

Donges, Juergen B.; Spinanger, Dean

**Working Paper — Digitized Version**

## Interventions in labour markets: An overview

Kiel Working Paper, No. 175

**Provided in Cooperation with:**

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

*Suggested Citation:* Donges, Juergen B.; Spinanger, Dean (1983) : Interventions in labour markets: An overview, Kiel Working Paper, No. 175, Kiel Institute of World Economics (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/46682>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# Kieler Arbeitspapiere Kiel Working Papers

Working Paper No. 175

INTERVENTIONS IN LABOUR MARKETS

- An Overview -

by

Juergen B. Donges and Dean Spinanger

Institut für Weltwirtschaft an der Universität Kiel

ISSN 0342 - 0787

Kiel Institute of World Economics  
Department IV  
Düsternbrooker Weg 120, 2300 Kiel

Working Paper No. 175

INTERVENTIONS IN LABOUR MARKETS

- An Overview -

by

Juergen B. Donges and Dean Spinanger

May 1983

A 9 18 98 / 83  
Wirtschaft  
Kiel

Kiel Working Papers are preliminary papers written by staff members of the Kiel Institute of World Economics. Responsibility for contents and distribution rests with the author. Critical comments and suggestions for improvement are welcome. Quotations should be cleared with the author.

ISSN 0342-0787

## I. Introduction

The starting point of this overview is the contention that unemployment problems in industrial countries can be attributed to a significant extent to distortions in the labour market. These interventions have caused the level and structure of real wages to not adequately reflect the productivity of labour and the differences of skills in the labour force. Myriads of laws and regulations, most of which have been implemented in the course of creating the modern Welfare State, have made it very expensive for firms to hire labour, have made it unattractive for some employees to change jobs between firms or regions and have made it lucrative for others not to work.

The purpose of this paper is to discuss the impact of government and trade union policies on the labour market and thus on employment. The analysis will focus on policies (i) directly influencing pay levels, (ii) directed toward job rights, (iii) concerned with job environment, and (iv) dealing with social aspects.

## II. Policies Directly Influencing Pay Levels

Minimum wages: With the advent of public concern for employment conditions in the course of the last century, governments and trade unions began to direct attention towards the adequacy of wages to maintain a socially accepted minimum income level. While Adam Smith had already pointed out that such a measure would hinder one from getting employed, the intent to attempt to do away with

sweat-shop pay prevailed.<sup>1</sup> Nearly all empirical studies tend to show that minimum wages induce unemployment and greater cyclical unemployment movements for those groups (youth, females, particular minority groups) whose wage levels would - without minimum wages - be lower (Ch. Brown et al., 1982; and sources therein).

We have reassessed this issue for the United States, using yearly labour force data (10 age cohorts by sex and race) for the period 1954-1975. The model in its functional form is as follows:

$$\ln \text{RUR}_i = a_0 + b_1 \ln \text{REMIN} + b_2 \ln \text{RLF}_i + b_3 \ln \text{CAP} \\ + b_4 \text{DUM 67} + b_5 \text{DUM CAP}$$

The dependent variable was defined as the relative unemployment rate (RUR) whereby

$$\text{RUR}_i = \frac{\text{UR}_i}{\text{UR}_{\text{MW}_{35-44}}}$$

$\text{RUR}_i$  = relative unemployment rate of cohort  $i$

$\text{UR}_i$  = unemployment rate of cohort  $i$

$\text{UR}_{\text{MW}_{35-44}}$  = unemployment rate of cohort male white  
35-44 years

---

<sup>1</sup>Government legislation on minimum wages dates back to New Zealand (1894), Australia (1896-1910) and Great Britain (1909). In the United States legislation first existed on a state level (mainly limited to women and children) before the Fair Labour Standards Act (FLSA) came into being in 1938. In Europe most initial legislation was directed towards special groups (e.g. women, children or cottage industries) as was the case in France (1915) and Norway (1918). In Great Britain it was basically effected with the establishment of wage councils in 1945. Even the International Labour Organization (ILO) dealt with the problem in 1928, passing a Convention and Recommendation subjecting signatories to setting up authorities to deal with fixing minimum wages.

$RUR_i$  (as opposed to  $UR_i$ ) was chosen to eliminate some of the cyclical disturbances and thus avoids a serious error made in other investigations where such an adjustment was accomplished by including an unemployment rate as an independent variable. Furthermore, the selection of the cohort  $MW_{35-44}$  years as the denominator avoids self-induced changes in the  $RUR$  for all other age groups.

The independent variables included are:

- $REMIN$  = real minimum wage rate constructed by deflating the minimum wage rate by the increase in consumer price index.
- $RLF_i$  = relative labour force of cohort  $i$  - calculated analogous to  $RUR$  (denominator is labour force cohort  $LF_{MW_{35-44}}$ ).
- $CAP$  = capacity utilization indicator computed by centering the percent deviations of GNP (constant dollars) from an exponential trend at 100.
- $DUM\ 67$  = a dummy variable assuming the value of 0 for the period prior to 1967 and 1 thereafter; ( $DUM\ 67 = 0$  if year  $< 1967$ ; 1 if  $\geq 1967$ ).
- $DUM\ CAP$  = a variable assuming the value of 0 prior to 1967 and equal to  $CAP$  thereafter; ( $DUM\ CAP = 0$  if year  $< 1967$ ;  $CAP$  if  $\geq 1967$ ).

The variables  $DUM\ 67$  and  $DUM\ CAP$  are supposed to capture a shift in the regression line beginning with 1967. The year 1967 was chosen because two revisions of the FLSA legislation occurred before and after this year. Furthermore, an adjustment to the major revisions during the early sixties should have been completed by them.

The results are shown in Table 1. They can be summarized as follows:

- white male youths experienced no significant increase in the cyclical sensitivity of their unemployment rates;
- nonwhite male teenage youths exhibit a significant increase in the cyclical sensitivity of their unemployment rates;
- the cohort 20-24 years (for both male regressions) shows a significant decrease in the cyclical sensitivity;
- a significant increase in the cyclical sensitivity of nonwhite but also white female youth cohorts' unemployment rates has resulted.

It might also be noted that the relative employment rate of older labour force cohorts even decreased - perhaps an indication of a certain degree of substitution in the form of more stable employment conditions.<sup>1</sup>

Given the continuous increase in the relative unemployment of the marginal labour force cohorts groups, there would seem to be a ratchet effect embodied in the restructuring of production processes and labour demands in accordance with minimum wage level increases. This has a cyclical component as well (this can be seen in the increase in the unemployment elasticity vis-a-vis cyclical demand) as minimum wages increase the vulnerabilities to cyclical changes in employment for most marginal labour force cohorts.

---

<sup>1</sup>For further evidence - including the impact of increased coverage and hidden unemployment - see Spinanger (1978).

Table 1 - Impact of Minimum Wages on Unemployment in the United States  
by Age, Sex and Race - 1956-1975 - Results of Regression  
Analysis to Test for Change in Cyclical Unemployment Movements

Age Cohort	M A L E S										
	W H I T E					N O N W H I T E					
	Elasticities <sup>b</sup>					Elasticities <sup>b</sup>					
	REMIN	RLF	CAP	DUM CAP	DUM 67	REMIN	RLF	CAP	DUM CAP	DUM 67	
Total	0.327	1.202	0.950	1.390 <sup>+</sup>	-6.495 <sup>+</sup>	0.050	0.864	0.410	2.957 <sup>+</sup>	-13.736 <sup>+</sup>	
16-19	0.813 <sup>+</sup>	0.274 <sup>+</sup>	4.104 <sup>+</sup>	0.248	-1.219	1.153 <sup>+</sup>	1.155 <sup>+</sup>	0.908	6.087 <sup>+</sup>	-28.194 <sup>+</sup>	
16-17	0.983 <sup>+</sup>	0.424 <sup>+</sup>	4.794 <sup>+</sup>	0.504	-2.403	1.261 <sup>+</sup>	1.870 <sup>+</sup>	-0.185	5.812 <sup>+</sup>	-26.959 <sup>+</sup>	
18-19	0.665 <sup>+</sup>	0.112 <sup>+</sup>	3.169 <sup>+</sup>	-0.225	0.980	1.178 <sup>+</sup>	0.447	0.986	4.176 <sup>+</sup>	-19.265 <sup>+</sup>	
20-24	0.035	0.113	1.731	-3.871 <sup>+</sup>	17.940 <sup>+</sup>	-0.004	0.059	2.168 <sup>+</sup>	-4.696 <sup>+</sup>	21.777 <sup>+</sup>	
25-34	0.282 <sup>+</sup>	0.490 <sup>+</sup>	-1.395 <sup>+</sup>	0.126	-0.589	-0.303 <sup>+</sup>	0.592 <sup>+</sup>	-2.278 <sup>+</sup>	4.220 <sup>+</sup>	-19.633 <sup>+</sup>	
35-44	-	-	-	-	-	-0.749 <sup>+</sup>	1.825	-0.747	4.601 <sup>+</sup>	-21.486 <sup>+</sup>	
45-54	0.008	-0.848 <sup>+</sup>	0.024	-0.197	0.916	-0.058	-0.592	-1.240	3.495	-16.341	
55-64	0.134	-0.744 <sup>+</sup>	2.084 <sup>+</sup>	-0.185	0.792	0.432	-0.914	1.625 <sup>+</sup>	5.765 <sup>+</sup>	-26.906 <sup>+</sup>	
≥ 65	-0.064	-0.607 <sup>+</sup>	3.672 <sup>+</sup>	1.812 <sup>+</sup>	-8.367 <sup>+</sup>	0.858 <sup>+</sup>	-1.428	5.044 <sup>+</sup>	-1.776	7.922	
F E M A L E S											
	W H I T E					N O N W H I T E					
	Total	0.733 <sup>+</sup>	0.508 <sup>+</sup>	4.243 <sup>+</sup>	0.389 <sup>+</sup>	-1.821 <sup>+</sup>	0.679 <sup>+</sup>	0.742 <sup>+</sup>	5.520 <sup>+</sup>	1.196	-5.618 <sup>+</sup>
	16-19	1.304 <sup>+</sup>	0.533 <sup>+</sup>	5.295 <sup>+</sup>	2.422 <sup>+</sup>	-11.347 <sup>+</sup>	1.177	0.707	5.486 <sup>+</sup>	2.368 <sup>+</sup>	-11.064 <sup>+</sup>
	16-17	1.321 <sup>+</sup>	0.316 <sup>+</sup>	6.010 <sup>+</sup>	0.794	-3.785	2.136 <sup>+</sup>	0.721	5.474 <sup>+</sup>	4.117 <sup>+</sup>	-19.249 <sup>+</sup>
	18-19	1.330 <sup>+</sup>	0.637 <sup>+</sup>	4.791 <sup>+</sup>	3.400 <sup>+</sup>	-15.874 <sup>+</sup>	0.754 <sup>+</sup>	0.550 <sup>+</sup>	5.376 <sup>+</sup>	0.759	-3.525
	20-24	0.769 <sup>+</sup>	0.540 <sup>+</sup>	1.794 <sup>+</sup>	3.971 <sup>+</sup>	-18.401 <sup>+</sup>	0.849 <sup>+</sup>	0.295 <sup>+</sup>	4.430 <sup>+</sup>	-0.478	2.108
	25-34	0.845	0.303	2.942	1.660 <sup>+</sup>	-7.655 <sup>+</sup>	0.727 <sup>+</sup>	0.756 <sup>+</sup>	5.793 <sup>+</sup>	3.903 <sup>+</sup>	-18.237 <sup>+</sup>
	35-44	0.630 <sup>+</sup>	0.336 <sup>+</sup>	4.024 <sup>+</sup>	-0.127	0.602	0.315	1.549 <sup>+</sup>	2.147 <sup>+</sup>	6.571 <sup>+</sup>	-30.562 <sup>+</sup>
	45-54	0.418 <sup>+</sup>	-0.144	3.055 <sup>+</sup>	-1.485 <sup>+</sup>	6.942 <sup>+</sup>	1.061 <sup>+</sup>	-0.376	4.351 <sup>+</sup>	1.328	-6.269
	55-64	0.376 <sup>+</sup>	-0.410 <sup>+</sup>	4.827 <sup>+</sup>	-4.868 <sup>+</sup>	22.537 <sup>+</sup>	0.637 <sup>+</sup>	-0.888 <sup>+</sup>	5.807 <sup>+</sup>	-2.382 <sup>+</sup>	11.085 <sup>+</sup>
	≥ 65	1.153 <sup>+</sup>	0.202	3.500 <sup>+</sup>	-1.507	7.047	-0.773	0.609	1.766	8.549 <sup>+</sup>	-39.478 <sup>+</sup>

<sup>a</sup>See explanation of regression in appendix.  
<sup>b</sup>Elasticities are the regression coefficients + = statistically significant at 10 % level.

Source: Own calculations. Data from U.S. Bureau of Labour Statistics.



Contract minimum wages and lump-sum wage increases as agreed upon between unions and employers (for instance to be applied across an industry) have essentially the same effect as those legislated: they increase the price of labour and decrease the flexibility of wages. Any number of studies for the USA have shown this to be the case. Ashenfelter (1978) has even shown that the union/nonunion wage differential has been increasing over time (Table 2), a fact which adds to the ratchet effect mentioned above.

Table 2 - Union/Nonunion Wage Ratios by Race and Sex  
(Total 1967 = 100)

Year	Employment Cohort				
	Total	M a l e s		F e m a l e s	
		White	Black	White	Black
1967	100.0	98.2	108.9	102.5	95.4
1973	102.9	103.5	109.8	101.0	101.4
1975	104.7	104.2	109.8	104.5	104.9

Source: Calculated from Ashenfelter (1978), p. 33.

It has also been shown that on a regional basis a higher degree of unionization is associated with higher unemployment levels (Olson, 1982, p. 219). By dividing employment into unionized and nonunionized segments, the nonunionized portion tends to be relegated towards the secondary labour force and subjected more severely to the ups and downs in demand or production cycles (as mentioned above in connection with legal minimum wages).

For Germany, where the degree of unionization is higher, it has been shown that wages for the lowest wage group have - as a result of union contract demands - increased considerably over the last twenty years (Table 3). These changes stem not only from higher percentage increases, but also reflect a policy of increasing wages at the lower end of the scale by a lump-sum ("Sockelbetrag") to add a "social" component to wage increases.

Table 3 - Relative Minimum Wages<sup>1</sup> in Selected Industries in West Germany (1960 = 100)

Industry	1960	1965	1970	1975	1979
Printing	100.0	100.0	106.6	117.4	118.9
Metal manu- facturing	100.0	100.0	106.8	113.9	117.0
Paper	100.0	109.0	116.9	124.6	125.4
Chemical	100.0	106.8	109.6	118.7	120.0
Iron and Steel	100.0	100.3	107.8	109.8	109.8
Ceramic	100.0	100.4	109.3	112.6	113.1
Woodworking	100.0	101.3	104.0	109.3	112.8
Construction	100.0	102.9	103.8	103.8	96.6

<sup>1</sup>In % of skilled labour wages.

Source: Calculated from Breithaupt and Soltwedel (1980), p. 76.

### III. Policies Directed Toward Job Rights

Employment security: The aim is to obligate the employer - after a certain period of time - to retain the employee come hell or high water or at least until those employees who entered at a later point in time have been released (in accordance with "last-in-first-out" principles). In its most extreme versions (e.g. civil servants) the employee even has total security (according to "once in never out" principles). In both cases, however, the contract is a one-way deal, as employees have every right - after due notification - to quit. While the advantages of the system are seen in the removing of the risk of being fired in exchange for a greater commitment of the employer, it nonetheless bears the seeds of moral hazard, since only severe reasons can be brought forth to substantiate a dismissal.

The United States and Germany almost represent the two ends of the employment security spectrum. In the USA firms practice hire and fire of labour; Germany approaches the crib-to-grave security system. Hence, the potential for moral hazard in the form of X-inefficiency is greater in Germany (and other European countries) than in the USA<sup>1</sup>. In particular, one can observe among workers a deterioration of attitudes to discipline and punctuality. Moreover, the allocative flexibility of the labour force has decreased both sectorally and geographically. Thus job security may jeopardize the international competitiveness of firms, which is bound to affect adversely the current level of employment and to retard the creation of new employment opportunities.

---

<sup>1</sup>This is not to say, however, that individual firms offering job security (even for life) are necessarily inefficient. Some firms may be able to carefully pick and choose and can thus come up with a "choice crop" of employees. Such is the case, for instance, at Procter and Gamble where even during the Great Depression employment was maintained, at lower wage levels of course. P & G as well as similar companies (e.g. IBM) go beyond mere job security: they instill workers with the feeling of belonging to a "big family". By doing so they emulate conditions under which the X-efficiency potential can be tapped. A similar statement can be applied to conditions in many Japanese companies.

Job security has another negative impact: it helps induce segmented labour markets. That is, for those who are accepted for a secure position, the world is nice and secure. However, for those outside the world is full of ups and downs as they are employed only when the protected labour force must be extended. Since most of those in this part of the labour force are conceived as having a relatively low output-to-remuneration ratio (e.g. younger people or discriminated groups), they end up paying part of the cost of job security.

Anti-discrimination legislation: In theory the reduction or removal of selective barriers to entry lead, under certain assumptions, to a more efficient allocation of resources. In practice, when the status of women in the labour force changed, pay and opportunity equality have dominated the policy debate and have induced politicians to develop anti-discrimination mechanisms (also with regard to racial issues). However, equal pay and equal opportunity presuppose that equal qualifications (human capital) are available. Even if equal qualifications exist, the rate of return to an employer - who makes an investment in on-the-job training - is calculated over a number of years, so that differences in the length of worklives and employment fluctuations determine to a large degree the level of remuneration. As has been shown by Smith (1982, p. 18), there is a sizeable difference in worklife expectancies (45 % greater for men in 1977). But even greater - and more important from a human capital viewpoint - is the expected duration in the labour force per entry (almost 240 % longer for men than for women in 1977). These factors are accordingly expressed in pay differentials (G. Brown, 1978, p. 19), which therefore, cannot be assumed to stem from deliberate sex discrimination (though discrimination takes place in some cases). Most interesting is the fact that women who worked for a whole year earned incrementally only slightly less than men; in the case of vocational training (which means less investment is necessary by the employer) they earned even slightly more.

Thus policies which attempt to force employers to adhere to the principle of "equal pay for equal work" - without taking into account possible underlying differences - may well cause fewer of those groups to be employed which are supposed to be helped. Germany is an interesting case in point. Politicians and trade union leaders not only propagated and actively promoted the increased participation of women in the labour force; they also attempted to ensure the concept of equal pay. The corresponding policies led indeed to a rapid expansion of the female labour force (particularly in part-time jobs), while wages for female workers did rise relative to those of males. The employment effects were straightforward as well: whereas in the sixties the female unemployment rate was below that of males, throughout the seventies and in the early eighties it was at times 50 % higher.

#### IV. Policies Directed Toward Job Environment

Work rules: This area covers a wide spectrum of regulations ranging from safety and health regulations to restrictions on employment of children and women. In the case of safety requirements and health regulations there has been a shift over the course of the last hundred years from agreements reached between employers and unions to regulations imposed by governments. In most cases the impact of applying legal standards to the job environment can be treated in a neo-classical sense as causing firms to have spend more per employee than before and thus prompting them to substitute capital for labour. In the United States, where the government did not really attempt to regulate job safety and health standards on a nationwide basis until 1970 (when the Occupational Safety and Health Act - OSHA - was passed), any number of studies have been carried out on the workings of

such legislation (Mitchell, 1982). In the case of injuries no difference could be established in before-and-after analyses, though sizeable costs were noted as being borne by the employer. Moreover, OSHA regulations were no doubt also used to upgrade capital stocks and thereby replace labour with capital.

As concerns restrictions on the employment of women and children, current legislation is often more an outgrowth of the reaction to sweatshop conditions during the early years of industrialization,<sup>1</sup> than based on carefully structured thoughts derived from scientific analysis. Likewise long outdated mores and sensitivities still linger in legislation and prevent - particularly women - from accepting certain jobs. In the United States, for instance, laws on regulations in most states regulate the hours women were allowed to work, in many other cases they are banned from certain jobs, employers are required to provide seats (!) for them or maximum loads they could carry were specified. Thus, despite the 1964 creation of the EEOC, a wealth of obstacles keep women out of certain jobs or burden the employer with costs so as to cause a degree of hesitancy about employing them.

The same conclusions can be drawn for Germany (and probably for the other OECD countries as well), where many of the regulations date back to the turn of the century or are based on the initial piece of legislation in the year 1878. Women are protected (from working "too long") because of their physical constitution, biological nature and their function as a house-

---

<sup>1</sup>Even today this argumentation is used in industrial countries to attempt to hinder labour-intensive goods from developing countries on the grounds that the low wages paid to women and children in these countries distort international competition and are incompatible with any sense of social justice.

wife and mother. However, since exceptions can be applied for, the real reason must still be sought. Since women "have to" be protected they can only work four and a half hours without a break, although it has not been proven that men do not suffer less from working too long hours. In other words, many laws and regulations do nothing more than disadvantage women's chances to really compete with men in securing and holding a job.

Job/occupational training: To the extent that firms are assigned major roles in the training (educational) system they encounter costs beyond what they can expect to receive in the form of higher productivity later, since the skills which they increase by training can be applied in other companies as well. Such is the case in Germany, where one refers to the training system as being "dual". It is dual in the sense that firms employ apprentices for a given trade and train them, but at the same time the apprentices are required to attend courses at schools (usually state run). During their absence from the firm (either certain days each week or for certain specified weeks) the apprentices are still remunerated. In an attempt to modernize this system - to ensure that future graduates would be subjected to state-of-the-art training -, much more stringent requirements were put into effect at the end of the sixties. Not only were the necessary qualifications of the in-plant trainers raised, but also the facilities used had to meet higher standards. At the same time the compensation for apprentices was increased rapidly and at faster rates than wages for other (skilled) workers. While small firms were exempted from the new regulations, the additional costs created resistance to the extent that the government felt it was necessary - particularly in light of the baby boom coming of age and peaking in the early 1980's - to enact a law to penalize

employers if not enough openings for apprentices were created.<sup>1</sup>

The situation in the United States is entirely different as apprentice training in an organized fashion hardly exists and - because of minimum wage legislation - would be difficult to institute. Furthermore, the path leading to a formal education in college is subsidized considerably, thereby making this option individually more attractive. To conclude, however, as Feldstein (1973) did, that the existence of a functioning apprenticeship training system (as he found existing in Great Britain in 1961) would reduce unemployment rates for youths in the USA, is at least somewhat hasty. To be sure the growth of the youth labour force in Great Britain at that time was quite slow and contrasted with the USA in the sixties and seventies and Germany in the seventies and eighties when the youth labour force expanded rapidly. But even in Germany - with a system similar in some respects to the British - employment problems were induced, not only because aggregate demand was sluggish, but also due to the extra burdens placed on employers.

## V. Social Policies

Maternity leave: The impact of laws "protecting" the well-being of women (and the fetus) in the final weeks of pregnancy and in the initial postnatal period depends on (a) the financing modus, (b) the time frame and (c) the obligations of the employer and employee vis-a-vis employment.

As concerns the financing modus most governments in Europe (see Table 4) have come to the conclusion that childbearing should be supported by society (e.g. this is stated explicitly in the German Constitution). Hence significant portions of wages and salaries foregone are covered by government transfer payments or insurance systems but also by employers. In Germany, for instance, 100 % of the average pay in the three months

<sup>1</sup>This law was declared to be invalid by the Constitutional Court in 1980.



Table 4 - Overview of Maternity Leave in European Countries<sup>1</sup>

Country	Eligibility conditions	Length of leave	Additional leave	Financial assistance
Belgium	6 months of contributions	6+8 weeks	-	100 % of net income
Denmark	Income in 4 weeks during 6 prenatal months	6+8 weeks	-	90 % of average income per week
France	Working times of 200 hours per year. Insured for 10 months at birth	6+8 weeks; 10 weeks for civil servants	Unpaid to 2nd birthday	90 % of income
Germany	12 weeks insured in 4th-10th prenatal month	6+8 (+18) weeks	-	100 % of insured income (+ max 750 DM per month)
Italy	none	18+13 weeks	6 months paid	80 % of income; 30 % of income during additional leave
Netherlands	none	6+6 weeks	-	100 % of income
Sweden	Each parent if insured 180 days prior to birth	7 months. Parent leave	Unpaid to 18th month	90 % of income, but not more than 7.5 times of base income

<sup>1</sup> Affecting working women; in Sweden working persons with more than 4,500 SK income per year.

prior to pregnancy are remunerated, whereby the Federal Government pays a maximum of 400 DM, the (public) insurance companies assume a minimum of 3.50 DM/day or a maximum of 25 DM/day and the employer finances the next (through the end of the immediate maternity period). In the United States, on the other hand, there are virtually no legal requirements dictating financial assistance by either the government or the employer. Not even civil service provides such benefits. The insurance coverage likewise tends to be minimal - only in the case of Aid for Dependent Children (AFDC) does the government provide financial subsidies.

The time frame involved in most European countries has been extended considerably in recent years and ranges from 12 weeks in the Netherlands to over six months in West Germany, Italy and Sweden. In any number of countries additional vacation can be taken with either reduced pay or without pay, whereby in some it is possible for males to take advantage of this possibility. In the United States, however, expectant mothers usually have to take sick or vacation in order to cover the pregnancy.

The other obligations refer to the type of work that women are not allowed to perform during pregnancy, the question of job tenure (security) and arrangements concerning total inability to work. Once again most European countries have built up a considerable amount of protection around childbearing women, so that employers have but little leeway.

All this together means that considerable costs are borne by employers to pay for part of the maternity leave, pay for replacements during the leave period and reorganize production schedules so as to be able to comply with the legal obligations. While larger companies, with a reservoir of potential substitutes, can relatively easily rearrange work schedules, smaller companies have considerable difficulties, particularly if highly qualified personnel is affected. Thus the more that

is done to upgrade and expand benefits accruing to women bearing children, the greater the reluctance on part of the employer to employ them in responsible positions and invest in them human capital. The result is a tendency to employ women during their childbearing age in more marginal positions - positions where they are most likely to be subjected to greater employment instability.

Paid sick/convalescence leave: That employees become sick is nothing new, but that employees should be given paid time-off from work and then receive all medical bills paid for, is something which has been effected in Germany within the last fifty years, but in the United States only partially. As can be seen in Table 5 the level of sick leave benefits is relatively high in Germany, whereas it is quite low in the United States. Paid sick-leave for white-collar workers in Germany was instituted in 1931 - blue-collar workers at this time received only 50 % of their basic pay beginning with the fourth day of sick-leave. In 1957 this was improved (90 % of basic pay for 6 weeks beginning with the third day of leave) and finally in 1970 full parity was reached with the white-collar workers.

By contrast, the United States - aside from medical care for pensioners and for the poor - there is no legal requirement for sick-leave or health insurance to be paid for. Most contracts covering such areas are thus made through the employer with a private insurance company in the form of a group policy. Thereby it can be determined that sick pay is often far less than actual pay.

If the existence of such policies increases the possibility of moral hazard, then for sure West Germany would be a candidate. This possibility would be reinforced by employment security laws which limit the possibility of employers to rid themselves of employees while they are sick (see above). Small wonder

Table 5 - Overview of Sick Leave Pay in Selected OECD Countries

		Paid by employer		Paid by insurance		
		% of gross pay	for -- days	% of gross pay	for -- days	initial days unpaid
Belgium:	a	100	7	60	364	1
	b	100	30			
Denmark:	a	90 <sup>c</sup>	35	90 <sup>c</sup>	no limit	0
	b	100	35			
France:	a	90/66	30 <sup>d</sup> /30 <sup>d</sup>	50/67	360/1080 <sup>e</sup>	3
	b	90/66	30 <sup>d</sup> /30 <sup>d</sup>			
Germany:	a	100	42	80	546	1
	b	100	42			
Great Britain:	a	-	-	60	168 <sup>f</sup> /156 <sup>g</sup>	3 <sup>f</sup> /12 <sup>g</sup>
	b	-	-			
Italy:	a	-	-	50 <sup>i</sup> /67 <sup>i</sup>	180 <sup>i</sup>	3 <sup>i</sup>
	b	100	90 <sup>h</sup>			
Netherlands:	a	-	-	80	364	0
	b	-	-			
Sweden:	a	-	-	90 <sup>j</sup>	no limit	1
	b	-	-			
USA:	a	-	-	50-67 <sup>k</sup>	182 <sup>k</sup>	0-7 <sup>k</sup>
	b	-	-			

<sup>a</sup>Blue-collar employees; <sup>b</sup>White-collar employees; <sup>c</sup>% of net pay;

<sup>d</sup>Minimum after 3 years of work-increases to 90 after 33 years;

<sup>e</sup>Only for illness lasting six months; <sup>i</sup>Lump-sum sick pay;

<sup>g</sup>Depends on income; <sup>h</sup>Minimum; <sup>i</sup>Taxable; <sup>k</sup>In 6 states only.

that the sick rate of Germany's labour force has been following an upward trend during the past twenty years; it is higher than in the United States (on average 7 % of labour force during the period 1972-82) and it tends to be inversely correlated with the business cycle. Moreover, about 70 % of sick leave falls on Friday or Monday but only 4 % on Wednesday. Even more relevant in connection with the rise in unemployment is the fact that the cost to employers for sick leave has risen from 1.7 % of gross pay in 1966 to 6.3 % in 1980. And in the subtime-period between 1969 and 1972 - during which time blue-collar workers finally received full benefits - the jump was from 1.7 % almost 6 %. Thus the system of paid sick-leave becomes a noteworthy source of increasing the wedge between the labour costs for firms and the wages earned by workers. The ability of the labour market to provide the necessary employment possibilities cannot but deteriorate under these circumstances.

Unemployment compensation: At roughly the same time that social laws being struck down by the courts in the United States towards the end of the last century, institutions in European countries were being spawned to shoulder the financial burden engendered by unemployment. While at first these were basically organized by unions - e.g. in Germany - in most cases they gave way to state operated systems at a later point of time. Of the EEC countries (excluding Greece) only Belgium, France and the Netherlands had no state run or supported unemployment insurance system by the late twenties. Today, however, unemployment insurance in most OECD countries not only provides relatively high compensation rates (see Table 6), it has been extended to cover most of the active labour force, aside from being complemented by myriads of other policies to help redirect unemployed human resources into areas presumed to be promising. Nowadays, various national governments are finding out that financing all these schemes is becoming expensive, that financial resources must be drawn away from the other sources and that thus crowding out (on financial markets) occurs at a time when lower interest rates might prove beneficial in prompting investment. A continually larger bite out of the paychecks of those still working and a heavier burden on the employers seem inescapable.

Table 6 : Overview of Unemployment Compensation Measures for Selected OECD Countries: 1973 and 1979

	Canada	France	Germany	Italy	Sweden	United Kingdom	United States
Eligibility requirements <sup>2</sup>	73 20w./12m. 79 12w./12m.	91d./12m. 91-182d./12m.	26w./36m. 6-24m./36m.	52w./24m. " "	52w. of which 5m./12m. " "	50w. / 12m. " "	Varies by state - depends on income and employment
Coverage <sup>3</sup>	73 All emps.(65) 79 >65 years excluded(90)	Empls.+apps. in commerce +industry (56) Apps. with contract + national service(60)	Empls. + apps. (78) - (85)	Empls.(47) - (48)	Empls. in branches with union funds (58) - (72)	Empls.+apps.(77) - (80)	Private sector emps. (72) - (90)
Waiting period for benefits	73 2 weeks 79 "	none "	none "	1 week "	5 days "	3 days: flat rate 12days: income related	1 week (usually) "
Benefits: how calculated	73 67% of gross wage 79 60% of gross wage	40% of gross wage for 91 days; 35% thereafter 90% of gross wage	63% of net wage 68% of net wage	400 lire/day or 67% of wage 800 lire/day or 67% of wage	SK 52.00/day depends on fund (average) SK 153.10/day depends on fund (average)	Flat rate + income related "	Depends on state, income and employment "
taxable?	73/79 yes / yes	yes / yes	no / no	no / no	no / yes	no / yes	no / no
minimum	73 \$ 20/week 79 \$ 50/week	ff.11.87/day for 91 days ff.10.32/day thereafter	- -	- -	- -	£ 7.35/week -	\$ 10-20/week \$ 10-35/week
maximum	73 \$107/week 79 \$265/week	ff.124.58/day for 91 days ff.108.33/day thereafter	DM1438/month DM2312/month	- -	- -	£ 46/week £ 102/week	\$ 45-100/week \$ 80-192/week
limit	73 51 weeks 79 58 weeks	365 days if <50 years 609 days if 26weeks = >50 years	Depends on weeks worked 78days 104 weeks = 312 days	30 weeks 180/360days	150-200 days/year 300 days if 60-67years 75 days if > 67 years	unlimited 96-312 days	depends on weeks worked 1 - 39 weeks "
Financing: employee/ employer	73 1% / 1.4% 79 1.35% / 1.9%	.14% / .56% .94% / 2.76%	.85% / .85% 1.5% / 1.5%	-.3% - / 1.3%	SK 17.20 per month / - (average) SK 34.10 per month / - (average)	.39% / .38% .8% / .8%	- / 3.2 % - / 3.4 %
wage ceiling	73 \$ 160/week 79 \$ 442/week	ff.11/360/year ff.192000/year	DM2300/month DM4000/month	- -	- -	£ 54 / week £ 120/ week	\$ 4200-7200/year \$ 6000-10300/year
Increase in maximum benefits	73-79 148 %	340 %	61 %	-	194 %	122 %	78 % - 92 %
wages	73-79 93 %	151 %	51 %	-	123 %	151 %	64 %

<sup>1</sup>This table provides an overview of the highest level compensation schemes. It does not include public assistance, welfare etc. which in many cases increases benefits. Furthermore, the statistics stem from various sources, thus incorrect representation of the various measures cannot be excluded- the authors would appreciate receiving corrections.

<sup>2</sup>Number of months (i.e. m.), weeks (i.e. w.) or days (i.e. d.) of contributions/in last months or weeks.

<sup>3</sup>Empls. = employees; apps. = apprentices. The explanation for 1979 mentions major changes only. The figure in () is an estimate of those covered in % of labour force for the years ≈ 1970 and ≈ 1979.

<sup>4</sup>Average benefits.

As concerns the issue of moral hazard, the ever increasing number of studies from numerous countries lend credence to this unwanted but actually not unknown consequence. Feldstein (1973, p. 31) quite aptly portrayed the situation of a fictitious worker who finds that being unemployed for certain periods of time causes disposable income to be decreased - at the most - only marginally. In Germany, until just recently, it would have even been possible to increase one's income by not working for a certain period of time during the year as unemployment insurance payments are not taxed. Moreover, while being officially unemployed (i.e. receiving unemployment compensation), workers - particularly those belonging to the trades - can and do earn illegal extra income in the "underground economy" or raise the return on do-it-yourself activities. While being denounced by the government, it is the government itself which enacted all those pieces of legislation which have contributed to making work in the official economy so expensive.

It is not merely the moral hazard impact of unemployment insurance alone but its interaction with the numerous other laws and regulations aimed at improving the social situation of workers and their families, thereby inducing costs to be borne by both employees and employers. To some extent the cost is expressed in terms of increasing unemployment. But since the unemployed person may not suffer any hardship over a longer period of time, the reservation wage is often increased to levels which do not correspond with human capital potential. That is, the opportunity costs of non-working activities are decreased - only over time does the reservation level decline, particularly when unemployment-insurance benefits are exhausted (Fishe, 1982). On the other hand, it is not only the employee whose behaviour is changed, likewise the employer finds that qualms about releasing employees are reduced.

In the United States where unemployment insurance was officially introduced on a nationwide basis in 1935, a system has been established whereby the Federal Government cooperates with State governments but the firms alone

are required to pick up the tab for unemployment insurance. Since the basis for the firm level financing of unemployment insurance is calculated on an experience-rating of the individual firms according to the rate at which they normally discharge employees - whereby a rather low ceiling is applied - once the ceiling is reached the firm can discharge workers at will without having to pay any more. This system embodies a negative incentive to stabilize employment.

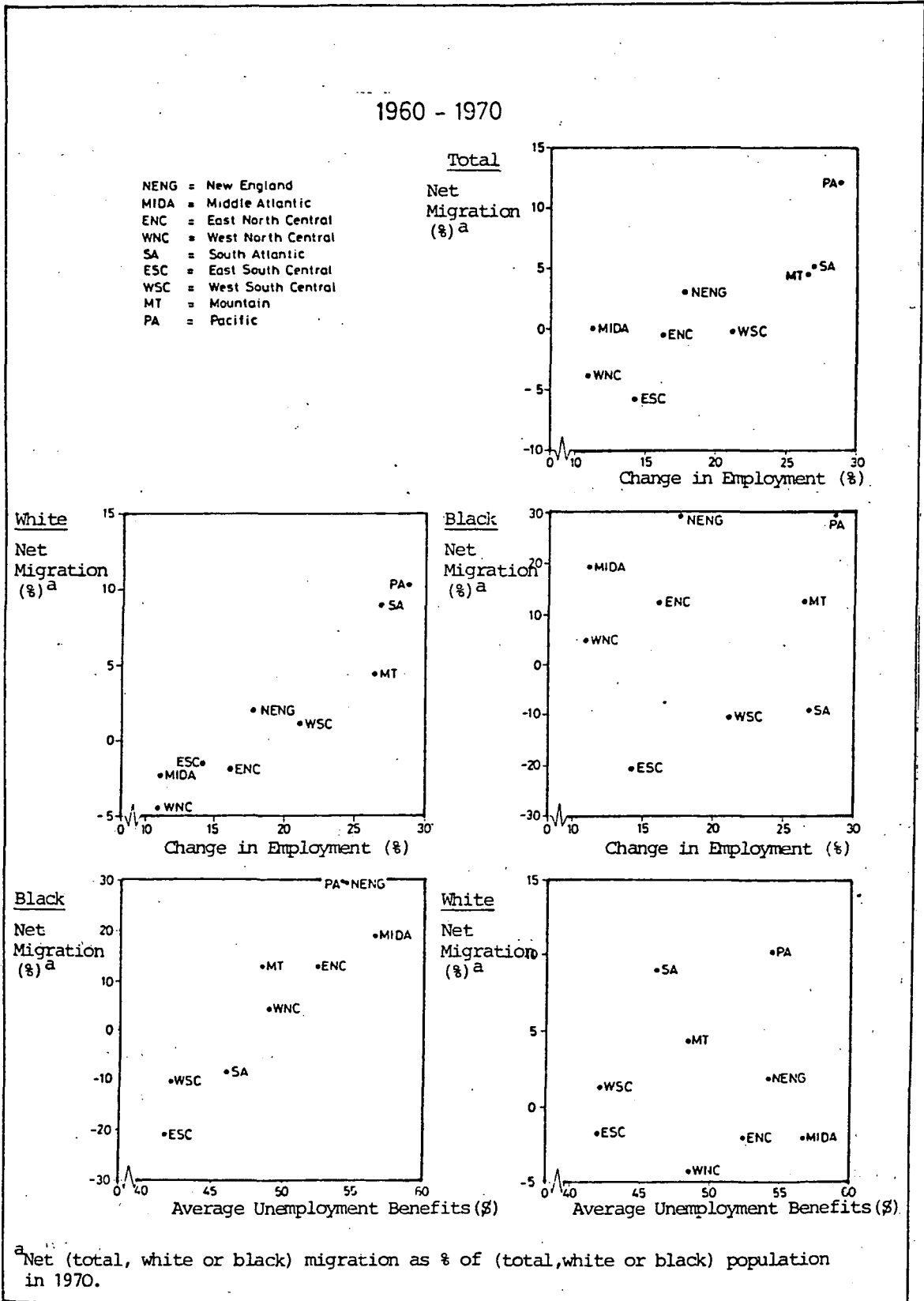
In addition to this destabilizing effect, the fact that unemployment compensation rates differ between states causes migration flows related to income maximization but not necessarily to a more efficient allocation of resources. This can be demonstrated quite easily by examining migration flows between the regions in the USA. Assuming that employment changes represent an appropriate indicator for earnings potential one would expect that a positive correlation exists between net migration and change in employment - a fact which can be established as shown in Diagram 1, upper right. If only whites are examined the correlation is even stronger (middle left), but for blacks there is no correlation at all (middle right). However, for blacks a strong correlation exists between migration and unemployment benefits (lower left), whereas for whites this is not true. In other words, the greater the extent to which certain labour force cohorts (in this case the blacks) have relatively greater difficulties procuring a job, the more likely they are to attempt to maximize their income via taking advantage of social legislation. It does not matter whether the difficulties in getting a job result from discrimination practices or are due to other barriers of entry such as minimum wages.

## VI. Concluding Remarks

The various policies which have been discussed above have steadily built rigidities into the labour market. Although the politicians and trade union leaders came to believe



Diagram 1 : Factors Influencing Interregional Migration in the U.S., 1960-1970

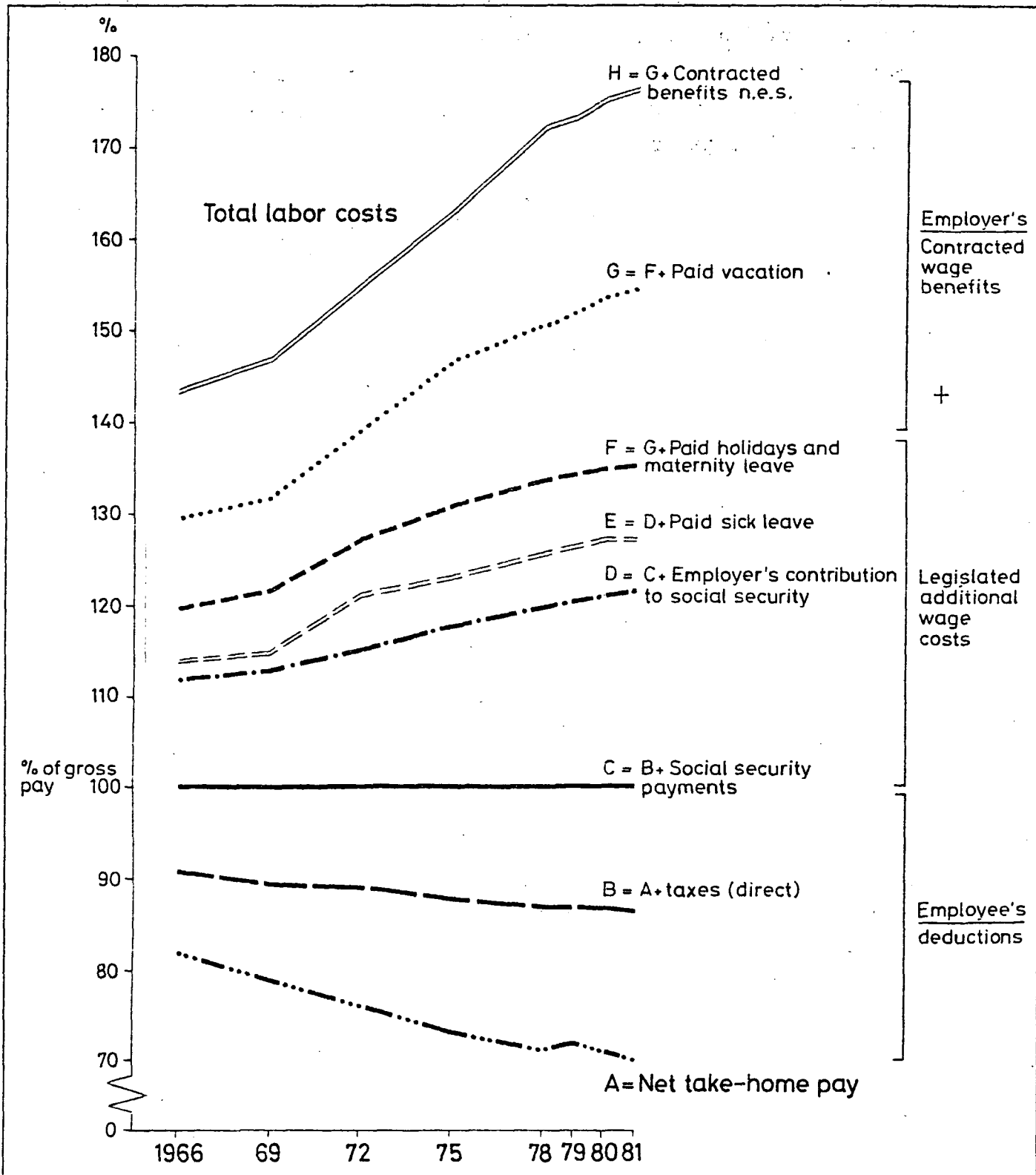


Source: Own calculations based on data from Statistical Abstract of the United States, various issues.

that the continuous improvement of the terms and conditions of employment could only be beneficial to the active population, their policies have in fact greatly handicapped the ability of the economy to absorb a growing labour force. Well-intended measures actually drove out an increasing number of workers from their jobs and prevented new generations of workers from finding employment, they thus provided social insecurity rather than security. The explanation for this is twofold: on the one hand the policymakers suffered from social policy illusions and on the other hand the firms were required to finance most of the various measures, thus inducing a strong increase in labour costs beyond the rate of growth of total factor productivity.

The degree to which labour costs have been inflated, can be illustrated by the recent German experience. Diagram 2 exhibits quite clearly the wedge which various laws, regulations and agreements have driven between net take-home pay accruing to the employees and total wage costs to be born by the employers. Whereas in 1966 total wage costs were 75 % above take-home pay, by 1981 they were almost 170 % higher. Looking at the situation in terms of contract negotiations, an agreement to increase wages by 10 DM (i.e. 10 % of 100 DM base pay) in 1966 would have meant - ceteris paribus - that an employee received an additional net 8 DM, but the employer would be incurring costs of over 14 DM. In 1981 (assuming the same raise and base) an employee would receive only 7 DM, but the employer would be paying almost 18 DM. Translated into real world numbers for 1981 and bringing it into proper perspective it can be shown that the increase in the labour costs to the employers (from 40 % of gross pay to 76 %) amounts to a figure almost 10 times as large as the total expenditures effected by the German Labour Office for unemployment and labour market policies (about 25 billion DM). Under such circumstances firms tend to opt for excessive labour-saving investments or for transferring production abroad where labour costs are lower. In the former case capital is wasted, and in both cases the level of domestic employment is negatively affected.

Diagram 2 : Development of Labour Costs and Take-home Pay in West Germany, 1966-1981



Source: Own calculations based on data from the Institute of the German Economy and the Federal Statistical Office.

If chronic unemployment is to be solved, fundamental changes in attitudes and policies are required. These changes include wage moderation as well as a removal of the above-mentioned distortions in the labour market (complemented, of course, by increased flexibility in other markets beyond the scope of this paper).

## Bibliography

- ASHENFELTER, Orley (1978): Union Relative Wage Effects: New Evidence and a Survey of their Implications for Wage Inflation. In: Richard Stone and William Peterson (eds.), Econometric Contributions to Public Policy (London: Macmillan Press), pp. 31-63.
- BREITHAUPT, Karl and Rüdiger SOLTWEDEL (1980): Nivellierungs- und Differenzierungstendenzen der inter- und intra-sektoralen Lohnstruktur, Die Weltwirtschaft, No. 1, pp. 61-78.
- BROWN, Charles et al. (1982): The Effect of the Minimum Wage on Employment and Unemployment, Journal of Economic Literature, Vol. XX, No. 2, pp. 487-528.
- BROWN, Gary D. (1978): Discrimination and Pay Disparities Between White Men and Women, Monthly Labour Review, Vol. 101, No. 3, pp. 17-22.
- FELDSTEIN, Martin S. (1973): The Economics of the New Unemployment, The Public Interest, No. 33, pp. 3-42.
- FISHE, Raymond P.H. (1982): Unemployment Insurance and the Reservation Wage of the Unemployed, The Review of Economics and Statistics, Vol. LXIV, No. 1, pp. 12-17.
- MITCHELL, Olivia S. (1982): The Labor Market Impact of Federal Regulation: OSHA, ERISA, EEO and Minimum Wage, NBER Working Paper, No. 844, Cambridge/Mass.
- OECD (1979): Unemployment Compensation and Related Employment Policy Measures. General Report and Country Studies - Canada, France, Germany, Sweden, United Kingdom, United States. Paris.
- OLSON, Mancur (1982): The Rise and Decline of Nations - Economic Growth, Stagflation and Social Rigidities (New Haven: Yale University Press).
- SEFFEN, Achim (1980): Einkommenssicherung bei Krankheit in westlichen Industrieländern, Beiträge zur Wirtschafts- und Sozialpolitik, No. 78.

- SMIRNOV, S.A. (1979): Mutterschutz: Landesgesetze und Praxis in ausgewählten europäischen Ländern, Internationale Revue für Soziale Sicherheit, Vol. XXXII, No. 4. pp. 458-484.
- SMITH, Shirley J. (1982): New Worklife Estimates Reflect Changing Profile of Labor Force, Monthly Labor Review, Vol. 105, No. 3, pp. 15-20.
- SPINANGER, Dean (1978): Social Legislation as a Cause of Unemployment: The Case of Minimum Wages in the United States, in: Herbert Giersch (ed.), Capital Shortage and the Unemployment in the World Economy (Tübingen: J.C.B. Mohr), pp. 223-252.
- VOLZ, Joachim (1980): Arbeitslosenversicherung und Arbeitslosigkeit in integrierten Wirtschaftsräumen - dargestellt am Beispiel der Europäischen Gemeinschaft und der USA (München: Minerva Publikationen).