingdom are affected to a much greater extent by unemployment than older people. The gap in the United Kingdom is clearly evinced by an unemployment rate of 12.1% for young people in 2000, compared with 4.5% for

those aged 25 and over. Young people are unemployed at a rate three times higher than older persons. This tendency is significant for most EU countries. In Germany, in contrast, there is little difference between the unemployment rates between this two groups (8.5% versus 7.9%), and the situation is similar in Austria and Denmark.

-table 1 about here-

Not only unemployment in general, but long-term unemployment in particular is a serious problem in many EU countries. Labour force participants are considered long-term unemployed if they have been out of work or looking for a new first job for 12 months or longer. In contrast to general unemployment, long-term unemployment is not significant for young labour market participants. If both age groups are compared – young persons and those aged 25 and over – it is apparent that in almost all countries young persons are less affected by long-term unemployment. Youth unemployment is distinguished by its greater probability and shorter duration. In most countries, young people are more often affected by unemployment but at the same time more likely to find work again. The 'first in, first out' rule accurately describes the labour market situation for young people living in the EU.

The long-term unemployment rates for both age groups (15 to 24 and 25 and over) decreased between 1985 and 2000 in most EU countries (cf. table 2). Despite this 'positive' development, the high long-term unemployment rates in 2000 in Greece – every second young person was experiencing long-term unemployment – and Italy, where three out of five of the unemployed youths have been out of work for over one year, are alarming. In contrast, Denmark (in 1995), the Netherlands, Sweden and

particularly Finland are able to protect their youth relatively well against long-term unemployment. Only 5.4% of the unemployed young persons in Finland were long-term unemployed in 2000. Although the level of youth unemployment rates differ between Germany and the United Kingdom in that young people living in Germany are not as affected by unemployment, the duration rates are higher than in the United Kingdom.

-table 2 about here-

3. Institutional Determinants of Youth Unemployment in Germany and the United Kingdom

Germany and the United Kingdom differ strongly in terms of the major institutional characteristics of their educational systems, labour markets and welfare systems. The organisational structure of the institutions is the result of different cultural orientations, socio-economic conditions and specific power shares in societies. The relationship between church and state and the influence of various political parties characterised the shape of these institutions. Due to this historic conjunction of conditions, the educational systems (and also the welfare systems) in the EU countries differ strongly (Müller & Shavit, 1998, p. 3f.; Müller *et al.*, 1997, p. 185). The country-specific arrangement of these institutions can help to explain differences in the magnitude, structure and duration of youth unemployment.

3.1. The Transition from School to Work: Educational Systems and Labour Market Institutions

Educational systems function as mediating instances for the transition from school to work. Country-specific differences regarding youth unemployment problems are closely linked with the institutional character of the educational systems and labour markets.

As we can see, the educational systems of Germany and the United Kingdom differ strongly in terms of degree of standardisation and stratification (cf. table 3). Depending on the specific institution, the transitions from school or apprenticeship to work can be facilitated. Standardisation is the degree to which the quality of education is equal in a country. Stratification concerns the selectivity: it differentiates the age at selection takes place and what proportion of a cohort attains the highest educational degree. The earlier allocation occurs and the smaller the proportion of pupils that complete the maximum number of school years, the larger the dimension of stratification (Allmendinger, 1989, p. 233).

- table 3 about here-

In Germany the link between education and occupational outcomes is strong. Germany has an occupational labour market and jobs are well defined in terms of content. Graduates with a vocational qualification have a lower risk of unemployment than those with 'only' a general qualification. In the United Kingdom, with its stable internal labour markets and where vocational education tends to be more general, people require 'on-the-job-training' before they are attractive to employers. In Germany the speciality of the so called 'dual system of training' ('Duales Ausbildungssystem') is thought to be the reason

for a relatively low youth unemployment rate in comparison with other countries (Kieselbach *et al.*, 2000, p. 136f.; OECD, 1994). In this apprenticeship system the teaching of work-specific skills is co-ordinated between vocational schools and the workplace. The link between educational qualification and labour market outcome is strong, whereas British vocational education is decentralised and organised along local or even private lines. The system of professional training in Germany offers youths who have successfully finished their apprenticeship a much smoother transition into the regular labour market than in labour markets in which professional education takes place through 'on-the-job-training' (Brauns *et al.*, 1999; OECD, 1998). The advantage lies in the fact that young persons in the 'dual system' are already labour market insiders during their training period and acquire knowledge that is easily transferable to other jobs. The dually-trained apprentices attain qualifications specific to their occupations.

Another institutional approach includes the labour market institutions and their impact on unemployment, especially on long-term unemployment. One can distinguish between rigid labour markets and more flexible labour markets. The German labour market is regarded as more rigid than the British labour market. In more regulated markets, the weaker labour force groups, like women, low-skilled workers or youths, will be more disadvantaged in the search for jobs than they would be in more flexible markets (McGinnity, 2001, p. 22ff.). We can see that although the unemployment rate for young people is higher in the United Kingdom than in Germany in 2000, the long-term rate is lower. Labour market regulation affects the structure of unemployment, not the level.

3.2. Welfare State Structures and Their Impact on Unemployment

Welfare state institutions differ strongly between Germany and the United Kingdom. Following Esping-Andersen's (1990) classification of welfare state structures, Germany can be classified as a typical representative of a conservative welfare state while the United Kingdom is an example of a liberal welfare state. The third form, the social-democratic type, is found in Sweden, for example.

Specific welfare state institutions dealing with unemployment should stratify outcomes in different ways. Germany and the United Kingdom responded diverse to rising unemployment. The influence of welfare state systems on unemployment, and here of the unemployment benefit systems in particular, may not be overlooked. In Germany unemployment is seen as an individual risk and people are to be insured by a statutory insurance system. In contrast, the British state has based individual choice and the compensation of negative outcomes on the principle of poverty alleviation. Unemployment benefits are primarily means-tested and not based on any contributions. In Germany, welfare state institutions are characterised by a high degree of de-commodification (extent to which the factor work is extracted from the market by the government) and a high degree of corporation (extent to which the social security system distinguishes between professional groups). In such welfare systems, the transition from school to work is strongly regulated and easier, especially for young people. In contrast to this, value is placed on the school degree in the United Kingdom, with its liberal welfare state model, in which de-commodification and corporation are weak. This leads to the fact that the labour market is hardly regulated by the state, protection rights for employees are weak and dismissals are simple. But on the other hand, barriers to new positions are accordingly low.

In the EU comparison, the German system of unemployment benefits grants relatively generous help. The social security system is well developed and therefore for many, unemployment appears to be a preferable alternative opposite to jobs that lie under their qualification level (Miegel, 1996, p. 3). In the United Kingdom, on the other hand, unemployed persons fall not into a social hammock, but onto a hard plank bed (Wirtschaftswoche, 2001, p. 22). In contrast to Germany, less well-paid work must be accepted; because of the weak social safety net, there is enormous economic pressure to accept new positions even if they are worse paid or in less popular branches or regions (Thurow, 1996, p. 41). We can observe that many young people work in substandard jobs. They often take 'McJobs' (Roberts, 2000, p. 65) to ensure their subsistence. In Germany persons thus affected are unemployed at least temporarily. Some welfare theorists argue that states with conservative welfare systems combined with specific characteristics of industrial relation systems create an 'insider-outsider' labour market in which skilled workers have secure jobs and outsiders are unemployed (DiPrete *et al.*, 2001, p. 46). In such systems labour market success is strongly age and education biased.

Although many young people have no right to social benefits, the influence of support payments is observable. The level of benefits affects the transition rate from unemployment to employment to a lesser extent; rather, it is the duration of benefits which has a greater impact (Nickell, 1997; Katz & Meyer, 1990). For the United Kingdom the effect of unemployment benefits varies with age. The influence of support payments on duration of unemployment is strongest for men aged 16 to 19 years, followed by the 20 to 24-year-old men. In the oldest age bracket, men over 45, there is no effect observable (Narendranathan *et al.*, 1985, p. 327f.).

4. Definitions, Data and Methods

The empirical analyses of the individual risk factors associated with unemployment in Germany and the United Kingdom are based on individual data from national Labour Force Surveys. The large data sets allow deeper insights into the structure of unemployment. For Germany the 1995 Microcensus, in which the questionnaire of the Labour Force Survey of the EU is integrated, was used; the corresponding 1996 Labour Force Survey was used for the United Kingdom.

For the determination of unemployment the standard definition of the International Labour Organisation (ILO) was used.²

This definition considers the unemployed to be persons who

- are not employed (dependent or self-employed) when surveyed,
- are currently available and willing to take up paid work within two weeks, and
- were actively seeking work in the last four weeks (includes not only the services of the employment office, but any type of job-seeking activity, e.g. via friends or newspapers).

The definition excludes persons who are not available for employment because they are in full-time education or are engaged in homemaking or parenting. Individuals who are out of work but will start a job in the near future are also considered unemployed in the sense of this definition.

The following analyses exclude individuals in apprenticeship or youth training programs, as well as young people who have completed a tertiary education. This latter group is particularly small, especially in Germany, and causes distortions when infrequent combinations of characteristics are brought into the analyses.

'Young people', according to the United Nations Definition, refers to all persons aged at least 15 and not older than 24, but due to the nature of the data, these analyses consider only persons between the ages of 16 and 24.

As a result of these selections, the total sample sizes are 19.895 cases for Germany in 1995 and 8.823 cases for the United Kingdom in 1996. The availability of huge sample sizes in Labour Force Surveys makes precise statistical estimation and detailed analyses of different social groups possible.

The individual level of education, which has a highly significant influence on employment prospects, must be operationalised in a standard form to permit international comparisons between countries. Education is measured by the CASMIN scale of educational qualifications, which has been developed for comparative research (Müller & Shavit, 1998, p. 17).³ This scale differentiates between levels of general education and vocational education (cf. table 4).

-table 4 about here-

Although one can show differences in the size and structure of youth unemployment by comparing unemployment rates⁴ according to certain individual characteristics, it is essential to use multivariate analyses. These methods can be used to determine the causal connection between two variables while controlling for third variables.

To examine the connection between youth unemployment and their socio-economic and macro-structural determinants, binomial logistic regression models are used. The analyses investigate the influence of age, gender, marital status, education, regional location and occupational sector on youth (long-term) unemployment.⁵ With these

models the probability of the occurrence of status $Y=1$ (unemployed at the time of survey) compared to $Y=0$ (being employed) is indicated as a function of the independent variables (x_i , with $i= 1,\dots,k$). The probability that $Y=1$ occurs is calculated according to the following equation:⁶

$$P(Y=1) = 1/1 + e^{-y}, \text{ with } y = a + b_1 * x_1 + \dots + b_k * x_k.$$

With dichotomous variables the maximum likelihood estimate is used.⁷ In tables 5 and 6 the reported coefficients indicate the estimated changes of the log of the odds ratios (logit), which express the competitive (dis)advantage that holders of specific characteristics have over others with regard to the risk of unemployment.

5. Individual Risk Factors of Youth Unemployment in Germany and the United Kingdom

In order to describe the factors that influence the individual risk of (long-term) unemployment in Germany and the United Kingdom, two models were used. Model A regards the risk of unemployment among young persons who are active in the labour market (employed and unemployed). Model B investigates the risk of long-term unemployment among the young unemployed.

5.1. Youth Unemployment in Germany

In Germany 'older young people' (those aged between 20 and 24) are more affected by unemployment than those aged between 16 and 19 years (cf. table 5, Model A). Young females are more prone to unemployment than young males. This effect reflects the general observation that in many countries women and girls have inferior labour market

chances as compared to men and boys (Kieselbach *et al.*, 2000, p. 155). Due to socially-recognised labour market alternatives, unemployment seems more reasonable for women. Although women today increasingly achieve educational qualifications equivalent to those of men, they are still disadvantaged in the job market. This can be partly attributed to the gender-related occupational choice by women (Born, 2000, p. 50). Apart from the teaching professions in the 'dual system', there are some occupations, in particular within the social and care sector, which can be pursued only through school training. These occupations are chosen mostly by women. Thus they profit less from the advantages of the 'dual system'. A link is also apparent between marital status and unemployment. The models distinguish only between single and married young people because the number of widowed or divorced persons is too small in this age group. Married young people are more affected by unemployment than young singles, probably because they are less mobile. On the other hand it could be possible that the decision to marry might be deferred due to impending unemployment.

- table 5 about here -

Young Germans (including those with dual citizenship) are less prone to unemployment than their contemporaries living in Germany who do not possess a German passport. In addition to language difficulties, this might also be due to discrimination (La Rosa & Chicci, 2001).⁸

The level of education turns out to be the most influential individual characteristic. The incidence of unemployment is highly correlated with individuals' educational achievement. As the level of education rises, the probability of unemployment

decreases. The attainment of a vocational qualification, in addition to school education, also plays a significant role here. One characteristic of Germany is the fact that unemployment rates do not fall steadily as the level of education increases, but rather depend on whether someone has a vocational qualification. Occupational skill for a specific vocation carries more weight than school education. A successfully completed apprenticeship seems to be an important selection criterion in the labour market. However, the differences become smaller as the level of formal education rises.

The individual risk of unemployment also depends on the region where young people live. It should be noted that young people living in eastern Germany and Berlin are much more severely affected by unemployment than their contemporaries in western Germany. Young people living in Baden-Wuerttemberg and Bavaria, in particular, are relatively well protected against unemployment. Youth unemployment is highest in the eastern part of Germany. The sector in which an individual works or has worked in the past is another feature that influences individual success on the labour market. Young people working in the manufacturing industry or the service sector are significantly more likely to be and to remain employed than those in agriculture and forestry. Employment in the service sector, and particularly in the public service sector, turns out to be advantageous.

There are only few characteristics that influence the duration of unemployment⁹ among young people in Germany (cf. table 5, Model B): gender, education and the occupational sector have an impact, while the other variables of age, marital status, nationality and region have no significant influence. Young women are more prone to (long-term) unemployment than their male contemporaries in that they are more often

unemployed and for longer periods. The education variable also reveals a similar effect compared to the general risk of unemployment among young people. As the level of education rises, the risk of long-term unemployment decreases. Vocational qualification is again an important criterion. The sector in which a young person is or was once employed is also a determining factor. Here, again, young people employed in the service sector are at an advantage.

5.2. Youth Unemployment in the United Kingdom

The situation in the United Kingdom in general is similar to that in Germany as regards individual risk factors. But despite similarities, there are some conspicuous differences (cf. table 6, Model A). As in Germany, young people aged between 20 and 24 are disadvantaged compared to those in the younger age bracket. And gender is also a significant risk factor in the United Kingdom, although here, in contrast to Germany, young males are at greater risk of becoming unemployed. While Germany follows the general pattern of higher unemployment rates for women in the EU, this pattern is reversed in the United Kingdom (McGinnity, 2001, p. 50). The decline of heavy industry and manufacturing has especially influenced the transition from school to work for many young people in the United Kingdom (Ashton *et al.*, 1990). The jobs lost in these sectors were predominately full-time manual jobs for males. The growth of service sector employment offers mostly part-time or flexible work, from which females benefited more than males (Canny, 2001, p. 134; Felstead & Jewson, 1999; Jones, 1998).

Unlike in Germany, marital status has no effect on youth unemployment, and British citizenship does not have a positive effect on individual labour market prospects either (La Rosa & Chicci, 2001, p. 26; Jones, 1998).¹⁰

- table 6 about here -

In the United Kingdom, too, the education variable proves to be the most important factor influencing the individual risk of unemployment. However, the pattern is somewhat different from that in Germany. As the level of education rises, the probability of unemployment falls steadily, while the German pattern, in contrast, is more polarised between general education and vocational qualification. Possession of a vocational qualification is relatively insignificant for individual success in the United Kingdom. Completion of vocational training reduces the risk of unemployment at any given level of education, but does not reduce it between levels. While there are striking regional differences in Germany with respect to the risk of unemployment, the situation is more homogeneous in the United Kingdom. While, for example, in Germany the unemployment risk for someone living and working in Saxony-Anhalt is four times higher than for a young person from Bavaria, the difference between the counties in the United Kingdom is only two times higher between East Anglia and Yorkshire and Humberside. There the biggest differences appear not between the separate regions, but between different places within regions. The risk of unemployment varies according to location. Characteristic features of such areas are high unemployment rates for the adult population, a concentration of low-income households, a low educational standard and a high rate of early school leavers (Roberts, 2000, p. 62). The link between the

occupational sector and unemployment is also less marked. Young people in almost all sectors face an equal risk of becoming unemployed, and this applies to the public service sector as well.

There are also some differences between Germany and the United Kingdom concerning the determinants of the duration of unemployment (cf. table 6, Model B). The effect of age is strong and highly significant in the United Kingdom, while there is no age effect in Germany. Young people in the older age bracket are at a much higher risk of suffering long-term unemployment. The gender effect plays a less significant role compared to the general risk of unemployment, but again this effect is stronger for young males than for young females. As in Germany, the risk of long-term unemployment decreases as the level of education rises, but the link is less significant. There are clear differences across the regions. Young people living in East Anglia, East Midlands, North West, South East, Wales, West Midlands or Yorkshire and Humberside face only a minor risk of long-term unemployment. Marital status and nationality have no significant impact on the duration, while the effect of the occupational sector has an impact, but only a negligible one. The only significant impact is that young people working in the transport sector have a minor risk.

5.3. Individual Risk Factors and Their Impact on the Probability of Youth Unemployment: Some Illustrations

The absence of characteristics which 'favour' unemployment can improve the labour market situation considerably, while a combination of several 'unfavourable' features can significantly raise the individual probability of unemployment. To illustrate this,

two examples shall be used, for which the individual probabilities of unemployment can be calculated using the formula: $P(Y=1) = 1/1 + e^{-y}$.

In the first example, the probability for a 22-year-old woman living in Germany who is married and does not have German citizenship will be calculated. She lives in Saxony-Anhalt, the 'Bundesland' with the highest rate of unemployment, and has completed only compulsory schooling. She is employed in the agricultural sector.

Another probability is calculated for a woman living in the United Kingdom, with the same characteristics of age, marital status, nationality, educational level and occupational sector and who lives in Merseyside, the region with the highest rate of youth unemployment in the United Kingdom.

The young woman in the first example has an individual probability of unemployment of 62%, while the young woman living in the United Kingdom with the same main characteristics has only a 7.5% risk of being jobless. Having just one fewer unfavourable characteristic can significantly increase an individual's labour market prospect. If the young woman in the first example had completed her 'Abitur' instead of only compulsory schooling, her probability of being unemployed – all else remaining equal – would have fallen to 17%. If another unfavourable characteristic were added, however, the prospects could worsen accordingly. For a young man living in the United Kingdom having the same characteristics as the woman in the second example (apart from gender), the probability of unemployment increases from 7.5% to 13%.

Although the individual risk factors are quite different in Germany and the United Kingdom we can see that the combination of certain characteristics can determine the

chances in the labour market. Young people with many 'negative' features are more likely to be unemployed than people without these unfavourable characteristics.

6. Active Labour Market Policy Programs in Germany and the United Kingdom

As a reaction to the increasing problems of integrating young people into the labour market, programs have been started in Germany and the United Kingdom during the last few years. The principal purpose of these active labour market policies is to accommodate disadvantaged young persons successfully.

For Germany the emergency program against youth unemployment – 'JUMP' – was passed by the government at the end of 1998 and started its promotion measures in 1999. The principal purpose of this state initiative is to bring unemployed young persons into vocational education and employment. The possibility of catching up on secondary school qualifications is also part of the program. It is directed to young people under 25 years of age who need an offer of education or qualification or unemployment assistance while seeking new employment. It is promoted within the framework of the budget of the Federal Institution of Work and is implemented by the labour exchanges. In 1999 and 2000 a total number of 268.205 persons participated. A study on the whereabouts of the participants after conclusion of the measure shows that a third of the participants became unemployed (33.5%), 21.1% are gainfully employed, 10.2% found a vocational education, 5.7% returned to school education and 21.2% landed in other school or occupational-preparatory measures which are not financed by 'JUMP'. Another 8.3% began other activities, as for example parental leave or incarceration (Dietrich, 2001). Unfortunately, no evaluation study is available which compares young people covered by 'JUMP' with others not involved in the program.

In the United Kingdom the 'New Deal' is a key part of the British government's welfare-to-work strategy. The program is directed not only to youthful unemployed persons, but also to the handicapped, to single mothers, to unemployed musicians and to the older long-term unemployed. The idea is to bring these groups from the income support system into regular employment through active labour market policy. The participants must consult the labour exchange, participate in training and then decide whether to accept a normal or subsidised job in the economy, a year-long continuing education measure or a temporary workplace. Those who accept none of these options see their income support reduced. The 'New Deal for Young People' has been run since 1998 with 600.000 participants, with the principal purpose of helping them leave the social security system (The Guardian, 1999, p. 15). Already 180.000 have found a job on the free market and have kept it longer than three months. Others have landed in programs for job creation or education. One third of the participants have left the program; one fifth continues to receive unemployment benefits (Fischermann, 2001). Critical voices say that the program tries to protect against the recipients' receiving income support, but at the same time does not fight the real causes of unemployment. Although it seems that youth unemployment is at a minimum, there are still problems. Certainly, many young persons could be taken off of income support; however, they generally end up in simple, poorly-paid jobs which are limited temporally. They are thereby exposed to the risk of future unemployment (Roberts, 2000, p. 65).

7. Concerns About the Ability to Explain Unemployment by Means of Individual Risk Factors and the Possibility of State Intervention

In addition to common individual risk factors, we can observe country-specific differences regarding youth unemployment in Germany and the United Kingdom. Overall, the risk of unemployment decreases as the level of qualification rises. However, other factors such as gender, nationality and region are also significant. If youth unemployment is to be combated successfully, the measures implemented – in addition to overall economic growth which increases the size of the pie – must be targeted towards those who are most affected. In order to pinpoint the problem groups, additional risk factors such as social origin, occupation and personal attitude must be identified as well. The risk of unemployment in both countries is strongly associated with the individual level of education. While a vocational qualification for a specific occupation can outweigh the importance of school education in Germany, in the United Kingdom the unemployment risk of a person with a vocational qualification may fall at any given level of education, but not between levels. Young people with a number of individual risk factors, such as a low level of education and foreign citizenship, for example, belong to the 'losers' of the labour market in both Germany and the United Kingdom.

In addition to individual risk factors, institutional determinants also play a significant role. The structure of unemployment depends on the country-specific organisation of welfare state structures, labour market institutions and the linkages between the countries' educational systems and labour markets. In particular, the structure of the educational system is an important factor. In Germany the system of dual training seems to guarantee more jobs and more fluid transitions for young people than in the United

Kingdom. The trainees obtain qualifications which are relevant to the labour market and are easily transferable. The first transition into the regular labour market is facilitated and young people in Germany are less likely to become unemployed. The association between strong apprenticeship systems and low youth unemployment rates is strong. Youth unemployment is lower in Germany than in the United Kingdom and the difference can partly be attributed to the apprenticeship systems which facilitate the transition from school to work in Germany. It seems that in Germany the 'dual model' can protect the young people very well against youth unemployment. But if we observe not only the extent of youth unemployment but also the duration, we can see that the long-term unemployment rate is higher in Germany. The structure of the welfare systems could be responsible for this effect, because in Germany (young) unemployed persons are better secured by the state and the pressure is weaker to take the first job they can get. In contrast, in the United Kingdom many people must accept substandard work to secure their subsistence.

Attempts to fight youth unemployment have been started in recent years in both Germany and the United Kingdom. At first glance it seems that 'JUMP' and the 'New Deal' have been successful in integrating the problem groups, but the success must be evaluated in the long term. The 'New Deal' is designed less to ensure the long-term procurement of knowledge; its main purpose is to break the vicious circle of unemployment. How successful this strategy is must be proven in the long run.

Notes

¹ These figures are based on data collected by Eurostat in the framework of the annual Labour Force Surveys. The advantage of these data is that they can be used for international comparisons, given that the same set of features are surveyed in each country and that the definitions and methods are used

identically. In addition, all the surveys are carried out at the same time – in spring each year – and the data are processed at a central level by Eurostat. For further details on the database see Eurostat (1996).

² Eurostat also uses these criteria to calculate unemployment rates.

³ For the original version see König *et al.* (1988); for a detailed description see Brauns & Steinmann (1999).

⁴ The calculation is based on the formula: total number of unemployed/total number of labour force (unemployed and employed persons) * 100. Inactive persons are excluded.

⁵ On the details of logistic regression models see Hamilton (1992).

⁶ The opposite probability can also be calculated: $P(Y=0) = 1/1 + e^y$. Moreover, the parameter a corresponds to the constant which marks the axis of the ordinate, and the regression coefficients b_i indicate the upward slope of the function, x_i are the values of the different independent variables.

⁷ This function l is two times the negative of the log likelihood function: $L = -2 \sum \ln(P(Y_i))$; $i = 1, \dots, k$.

⁸ Because of the small number of cases, it was not possible to classify young foreigners by country of origin, nor are young people born in Germany who do not have German citizenship considered as a separate group. A differentiated analysis of the young foreigners would presumably reveal different risks of unemployment depending on the country of origin.

⁹ Because the data used are cross-sectional surveys, the individual courses of work cannot be pursued temporally. Therefore it is impossible to say whether or not somebody who is short-term unemployed at the time of questioning will move on to long-term unemployment.

¹⁰ However, if we observe the youth unemployment rates in the United Kingdom as a function of ethnic origin, differences become evident. The individual risk of unemployment is much lower for 'white' young people than for young people of other ethnic origins (7.7% as opposed to 17.6% in 1996, estimation of the Department of Education and Employment in the United Kingdom, see O'Higgins (1997)), despite the fact that, on average, the latter have a higher level of education, see Heath & McMahon (1997).

References

- Allmendinger, J. (1989) Educational Systems and Labour Market Outcomes, *European Sociological Review*, 5, pp. 231-250.
- Ashton, D.N., Maguire, M.J. & Spilsbury, M. (1990) *Restructuring the Labour Market: The Implications for Youth* (Basingstoke, Macmillan).
- Born, C. (2000) Erstausbildung und weiblicher Lebenslauf. Was (nicht nur) junge Frauen bezüglich der Berufswahl wissen sollten, *Zeitschrift für Soziologie der Erziehung und Sozialisation*, 3. Beiheft 2000, pp. 50-65. (Vocational Training and the Female Life Course. What (not only) Young Women Should Know about Choosing a Career, *Journal for Sociology of Education and Socialisation*).
- Brauns, H., Gangl, M. & Scherer, S. (1999) *Education and Unemployment: Patterns of Labour Market Entry in France, the United Kingdom and West Germany*, MZES Working Paper No. 6 (Mannheim, MZES).
- Brauns, H. & Steinmann, S. (1999) Educational Reform in France, West Germany and the United Kingdom: Updating the CASMIN Educational Classification, *ZUMA-Nachrichten*, 23, pp. 7-44.
- Canny, A. (2001) The Transition from School to Work: An Irish and English Comparison, *Journal of Youth Studies*, 4, pp. 133-154.
- Dietrich, H. (2001) *JUMP, das Jugendsofortprogramm. Unterschiede in den Förderjahren 1999 und 2000 und Verbleib der Teilnehmer nach Maßnahmeende*, IAB

Werkstattbericht, Diskussionsbeiträge des Instituts für Arbeitsmarkt- und Berufsforschung 3 (Nürnberg, Bundesanstalt für Arbeit).

DiPrete, T. A., Goux, D., Maurin, E. & Tahlin, M. (2001) Institutional Determinants of Employment Chances. The Structure of Unemployment in France and Sweden, *European Sociological Review*, 17, pp. 1-22.

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism* (London, Polity Press).

Eurostat (Various Issues) *Labour Force Survey. Results* (Luxembourg, Office for Official Publications of the European Communities).

Eurostat (1996) *The European Union Labour Force Survey. Methods and Definitions - 1996*. (Luxembourg, Office for Official Publications of the European Communities).

Felstead, A. & Jewson, N. (1999) Flexible Labour Market and Non-Standard Employment: An Agenda of Issues, in: A. Felstead & N. Jewson (Eds) *Global Trends in Flexible Labour* (Basingstoke, Macmillan).

Fischermann, T. (2001) Blairs Rechenbeispiele. Wie die britische Regierung den Arbeitswillen fördert, *Die Zeit*, 56, p. 18.

Franz, W. (1998) Arbeitslosigkeit, in: B. Schäfers & W. Zapf (Eds) *Handwörterbuch zur Gesellschaft Deutschlands* (Opladen, Leske + Budrich).

Hamilton, L.C. (1992) *Regression with Graphics. A Second Course in Applied Statistics* (Belmont, Calif., Duxbury Press).

- Hammer, T. (2000) *Youth Unemployment and Social Exclusion in Europe*. Paper presented at the UWWCLUS Workshop Brussels, November 9th – 11th 2000.
- Harten, H.-C. (1983) *Jugendarbeitslosigkeit in der EG* (Frankfurt a.M., Campus).
- Heath A. & McMahon, D. (1997) Education and Occupational Attainments: The Impact of Ethnic Origins, in: A.H. Halsey, H. Lauder, P. Brown & A. Stuart Wells (Eds) *Education. Culture, Economy and Society* (Oxford/New York, Oxford University Press).
- Hermanns, M. (1991) Auswirkungen der Jugendarbeitslosigkeit, *Aus Politik und Zeitgeschichte*, 27, pp. 20-29.
- Jones, B. (1998) Disadvantage and Disenfranchisement in British Labour Market: A Social Constitution Perspective, *International Review of Sociology*, 8, pp. 95-114.
- Katz, L.F. & Meyer, B.D. (1990) The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment, *Journal of Public Economics*, 41, pp. 45-72.
- Kieselbach, T. (Eds) (2000) *Youth Unemployment and Social Exclusion. A Comparison of Six European Countries* (Opladen, Leske + Budrich).
- Kieselbach, T., van Heeringen, K., La Rosa, M., Lemkow, L., Sokou, K. & Starrin, B. (Eds) (2001) *Living on the Edge – An Empirical Analysis on Long-term Youth Unemployment and Social Exclusion in Europe* (Opladen, Leske + Budrich).
- Kieselbach, T., Beelmann, G., Erdwien, B., Stitzel, A. & Triser, U. (2000) Youth Unemployment and Social Exclusion in Germany, in: T. Kieselbach (Eds) *Youth*

Unemployment and Social Exclusion. A Comparison of Six European Countries (Opladen, Leske + Budrich).

König, W., Lüttinger, P. & Müller, W. (1988) *A Comparative Analysis of the Development and Structure of Educational Systems. Methodological Foundations and the Construction of a Comparative Educational Scale*, CASMIN Working Paper No. 12 (Mannheim, University of Mannheim).

La Rosa, M. & Chicci, F. (2001) Weak Groups on the Labour Market, in: T. Kieselbach, K. van Heeringen, M. La Rosa, L. Lemkow, K. Sokou, & B. Starrin (Eds) *Living on the Edge – An Empirical Analysis on Long-term Youth Unemployment and Social Exclusion in Europe* (Opladen, Leske + Budrich).

McGinnity, F. (2001) *Who benefits? A Comparison of Welfare and Outcomes for the Unemployment in Britain and Germany* (Nuffield College Oxford, Hilary Term).

Miegel, M. (1996) Schlecht bezahlt, *Frankfurter Allgemeine Zeitung*, 11/06/1996, p. 3.

Müller, W., Steinmann, S. & Schneider, R. (1997) Bildung in Europa, in: S. Hradil & S. Immerfall (Eds) *Die westeuropäischen Gesellschaften im Vergleich* (Opladen, Leske + Budrich).

Müller, W. & Shavit, Y. (1998) The Institutional Embeddedness of the Stratification Process: A Comparative Study of Qualifications and Occupations in Thirteen Countries, in: Y. Shavit & W. Müller (Eds) *From School to Work. A Comparative Study of Educational Qualifications and Occupational Destinations* (Oxford, Clarendon Press).

- Narendranathan, W., Nickell, S. & Stern, J. (1985) Unemployment Benefits Revisited, *The Economic Journal*, 95, pp. 307-329.
- Nickell, S. (1997) Unemployment and Labor Market Rigidities: Europe versus North America, *Journal of Economic Perspectives*, 11, pp. 55-74.
- OECD (1994) *OECD Jobs Study, Parts I and II* (Paris, OECD).
- OECD (1998) Getting Started, Settling in: the Transition from Education to the Labour Market, in: OECD (Eds) *Employment Outlook* (Paris, OECD).
- O'Higgins, N. (1997) Die Herausforderung der Jugendarbeitslosigkeit, *Internationale Revue für soziale Sicherheit*, 50, pp. 67-100.
- Roberts, K. (2000) Großbritannien, in: I. Richter & S. Sardei-Biermann (Eds) *Jugendarbeitslosigkeit. Ausbildungs- und Beschäftigungsprogramme in Europa* (Opladen, Leske + Budrich).
- Russell, H. & O'Connell, P. (2001) Getting a Job in Europe: The Transition from Unemployment to Work among Young People in Nine European Countries, *Work, Employment & Society*, 15, pp. 1-24.
- Sinnhold, H. (1990) *Ausbildung, Beruf und Arbeitslosigkeit. Eine Strukturanalyse der Ausbildung im dualen System und der Beschäftigungschancen junger Fachkräfte* (Frankfurt a.M., Lang).
- Strasser, H. (1997) Langzeitarbeitslose zwischen diskontinuierlichen Erwerbsverläufen und sozialer Selektion, in: G. Klein & H. Strasser (Eds) *Schwer vermittelbar: zur Theorie und Empirie der Langzeitarbeitslosigkeit* (Opladen, Westdeutscher Verlag).

The Guardian (1999) They're working, but it is?, *The Guardian*, 04/03/1999, p. 15.

Thurow, L. C. (1996) Die Illusion vom Jobwunder, *Die Zeit*, 51, p. 41.

Wirtschaftswoche (2001) Nur eine harte Pritsche, *Wirtschaftswoche*, 17, p. 22.

Table 1. Selected unemployment rates in EU countries by age group[§] (in %)

	1985	1990	1995	2000
Austria	.	.	4.3	4.7
Aged under 25	.	.	5.9	6.3
Aged 25 and over	.	.	4.1	4.5
Belgium	11.3	7.3	9.3	6.6
Aged under 25	23.6	14.5	21.5	15.2
Aged 25 and over	9.0	6.2	7.9	5.7
Denmark	7.8	8.3	7.0	4.5
Aged under 25	11.5	11.5	9.9	6.7
Aged 25 and over	6.8	7.6	6.3	4.1
Finland	5.0	3.4	17.0	11.1
Aged under 25	9.1	6.4	41.2	28.4
Aged 25 and over	4.2	2.9	13.8	8.1
France	10.3	9.4	11.9	10.2
Aged under 25	25.8	19.8	27.1	20.6
Aged 25 and over	7.2	7.7	10.1	9.1
Germany[‡]	6.9	4.9	8.2	7.9
Aged under 25	9.8	4.6	8.5	8.5
Aged 25 and over	6.1	5.0	8.1	7.9
Greece	7.8	7.0	9.1	11.1
Aged under 25	23.9	23.2	27.9	29.5
Aged 25 and over	5.2	4.4	6.5	8.8
Ireland	18.0	14.1	12.0	4.3
Aged under 25	25.1	19.8	19.0	6.5
Aged 25 and over	15.4	12.5	10.3	3.8
Italy	9.5	9.8	11.8	10.8
Aged under 25	32.2	29.0	32.8	31.5
Aged 25 and over	4.5	5.9	8.4	8.4
Luxembourg	3.0	1.6	2.9	2.3
Aged under 25	6.5	3.6	7.2	6.4
Aged 25 and over	2.0	1.3	2.3	2.0
The Netherlands	10.5	7.8	7.2	2.7
Aged under 25	17.7	11.4	12.1	5.3
Aged 25 and over	8.7	6.8	6.1	2.2
Portugal	.	4.7	7.1	3.9
Aged under 25	.	10.4	16.0	8.4
Aged 25 and over	.	3.2	5.5	3.4
Spain	.	16.3	22.7	14.0
Aged under 25	.	31.8	41.7	25.5
Aged 25 and over	.	12.4	18.7	12.1
Sweden⁺	2.8	1.7	8.1	5.5
Aged under 25	5.8	3.8	19.0	9.5
Aged 25 and over	2.3	1.3	6.7	5.1
The United Kingdom	11.5	7.0	8.7	5.6
Aged under 25	18.2	10.4	15.5	12.1
Aged 25 and over	9.5	6.1	7.4	4.5

Notes:

[§] Young people aged 16 to 24 until 1994 and aged 15 to 24 from 1995 onwards.[‡] Up to 1990 West Germany.⁺ Up to 1994 the Swedish figures are based on OECD data, which are comparable with the Eurostat data.

Sources: Eurostat, OECD.

Table 2. Selected long-term unemployment rates in EU countries by age group[§] (in %)

	1985	1990	1995	2000
Austria	.	.	27.5	28.2
Under 25	.	.	14.0	15.6
25 and over	.	.	31.2	31.5
Belgium	68.2	67.0	62.4	56.6
Under 25	52.5	47.1	44.4	32.4
25 and over	76.0	72.6	68.1	60.9
Denmark	32.0	29.0	28.1	19.8
Under 25	21.5	17.8	9.3	.
25 and over	36.4	33.0	34.5	24.7
Finland	.	.	37.0	24.7
Under 25	.	.	17.3	5.4
25 and over	.	.	43.7	36.7
France	43.8	39.7	40.2	39.6
Under 25	34.3	22.8	23.7	21.1
25 and over	50.4	46.7	45.4	44.3
Germany[‡]	46.9	45.9	48.7	51.5
Under 25	30.2	25.1	26.8	23.5
25 and over	53.2	49.5	51.7	55.1
Greece	43.4	49.3	51.2	56.5
Under 25	42.4	46.8	49.8	51.6
25 and over	44.2	51.3	52.1	58.9
Ireland	62.1	64.8	61.4	.
Under 25	54.4	51.0	48.0	.
25 and over	66.7	71.4	66.8	.
Italy	64.5	69.0	63.6	61.3
Under 25	64.5	69.2	63.4	58.2
25 and over	65.5	68.8	63.7	62.7
Luxembourg	36.8	50.0	23.2	25.0
Under 25	36.6	.	.	.
25 and over	36.9	50.0	26.0	33.3
The Netherlands	56.4	46.7	46.8	33.0
Under 25	41.7	22.3	32.9	12.8
25 and over	63.5	56.0	51.6	38.4
Portugal	53.4	44.6	50.9	42.6
Under 25	52.8	36.7	41.4	20.7
25 and over	53.9	49.6	55.1	51.8
Spain	58.5	51.1	54.6	42.4
Under 25	57.8	48.2	45.7	30.0
25 and over	59.2	52.8	57.7	47.1
Sweden	.	.	20.2	30.7
Under 25	.	.	12.7	12.8
25 and over	.	.	22.8	34.4
The United Kingdom	48.7	33.4	43.6	27.9
Under 25	37.9	18.8	27.2	14.4
25 and over	54.6	39.8	50.3	34.4

Notes:

[§] Young people aged 16 to 24 until 1994 and aged 15 to 24 from 1995 onwards.[‡] Up to 1990 West Germany.

Source: Eurostat.

Table 3. Selected EU countries by level of standardisation and stratification

Standardisation	Stratification		
	low	medium	high
high	Ireland, Sweden*	France*, Italy*	Germany**, Netherlands**
low	United Kingdom*	—	—

Notes:

Asterisks indicate the degree of occupational specificity of vocational education, with: ** meaning high level, * intermediate level, no asterisks low level.

Source: Müller & Shavit 1998, p. 14.

Table 4. The CASMIN scale of educational qualifications

Qualification	Description
1ab	Social minimum of education. This is the minimum level that individuals are expected to have obtained in a society; it corresponds to the level of compulsory education.
1c	Basic vocational training above and beyond compulsory schooling.
2a	Advanced vocational training or secondary programmes in which general intermediate schooling is combined with vocational training.
2b	Academic or general tracks at the secondary intermediate level.
2c	Full maturity certificates, e.g., German Abitur, British A levels or French Baccalauréat.
2cvoc	Full maturity certificates including vocationally-specific schooling or training.
3a	Lower-level tertiary degrees, generally of shorter duration and with a vocational orientation.
3b	Completion of a traditional, academically-oriented university education.

Source: Müller & Shavit 1998, p. 17.

Table 5 Results of logistic regression models for unemployment (Model A) and long-term unemployment (Model B) in Germany[§] in 1995

	Model A		Model B	
	Coefficients	Standard errors	Coefficients	Standard errors
Age				
<i>16 to 19 years</i>				
20 to 24 years	.27***	.08	.29	.19
Gender				
<i>Male</i>				
Female	.29***	.06	.48***	.13
Marital Status				
<i>Single</i>				
Married	.19***	.07	.05	.15
Nationality				
<i>German</i>				
Non-German	.35***	.09	-.01	.18
Education[#]				
<i>1ab</i>				
1c	-.97***	.08	-.41**	.17
2b	-.66***	.12	-.29	.23
2a	-1.69***	.09	-.73***	.18
2c	-1.73***	.16	-1.47***	.50
2cvoc	-2.04***	.16	-.39	.37
Region				
<i>Schleswig-Holstein</i>				
Hamburg	.12	.25	-.62	.65
Lower Saxony	.15	.18	.11	.39
Bremen	.08	.37	-5.35	6.94
North Rhine-Westphalia	-.14	.16	.28	.37
Hesse	-.14	.19	-.30	.44
Rhineland-Palatinate	-.20	.20	.24	.44
Baden-Wuerttemberg	-.48***	.17	.12	.40
Bavaria	-.74***	.17	-.15	.40
Saarland	.06	.29	.01	.68
Berlin	.89***	.19	.18	.42
Brandenburg	1.23***	.19	.52	.42
Mecklenburg-Western Pomerania	1.24***	.20	.67	.43
Saxony	1.19***	.18	.52	.40
Saxony-Anhalt	1.36***	.18	.88**	.40
Thuringia	1.08***	.19	.67	.42
Sector				
<i>Agriculture</i>				
Energy	-.03	.25	-.41	.49
Energy derivates	-.62***	.16	-.21	.32
Metal-processing industry	-.27*	.14	-.42	.28
Other manufacturing industry	-.29*	.16	-.29	.30
Construction	-.53***	.15	-.79***	.29
Trade	-.59***	.14	-.59**	.26
Transport	-.78***	.18	-.91**	.38
Banking	-.93***	.17	-1.03***	.37
Public Service	-1.01***	.14	-.38	.26
Constant	-1.97***	.07	-1.60***	.47
Pseudo-R ²		0.125		0.083
N		19895		1724

Notes:

[§] All the categories written in italics are reference categories. The regression coefficients must always be interpreted in relation to the reference category, which has a coefficient of 0. Positive values mean that an effect 'favours' (long-term) unemployment, while negative values indicate effects that favour employment or not long-term unemployment, respectively. The regression coefficients, their standard errors and their error probabilities of < 10 % (*), < 5 % (**), and < 1 % (***) are provided for each model.

[#] For levels of education cf. table 3.

Sources: German Microcensus 1995; own calculations.

Table 6 Results of logistic regression models for unemployment (Model A) and long-term unemployment (Model B) in the United Kingdom[§] in 1996

	Model A		Model B	
	Coefficients	Standard errors	Coefficients	Standard errors
Age				
<i>16 to 19 years</i>				
20 to 24 years	.24***	.08	1.27***	.20
Gender				
<i>Male</i>				
Female	-.61***	.08	-.48**	.20
Marital Status				
<i>Single</i>				
Married	.06	.14	.42	.29
Nationality				
<i>British</i>				
Non-British	-.05	.22	-.70	.54
Education[#]				
<i>1ab</i>				
1c	-.33***	.11	-.29	.24
2b	-.83***	.09	-.17	.21
2a	-.95***	.12	-.75***	.29
2c	-1.34***	.14	-1.94***	.49
2cvoc	-1.30***	.20	-.72	.50
Region				
<i>North East</i>				
North West	-.10	.18	-.73*	.38
Merseyside	.30	.24	-.30	.48
Yorkshire and Humberside	-.16	.19	-.81**	.40
East Midlands	-.34*	.20	-1.08**	.46
West Midlands	-.14	.18	-.41	.38
South West	-.51**	.21	-1.46***	.51
East Anglia	-.62***	.20	-1.15***	.44
London	-.14	.19	-.28	.39
South East	-.49***	.18	-.54	.37
Wales	-.13	.21	-.91**	.46
Scotland	-.11	.18	-.96**	.39
Northern Ireland	-.37	.24	-.45	.50
Sector				
<i>Agriculture</i>				
Energy	-.55	.65	.01	1.48
Energy derivatives	-.68*	.40	-.57	.97
Metal-processing industry	.13	.27	.20	.60
Other manufacturing industry	.31	.26	-.38	.58
Construction	.44*	.26	.10	.58
Trade	-.10	.25	-.19	.56
Transport	-.51*	.31	-1.84**	.93
Banking	-.31	.30	-.51	.66
Public Service	.22	.26	.08	.57
Constant	-2.45***	.15	-2.23***	.36
Pseudo-R ²		0.088		0.177
N		8823		957

Notes:

[§] All the categories written in italics are reference categories. The regression coefficients must always be interpreted in relation to the reference category, which has a coefficient of 0. Positive values mean that an effect 'favours' (long-term) unemployment, while negative values indicate effects that favour employment or not long-term unemployment, respectively. The regression coefficients, their standard errors and their error probabilities of < 10 % (*), < 5 % (**) and < 1 % (***) are provided for each model.

[#] For levels of education cf. table 3.

Sources: British Labour Force Survey 1996; own calculations.