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Youth Unemployment: Individual Risk Factors and Institutional Determinants.

A Case Study of Germany and the United Kingdom.

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Summary

This study deals with youth unemployment trends in Europe since the mid of the 80ths in general and regards individual risk factors for Germany and the United Kingdom in particular in the mid of the 90ths. The study for 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 or region of living, for example. The individual level of education is an important determinant of occupational success. Thereby the country specific organisation of educational systems and labour market institutions effects also different occupational outcomes. But also 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' which are discussed.

Key words

youth unemployment / individual determinants / institutional determinants / active labour market programs

Introduction

Over the past 30 years unemployment in general and youth unemployment in particular have been a major problem in many industrial societies. Nowadays the experience of being unemployed is for a large part of the young labour force a common component of their working biographies. By youth unemployment one understands the unemployment of young people which happens mostly with the crossing from the education system in the labour market. But also layoffs are another possibility to become unemployed and an increasing real problem in recent years (Sinnhold 1990: 57). It seems to be an European problem that young people are more severely affected by unemployment than people over the age of twenty-five in the majority of European Countries. Germany is one of the exceptions to this rule. Thus a comparison with a high risk country is of special interest for the evaluation of policies in Europe.

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 markets and relegated to the periphery the social security system, which is aligned to the compensation of the generations, is endangered (Harten 1983: 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, but increasing readiness to resort to violence and delinquency are also potential results (Strasser 1997: 29). Youth unemployment leads to social problems - like lack of orientation, hostility towards foreigners, drug abuse, homelessness and crime – which also lead to increased social expenditures. At the society level high youth unemployment endangers the inventory of social security systems, whose proper

functioning is connected to enough compulsory social insurance working contracts (Franz 1998: 11).

In order to circumvent unemployment, many young people stay 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 and Shavit 1998: 1). However this extends the process of becoming independent from the parents and delays entry into the labour market. Especially young unemployed who have slip off in welfare, belongs often to the long-term unemployed and to the repeated unemployed. For this group the unemployment risk increase due to the wean of regular work and the preceding dequalification. A concomitant phenomenon of unemployment is the increasing concern with the problem of social exclusion. Some groups like long-term unemployed are detached from society and the concentration of disadvantage factors like unemployment, poverty or deficiencies in education leads as a possible consequence to marginalisation of some social groups (McGinnity 2001: 1). In addition, unemployment often leads to a number of political consequences including a decrease of political interest (resignation thesis), blaming of the respective government (anti government thesis), intensified identification with the labour party (clientele thesis) or a turn towards extreme parties or movements (anti system thesis) (Hermanns 1991: 23ff.).

This article is organised as follows: the first section analyses the aggregated (long-term) unemployment trends in the EU countries for selected years during the period from 1985 to 2000 in order to reveal the structural differences between the two countries. The next section deals with the individual risk factors of (long-term) unemployment in Germany and the United Kingdom by using micro-data 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. More recent data were not yet available when the analysis was carried out. The following section deals with the differences in the amount and structure of unemployment in Germany and the United Kingdom, which can be explained by the specific organisation of the education systems, labour markets and social security systems. 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.

(Youth) Unemployment Trends in the EU Countries

Like unemployment as a whole, youth unemployment fluctuated sharply in the European Union in the last two decades (cf. table 1). During the mid 1980s, young people in Belgium, France, Greece, the United Kingdom, Ireland, Italy and the Netherlands experienced a high risk of being unemployed. At the end of the 1980s a cyclical boom led to a temporary improvement in the labour market situation in most countries, with reduced unemployment rates in 1990. Since the beginning of the 1990s unemployment rates returned to their original levels or rose even higher. In the period from 1990 to 1995 the unemployment rates rose for young persons in Belgium, Germany, Finland, France, Greece, the United Kingdom, Italy, Luxembourg, the Netherlands, Portugal, Sweden and Spain partly alarming. In Finland the rate rose during this time period from 6,4% to 41,2%.

At present (2000), an improved labour market situation can be observed in almost all European countries. Finland, Ireland, the Netherlands, Portugal, Sweden and Spain, in particular, have managed to reduce their unemployment rates substantially during the

last five years. However, the dimension of youth unemployment varies considerably from country to country. While Ireland, Luxembourg, the Netherlands and Austria were characterised by low youth unemployment rates in 2000, almost one young person in four was unemployed in Spain, Belgium and Finland, and no less than a third of young people were jobless in Italy. The youth unemployment rates in Denmark, Germany, the United Kingdom, Portugal and Sweden 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 of young people is still considered a serious problem in many European countries. As in Belgium, Denmark, Finland, France, 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 workers. The gap in the United Kingdom is clearly evidenced by an unemployment rate of 12.6% for young people in 2000, compared with 4.2% 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, by contrast, there is little difference between the unemployment rates between this two groups (9% versus 8%), and the situation is similar in Ireland and Austria.

-table 1 about here-

Not only unemployment in general but also 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 for young labour market participants unincisive. While young people are at greater risk than persons over twenty-five of becoming unemployed, there are simultaneously shorter time periods in this status.

The rates of long-term unemployment for both age groups (16 until 24 and aged 25 and over) decreased between 1985 and 1995 in nearly all EU countries, with the exception of Greece (cf. table 2). Despite this 'positive' development, the high long-term unemployment rates in Belgium, Greece, Ireland, Portugal, Spain and Italy in 1995 are alarming. In these countries, almost every second young person is experiencing long-term unemployment. In Italy two-thirds of the unemployed young persons have been over a year without work. In contrast Austria, Sweden and particularly Denmark are able to protect their youth relatively well against long-term unemployment. Only 9,3% of the unemployed young persons in Denmark were long-term unemployed in 1995. Germany and the United Kingdom show similar ratios which lie below the European average value of 32,6%, but with 26,8% (for Germany) and 27,2% (for the United Kingdom) are still rather high.²

If one compares both age groups - young persons and those 25 years and older - one sees that in almost all countries young persons are less concerned by long-term unemployment. Exceptions are Greece and Italy. Youth unemployment distinguishes itself 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 rule 'first in, first out' accurately describes the labour market situation for young persons in Europe.

-table 2 about here-

Youth (Long-term) Unemployment in Germany and the United Kingdom

Although the basic tendencies of unemployment like general increase or different concernment of certain social groups³ show similar patterns, there is, what indicates height and structure country specific differences. In this chapter Germany and the United Kingdom will be considered. Background of the following analyses is the assumption that the individual risk does not distribute itself evenly about all young persons, but there can be differences according to individual characteristic feature developments. Thereby influence is not independent on the general business cycle situation. However, the worse the economic situation, the stronger the competition for vacancies and the greater likelihood that individual characteristics will affect employment outcomes. The analysis will deal with following questions:

- Which determinants (socio-economic and macro-structural) influence unemployment risk and duration for young labour market participants in Germany and the United Kingdom?
- Are the risk factors the same for Germany and the United Kingdom and how can differences be explained?

Definitions, Data and Method

The empirical analysis 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 Micro-census, in which the questionnaire of the

Labour Force Survey of the EU is integrated, was used and the corresponding 1996 Labour Force Survey for the United Kingdom. For the definition of unemployment the standard definition of the International Labour Office (ILO)⁴ was used.

The ILO definition considers the unemployed to be persons who

- are not in employment when surveyed⁵ (individuals who are out of work but take up a job in the near future are unemployed as well in the sense of definition),
- are currently available and willing for taking up paid work within two weeks, and
- were actively seeking work in the last four weeks.⁶

The definition excludes persons who are not available for employment because they are in full-time education or are engaged in homemaking or parenting.

The study presented here also excludes individuals in apprenticeship or youth training programs, which are defined as education and not as work, and young people who have completed third level education. This category includes persons who have a university degree by the age of 24, because this group is particularly small, especially in Germany, and the analysis distorted when infrequent combinations of characteristics are brought into the analysis.

'Young people', according to the United Nations Definition, refers to all persons aged at least 15 and not older than 24, but this analysis deviates from this definition due to the nature of the data and considers only persons aged 16 and upwards.

As a result of this selection, the total sample sizes are 19895 cases for Germany in 1995 and 8823 cases for the United Kingdom in 1996. The huge sample sizes available in the Labour Force Surveys makes precise statistical estimation possible and detailed analyses of different social groups.

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.⁷ This scale differentiates between levels of general education and vocational education (cf. table 3).

-table 3 about here-

Although one can show differences in size and structure of the youth unemployment by comparisons of the unemployment rates⁸ after certain individual characteristics, it is inevitable to determine the causal connection between two variables (under control of third variables) by multivariate analyses.

To examine the connection between youth unemployment and their socio-economic and macro-structural determinants binomial logistic regression models are used. We investigate the influence of age, gender, marital status, education, regional location and occupational sector on youth (long-term) unemployment. With these models the probability of the occurrence of the status 1 (compared to 0)¹⁰ is indicated as a function of the independent variables. The probability that the status 1 enters, is calculated according to the following linear regression equation:¹¹

P (Y=1) =
$$1/1 + e^{-y}$$
, with $y = a + b_1 * x_1 + ... + b_n * x_n$.

With dichotomous variables the Maximum-Likelihood-Estimate procedure is used.¹² In the tables the coefficients are transformed into odds ratios, which express the competitive dis(advantage) that holders of specific characteristics have over others with regard to the risk of unemployment.

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

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

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 4, Model A). Young females are more prone to unemployment than young males. This effect reflects the general observation that women have inferior labour market chances than men. Due to socially recognised labour market extern alternatives unemployment seems for women more reasonable. A link is also found between marital status and unemployment. The models only distinguish between single and married young people because the number of widowed or divorced persons is to 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 marital decision would be deferred because of the impending unemployment.

- table 4 about here -

Young Germans (including those with dual citizenship) are less prone to unemployment than their contemporaries living in Germany who are not in possession of a German passport. In addition to language difficulties, this might also be due to discrimination.¹³ 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, possession of a vocational qualification in addition to school education also playing 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 is in possession of 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 at 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-Württemberg 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 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 unemployment ¹⁴ among young people in Germany (cf. table 4, Model B): gender, education and the occupational sector have an impact, while the other variables age, marital status, nationality and region have no significant impact. 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.

Youth Unemployment in the United Kingdom

The situation in the United Kingdom is in the main similar to that in Germany if we regard individual risk factors. But despite similarities there are some conspicuous differences (cf. table 5). As in Germany, young people aged between 20 and 24 are disadvantaged compared with those in the younger age bracket. And gender is also an 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 for women in the EU, this pattern is reversed in the United Kingdom. Here the more rapid growth of the service sector linked with job offerings for women and a higher proportion of part-time employed leads to this situation. Unlike in Germany, marital status has no effect on youth unemployment. And British citizenship – unlike German citizenship in Germany – does not have an positive effect on an individual's labour market prospects. ¹⁶

- table 5 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 in the United Kingdom, the probability of unemployment falls steadily, while the German pattern is in contrast more polarised between general education and vocational qualification. Possession of a vocational qualification is relatively insignificant for individual success. Completion of vocational training reduces the risk 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.¹⁷ There the biggest differences appear not between the separate regions, but between different places in all regions. The unemployment risk vary according to place. Characteristic features of such areas are high unemployment rates for the adult population, a concentration of budgets with low income, low educational standard and a high interest in early school leavers (Roberts 2000: 62). The link

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

The rates of long-term unemployment among unemployed young persons in the United Kingdom and Germany are equal (27%). But if we look on the individual risk factors for the duration of unemployment in the two countries, differences became apparent. 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 than the gender effect in 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 significant differences across the regions. Young people living in North West, Yorkshire & Humberside, East Midlands, West Midlands, East Anglia, South East or Wales face only a minor risk of long-term unemployment. Marital status and nationality have no significant impact to the duration, while the effect of the occupational sector has an impact, but only a negligible one. Young people working in the transport sector have a minor risk, this is the only significant impact.

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:

- A 22-year-old woman living in Germany who is married and does not have German citizenship. She lives in Saxony Anhalt, the 'Bundesland' with the highest rate of unemployment, and has only completed compulsory schooling. She is employed in the agricultural sector.
- A woman living in the United Kingdom, with the same characteristics of age, marital status, nationality, education 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 unemployment¹⁸ 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 unfavourable characteristic less can significantly increase an individual's labour market prospects. If the young women in the first example had completed her 'Abitur' instead of only compulsory schooling, her probability of being unemployed - if all else remained equal – would have fallen to 17%. If another unfavourable characteristic is added, however, the prospects can worsen accordingly. For a young man living in the United Kingdom and having the same characteristics as the women in the second example apart from gender, the probability of unemployment increases from 7,5% to 13%.

Although the individual risk factors are particularly different in Germany and the United Kingdom we can see that the combination of some characteristics can determine the chances at the labour market. Young people who possess many 'negative' features are more likely to be unemployed than people without this unfavourable items.

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 are the result of different cultural orientations, socio-economic conditions and specific power proportions in societies. The contentions between church and state and the influence from different political parties coined the figuration of the institutions. Due to this historic conjunction conditions the educational systems (and also the welfare systems) in the EU countries differ strongly (Müller and Shavit 1998: 3f.; Müller *et al.* 1997: 185). The country-specific arrangement of this institutions can help to explain differences in dimension, structure and duration of youth unemployment.

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

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

As we can see the education systems of Germany and the United Kingdom differ strongly in terms of degree of standardisation and stratification (cf. table 6). Depending on the specific formation the transitions from school/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 at which age the selection takes place and how many people of a cohort get the highest educational degree. The earlier allocation happens and minor proportion of reaching maximum number of school years is, the larger is the dimension of stratification (Allmendinger 1989: 233).

- table 6 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 term of content. Holders of vocational qualification have a smaller risk of unemployment than those with 'only' a general qualification. In the United Kingdom with its firm internal labour markets and where vocational education tends to be more general, people require 'on-the jobtraining' before they are useful for employers. In Germany the speciality of the so called 'dual system' is thought to be the reason for a relatively low youth unemployment rate in comparison with other countries (OECD 1994). In this apprenticeship system the teaching of work specific skills is co-ordinated between vocational schools and workplace. The link between educational qualification and labour market outcome is strong. Whereas the British vocational education is decentralised and organised on local or even private bases. The system of professional training in Germany offers the young

persons who have finished successfully their apprenticeship, much smoother crossing in the regular labour market than in labour markets in which the professional education takes place through 'on-the-job-training' (OECD 1998; Brauns et al. 1999). The advantage lies in the fact that young persons in the 'dual system' are already labour market insiders during their training and receive knowledge that is easy transferable to other jobs. The binary trained apprentices attain occupational-specific qualifications. 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 or young will be more disadvantaged in the search for jobs than in more flexible markets (McGinnity 2001: 22ff.). Labour market regulation affects the structure of unemployment not the level. We can see, for these groups the duration of unemployment is particularly long in Germany. Although the unemployment rate for young people is higher in the United Kingdom, the long-term rates are nearly the same in our two countries.

Welfare State Structures and Their Impact on Unemployment

Welfare state institutions differ strongly between Germany and the United Kingdom. Following Esping-Andersens 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 type – the social-democratic type – we can find in Sweden, for example.¹⁹

Specific welfare state institutions dealing with unemployment should stratify outcomes in different ways. Germany and the United Kingdom responded in different ways on rising unemployment. The influence of welfare-state systems - and here particularly of the unemployment benefit systems - on the unemployment may not be overlooked. In Germany unemployment is seen as a individual risk and people should be insured by a statutory insurance system. In contrast the British state based individual choice and compensation of bad outcomes on the principle of poverty alleviation. Unemployment benefits are primarily means-tested and not based on any contributions.

In Germany we have a high degree of de-commodification (size in which the factor work is taken away from the market by the government) and a high degree of corporation (extent in which the social security system distinguishes between professional groups). The transition from school to work is in such systems strongly regulated and transitions are easier, especially for young people. In contrast to this the degree is coined 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 regulated hardly by state, the protection rights for employees are weak and dismissals are simple. But on the other side barriers are low thereby for new attitudes. The German system of unemployment benefit grants in the European comparison comparatively broadminded help. The social security system is developed well and therefore to be unemployed appears for many an alternative to workplaces which lie under their qualification level (Miegel 1996: 3). In the United Kingdom unemployed persons on the contrary fall not in a social hammock, but on a hard plank bed (Wirtschaftswoche 2001: 22). In contrast to Germany also less well paid work must be accepted in the United Kingdom, because of the weak social safety net, there is an

enormous economic pressure to accept new workplaces even if they are less paid or in little popular branches or regions (Thurow 1996: 41). We can observe that many young people work in substandard jobs. They often take 'McJobs' (Roberts 2000: 65) to assure their subsistence. In Germany the affected persons are unemployed at least for the moment rather. Some welfare theorists argue that states with conservative welfare systems combined with specific characteristics of industrial relation systems, creates an 'insider-outsider' labour market, in which skilled workers have secure jobs and outsiders are unemployed (DiPrete *et al.* 2001: 46). In such systems labour market success is strongly aged- and education biased.

Although many young people have no right to social benefits, the influence of support payments is observable. It is to a lesser extent the level of benefits which affects the transition rate from unemployment to employment, but rather the duration of benefits which has a greater impact (Nickell 1997). For the United Kingdom the effect of unemployment benefits varies with age. Then influence of support payments to unemployment duration 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: 327f.).

Active Labour Market Policy Programs in Germany and the United Kingdom

As a reaction to the increasing integration problems of young people in the labour market, programs were started in Germany and the United Kingdom during the last few years. Principal purpose of this active labour market policy is to accommodate hardly provided young persons successfully.

For Germany the emergency program against youth unemployment - 'JUMP' - was dismissed in the end of 1998 and started its promotion measures in 1999. Principal purpose of this state initiative is it to bring unemployed young persons in vocational education and employment. The possibility to catch up secondary school qualifications also belongs to the program. It is directed at young people till 25 years which need an education or qualification offer or need as unemployed help while finding a 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 number of 268205 persons participated. A study to the whereabouts of the participants after conclusion of the measure shows that a third of the participants become unemployed (33,5%). 21,1% are gainfully employed. 10,2 % find an operational education, 5,7 % flow into school education and 21,2 % land in other school or occupational-preparatory measures which are not financed by 'JUMP'. 8,3 % flow into other activities, as for example parental leave or arrest (Dietrich 2001). Unfortunately, no evaluation study is available which compares young people covered by 'JUMP' with other ones.

In the United Kingdom the 'New Deal' is a key part of the British government's welfare to work strategy. It gives different social problem groups of the labour market a real chance to develop their potential, gain skills and experience or find work. The program is directed beneath youthful unemployed persons also at handicapped persons, lone mothers, unemployed musicians and older long-term unemployed. One tries to bring these groups by active labour market policy from the income support system in regular employment. The participants must consult at the labour exchange, participate in training and decide then whether they accept a normal or subsidised job in the economy,

a year-long continuing education measure wear through or accept a temporary post. The ones who accept none of these options see their income support agrees shortened.

The 'New Deal for Young People' has been run since 1998 with 600000 participants, with the principal purpose to help them to leave the social security system (The Guardian 1999: 15). Therefrom already 180000 found a job at the free market and keep it longer than 3 months. Others have landed in programs to the job creation or education. 1/3 of the participants again have left the program. 1/5 of the participants covers again unemployment benefit (Fischermann 2001). Critical voices say that the program tries to protect the recipients from receiving income support, but the real causes of the unemployment does not fight. Although it seems that youth unemployment is on a minimum lowered, there are still problems. Certainly, many young persons can be taken out from the income support, however, they land mostly in simple, badly paid jobs which are limited temporally. They are exposed thereby furthermore to the risk of unemployment (Roberts 2000: 65).

Concerns About the Ability of Explaining Unemployment by Individual Risk Factors and the Possibility of State Interventions

Beneath common risk factors of the individuals 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 successfully combated, the measures implemented – in addition to overall economic growth which lifts all boats– must be targeted towards those who are most affected. In order to pinpoint the problem groups, additional risk

factors such as social origin, occupation, place of residence and personal attitude must also be identified. The risk of unemployment in both Germany and the United Kingdom depends strongly on 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 does fall at any given level of education, but not between levels. Young people with different individual risk factors side by side, like low level of education and foreign person for example, belong to the 'losers' of the labour market, in Germany and the United Kingdom.

Next to individual risk factors, institutional determinants play also a significant role. The structure of unemployment depends on the country-specific formation of the welfare state structures, labour market institutions and the linkages between the educational systems and the labour markets. In particular the formation 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 Britain. The trainees get qualifications which are close to the labour market and easy 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 facilitates 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 not only observe the extent of youth unemployment but also the duration, we can see, that long-term unemployment in both countries is equal. 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 take substandard work to secure their subsistence.

Attempts to fight against youth unemployment started in recent years in Germany and the United Kingdom. At the first glance it seems that 'JUMP' and the 'New Deal' are successful in integrating the problem groups, but the success must be evaluated in depth. The 'New Deal' is less to be laid out of the long-term procurement of knowledge. The main purpose is to breach the doom loop of unemployment. How successful this strategy is have to be proved in the long run.

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Notes

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

² Although the height of the youth unemployment differs in Germany and the United Kingdom, the whereabouts rates seem to be similar. A reason for this could be the specific arrangement of the social security systems. While in the United Kingdom the support system is coined rather weakly and the unemployed persons are depended to accept as quick as possible any work, unemployed persons in Germany can rely stronger on institutional help.

³ To the social problem groups of the labour market belong near young persons still older acquisition persons, women, foreigners, people with health problems and acquisition persons with low qualification.

⁴ Eurostat also uses these criteria to calculate unemployment rates.

⁵ Employment may be either dependent employment or self-employment.

⁶ Active jobsearch includes not only availing of the services of the employment office, but any type of job-seeking activity, e.g. via friends or newspapers.

⁷ See Müller and Shavit 1998: 17; for the original version see König *et al.* 1988; for detailed description Brauns and Steinmann 1999.

⁸ The calculation takes place after the formula: total number of unemployed/total number of acquisition persons (unemployed and employed persons) * 100. The inactive labour force is excluded.

⁹ To the details of the logistic regression see Hamilton 1992.

¹⁰ 1 indicates the status of unemployment, 0 the status of being employed at the time of survey.

¹¹ The opposite probability can also be calculated: $P(Y=0) = 1/1 + e^y$. Besides, the parameter a corresponds to the constant which marks the axis of ordinate, the regression coefficients b_i indicate the upward gradient of the function. X_i are the values of the different independent variables.

This function l is two times the negative of the Loglikelihood function: $L = -2 \sum_{i=1}^{n} \ln(P(Y_i))$; i = 1, 2, ..., n.

- ¹³ 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.
- ¹⁴ Because the used data are cross sectional surveys, the individual working courses can not be pursued temporally. Therefore it is impossible to say whether somebody who is at the time of questioning short time unemployed flows into long-term unemployment or not.
- ¹⁵ The pattern for young people follows the general figure of men and women in Germany and the United Kingdom, see McGinnity 2001: 50.
- ¹⁶ However, if we observe the youth unemployment rates in the United Kingdom by 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% against 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 and McMahon 1997.
- 17 While in Germany the unemployment risk for someone living in Saxony-Anhalt is four times higher than for a young person living and working in Bayaria, the difference between the counties in the United Kingdom is only two times higher between East Anglia and Yorks & Humberside.
- The probability for being unemployed can be calculated towards the formula $P(Y=1) = 1/1 + e^{-y}$.
- ¹⁹ To the welfare state models see in detail Esping-Andersen 1990.

References

Allmendinger, J. (1989) 'Educational Systems and Labour Market Outcomes', European Sociological Review, 5, 3, 231-250.

Brauns, H., Gangl, M. and 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. and Steinmann, S. (1999) 'Educational Reform in France, West Germany and the United Kingdom: Updating the CASMIN Educational Classification', *ZUMA-Nachrichten*, 23, 44, 7-44.

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., D. Goux, E. Maurin and M. Tahlin (2001) 'Institutional Determinants of Employment Chances. The Structure of Unemployment in France and Sweden', *European Sociological Review*, 17, 3, 1-22.

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

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

Fischermann, T. (2001) 'Blairs Rechenbeispiele. Wie die britische Regierung den Arbeitswillen fördert', *Die Zeit*, 56, 17, 18.

Franz, W. (1998) 'Arbeitslosigkeit', in B. Schäfers and 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.

Harten, H.-C. (1983) *Jugendarbeitslosigkeit in der EG*, Frankfurt a.M.: Campus.

Heath A. and McMahon, D. (1997) 'Education and Occupational Attainments: The Impact of Ethnic Origins', in A. H. Halsey, H. Lauder, P. Brown and 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, 20-29.

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, 3.

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

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

Narendranathan, W., Nickell, S. and Stern, J. (1985) 'Unemployment Benefits Revisited', *The Economic Journal*, 95, 307-329.

Nickell, S. (1997) 'Unemployment and Labor Market Rigidities: Europe versus North America', *Journal of Economic Perspectives*, 11, 3, 55-74.

König, W., Lüttinger, P. and 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.

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, 4, 67-100.

Roberts, K. (2000) 'Großbritannien', in I. Richter and S. Sardei-Biermann (eds)

Jugendarbeitslosigkeit. *Ausbildungs- und Beschäftigungsprogramme in Europa*,

Opladen: Leske + Budrich.

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 and 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, 15.

Thurow, L. C. (1996) 'Die Illusion vom Jobwunder', Die Zeit, 51, 44, 41.

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

Table 1 Selected unemployment rates in EU countries by age group§ in %					
Country	1985	1990	1995	2000#	
Belgium	11,3	7,3	9,3	8,4	
Aged under 25	23,6	14,5	21,5	23,0	
Aged 25 and over	9,0	6,2	7,9	6,9	
Denmark	7,8	8,3	7,0	5,0	
Aged under 25	11,5	11,5	9,9	8,4	
Aged 25 and over	6,8	7,6	6,3	4,4	
Germany [‡]	6,9	4,9	8,2	8,2	
Aged under 25	9,8	4,6	8,5	9,0	
Aged 25 and over	6,1	5,0	8,1	8,0	
Finland	5,0	3,4	17,0	9,6	
Aged under 25	9,1	6,4	41,2	21,4	
Aged 25 and over	4,2	2,9	13,8	7,8	
France	10,3	9,4	11,9	8,9	
Aged under 25	25,8	19,8	27,1	18,8	
Aged 25 and over	7,2	7,7	10,1	7,8	
Greece	7,8	7,0	9,1		
Aged under 25	23,9	23,2	27,9		
Aged 25 and over	5,2	4,4	6,5		
The United Kingdom	11,5	7,0	8,7	5,5	
Aged under 25	18,2	10,4	15,5	12,6	
Aged 25 and over	9,5	6,1	7,4	4,2	
Ireland	18,0	14,1	12,0	4,1	
Aged under 25	25,1	19,8	19,0	5,6	
Aged 25 and over	15,4	12,5	10,3	3,8	
Italy	9,5	9,8	11,8	10,7	
Aged under 25	32,2	29,0	32,8	31,9	
Aged 25 and over	4,5	5,9	8,4	7,9	
Luxembourg	3,0	1,6	2,9	2,1	
Aged under 25	6,5	3,6	7,2	5,7	
Aged 25 and over	2,0	1,3	2,3	1,7	
The Netherlands	10,5	7,8	7,2	2,8	
Aged under 25	17,7	11,4	12,1	5,1	
Aged 25 and over	8,7	6,8	6,1	2,4	
Austria	•		4,3	3,2	
Aged under 25	•	•	5,9	4,4	
Aged 25 and over	•		4,1	3,0	
Portugal	•	4,7	7,1	4,1	
Aged under 25	•	10,4	16,0	8,5	
Aged 25 and over	•	3,2	5,5	3,4	
Sweden ⁺	2,8	1,7	8,1	5,6	
Aged under 25	5,8	3,8	19,0	10,5	
Aged 25 and over	2,3	1,3	6,7	5,0	
Spain		16,3	22,7	13,6	
Aged under 25		31,8	41,7	25,0	
Aged 25 and over	•	12,4	18,7	11,6	
17		*	•		

Source: Eurostat.

Notes:

S Young people aged 16 to 24 until 1994 and aged 15 to 24 from 1995 onwards.

The figures for 2000 are seasonally adjusted unemployment rates for the month of November (for Denmark and the Netherlands of October, for the United Kingdom of September and for Italy of July), because annual rates for 2000 were not yet available.

Up to 1990 West Germany.

Up to 1994 the Swedish figures are based on OECD data, which are comparable with the Eurostat data.

Table 2 Rates of unemployment and long-term unemployment in the EU countries in 1985 and 1995 in %

	1985		1995	
	Unemployment	Long-term- Unemployment	Unemployment	Long-term- Unemploymen
Belgium	11,3	68,2	9,3	62,4
Under 25	23,6	52,5	21,5	44,4
25 and over	9,0	76,0	7,9	68,1
		32,0	7,9	28,1
Denmark	7,8			
Under 25	11,5	21,5	9,9	9,3
25 and over	6,8	36,4	6,3	34,5
Germany	6,9	46,9	8,2	48,7
Under 25	9,8	30,2	8,5	26,8
25 and over	6,1	53,2	8,1	51,7
Finland	5,0	•	17,0	37,0
Under 25	9,1	•	41,2	17,3
25 and over	4,2	•	13,8	43,7
France	10,3	43,8	11,9	40,2
Under 25	25,8	34,3	27,1	23,7
25 and over	7,2	50,4	10,1	45,4
Greece	7,8	43,4	9,1	51,2
Under 25	23,9	42,4	27,9	49,8
25 and over	5,2	44,2	6,5	52,1
The United Kingdom	11,5	48,7	8,7	43,6
Under 25	18,2	37,9	15,5	27,2
25 and over	9,5	54,6	7,4	50,3
Ireland	18,0	62,1	12,0	61,4
Under 25	25,1	54,4	19,0	48,0
25 and over	15,4	66,7	10,3	66,8
Italy	9,5	64,5	11,8	63,6
Under 25	32,2	64,5	32,8	63,4
25 and over	4,5	65,5	8,4	63,7
Luxembourg	3,0	36,8	2,9	23,2
Under 25	6,5	36,6	7,2	23,2
25 and over	2,0	36,9	2,3	26,0
The Netherlands	10,5	56,4	7,2	46,8
Under 25		41,7	12,1	32,9
25 and over	17,7 8,7	63,5	6,1	51,6
	0,7	03,3		
Austria	•	•	4,3	27,5
Under 25	•	•	5,9	14,0
25 and over	•		4,1	31,2
Portugal	•	53,4	7,1	50,9
Under 25	•	52,8	16,0	41,4
25 and over		53,9	5,5	55,1
Sweden	2,8	•	8,1	20,2
Under 25	5,8		19,0	12,7
25 and over	2,3		6,7	22,8
Spain	•	58,5	22,7	54,6
Under 25		57,8	41,7	45,7
25 and over		59,2	18,7	57,7

 Table 3 The CASMIN scale of educational qualifications

Qualification	Description
1ab	Social minimum of education. This is the minimal level that individuals
	are expected to have obtain in a society, it corresponds to the level of
	compulsory education.
1c	Basic vocational training above and beyond compulsory schooling.
2b	Academic or general tracks at the secondary intermediate level.
2a	Advanced vocational training or secondary programmes in which general
	intermediate schooling is combined by vocational training.
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.
Courac: Müller	and Shavit 1008: 17

Source: Müller and Shavit 1998: 17.

Table 4 Results of logistic regression models for unemployment (Model A) and long-term unemployment (Model B)

in Germany[§] in 1995

in Germany's in 1995	Model A		Model B	
	Coefficients	Standard errors	Coefficients	Standard errors
Age				
16 to 19 years				
20 to 24 years	.27***	.08	.29	.19
Gender				
Male				
Female	.29***	.06	.48***	.13
Marital Status				
Single				
Married	.19***	.07	.05	.15
Nationality				
German				
Non-German	.35***	.09	01	.18
Education#	.50	.02	.01	
lab				
1c	- 97***	.08	41**	.17
2b	66***	.12	41	.23
2a 2a	-1.69***	.09	73***	.18
2a 2c	-1.73***	.16	-1.47***	.50
2cvoc	-2.04***	.16	39	.37
	-2.04 · · ·	.10	39	.37
Region				
Schleswig-Holstein	10	25	(2	65
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-Württemberg	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	1.24***	.20	.67	.43
Pomerania	1.19***	.18	.52	.40
Saxony	1.36***	.18	88**	.40
Saxony-Anhalt	1.08***	.19	.67	.42
Thuringia				
Sector				
Agriculture				
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		125		.083
N		9895		724

Notes

Sources: German Micro-census 1995; own calculations.

[§] 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 resp. not long-term unemployment. The regression coefficients, their standard errors and their error probabilities of < 10 % (*), < 5 % (**) and < 1 % (***) are # For levels of education cf. table 3.

Table 5 Results of logistic regression models for unemployment (Model A) and long-term unemployment (Model B)

	Model A		Model B	
	Coefficients	Standard errors	Coefficients	Standard errors
Age				
16 to 19 years				
20 to 24 years	.24***	.08	1.27***	.20
Gender				
Male				
Female	61***	.08	48**	.20
Marital Status				
Single				
Married	.06	.14	.42	.29
Nationality				
British				
Non-British	05	.22	70	.54
Education#				
lab				
lc	33***	.11	29	.24
2b	83***	.09	17	.21
2a	95***	.12	75***	.29
2c	-1.34***	.14	-1.94***	.49
2evoc	-1.30***	.20	72	.50
Region	-1.50	.20	12	.50
North East				
North West	10	.18	73*	.38
Merseyside	.30	.24	30	.48
Yorkshire & Humberside	16	.19	81**	.40
East Midlands	10	.20	-1.08**	.46
West Midlands	14	.18		.38
South West	14 51**	.18	41 -1.46***	.56 .51
	62***	.20	-1.46***	.31 .44
East Anglia London	62*** 14	.20	-1.13***	.39
	14 49***			
South East	*	.18	54	.37
Wales	13	.21	91**	.46
Scotland	11	.18	96**	.39
Northern Ireland	37	.24	45	.50
Sector				
Agriculture		6.5	0.1	1 10
Energy	55	.65	.01	1.48
Energy derivates	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		088	0,177	
N	8	823		957

Notes

Sources: British Labour Force Survey 1996; own calculations.

[§] 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 resp. not long-term unemployment. 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.

Table 6 Selected 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, withal means: ** high level, * intermediate level, no asterisks low level.

Source: Müller and Shavit 1998: 14.