DOCUMENT RESUME

ED 401 479 CE 073 023

AUTHOR	Bellmann, Lutz
TITLE	Wage Differentiation and Long-Term Unemployment. An International Comparison. IAB Labour Market Research Topics No. 19.
INSTITUTION	Institute of Employment Research, Nurenberg (Germany).
REPORT NO	ISSN-0945-8093
PUB DATE	96
NOTE	21p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Comparative Analysis; Competition; *Developed Nations; Employment Level; *Employment Patterns; Foreign Countries; Labor Market; *Minimum Wage; *Salary Wage Differentials; Trend Analysis; *Unemployment; Wages
IDENTIFIERS	*Europe; Japan; Organisation for Economic Cooperation Development; *United States

ABSTRACT

The relationship between wage differentiation and long-term unemployment was examined in a study that considered data regarding long-term unemployment and minimum wages in the United States, Japan, and 10 member nations of the Organisation for Economic Cooperation and Development. Data regarding wages and unemployment in the 11 countries were analyzed to determine the effect of minimum wages on employment and unemployment and the relationship between long-term unemployment and wage disparity. In the data analysis, consideration was given to the differences between individual countries' wage replacement payments, wage negotiations, and labor market policies. After those factors had been taken into account, it was determined that larger wage disparity (or a lower first decile ratio of the distribution of incomes) decreases the relative number of long-term unemployed among the total number of unemployed individuals in a given country. The study confirmed the neoclassical standard model of the labor market with perfect competition and contradicted U.S. studies that could not find any negative employment after the minimum wage increases in the United States in the late 1980s and early 1990s. The implications of the study findings were discussed within the context of Germany's labor market and labor market policies. (Contains 42 references.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 401 479

IAB topics
labour market research

No. 19

Institut für Arbeitsmarkt- und Berufsforschung

Institute for Employment Research

Dr. Lutz Bellmann

Wage Differentiation and Long-term Unemployment

An International Comparison

- **Long-term Unemployment**
- **Minimum Wages**
- **Wage Disparity**

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

1996

Institut für Arbeitsmarkt- und Berufsforschung
der Bundesanstalt für Arbeit
Regensburger Straße 104, D-90327 Nürnberg

CE073023

BEST COPY AVAILABLE

Publisher of the series:
Institut für Arbeitsmarkt– und Berufsforschung der Bundesanstalt für Arbeit (IAB),
Regensburger Strasse 104, 90327 Nürnberg
Telephone: +49–911–179–0
Telefax: +49–911–179–3258

Coordinators:
IAB Topics Working Group: Lutz Bellmann, Werner Dostal, Knud Emmerich, Barbara Koller, Gerhard Kühlewind, Gerd Peters, Thomas Rhein, Peter Schnur, Manfred Tessaring, Ulrich Walwei, Heinz Werner

Translator and editor:
Elke Limberger–Katsumi, c/o Institut für Arbeitsmarkt– und Berufsforschung der Bundesanstalt für Arbeit (IAB), Regensburger Strasse 104, 90327 Nürnberg

Distribution:
To order apply to the IAB, Regensburger Strasse 104, 90327 Nürnberg

Annual price:
DM 30 (for German subscribers); foreign subscribers are currently supplied free of charge

Copyright:
No part of this publication may be reproduced in any form without prior written permission of the IAB and in all reproductions full reference of the details must be given.

The series "IAB Labour Market Research Topics" is designed for the publication of selected papers resulting from the work done by the IAB or by studies commissioned by the IAB. Papers bearing the author's name do not necessarily represent the opinion of the IAB or the Bundesanstalt für Arbeit.

ISSN 0945–8093

The IAB is the research division of the German Bundesanstalt für Arbeit where scientists of different economic and social science disciplines work. The range of research topics can be characterized briefly as follows:
- observation of and forecasts for the German labour market
- labour market statistics
- labour market theory and policy
- evaluation of employment programmes
- regional and international labour markets
- occupation sociology
- research in skills and qualifications
- technological development and the labour market
- business and personnel management

Lutz Bellmann*)

WAGE DIFFERENTIATION AND LONG-TERM UNEMPLOYMENT

- An International Comparison -

1 Introduction

2 Effect of minimum wages for employment and unemployment

3 Econometric investigation of the relationship between long-term unemployment and wage disparity

4 Summary

5 References

*) Researcher of the Institut für Arbeitsmarkt- und Berufsforschung

0 Abstract

This paper presents an international analysis of the share of long-term unemployed of all unemployed for a number of industrial countries in the period 1985–1991. After allowing for the differences in the systems for payments to replace wages, wage negotiations and the level of activity of labour market policy the comparison reveals that a larger wage disparity (i.e. a lower first decile ratio of the distribution of incomes) reduces long-term unemployment. This result contradicts empirical studies from the USA which could not find any negative employment effect after the increase of minimum wages in the late eighties and early nineties. Thus the international comparative study confirms the neo-classical standard model of the labour market with perfect competition.

1 Introduction

The OECD (1993, chapter 3) found in a comprehensive survey that long-term unemployment showed a marked increase in the last decade, despite the prolonged boom in the second half of the eighties and even in countries which had previously reported only a small number of long-term unemployed among all unemployed. Relatively high inflow rates to unemployment with short duration of such unemployment can produce the same level of unemployment as relatively low inflow rates and long duration of unemployment. Both in 1979 and in 1991 the share of the long-term unemployed was relatively low in North America and high in the European countries (see OECD 1994, pp. 47–49). An analysis of the different shares of the long-term unemployed of all unemployed based on an international comparison is the subject of this paper.

Several parties in Germany have suggested creating simple jobs (Klös 1995) and permitting the employment of long-term unemployed at wages 20% below the negotiated wages (Siebert 1996)[1], this was triggered not only by the renewed (seasonally adjusted) increase in unemployment at the beginning of 1996, but also by the high unemployment level and its increasing persistence in the form of long-term unemployment [2].

The structural analysis of unemployment of the Bundesanstalt fürArbeit (BA) forms a background to these proposals. For September 1994 this analysis quotes a percentage of 46.3% for unemployed without completed vocational training and a corresponding 50.2% share of long-term unemployed (see BA 1995, p.18). This is why lowering the wages in the lower negotiated wage groups is seen as a pre-requisite for the re-employment of the unemployed in general and the long-term unemployed in particular.

Negotiated wages represent minimum wages in Germany. Therefore a discussion about the lowering of negotiated wages for certain groups can be related to the effects of legislation on minimum wages. The difference between effective wage and negotiated wage is less for unskilled workers than for semi-skilled and skilled workers (see Schnabel

[1] The chemical industry has known incoming wages since 1994. In early 1993 the granting of wage subsidies in the new federal states for programmes under section 249h of the Labour Promotion Act was made subject to the agreement of wages for the unemployed assigned to these programmes which were reasonably lower than those for similar employees who were not part of the programme (see Stark/Wolfinger 1995).

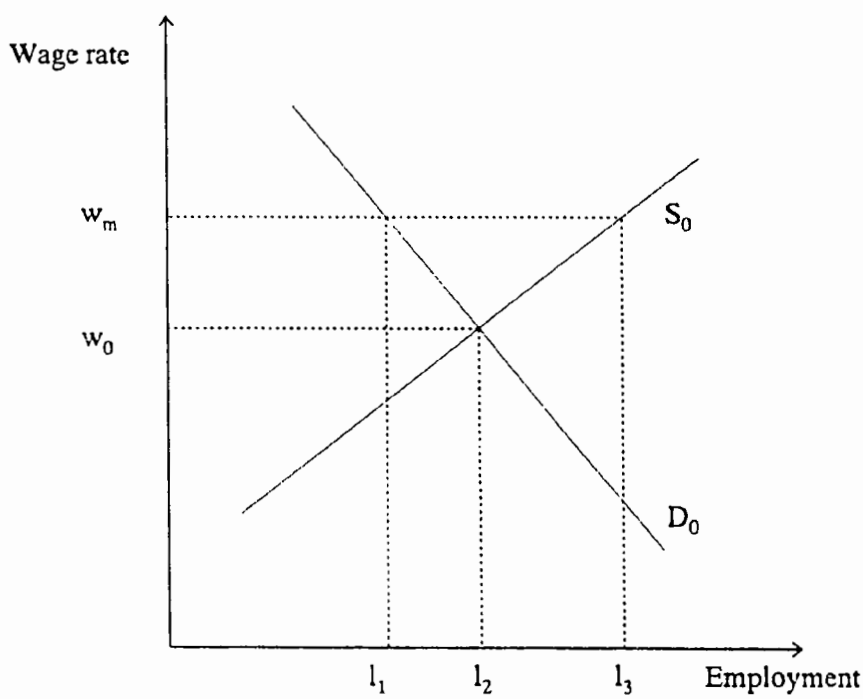
[2] See the topical issue of WSI Mitteilungen 12/1995

is less for unskilled workers than for semi-skilled and skilled workers (see Schnabel 1995, p. 37), therefore one can consider negotiated wages to be more binding in the lower wage groups. Several theoretical approaches must be discussed in this context which go beyond the standard models of perfect competition and monopsonism. This may explain why companies are paying higher than negotiated wages and why an increase in minimum wages can raise the number of employed people. At this point we shall dispense with providing empirical evidence for the changes of negotiated wage structures and above-negotiated wage payments in the old states of the Federal Republic of Germany, because this has already been done in other papers (see Klös 1995, Bellmann 1995). Neither shall we provide a survey of the basically very interesting empirical studies about the effects of the increase in minimum wages in the US in the late eighties and early nineties discussed by Card/Krueger (1995)[3]. The reason being the systems-related differences in the USA and western European countries. Therefore we opted for an empirical approach with an international comparison, investigating the effect of wage disparity for the percentage of long-term unemployed among all unemployed. In doing so we take the differences among the institutions for wage negotiations, passive and active labour market policy and the trade union representation of workers into consideration.

2 Effect of minimum wages for employment and unemployment

The neo-classical standard model of perfect competition allows to demonstrate the effect of a minimum wage w_m for a labour market on which the supply and demand of labour are balanced when the wage rate is w_0(Fig. 1). If the minimum wage rate w_m is higher

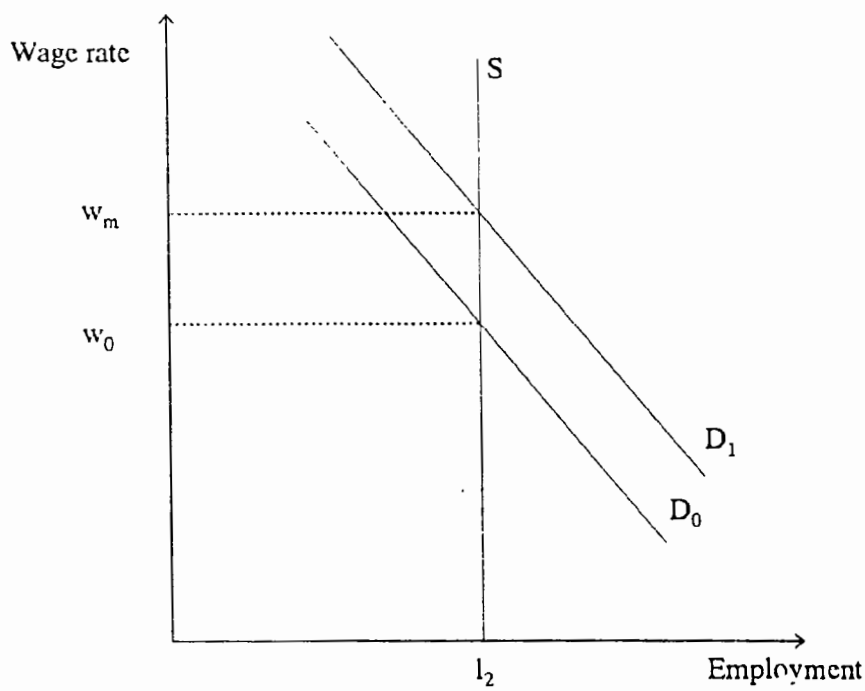
Fig. 1: The effects of minimum wages in a situation of perfect competition



[3] For a controversial discussion thereof see Deere et al. (1995) and Kennan (1995)

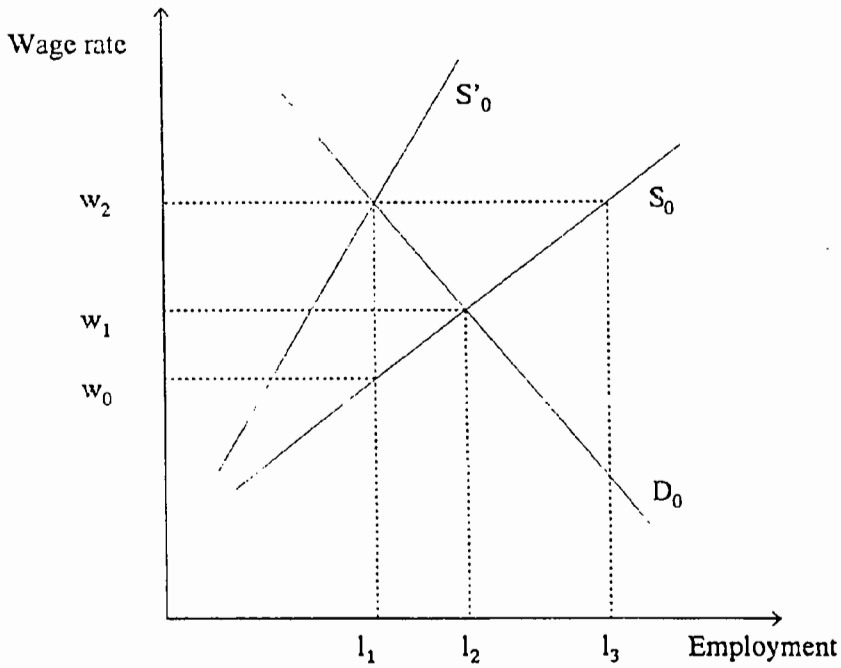
than the market–clearing wage rate w_o, employment will drop from l_2 to l_1. Since w_m is higher than w_o, the supply of labour will increase from l_2 to l_3, consequently l_3–l_1 people will become unemployed. To be sure, the effect will be all the more pronounced the higher w_m is relative to w_o. The more flexible the labour supply is, the more unemployment will result. Those advocating minimum wage increases argue that companies are forced to abolish existing inefficiency. This means that the labour demand curve is moved towards the top right, causing a higher level of employment and thus lower unemployment. In combination with a totally flexible labour supply this 'shock effect' may offset the negative employment effect and the unemployment effect of the minimum wage. Fig. 2 shows this extreme case.

Fig. 2: The effects of minimum wages in a situation of perfect competition, inflexible supply of labour and a a shift of the curve for labour demand



The assumption of perfect competition may be modified to say that there is only one company (or that several companies have made an agreement among themselves) on the labour market studied. This monopsonist is then confronted with an increasing marginal cost curve, for the positive slope of which literature offers several reasons which shall be discussed below. Because the first order profit maximising condition for the monopsonist is that marginal revenue product equals marginal cost, the company will select the number of workers that corresponds to the intersection of the marginal cost curve and the marginal revenue product curve. On the labour market the cost relates to the cost of labour, i.e. to the marginal wage cost (S'_0), which is the rise of the curve of average wage cost (S_0).

Fig. 3: The effects of minimum wages in the monopson case



Since l_1 employees are willing to work for a wage rate w_o, the wage rate will drop from w_1 to w_0 compared to the perfect competition case, while employment will drop from l_2 to l_1. Introducing a minimum wage rate in the range w_0 to w_2 will increase employment between w_0 and w_1 and decrease it between w_1 and w_2 (but only compared to the maximum possible employment increase, not compared to a situation without minimum wage). The wage increase caused by the introduction of a minimum wage rate expands the supply of labour from l_1 to l_3. If the minimum wage rate is higher than w_1, unemployment will result, e.g. unemployment l_3-l_1 in case of wage rate w_2. Furthermore there will be vacancies at a minimum wage rate below w_1 since the demand for labour exceeds the supply.

Some authors (see e.g. McConnel/Brue 1986, p. 268) hold that the monopson case is irrelevant for the low wage range e.g. in the USA, because restaurants, retailers and other service providers will always find sufficient people without formal qualifications looking for a job, without being required to increase their wages when they have a higher demand for labour. Although the OECD (1994, p. 31) considers it possible that labour receiving only minimum wage rates is less mobile than other workers, because young people are living with their parents and working mothers want to find a job near their home; it also says that public transport in urban areas is so widely available that in cities there are hardly any companies that have market power.

Several recently developed theoretical models, however, stress the expense related to hiring and the training periods for new workers. They argue that to minimise these transaction costs companies are prepared to pay higher than market-clearing wages, these being all the higher, the more jobs are to be filled. Card/Krueger (1995, p. 374) point out that many fast-food restaurants pay premiums to employees who recommend their friends and relatives as employees. Devine/Kiefer (199, chapters 8 and 10) show that in a number of empirical studies the wage rate induces a lower termination rate (by the employee) and the supply of applicants correlates positively with the offered wage rate.

Rebitzer/Taylor (1991) argue differently. According to their model labour determines its effort which companies want to increase by a combination of efficiency wages and supervision. The model states that by paying higher than market-clearing wages companies can extend the control range and thus cut control costs.

3 Econometric investigation of the relationship between long-term unemployment and wage disparity

According to a theoretical hypothesis excessive minimum wages or the inflexibility of the wage structure are the major reasons for the increase in unemployment in many OECD countries when demand changes due to sectoral structural changes and/or because technological developments require differently qualified labour (see Bellmann/Buttler 1989 and Bellmann 1995). In this context we shall discuss particularly the role of wage negotiations, wage disparity and wage replacement payments, because an international comparison reveals major differences for these.

Whether or not wage negotiations are centralised and what percentage of workers are organised in trade unions is decisive for the effect of wage negotiations' results on unemployment (see Bellmann/Emmerich 1992a). If wages are negotiated centrally, the trade unions tend to take the inflationary effect of excessive agreements and their negative consequences for unemployment into account, because their own members are affected. Excessive wage increases negotiated at company level also adversely affect trade union members, because the company must dismiss people if the customers for the products manufactured by it can switch to other companies. The negotiators will take this into consideration. If wages are negotiated at the level of the respective industry, customers of the products made by this industry cannot switch to other sources as easily, therefore excessive wages might result which will then cause distribution disputes which in turn push up unemployment. Jackman (1995) argues that the central negotiating systems require a certain uniformity of wage agreements which is unjustified in view of the different demands made on the individual industries in international competition. The industries pressed hardest by international competition will dismiss workers, again raising unemployment.

An international comparison of unemployment benefit systems reveals vast differences. Two factors are important for their economic effect, one is the average amount of wage replacement payments, as percentage of income from wages (the so-called wage replacement rate) and the maximum period for which such benefits are paid (see Atkinson/Micklewright 1991 and Commission of the European Communities 1992, chapter 2) In the USA and Japan replacement rates are lower and less benefits are granted for

shorter periods than in Western Europe. Comparatively high wage replacement payments theoretically have a negative effect on the unemployeds' willingness to intensively find a job and to accept an available job. On the other hand the matching quality suffers when the search is too short (see Mavromaras 1992). Furthermore it is difficult for companies to offer jobs at wages which are only marginally higher than the wage replacement payments, therefore these constitute a kind of lower limit to wages (see Elmeskov 1993).

Below we present the results of a multi-variant regression model which analyses the reasons for the respective shares of long-term unemployed of all unemployed for 1985-1991 using OECD (1993) data for a number of industrial countries (Austria, Australia, Belgium, Canada, Denmark, France, Germany, Great Britain, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the USA). Here the role of the wage negotiation system, the wage replacement benefit system and existing wage disparity are given special consideration[4].

It would certainly be interesting to apply the same empirical approach to explain the unemployment rate and the development of employment in different countries. Since unemployment can be defined as the result of a labour supply exceeding labour demand, regression models would have to include the unemployment rate as a dependent variable, just the same as the variables labour demand and supply, while this poses problems for the development of the activity rate (see Klauder 1989). For the variable 'share of long-term unemployed of all unemployed' the variables for labour demand and labour supply are reduced in the numerator and the denominator, if they have an effect both on the number of unemployed and the number of long-term unemployed. In addition, the level of unemployment determines the extent of active and passive labour market policy and the result of wage negotiations to a larger extent than does its structure. Thus these variables would not be exclusively independent variables in a regression model in which the unemployment rate is a dependent variable, therefore simultaneous equation methods would be required. Similar arguments hold for the development of employment. While for regression models which include the unemployment rate as the dependent variable, the lack of certain labour supply variables is considered a problem, a similar problem arises for regression models which include the development of employment as the dependent variable, because certain labour demand variables, e.g. describing company dynamics, are lacking for these.

The data for the share of the long-term unemployed were taken from a study by Huckemann/Van Suntum (1994). The wage disparity was computed firstly as the difference between the first and the ninth decile of the distribution of working incomes, related to the median of wage distribution[5]. Secondly, the ratio of the first decile of wage distribution to the median was used as regressor. This variable may be interpreted as the ratio of the minimum wage rate to the median income level. Table 1 shows the highest and the lowest value in the 1985-1991 period under review for different OECD countries; their

[4] The number of cases is reduced because data for certain countries and certain times are not available for some countries. For a similar approach see OECD (1993) which is concentrating too much on passive labour market policy in my view.

[5] The first decile indicates the income not exceeded by 10% of employed people. The ninth decile is the income not exceeded by 90% of employed persons and the median line is the income not attained by 50% of employed persons.

minimum wage system is briefly characterised and the minimum wage rate related to the median income is indicated.

Table 1: Minimum wages and lower decile ratio in Western Europe and the USA (in % of average wages)

Country	Brief characterisation	Minimum wages	Decile ratio
USA	there is a sub-minimum wage (-25%) for young people	36 men 58 women	37 – 38
Belgium	for workers over 20 years of age (-7.5% for those under 20)	66	69 – 70
Germany	wages are negotiated according to industries and regions		70 – 71
Spain	for workers over 17 years of age (-39% for 17 year- olds; -61% for those under 17)	54	no figures
France	only applies to workers above 18 years old	61	63 – 66
Greece	depends on civil status, seniority and economic sector (private or public)	67	no figures
Ireland	no minimum wage fixed		
Italy	wages are negotiated according to industries and regions		73 – 75
Netherlands	for workers over 22 years of age (-10% for those under 22)	72	72 – 75
Portugal	for workers over 17 years of age (-25% for those under 17; -17% for services in Portugal)	73	70 – 71
UK	no minimum wage fixed		59 – 63

Source: CERC (1991) quoted after Jackman (1995, p. 31). Information for the USA were taken from the OECD study (1994, p. 49). The decile ratio indicates the income not exceeded by 10 % of the population in relation to the median income.

The average amount of benefits related substituting wages to average wages was adopted from Heylen (1993) as further explanatory variables, i.e. the so-called wage replacement rate and the maximum period for which it is paid. This will help to determine the in-

centive the unemployment insurance system provides for the unemployed. The degree of activity of labour market policy is described by the ratio of the expenses for active labour market policy to total expenses of labour market policy measures, i.e. including expenditures for unemployment benefits and early retirement pay. These data, as well, were taken from Huckemann/van Suntum (1994). The ranking of countries according to how central their wage negotiations are as compiled by Calmfors/Driffill (1988) was considered as a further explanatory variable[6]. Choi (1983) operationalised and ranked countries according to Olsen's (1979) concept that societies are suffering a sclerosis of institutions because of the growth of large-scale organisations and interest groups. The percentage of trade union membership was included as a further explanatory variable. The data for the latter two variables were again taken from Heylen (1993).

Table 2 includes two versions of the regression model. In the first version all explanatory variables were considered as regressors, while in the second one the two wage differentiation variables were included in the regression. More specifically they are instrumentalised by means of the three variables institutional sclerosis, centrality of wage negotiations and percentage of trade union membership. These three variables were then used exclusively as instrumental variables and not included in the regression estimates as explanatory variables anymore. The negative sign of the variable 'wage disparity' and the positive signs of the variables 'decile ratio' confirm the neo-classical standard model of perfect competition, i.e. higher minimum wages increase the rate of long-term unemployed among the unemployed. Here the significance of the results of the different estimated variables varies. This result, however, contradicts the results of the studies collected by Card (1992a, 1992b), Katz/Krueger (1992) and Card/Krueger (1995) on the effects of an increase in minimum wages in the USA in the late eighties and early nineties, which will have to be discussed further below.

Paying substitutes for wages to the unemployed for a longer period leads to a higher share of long-term unemployed, but it cannot be determined, whether this empirical result is due to less intensive searching, lack of willingness to accept jobs or because wage replacement is a kind of lower limit for wages. The amount of substitute payment is only significant for the instrumental variables (IV) estimates. Here the estimated regression coefficient has a sign not expected according to the theory. Atkinson/Micklewright (1991) offer a survey of a number of micro-econometric studies for different countries. Only very few studies are available for Germany so far. Licht/Steiner (1991), Stobernak (1990) and Steiner (1994) find that marginal changes in the amount paid as unemployment benefits are of minor effect.

Centralised wage negotiations increase the percentage of long-term unemployed. This supports the hypothesis that the employment interests of the long-term unemployed are inadequately considered in central wage negotiations. The variables 'percentage of trade union membership' and 'degree of activity of labour market policy' are insignificant at conventional levels. The variable 'institutional sclerosis' is significant only once, however, with a theoretically unexpected sign. The amount of the corrected multiple determination coefficient is satisfactory at 0.535 and 0.557 respectively. However, it cannot be reasonably interpreted for the IV regressiions.

[6] For a more recent survey see Fitzenberger (1995)

Table 2: Determining factors for the share of long-term unemployed persons in various OECD countries (OLS and instrumental variable estimates)

Independent variables	OLS	OLS	IV	IV
Wage disparity	– 20.185* (1.75)	n.a.	– 22.206*** (3.24)	n.a.
Decile ratio	n.a.	150.581** (2.41)	n.a.	80.237*** (3.10)
Institutional sclerosis	– 0.500** (2.47)	– 0.188 (0.70)	n.a.	n.a.
Degree of centralisation of wage negotiations	4.010*** (2.78)	5.623*** (3.49)	n.a.	n.a.
Percentage of trade union members	0.475 (1.45)	0.316 (0.96)	n.a.	n.a.
Wage replacement rate	0.047 (0.29)	0.235 (1.24)	– 0.499*** (6.95)	–0.493*** (6.86)
Duration of benefits	0.997*** (5.97)	0.687*** (3.22)	0.646*** (7.58)	0.587*** (6.48)
Extent of active labour market policy	0.288 (1.31)	0.204 (1.00)	– 0.213 (1.39)	– 0.249 (1.53)
Constant	– 13.648 (0.43)	– 157.340** (2.53)	73.991*** (5.49)	1.543 (0.116)
R^2	0.591	0.611		
R^2 (corrected)	0.535	0.557		
Number of cases	62	62	105	105

Notes: For the regressions with the instrumental variables (IV) the wage disparity and decile ratio were instrumentalised with the variables 'institutional sclerosis', 'centrality of wage negotiations' and 'percentage of trade union members'. *** (**) <*> significant at a level of 1% (5%) <10%>, n.a. means that the variable was not included. The decile ratio expresses the income which 10% of the employees do not exceed, related to the median income level.

Since the USA have both the lowest minimum wages and the lowest percentage of long-term unemployed among the countries included in the survey, I excluded these data to perform a sensitivity analysis. The results hardly change, the same is true when the data for West Germany are excluded, because the negative wage disparity trend indicated by the OECD-data (1993) is misleading as shown by Bellmann/Möller (1995a, 1995b).

How should one interpret the different results of the national studies presented e.g. by Card/Krueger (1995) and the international comparative study presented by me? While one must be sceptical about the validity of the hypothesis of increasing marginal wage costs due to lack of suitable labour supply assuming complete information, the increase of marginal wage cost can well be explained by a reduction of costs for hiring, training and control. Accordingly companies will pay higher than market-clearing wages to have an advantage over their competitors on the labour market and to punish employees who

have been caught shirking work by dismissing them which means they have to accept a lower paid job or become unemployed. To determine its wages the company will thus observe the situation on the labour market relevant for it. Therefore studies concentrating on one specific labour market might well find that companies paying higher wages have advantages over those paying lower ones. An international comparative study, however, includes several labour markets which differ not only regarding the minimum wage legislation applicable to them, but also regarding other factors, e.g. the amount and duration of wage replacement payments. It will not be advantageous for German companies to increase their wages above those of US-companies, i.e. the companies looked at in the empirical studies have almost no direct relationships. The agreement on flexible application of negotiated wages in Germany (see Bellmann/Emmerich 1992b) to create simple jobs, i.e. to lower minimum wages for certain groups, such as long-term unemployed in Germany, might lower the share of long-term unemployed among all unemployed, but only if the companies' competitive situation will permit it and labour can still be adequately motivated.

4 Summary

The paper consists of an international comparison of the shares of long-term unemployed of all unemployed. With due consideration of the differences in the system of wage replacement payments, wage negotiations and the activity of labour market policy the comparison shows that larger wage disparity (or a lower first decile ratio of the distribution of incomes) decreases the number of long-term unemployed. This result contradicts empirical studies for the USA which have found no negative employment effect of the increase in minimum wages in the late eighties and early nineties. The result of the international comparative study thus confirms the neo-classical standard model of the labour market at perfect competition, while the studies for the USA may be interpreted as evidence for a monopsony, while some refinements have been made under the aspect of efficient wage theories. The effect of lowering long-term unemployment may be explained by the creation of low paying jobs in services and the avoidance of dismissals of the type of persons who would be especially prone to become long-term unemployed.

Economic policies for a more pronounced differentiation of wages are another issue. Hardes (1988) collects arguments for a limited flexibility of wage policy at company level. The plan devised by Weitzman (1987) proposes company wage decreases when demand for the goods produced by the company drops which permits shifting the risk of shortage of income to the employees in return for more job security. By means of exceptional clauses to wage agreements both sides of industry waive the priority principle of the wage agreement to allow for consideration of the different needs at company level by company agreements. Such clauses are frequently combined with agreements on working hours in practice (see Bellmann/Emmerich 1992b).

With a view to the US labour market, Germany does not want to admit the coming about of jobs which do not provide an income that secures support. As stressed by Sadowski/Schneider (1995, p. 25) 'the polarisation, the existence side by side of a high wage and a low wage level might well be the price to pay for a clear differentiation of wages to ameliorate the problem of long-term unemployment.' Unemployed with few qualifications receiving benefits are actually penalised by the current system, because the income

BEST COPY AVAILABLE

they earn is fully offset against the wage replacement payments. This is why Scharpf (1994) suggested that income earned should be offset only partially and thus subsidise low-qualification jobs, e.g. in catering, commerce and for personal services. Otreba (1995) suggests a bidding procedure where companies are requested to notify the labour offices of potential vacancies and the wages for these at which the company expects the vacancy to be filled. The labour office can then select the 'most favourable vacancies' from this offer. Generally this would be those for which the gap between the wage justified under business management aspects and actual minimum wage is smallest. These jobs can then be assigned to job-seekers and the difference between the wage paid by the company and the minimum wage would be covered by the labour office.

Compared to the wage subsidies permitted under the Labour Promotion Act mentioned above, this procedure would have the advantage that the specific demand for subsidies can be determined relatively well. The competition in bidding will guarantee that unrealistic demands for subsidies will not be made in the first place or can be eliminated by selection of the vacancies offered. It would have to be ensured that the labour office would be free to accept jobs thus notified, and this would at the same time permit the labour office to control financial input and limit it.

5 References:

Atkinson, A. / Micklewright, J. (1991): Unemployment compensation and labour market transitions: a critical review. In: Journal of Economic Literature (1991) 29: 1796–1827.

Bellmann, L. (1995): Was bringt die Spreizung der Löhne für den Arbeitsmarkt? <Which effects will a wider variation of wages have on the labour market?> In: Mitteilungen aus der Arbeitsmarkt– und Berufsforschung (1995) 28: 391–398.

Bellmann, L. / Buttler, F. (1989): Lohnstrukturflexibilität – Theorie und Empirie der Transaktionskosten und Effizienzlöhne. <Flexibility of wage structures – theory and empirics of transaction costs and efficency wages> In: Mitteilungen aus der Arbeitsmarkt– und Berufsforschung, (1989) 22: 202–217.

Bellmann, L. / Emmerich, K.(1992a): Union Bargaining, Wage Differentials and Employment. In: Labour (1992) 6 (2): 19–30.

Bellmann, L. / Emmerich, K.(1992b): Die Verbindlichkeit von Lohntarifverträgen aus arbeitsmarkttheoretischer Perspektive <The binding effect of collective agreements from the perspective of labour market theory>. In: Jahrbuch für Sozialwissenschaft (1992) 43 (2): 227–242.

Bellmann, L. / Jackman, R. (1995): The impact of labour market policy on wages, employment and labour market mismatch. Mimeo.

Bellmann, L. / Möller, J.(1995a): Institutional influences on interindustry wage differentials. In: F. Buttler, W. Franz, R. Schettkatt, D. Soskice (eds.): Institutional Frameworks and Labour Market Performance, London/ New York: 132–167.

Bellmann, L. / Möller, J. (1995b): Der Wandel der interindustriellen und qualifikatorischen Lohnstruktur im verarbeitenden Gewerbe <Changes in interindustrial and qualification-related wage structure in the manufacturing industry>. In: ZEW–Wirtschaftsanalysen (1995), Bd. 3, 65–90.

Bundesanstalt für Arbeit (1995): Strukturanalyse 1994, Nürnberg.

Calmfors, L. / Driffill, J.(1988): Bargaining structure, corporatism and macroeconomic performance. In: Economic Policy (1988) 6: 13–61.

Card, D. (1992a), Using regional variation in wages to measure the effects of the federal minimum wage. In: Industrial and Labour Relations Review (1992) 46: 22–37.

Card, D. (1992b), Do minimum wages reduce employment? A case study of California, 1987–89. In: Industrial and Labour Relations Review (1992) 46: 38–54.

Card, D. / Krueger, A.B.(1995): Myth and Measurement: The Economics of the Minimum Wage. Princeton: Princeton University Press.

CERC (1991): Les bas salaires dans les pays de la Comunauté économique européenne. In: Documents du Cerc, No. 101, La Documentation Française Paris.

Choi, K. (1983): A statistical test of Olson's modell. In: Mueller, D. (ed.), The political economy of growth, New Haven: Yale University Press: 57–78.

Deere, D., Murphy, K., Welch, F.R. (1995): Employment and the 1990–1991.Minimum Wage Hike. In: American Economic Review, Papers and Procedings (1995) 85: 232–237.

Devine, T.J., / Kiefer, N.M.(1991). Empirical Labour Economics: The Search Approach. Oxford: Oxford University Press.

Elmeskov, J. (1993): High and Persistent Unemployment: Assessment of the Problem and its Causes. OECD Economics Department, Working Paper No. 132.

Fitzenberger, B. (1995): Zentralisierungsgrad von Lohnverhandlungen und Lohnbildung in den Ländern der Europäischen Union <Degree of centralisation of wage negotiations and wage determination in the countries of the European Union>. discussion paper 20–1995 of the research centre 'International Labour Market Research' of Konstanz University (1995).

Hardes, H.D. (1988): Vorschläge zur Differenzierung und Flexibilisierung der Löhne <Proposals for a differentiation and flexibilisation of wages>. In: Mitteilungen aus der Arbeitsmarkt– und Berufsforschung (1988) 21: 52 73

Heylen, F. (1993): Labour market structures, labour market policy and wage formation in the OECD. In: Labour (1993) 7 (2): 25–51.

Huckmann, St. / Van Suntum, U.(1994): Beschäftigungspolitik im internationalen Vergleich. Länder–Ranking 1980–1993 <An international comparison of employment policy. Ranking of countries 1980–1993>, Gütersloh: Verlag Bertelsmann Stiftung.

Jackman, R. (1995): Unemployment and Wage Inequality in OECD Countries. Diskussionspapier Nr. 235 des Center for Economic Performance of the London School of Economics.

Katz, L.F., / Krueger, A.B.(1992), The effect of the minimum wage on the fast–food industry. In: Industrial and Labour Relations Review (1992) 46: 6–21.

Kennan, J. (1995): The elusive effects of minimum wages. In: Journal of Economic Literature (1995) 33: 1949–1965.

Klauder, W. (1989): Bevölkerungsentwicklung, Erwerbsbeteiligung und Beschäftigung <Development of the population, employment participation and employment>. In: Scherf, H. (eds.): Beschäftigungsprobleme hochentwickelter Volkswirtschaften, Schriften des Vereins für Socialpolitik NF Band 1978: 161–182.

Klös, H.P. (1995): Der Beitrag von Einfacharbeitsplätzen zur Verringerung der Sockelarbeitslosigkeit <The contribution made by simple jobs to reducing hard-core unemployment>, Köln. Mimeo.

Kommission der Europäischen Gemeinschaft (1992): Beschäftigung in Europa <Employment in Europe> (1992), Luxemburg.

Licht, G. / Steiner, V. (1991): Abgang aus der Arbeitslosigkeit, Individualeffekte und Hysteresis – eine Panelanalyse für die Bundesrepublik Deutschland <Leaving unemployment, individual effects and hysteresis – a panel analysis for the FRG>, in: Helberger, Ch., Bellmann, L., Blaschke, D.(eds.): Erwerbstätigkeit und Arbeitslosigkeit. Beiträge aus der Arbeitsmarkt- und Berufsforschung 144, Nürnberg: 182–206.

Mavromaras, K. (1992): Zur Arbeitslosigkeits- und Beschäftigungsdauer <On the duration of unemployment and employment>. In: Mitteilungen aus der Arbeitsmarkt- und Berufsforschung (1992) 24: 84–90.

McConnell, C.R. / Brue, St.L.(1986): Contemporary Labour Economics, New York.
OECD (1993): Employment Outlook, Paris.

OECD (1994): The OECD Jobs Study. Evidence and Explanations. Part I: Labour Market Trends and Underlying Forces of Change; Part II: The Adjustment Potential of the Labour Market, Paris.

Otremba, W. (1995): Lohnsubventionen im Bietverfahren <Wage subsidies in a bidding process>. In: Wirtschaftsdienst (1995) 75: 200–202.

Rebitzer, J.B., / Taylor, L.J.(1991). The Consequences of Minimum Wage Laws: Some New Theoretical Ideas. Working Paper, no. 3877. Cambridge, MA: National Bureau of Economics Research.

Sadowski, D. / Schneider, M. (1996): Lohndifferenzierung – Ein Ansatz zur Integration von Langzeitarbeitslosen? <The differentiation of wages – an approach to integrate the long-term unemployed> In: WSI-Mitteilungen (1996): 19–25.

Scharpf, F.W. (1994): Nicht Arbeitslosigkeit, sondern Beschäftigung fördern – Einkommenshilfen für niedrige Erwerbseinkommen <Don't subsidise unemployment, but employment – financial assistance for low wages>, in: Den zweiten Arbeitsmarkt fördern, Friedrich-Ebert-Stiftung, Bonn.

Schnabel, C. (1995): Übertarifliche Entlohnung: Einige Erkenntnisse auf Basis betrieblicher Effektivverdienststatistiken <Wages exceeding negotiated wages: Some results based on companys' real wage statistics>. In: Gerlach, K., Schettkat, R. (eds.), Determinanten der Lohnbildung, Berlin: 28–49.

Siebert, H. (1996) quoted from a text in the paper Nürnberger Nachrichten of 20 January 1996

Stark, B. / Wolfinger, C.(1995): Lohnkostenzuschüsse nach § 249h AFG: Erste Ergebnisse einer repräsentativen schriftlichen Befragung von Maßnahmeträgern Ende 1994/Anfang 1995 <Wage cost subsidies according to Section 249H Labour Promotion Act: First results of a representative written survey of programme organisers a the end of 1994/beginning of 1995>. IAB–Werkstattbericht Nr. 11 of 18 December 1995.

Steiner, V. (1994): Labour Market Transition and the Pesistence of Unemployment in West Germany. ZEW Discussion Paper No. 94–20.

Stobernack, M. (1990): Die Bedeutung der Arbeitslosenversicherung für Erwerbslosigkeit und Arbeitsangebot <The significance of unemployment insurance for unemployment and the supply of jobs>, Frankfurt a.M. /New York.

Weitzman, M.L. (1984): The share economy, New York.

The papers published in this series:

1 Ulrich Walwei, Heinz Werner:
Employment and Social Dimensions of the Single European Market

2 D. Bogai, F. Buttler, K. Emmerich, W. Klauder, M. Koller, G. Kühlewind, U. Möller:
Promoting Employment Instead of Financing Unemployment – Advocating an Investive Employment and Labour Policy in the New German States

3 Gerhard Kühlewind:
Long–Term Labour Market Projections, – Methods and Results for the Federal Republic of Germany –

4 Manfred Tessaring :
Manpower Requirement By Levels Of Qualification In West Germany Until 2010; Implications of the 1989 IAB/Prognos Projection for the Qualification Structure of Jobs

5 Ulrich Walwei:
Monopoly or Coexistence: An International Comparison of Job Placement

6 Heinz Werner:
The Integration of Foreign Workers into the Labour Market, (France, Germany, Netherlands, Sweden)

7 Friedrich Buttler/UlrichWalwei:
The Employment Contract: Cooperation Requires Stability

8 Friedrich Buttler/Manfred Tessaring:
Human Capital as a Location Factor: Arguments for the Education Policy Discussion From a Labour Market Policy Standpoint

9 Barbara Koller
Social and Occupational Integration of Immigrants of German Origin in Germany

10 Gerhard Kühlewind
Gainful Employment and the Inter–Generational Contract

11 Johann Fuchs
Long–term Labour Force Projections for Germany – the Concept of Potential Labour Force –

12 Heinz Werner
Economic Integration and Migration: the European Case

The papers published in this series (continued):

13 Alfons Barth
IAB Long-term Labour Market Projections and Policy Simulation with the SYSIFO Macroeconometric Model – Concept and Application

14 Thomas Rhein
The European Monetary Union: Possible Consequences for Employment and Earnings

15 Lutz Bellman/Susanne Kohaut
Determinants of Wages in the German Service and Manufacturing Sectors: An Empricial Analysis Based on the IAB Establishment Panel

16 Ulrich Walwei/Heinz Werner
More Part- time Work as a Cure for Unemployment?
Results of an International Comparison

17 Ulrich Walwei
Placement as a Public Responsibility and as a Private Service
An International Comparative Perspective of the Reorganization of Placement Systems

18 Heinz Werner
Temporary Migration of Foreign Workers – Illustrated with Special Regard to East–West Migrations

19 Lutz Bellmann
Wage Differentiation and Long-term Unemployment – An International Comparison