

Paqué, Karl-Heinz

Working Paper — Digitized Version

Unemployment in West Germany: A survey of explanations and policy options

Kiel Working Paper, No. 407

Provided in Cooperation with:

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

Suggested Citation: Paqué, Karl-Heinz (1990) : Unemployment in West Germany: A survey of explanations and policy options, Kiel Working Paper, No. 407, Kiel Institute of World Economics (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/47240>

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. 407

- Unemployment in West Germany -
A Survey of Explanations
and Policy Options*

by

Karl-Heinz Paqué

Institut für Weltwirtschaft an der Universität Kiel
The Kiel Institute of World Economics

ISSN 0342-0787

Kiel Institute of World Economics
D-2300 Kiel, Düsternbrooker Weg 120

Working Paper No. 407

- Unemployment in West Germany -
A Survey of Explanations
and Policy Options*

by

Karl-Heinz Paqué

AG 521 / 90 Weltwirtschaft
Kiel

January 1990

*Paper presented under a different title at the conference "The Art of Full Employment" on September 28-30, 1989 at the Rijksuniversiteit Limburg, Maastricht, The Netherlands. Thanks are due to many participants of this conference for valuable comments.

The author, not the Kiel Institute of World Economics is solely responsible for the contents and distribution of each Kiel Working Paper. Since the series involves manuscripts in a preliminary form, interested readers are requested to direct criticisms and suggestions directly to the author and to clear any quotations with him.

I. Introduction

By historical standards, the 1980's have been a time of high unemployment in West Germany. Not surprisingly, they have also been a boom period for theories about unemployment and policy proposals against it. This paper is an attempt in stocktaking: We shall try to sort out which of the most prominent of these theories and policy proposals are still relevant today at the end of the decade, with the West German economy having somewhat recovered from its prior growth slack, but unemployment nevertheless remaining a persistent macroeconomic phenomenon. Of course, the survey-like nature of the paper prohibits any extensive discussion of theoretical subtleties and any detailed presentation of econometric evidence. Instead, it must suffice to sketch the main threads of arguments and to identify major characteristic features of the empirical picture.

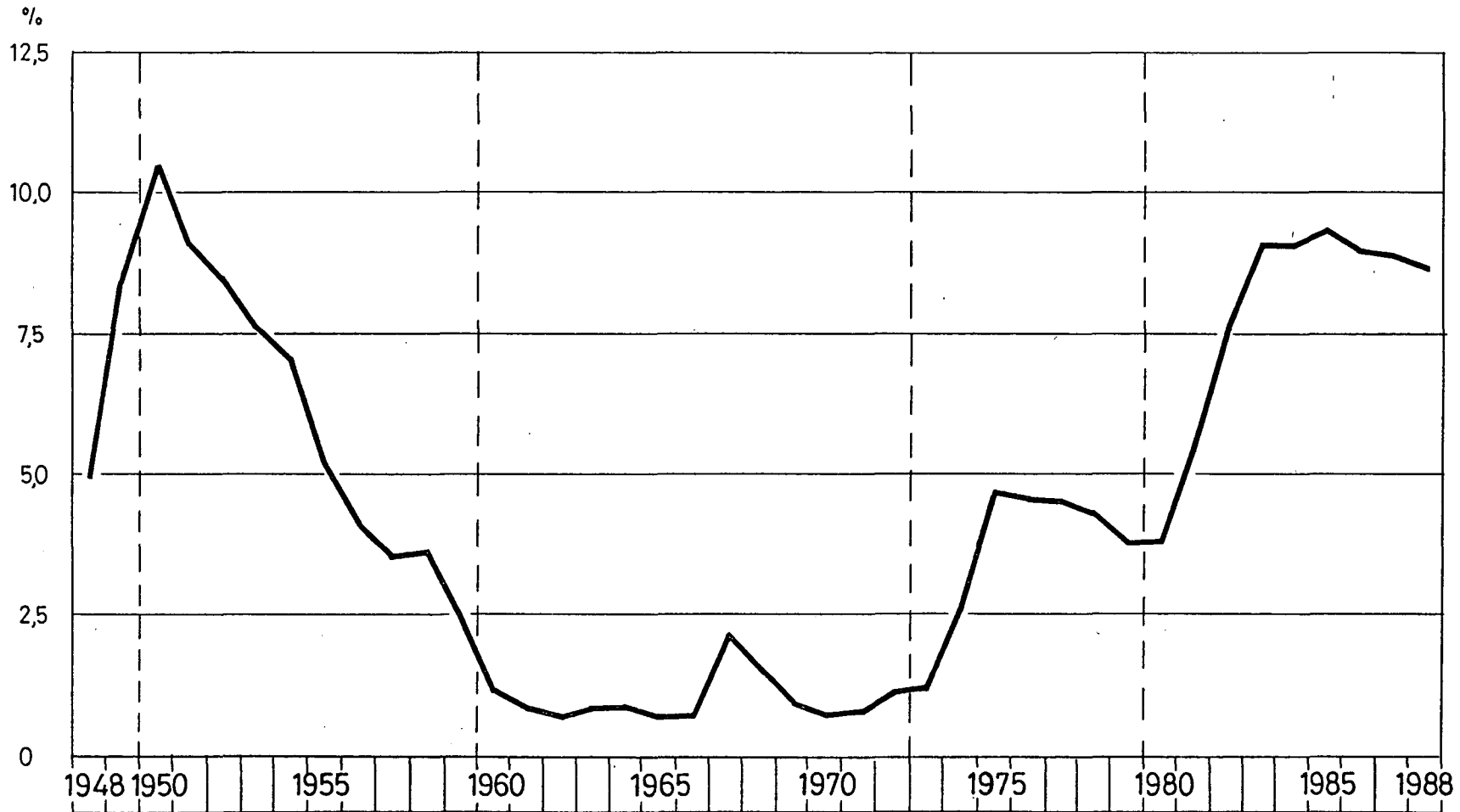
Our survey consists of three parts. In section II of the paper, we shall summarize some important macroeconomic facts about West German unemployment in the eighties. In section III, we shall briefly evaluate some major theories of unemployment with a view to their explanatory power for present-day West Germany. In the final section IV, we shall discuss various policy measures which have been proposed as a cure to the unemployment malaise.

II. Some Stylized Macroeconomic Facts

Figure 1 presents the average annual unemployment rate in West Germany from mid' 1948 - the time of the currency reform - up to the present. The picture suggests a division into five periods: after a sharp increase in 1948-50, the rate declined almost continuously all over the fifties, from a peak above 10 % in 1950 down to almost 1 % in 1960. The sixties and the early seventies were a period of very tight labour market conditions with an unemployment rate around 1 %; only the short recession of 1967 led to a temporary upsurge to just over 2 %. Around 1973/75, the picture shifts quite dramatically: within two years, the unemployment rate rose to about 4 % and then stayed there, with the number of unemployed stagnating at the 1 Mio. threshold level. At the beginning of the eighties, a second upward shift occurred, with a subsequent unemployment rate of 8-9 % and a jobless labour force of about 2.2 Mio. people. Clearly, this pattern points to two structural

Figure 1

Unemployment Rate in West Germany 1948-88 (a)



(a) For 1948 only second half of the year; for 1948-59 excluding the Saar and Berlin.

Source: Until 1952, Bundesminister für Arbeit, Labour Statistics; from 1953, Bundesanstalt für Arbeit, Labour Statistics.

Table 1: Unemployment Rates of G7-Countries for Selected Years (in %)

	1983		1988	
	(a)	(b)	(a)	(b)
West Germany	9.1	8.0	8.7	6.2
France	8.4	8.3	10.1	10.1
Italy	9.2	9.3	11.0	11.8
UK	11.2	12.4	8.2	8.3
USA	9.6	9.5	5.5	5.4
Canada	11.8	11.8	7.8	7.7
Japan	2.7	2.6	2.5	2.5
EEC-average	10.5	10.5	10.2	10.0

(a) unemployment rate according to national sources (annual average)

(b) standardized unemployment rate according to OECD (annual average)

Source: OECD Economic Outlook 45, June 1989, pp. 188-189 and Bundesanstalt für Arbeit, Arbeitsstatistik 1988 - Jahreszahlen, pp. 8-9.

breaks in the labour market record of the last fifteen years, one in 1973/75 with a rise of the unemployment rate from 1 to 4 % and one in 1981/83 with a rise from 4 to 9 %. Note that, by international standards, it is not before 1981/83 that West Germany qualifies as a country with a genuine mass unemployment problem. Prima facie, this supports the popular view that, after all, the culprit must be found in the economic environment and policies of the eighties, not of prior periods.

As to the labour market of the eighties, the impression conveyed by Figure 1 may be misleading in two respects. Firstly, for a number of technical reasons, West German unemployment statistics tend to overstate the jobless rate, at least by commonly used OECD-standards. This is shown in Table 1 which juxtaposes the unemployment rates of the G7-countries in 1983 and 1988, measured according to (a) the respective national definitions and (b) OECD-standardization.¹ The message is unambiguous: only in West Germany

¹ The difference between the numbers (a) and (b) in Table 1 is mostly due to the fact that, to measure unemployment, some national statistics use the officially registered number of unemployed persons while others (and the OECD) use census data on labour force status. In the case of West Germany, the difference is particularly large for two reasons: (i) The
contin. footnote

does the 'national rate' significantly surpass the 'OECD-rate' in both years. Thus, compared to other countries, the labour market performance in West Germany looks much better on a standardized basis. Still more important is the fact that the West German 'national rate' has virtually stagnated around 9 % between 1983 and 1988, whereas the 'OECD-rate' has been reduced from 8 % in 1983 to 6.2 % in 1988 (and, on a seasonally adjusted basis, to 5.6 % in May 1989). It follows that, according to the OECD-figures, West Germany now takes the third rank in the G7-country-league, far behind Japan, but fairly close to the United States and well ahead of the EEC-partners and the EEC as a whole. Hence, whatever the merits and shortcomings of any particular definition of the unemployment rate, it is indisputable that West Germany in the late 1980's has much less of a labour surplus than the other major EEC-countries.

Secondly, the more fundamental question arises whether unemployment is an adequate measure of the labour market performance in different periods. Clearly, this depends on the definition of performance: if one strictly means the ability of an economy to provide its labour force with jobs, then the unemployment rate is in fact the relevant criterion. However, for many purposes of comparative evaluation in an environment with persistent surplus labour, the development of labour demand justly receives somewhat more weight than labour supply; after all it makes quite a difference for economic policy whether an increase of the unemployment rate is mainly due to a slow-down of employment growth or to an accelerated increase of the labour force. In the former case, the economy has increasingly failed to meet a fixed target; in the latter case, it has 'only' failed to keep pace with an upward-moving target.

contin. footnote

'national' rate is defined as the share of unemployed in the labour force excluding self-employed, the OECD-rate as the share of unemployed in the total labour force (incl. self-employed); (ii) the number of unemployed persons is calculated on basis of the officially registered unemployment, with an exceptionally generous definition of the relevant criteria 'available for work' and 'actively searching for work'. Thereby, the growth of the gap between (a) and (b) for West Germany from 1.1 to 2.5 percentage points (from 1983 to 1988) can be explained by a change of census methodology: until 1983, the OECD used data of the West German census, after 1983 of an EEC-wide census which is somewhat more restrictive as to the definition of unemployment. For details, see Klös (1989).

Table 2: Average Annual Growth Rate of Real GDP, the Labour Force and Various Measures of Employment in West Germany for Selected Periods (in %)

	1960-73	1973-80	1980-88	1976-80	1983-88
Real GDP	+4.4	+2.2	+1.7	+2.8	+2.5
Labour Force	+0.2	±0.0	+0.5	+0.5	+0.6
Employment (a)					
- total	+0.2	-0.3	-0.1	+0.7	+0.6
- private sector*	-0.1	-0.8	-0.4	+0.5	+0.4
Dependent Status Employment (a)					
- total	+1.0	+0.1	-0.1	+1.2	+0.8
- private sector*	+0.7	-0.4	-0.5	+1.0	+0.6
Dependent Status Employment (b)					
- total	n.a.	n.a.	+0.2	+1.3	+1.1
- private sector*	n.a.	n.a.	+0.1	+1.3	+1.0
Employment (a) in					
- Agriculture, Forestry	-4.7	-4.1	-1.4	-3.9	-1.6
- Industry	+0.1	-1.3	-1.3	+0.4	-0.1
incl. Energy, Mining	-2.8	-0.4	-0.6	-0.3	-0.9
Manufacturing	+0.2	-1.3	-1.0	+0.2	+0.3
Construction	+0.8	-1.6	-2.5	+1.4	-2.0
- Services	+1.0	+0.7	+0.8	+1.4	+1.5
- Government	+3.7	+2.1	+0.9	+1.8	+0.9
- Private non-profit org.	-0.7	+1.9	+3.2	+2.4	+3.7

Notes: * Excluding private non-profit organizations

(a) Employment statistics of national accounts

(b) Employment statistics of social security administration

Source: Own calculations from National Accounts Statistics and Employment Statistics of social security administration (Bundesanstalt für Arbeit)

Table 2 shows that this distinction is important for the question at hand: in West Germany, the labour force grew faster in the eighties than in the two prior periods, mainly because the changing age structure of the population led to a rising participation ratio. Note that if one restricts the periods to two recovery years after major cyclical troughs (1976-80 and 1983-88) the rates are almost equalized since (i) foreign labour was heavily used as a pro-cyclical buffer stock in the labour market in the recession 1974/75, but much less so in 1981/82, and (ii) the rise of the participation ratio already began right in the second half of the seventies. Looking at employment growth as a whole (including self-employed), the message of Figure 1 is almost put upside down: while employment still grew in the sixties - mainly through the guest worker influx - its annual growth rate turned negative thereafter, with the relative decline being slightly more pronounced in 1973-80

than in 1980-88. If we confine ourselves to the shorter recovery periods, the growth rates become positive, but the interperiod pattern shifts only marginally, with the growth in the late seventies now being somewhat faster than in the eighties. If government employment is excluded, the picture turns even more favourable for the eighties: private sector employment shrank at a lower rate in the eighties than in the years 1973-1980 and it grew at about the same rate in the two recovery periods 1976-80 and 1983-88. If self-employment is excluded, the seventies fare better than the eighties, independent of the measure used², but the gap is much smaller than between the sixties and the two later periods. If we further take into account that 1989 is likely to turn out as an exceptionally successful year of job creation with an employment increase of probably around 350000, then there is certainly no basis for suspecting a break in trend growth of employment somewhere at the beginning of the current decade.

This conclusion holds not only for the speed of unemployment growth, but also for its structural dimension (see again Table 2). The general pattern of structural change is unambiguous: agriculture and forestry shrank dramatically in the sixties and seventies, but much less so in the eighties. As this shrinkage mainly involved a reduction of self-employment, a major reason for the divergence between employment growth measured including and excluding self-employed becomes evident: apparently, the labour supply reserve of agriculture had been dried up by the late seventies since, in the given institutional framework with heavy subsidization of agriculture, a further rapid decline was not feasible. In all other major structural respects, the seventies and eighties look much alike, but quite different from the sixties: industry grew until 1973, but shrank thereafter, with an average annual rate of -1.3 %. Note that, within industry, manufacturing recovered somewhat faster from the recession in the eighties than in the seventies whereas construction boomed in the late seventies, but badly contracted in the eighties; energy

² Table 2 presents data on dependent status employment of both the national accounts and the social security statistics. In general, the latter source points to higher growth rates than the former. Right now, there is a fierce debate among statisticians in West Germany about which of these data sources comes closer to the truth, with the result of the 1987 population census raising serious questions about the reliability of both sources. As our main conclusions do not depend on the final outcome of this debate, we can by-pass it at this point. For details, see Wermter, Cramer (1988).

and mining continued a moderate decline all throughout, with a temporary relative improvement in the seventies due to the surge of energy prices. Private services and government grew in all three periods: services at about a constant rate of 0.7-1 % p.a. and government at a decreasing rate, reaching a low of about 0.9 % p.a. in the period 1983-88.

To summarize, most indicators of the employment growth performance of the seventies since 1973 and the eighties until 1988/89 suggest that the periods should be treated as one. The only major difference stems from the bottoming out of structural change away from the primary sector which was still an important labour supply source in the seventies, but not any more in the eighties. If one focuses on private sector employment - and this is justified since government expansion reflects more political preference and necessity than economic forces - it is hard to recognize any dramatic slow-down of growth at the beginning of the eighties. Hence, the relatively poor unemployment record in the 1980's may well have its roots in a slack of employment growth which goes back deep into the seventies and which is, after all, a long-term phenomenon.

III. Theories of West German Unemployment

Among the many theories of West German unemployment that have sprouted in recent years, we shall review five paradigmatic ones which figure as the main landmarks of the economic policy debate. They are the theories of (1) a Keynesian demand gap, (2) a neoclassical wage gap, (3) a transatlantic crowding-out of growth dynamics, (4) a hysteretic labour market and (5) structural rigidities. Leaving aside any technical details, we shall in the following evaluate their explanatory power.³

1. Keynesian Demand Gap

When assessing the (traditional) Keynesian view that a lack of aggregate demand is the main explanation of West German unemployment of the 1980's,

³ Much of our reasoning in Part III of this paper follows the more extensive treatment in Paqué (1989b,c) where the technical details of the relevant empirical studies are dealt with.

one has to distinguish between two alternative meanings of the term 'explanation'.

If explanation means a historical account of the emergence of unemployment, then the Keynesian view has some appeal. Clearly, a new dimension of unemployment was reached in the early eighties in the course of a demand contraction which was the immediate result of deliberate policy shifts of the West German Bundesbank towards stabilizing the price level and of the government towards consolidating public finances, both political backlashes after the prior 'locomotive experiment' of concerted demand expansion in the late seventies. The relevant macro statistics are broadly consistent with this view, econometric evidence supports it.⁴ After all, this is not surprising: the historical record shows that drastic upward shifts of the unemployment rate usually occur via a stabilization crisis; in post-war West Germany, this was so in 1948-50 after the currency reform, but also in 1974-75 and again in 1981-83. Apparently, the intertemporal covariance of sharp demand contractions and equally sharp increases of unemployment is the statistically dominant force in the empirical picture so that any econometric attempt at assigning unemployment to 'causes' tends to support a demand side hypothesis more than any supply side competitor. Note, in this respect, that the most widely quoted econometric accounting study (Bruno 1986) assigns at no time from 1974 to 1982 less than one half of West German unemployment to aggregate demand causes, despite the pronounced and by now generally recognized wage pressure and the accompanying marked increase of unit labour costs from 1969 to early 1975, and despite the locomotive experiment of the late seventies which pushed the capacity utilization of the capital stock to a peak not reached since 1973 and not reached again until 1988.⁵

If 'explanation' means a genuine diagnosis of unemployment as it is today, the traditional Keynesian view is hardly compatible with the facts since the relevant economic indicators show that the West German economy does not

⁴ See, e.g., Bruno (1986) who assigns 2/3 of West German unemployment of 1982 to aggregate demand (i.a. monetary and fiscal policy variables) and only the rest to a wage gap measure.

⁵ Similar results for West Germany have been obtained with different econometric techniques i.a. by Layard, Nickell (1985); Layard, Nickell, Jackman (1985); Franz, König (1986), and Gordon (1988).

suffer from a general demand slump which involves underemployment of both capital and labour. By 1989, capacity utilization in industry - how ever measured - has probably surpassed the prior peak levels of 1979 and 1973, after six years of steady - albeit moderate - real GDP-growth averaging about 2.5 % p.a. which lately accelerated to about 3.5 % in 1988 and probably around 4 % in 1989.⁶ Whatever slack of demand may have been present at the beginning of the long upswing around 1982/83 or in the temporary slowdown of growth around 1984/85, it has definitely disappeared since then. Note that those econometric studies still pointing to an output gap in recent years (notably Coen, Hickman, 1988; Gordon, 1988) use data up to 1984 only, a time when the cyclical indicators in West Germany revealed a slightly below average, not an extraordinarily high utilization of the capital stock; by now, their diagnostic messages have simply become obsolete.

In discarding a traditional Keynesian diagnosis, two caveats must be kept in mind. First, by definition, the capital stock today is the outcome of prior investments, and when the pace of capital accumulation slows down due to a demand induced recession as it did in 1981/82, the capital stock in later times will be smaller and thus more quickly fully utilized than in the absence of the recession. This means that, historically, Keynesian causes have non-Keynesian consequences; however, as the capital stock inherited from the past is today a binding supply side constraint, this does not save the traditional Keynesian diagnosis from being misplaced. It merely introduces an element of path dependency which, of course, speaks for avoiding recessions in the first

⁶ See the forecast of the Institut für Weltwirtschaft (1989), p. 18, Tab. 3. The 4 % -growth-forecast is hardly controversial among business observers of the West German economy. As to capacity utilization, there are several indicators: according to the quarterly industry poll of the Ifo-Institute, Munich, which is usually regarded as the most reliable source for this kind of data, capacity utilization in manufacturing reached 88.7 % in the fourth quarter of 1988, higher than the prior peak levels of 1979 IV (85.5 %) and 1973 II (87.4 %) and only below the 'historical' high of 1970 I (92 %). On a yearly basis, capacity utilization in 1988 (86.7 %) has been higher than in 1979 (84.7 %) and about as high as in 1973 (87.1 %), but again below 1970 (91.0 %). On basis of (less reliable) capital stock figures and extrapolations of capital productivity, the Kiel Institute of World Economics and some other institutions calculate economy-wide annual capacity utilization indices. Defining the long-term high of 1970 as 100, the Kiel Institute Index reached 98.4 in 1988, slightly below the level of 1979 (99.1) and 1973 (99.2). All relevant business observers agree that in 1989, capacity utilization is likely to be even higher.

place. Second, the comparatively low rates of price and wage inflation in present-day West Germany may provoke a traditional Keynesian to argue that - given some wage and price stickiness in the short run - there remains enough scope for exploiting a Phillips-curve trade-off between unemployment and demand induced price inflation; hence West German unemployment would still be Keynesian in this sense.⁷ This argument mistakes the absolute level of price and wage inflation as a better indicator for the state of the business cycle than some measure of capacity utilization and output growth. However, as the West German (and other countries') historical experience shows, business cycle peaks have at different times been accompanied by vastly different levels of price inflation, depending on the prior record of price (in-)stability which forms the basis for economic agents' expectations. If anything, the acceleration of price inflation may give a clue as to the state of the business cycle, and this indicator does in fact signal some worsening of the price climate, with virtual consumer price stability in 1986 being followed by inflation rates of 0.5 % in 1987, 1.3 % in 1988 and, as most forecasters predict, somewhere around 3 % in 1989 and 3-3.5 % in 1990.⁸ Hence, despite its low level by international standards, West German inflation cannot be taken as evidence that the economy is still operating far below its capacity limits, with additional labour being employable at more or less constant marginal cost at a given capital stock. Yet, with a fully utilized capital stock, price increases can only serve as (non-anticipated) shocks to reduce the level of real wages so that, at its lower than average marginal product, additional labour will be hired. Then, of course, the Phillips-curve strategy would boil down to a Keynesian cure for a neoclassical malady, namely a level of real wages not compatible with full employment.

⁷ Usually, Keynesian calls for expansionary macro policies in West Germany are couched in terms of international coordination, with a view to the notorious West German trade and current account surplus (see, e.g., *The Economist* of Feb., 4, 1989, p. 65 "Still waiting for the locomotive"). As far as these calls are simply meant as a case for international charity in the sense that West Germany should pull other countries out of a slump (though, incidentally, a non-visible one), they have nothing to do with unemployment in West Germany and thus go beyond the scope of this paper. As far as they are meant to make a case for unemployment reduction in West Germany itself, their validity crucially depends on the elasticity of aggregate supply which is dealt with in the text.

⁸ See, e.g., Institut für Weltwirtschaft (1989), p.18, Table 3; RWI-Konjunkturberichte (1989), p. 29.

2. Neoclassical Wage Gap

The traditional neoclassical diagnosis of West German unemployment states that the level of unit labour costs is too high for full employment to be achieved. The only straight way to test this hypothesis comes down to comparing the current level of real unit labour costs at a hypothetical state of full employment with a base level at some time in the past when full employment of labour and capital actually prevailed. The difference between these two levels - expressed as a share of the base level - is then called a wage gap. Many serious technical difficulties are involved when calculating a wage gap. In particular, some crucial parameters of the economy's production technology must be estimated or imposed beforehand, and the 'neoclassical' inverse variation of employment and labour productivity has to be econometrically separated from the 'Keynesian' procyclical movements of productivity due to labour hoarding in recessions and dishoarding in booms.⁹

How ever these technical problems are tackled, the most recent wage gap estimates for West Germany give a quite uniform picture for the manufacturing sector¹⁰, they indicate substantial wage gaps around 20 % in the 1980's, with only a very recent trend downwards. Of course, manufacturing has a share of no more than 35 % of total employment in West Germany so that a manufacturing wage gap may tell a partial and distorted story for the economy as a whole. Estimates for the entire West German economy point to much smaller gaps since the mid-seventies peaking at around 10 % in the early eighties and then falling to levels around 7 % in 1986 and - as a first guess - around 5-6 % in 1988/89.¹¹ Also, intertemporal patterns are remarkable: while the wage gap in manufacturing grew into a new dimension in the second half of the seventies, it leveled off in the economy as a whole, with only a very modest increase from the mid-seventies to the early eighties. Table 3 gives a

⁹ See Artus (1984), pp. 256-261, Bruno, Sachs (1985), pp. 179-183, and Paqué (1989b), pp. 13-18 for the relevant details.

¹⁰ See, above all, Burda, Sachs (1987) and Paqué (1989b). Using data up to 1984, Gordon (1988) finds no wage gaps at all for the West German economy in the early eighties; however, his methodology has serious shortcomings which make his estimates look quite suspect. For a critique of Gordon (1988), see Vaubel (1989).

¹¹ See Paqué (1989b, c). Technical details are discussed in Paqué (1989b).

clue to the structural forces behind this well-confirmed empirical picture: in the early seventies, both manufacturing and services were hit by a hefty rise of nominal labour costs which was mainly due to an increase of the wage level. Yet, all over the seventies, the service sector could significantly improve its terms-of-trade relative to manufacturing, so that, by the middle of the decade, real unit labour costs in services began to decline again while employment continued to grow. Not so in manufacturing, where it took two recessions with a net loss of almost two million jobs to achieve the required cost adjustment by the mid' 1980's. Apparently, import competition from newly industrialized countries finally squeezed the manufacturing sector down to a competitive size with a better product mix to halt a further deterioration of its terms-of-trade relative to the service sector. In fact, in the 1980s, manufacturing even managed to realize a slight intersectoral terms-of-trade gain which translated into a marked reduction of real unit labour costs.

Given this distinct pattern of structural change between two major sectors of the West German economy, it would be misleading to infer from a large manufacturing wage gap that the level of unit labour costs is on average 'too high' in the economy as a whole.¹² As the relatively small wage gap for the total economy indicates, a good part of the manufacturing wage gap is likely to be due to intersectoral terms-of-trade effects. By themselves, these effects raise important issues of intersectoral wage rigidity to which we turn later in this paper. Nevertheless, they speak against the simple neoclassical wage level diagnosis.

To save the traditional macro-version of the neoclassical approach from obsolescence, some non-Keynesian macro reason must be found why about the same level of average unit labour cost means lower employment in the eighties than in the wage gap reference period, usually the late sixties. Just this is the core of the transatlantic crowding-out hypothesis.

¹² This inference pervades much of the argument by Burda, Sachs (1987).

Table 3 - Average Annual Growth Rate of Value Added Deflator,
Nominal and Real Unit Labour Costs in West Germany (in %)

	1969-74	1974-80	1980-87
a) Value Added Deflator			
- all sectors	+7.2	+4.2	+3.0
- manufacturing	+6.0	+3.3	+3.6
- services ²	+8.0	+4.5	+2.9
b) Nominal Unit Labour Cost ¹			
- all sectors	+8.5	+3.9	+2.0
- manufacturing	+8.1	+4.5	+2.6
- services ²	+8.9	+3.3	+1.6
c) Real Unit Labour Cost ¹			
- all sectors	+1.3	-0.3	-1.0
- manufacturing	+2.1	+1.2	-1.0
- services ²	+0.9	-1.2	-1.3

¹ at current employment

² incl. trade and transportation

Source: Own calculations from National Accounts Statistics.

3. Transatlantic Crowding-out

Fitoussi, Phelps (1988) have advanced the theory that it was the peculiar policy mix of the early Reaganomics which caused the European - and thus also the West German - unemployment malaise in the eighties, despite the downward correction of real unit labour costs. Briefly summarized, their argument runs as follows: after the tax reform act of 1981, the sharp rise of the U.S.-budget deficit led to an increase of real interest rates, a high current account deficit and - temporarily - to a drastic appreciation of the U.S.-dollar. As U.S.-firms were heavily favoured by the newly implemented tax cuts and investment subsidies, they did not face a rise in capital costs despite the increase of real interest rates. In Europe, however, high real interest rates did raise capital costs while the appreciation of the US-dollar reduced the pressure of competition; both effects pushed firms into increasing their mark-up over unit labour cost. Hence, despite the actual fall of real unit labour cost, employment contracted or at least stagnated.

Whatever the merits of this reasoning as a theoretical account of some macroeconomic disequilibria, it has diagnostic shortcomings for present-day unemployment in West Germany. This is so for three reasons. Firstly, as an

account of the sharp rise of unemployment in 1981-83, the theory fails due to wrong timing: the U.S.-budget deficit began its spectacular rise in 1982, a year when the business cycle trough had already been reached in West Germany. Also, real interest rates - how ever measured - had made a great upward leap before, from around 3 % in 1978-79 to about 4 1/2-6 % in 1982, depending on which deflator is used and to what extent the movements of price inflation are smoothed by intertemporal averaging¹³. It is very likely that, in these recession years, contractionary monetary and fiscal policies in West Germany and most other countries (including since 1979 the U.S.) played by far the major part in the story.¹⁴ Secondly, as to the persistence of unemployment in the recovery period, only the early years 1983-85 show the relevant configuration of macro variables (high US-budget and current account deficits, high real interest rates and an 'overvalued' dollar). However, with the exception of a brief dip of the business cycle in late 1984 and early 1985, these were not genuine depression years in West Germany: on average, real GDP grew at slightly above 2 % p.a., industrial production at 3 % p.a., gross fixed capital formation at 1.4 % p.a., with a notable difference in growth rates between investment in durable equipment (4.8 % p.a.) and investment in buildings (-0.8 % p.a.). Of course, this is no spectacular growth and - by placing a capital cost burden on Europe - the American policy mix may well have contributed to the slowness of the recovery at that time. In this respect, the theory makes an important point. Even then, however, the very different investment balances of European countries - note the early investment boom in Denmark, the UK and Sweden - suggest that home made policy may still have played a major role. Thirdly, in the period after the dollar's fall and the gradual decline of real interest rates¹⁵, the growth of investment, output and also employment accelerated markedly (especially in 1988/89), but unemployment - though somewhat diminishing - remained

¹³ For details, see Paqué (1989c), p. 10, Table 3.

¹⁴ See also Jackman (1988), p. 1248.

¹⁵ Note that this period should be dated from mid-1985 until 1988, despite the fact that the real interest rate, if measured by subtracting consumer price inflation from the nominal interest rate, did not come down until 1987. The sudden drop of consumer price inflation below zero in 1986 was certainly regarded by economic agents as a transitory phenomenon since it was all too obvious that the dramatic oil price decline would not continue at the pace it did at that time.

stubbornly high, with a still growing share of long-term unemployed and no prospect of substantial improvement in the near future, even if the boom will continue at its present pace. Just these last years' positive business cycle experience, which Fitoussi, Phelps (1988) take as indirect empirical support for their theory¹⁶, casts serious doubt on whether the transatlantic crowding-out hypothesis is really targeted at explaining the two main features of the current West German (and also European) malaise, namely (i) persistent unemployment even at the peak of a powerful boom, and (ii) an unsatisfactory trend growth of employment over the last fifteen years which - quite obviously - is not just a matter of poor cyclical performance in the early eighties. Hence, the transatlantic crowding-out model may be a valid supply side paradigm to explain the peculiar pattern of European business cycles in the 1980's, but it is not a genuine theory of unemployment persistence and the poor long-term record of employment growth.

4. Hysteresis

The failure of the (traditional) Keynesian paradigm to explain the European unemployment record in the 1980's has led Blanchard, Summers (1986a, b, c; 1988) to formulate a theory of hysteresis which takes explicit account of the asymmetry of this record. Briefly summarized, the theory states that, after the long and severe recession of 1981-83, a dual labour market has gradually developed with two kinds of workers: those who remained employed all throughout or became re-employed after some brief jobless spell, and those who - for whatever reason - remained unemployed. For the latter group, the chances for re-employment have subsequently worsened for essentially two reasons: (i) an effective devaluation of their human capital due to the lack of job practice, demotivation and demoralization and the potential employers' inclination to take the length of an unemployment spell as a negative indicator for the expected productivity of a job applicant; and (ii) the wage setting process where the interests of (employed) insiders are much better represented than the interests of (unemployed) outsiders. Thereby, the detrimental impact of the wage-setting process is not or at least not primarily attributed to centralized wage bargaining between unions and employers'

¹⁶ Fitoussi, Phelps (1988), Preface, pp. VII-VIII.

associations in (neo-)corporatist economies; it is rather booked on the account of employers' rational inclination to pay efficiency wage premia which lead to a wage level incompatible with full employment.¹⁷

Does this theory stand up to the facts in the case of West Germany? Two straight empirical consequences of a process of hysteresis are that, in the course of cyclical recovery, (i) the share of long-term in total unemployment rises and (ii) the average duration of a completed relative to an uncompleted spell of unemployment declines (due to the adverse-selection effect of the 'good ones' leaving and the 'bad ones' remaining in the pool of the unemployed). In fact, this is broadly what happened in West Germany: the share in total unemployment of those who have been out of work for more than one (two) year(s) rose from 13.0 (3.9) % in 1981 over 24.9 (7.2) % in 1983 up to 32.6 (16.5) % in 1988 (end of september respectively); in addition, the average duration of a completed spell of unemployment relative to an uncompleted one declined sharply, from 70 % in 1982 and still 59 % in 1985 down to 49 % in 1988.¹⁸ A similar process of hysteresis seems to have taken place in the recovery years of the second half of the seventies, with the share of long-term unemployment (uncompleted spell equal or above one year) increasing from low levels of about 5 % in 1971-73 up to 14.5 % in 1979.¹⁹ Hence hysteresis seems to be not a new phenomenon, but a general characteristic of the two extended recovery periods after the slowdown of trend employment growth some time in the mid-seventies.

¹⁷ See i. a. Summers (1988).

¹⁸ Own calculations based on data of the Bundesanstalt für Arbeit. Note that the expected duration of an uncompleted spell is higher than the time of unemployment passed at the time of inquiry. In a stationary state, with entries into and exits out of unemployment being equal, this expected duration should be about double the duration of the uncompleted spell. As, by 1988, the labour market came close to a stationary state in this sense, the average duration of a completed spell was about one quarter of the average expected spell duration for a person who was unemployed at the end of september 1988.

¹⁹ As the method of computing long-term unemployment has been slightly changed in 1983 (for details, see Paqué 1989b, p. 32, footnote 30 and Werner 1987a, pp. 41-42), the share given for 1971-73 is a (quite reliable) estimate of the author; the share for 1979 is an ex-post recomputation by the Bundesanstalt für Arbeit.

As is well-known, the hysteresis theory has far-reaching macroeconomic implications for the intertemporal pattern of wage inflation: whenever unemployment becomes hysteretic, recession-induced wage moderation fades away as soon as laid-off workers lose their market clout while they slide into long-term unemployment. This has straightforward consequences for econometric modelling: in traditional wage equations, the growth of the wage level depends i. a. on the current unemployment rate as a proxy for the extent of disequilibrium (i. e. excess supply) in the labour market. Implicit in this specification is the assumption that the non-accelerating inflation rate of unemployment (NAIRU) remains constant all throughout. The standard specification implies that persistently high unemployment in fact leads to permanent wage moderation. If the hysteresis theory is correct, the standard wage equation is misspecified and must be replaced by a hysteretic wage equation which includes some measure of the short-term deviation of the unemployment rate from its long-term level, with this level gradually adjusting to changes of the current rate.

By now, there have been quite a few macroeconometric studies of nominal wage behaviour in the West German economy along these modified lines. In general, they give quite unanimous support to the (hysteresis) view that wage moderation is of a cyclical nature and thus fades away rather quickly - after three to four years at the latest - in the process of economic recovery, no matter how large and durable the remaining sediment labour surplus turns out to be.²⁰ Together with the macro statistics on long-term unemployment, this points to an increasingly dualized labour market as postulated by the hysteresis theory, both in the late seventies and the eighties.

Still then, the question remains which economic forces are responsible for the hysteretic macro picture. Here lies the weak spot of hysteresis models as a full-scale alternative to traditional NAIRU-theorizing. As mentioned above, there are two candidates for an economic explanation of hysteresis: wage-setting in an insider-/outsider framework and human capital devaluation. In general, advocates of the hysteresis theory place much more emphasis on the

²⁰ See i. a. Blanchard, Summers (1986a), Coe (1985, 1988) and Paqué (1989b, c).

former than on the latter²¹. Attractive as wage setting may in fact be in view of the prominent role of collective bargaining in West Germany, it faces one major difficulty: by itself, i.e. without any recourse to some kind of outsiders' human capital devaluation, it can hardly be made compatible with the observation of a declining wage gap. If, e.g., a major demand contraction as in 1981-82 eventually pushed about 3-4 % of the labour force into unemployment, and if - as actually happened in the 1980's - wage policy had hysteretic features, but nevertheless allowed profit margins to recover so that any sensible macro wage gap measure indicates about a return to pre-recession levels of real unit labour cost, then it is difficult to understand economically, why the outsiders' unchanged human capital stock will not be gradually reemployed. Clearly, the failure of the macro-version of the neo-classical labour cost theory equally applies to a 'macro-version' of the insider-outsider theory.

Simply adding some efficiency wage considerations does not make the case more convincing as a little thought experiment may indicate: if, in the course of a recession, one of two workers with identical human capital is laid off while the other one remains employed so that, subsequently, the only difference between them consists in the very fact of insider- versus outsider-status, then it overstretches economic imagination to assume that, after cyclical recovery and the melting away of any prior wage gap, a profit-maximizing firm employing the insider would not recognize the outsider to match the insider in terms of (potential) productivity and thus not profitably reemploy him. Even more importantly, an efficiency-wage based insider-/outsider-theory fails to contribute to the explanation of the most obvious and striking international fact of labour markets in the 1980's, the difference in performance between the United States and most EEC-countries, including West Germany: while the United States managed to cut down its unemployment rate from almost 9.5 % in 1983 to just about 5 % in 1988, West Germany achieved only a much more modest reduction from 8 % in 1983 to 6.2 % in 1988; likewise, the US-employment growth rate in the recovery period surpassed 2.6 % p.a., the West German one was around 1 % p.a. As there is no argument why efficiency wage premia should suddenly play a much more

²¹ See Blanchard, Summers (1986a) with strong reliance on the ideas of Lindbeck, Snower (1986), and the contributions in Cross (1988) which mostly focus on wage-setting.

prominent role in West Germany than in the United States - if anything, the higher mobility of the American work force speaks for the reverse to hold -, efficiency wage models should not serve as major ingredients of an explanation of the current West German malaise.²²

Hence one is left with human capital devaluation. Conceptually, two types of human capital devaluation may be distinguished: (i) an 'internal' devaluation due to the lack of job practice, demotivation and demoralization in the course of an unemployment spell; and (ii) an 'external' devaluation due to a decline of demand for certain kinds of labour (including crude physical force) which is the indirect result of structural change in the markets for goods and services. By its very nature, a hysteresis theory must focus on the first, not on the second one which falls more into the realm of conventional NAIRU-theorizing. Unfortunately, the first type is empirically very fuzzy since subjective categories like morals, motivation or the 'rusting' of skills are hardly quantifiable. The second type is somewhat easier to grasp: If aggregate statistics reveal that long-term unemployment is concentrated among those unemployed with negative structural characteristics like, e.g., lack of qualification, bad health, old age or location in declining regions, then a good case can be made for external devaluation dominating the picture. If, e.g., the share of long-term in total unemployment is *ceteris paribus* much higher in, say, the declining coal mining area C than in the fast growing modern service region S, then it would be awkward to ascribe this fact not to the difference of local economic conditions, but to the endogenous deterioration of human capital in C compared to S due to some local differential in skill rusting, morals or motivation. Bluntly speaking, the former coal miner in C does not remain long-term unemployed because he has recently become a bad coal miner, but because (i) he is a coal miner at all or (ii) no jobs in other sectors are on offer in region C. In case (i), his specific skill is not demanded anymore; in case (ii), he finds no vacancy to match. In either case, his human capital is devalued right from the start of his unemployment spell, be it through skill rigidity or regional immobility. Of course, this kind of structural imbalance will not be immediately recognized as

²² This does not mean that efficiency wage models are not an important theoretical contribution to labour economics with a very broad range of applicability (see Katz, 1986). It rather means that, for the particular question at hand, their explanatory power is very limited.

Table 4: Share of Long-term in Total Unemployment (in %) in Different Samples of Unemployed Persons (September 1988)*

Unemployed persons	
a) aged below 55	22.5
aged equal or above 55	57.1
b) with unimpaired health	28.7
with impaired health	46.2
c) with completed vocational education/training	28.2
without completed vocational education/training	37.2
d) in state with lowest share (1)	24.4
in state with highest share (2)	37.9
e) in labour district with lowest share (3)	15.6
in labour district with highest share (4)	45.5
All unemployed	32.6

* long term unemployment defined as an uncompleted spell of unemployment of at least 1 year at the end of September 1988.

(1) Southern Bavaria; (2) Northrhine-Westfalia; (3) Nagold; (4) Essen

Source: Own calculations from Bundesanstalt für Arbeit, Arbeitsstatistik

such by the collective bargaining parties in the course of a recession so that wage moderation will prevail for a while. However, with cyclical recovery gaining ground, the structural core of the labour market disequilibrium will become visible to unions and employers' associations so that a hysteretic macro pattern of wage inflation emerges.

A casual glance over some aggregate statistics shows that structural factors like age, qualification, health, and region play an important part in West German long-term unemployment. As Table 4 indicates, the share of long-term in total unemployment is higher than the average of 32.6 % in all subsamples of unemployed which are characterized by some structural handicap. Thereby, age (above 55 years), poor health and the regional factor seem to be the most powerful determinants of long unemployment spells. When cross-classifications of structural factors are considered, the picture is even more revealing: in September 1987, 74.1 % of all long-term unemployed (with an uncompleted spell over one year) were either aged above 55 and/or had an impaired health and/or no vocational qualification; the corresponding share of short-term

unemployment of this group was 57.7 %. If the large group of unemployed without vocational qualification is excluded - it alone comprises about 50 % of all unemployed -, these shares drop to 42.2 % and 21.6 % respectively, i.e. more than 40 % of all long-term unemployed are either quite old for a successful job search or in an economically relevant sense 'disabled'. In addition, econometric evidence for West Germany indicates that the power of negative structural characteristics as determinants of long-term unemployment has increased in recent years. With highly disaggregated data on long-term unemployment for the time 1975-87, Paqué (1989c) shows that most of the rise of the share of long-term in total employment during the two recovery periods 1975-79 and 1983-87 is due to the (growing) economic importance of structural handicaps in the labour market, with age (above 55 years) and region (location in high unemployment labour district) having gained most. Thus, in the periods 1975-79 and 1983-87, the share of long-term unemployment among structurally non-handicapped unemployed persons²³ remained virtually constant (at around 5-6 % in 1975-79 and 12-13 % in 1983-87); at the same time, however, the respective share among structurally handicapped persons increased quite dramatically (e.g. for the group with age above 55 years from about 12 to 22 % in 1975-79 and from about 21 to 38 % in 1983-87).

On the whole, these results support the view that external rather than internal forces are mostly responsible for human capital devaluation and thus for labour market dualization in West Germany. To explain why age, bad health, lack of qualification and location in a depressed area have reduced the long-term chances for reemployment, one does not need any recourse to an implausibly powerful process of dequalification and demotivation during a jobless spell. Rather, it is sufficient to assume that, given the high level of dismissal protection West German labour law and collective bargaining agreements grant to any worker under normal business cycle conditions²⁴, the

²³ E.g. an unemployed person living in Baden-Württemberg or Southern Bavaria with age below 55, good health and completed vocational education/training.

²⁴ For a complete summary of dismissal protection in West Germany, see Soltwedel (1980), pp. 185 ff. In general, West German labour law requires that any dismissal must be 'socially justified', with by far the most important case of justification being urgent business requirements. Of course, this condition is most likely to be met in times of recession. By a
contin. footnote

cyclical downturns of 1974-75 and 1981-82 were taken by firms as a chance to cut down their labour costs by laying off the least productive workers. Right from the start as job seekers, those laid-off workers with some 'structural handicap' (lack of qualification, impaired health and, above all, age) were at a disadvantage since - given the quite rigid structure of collective bargaining wages - there is no great chance for them to offer a permanent compensatory wage cut for their particular handicap. Hence, in the course of economic recovery, they were left untouched as a sediment of long-term unemployment. In this light, the human capital devaluation usually precedes the state of unemployment; it is only temporarily concealed by favourite cyclical conditions and the constraints imposed by the labour law which prevents a continuous equilibrium type adjustment of the wage and/or employment structure to the forces of structural change.²⁵ Note that the increasing importance of regional factors for the explanation of long-term unemployment is a direct reflection of the regional incidence of economy-wide structural change: laid-off workers in declining regions remain long-term unemployed either because their skills are too specifically linked to the declining sectors or because not enough job alternatives in other sectors are available in the particular region.

Summing up, it must be conceded that the hysteresis paradigm has made an important contribution to theory by focusing on the dualization of the labour market in the aftermath of severe recessions, an aspect which has been unduely neglected by traditional NAIRU-theorizing. In doing so, however, the hysteresis paradigm is caught in a dilemma: either it sticks to a genuine macro framework - and thus fails to account for the lack of any newly emerging wage gap in the eighties - or it looks for an explanation in terms of human capital devaluation, but then ends up in the micro or structural domain which still belongs to the family of NAIRU-theories. In our view, only the second alternative is promising, at least in the case of West Germany.

contin. footnote

somewhat more liberal permission of fixed-term employment labour contracts, the 1985 Employment Promotion Law ('Beschäftigungsförderungsgesetz') led to some de-facto loosening of dismissal protection in recent years. We shall discuss the economic effects of this legal change in part IV of this paper.

²⁵ On this matter in detail, see Soltwedel (1988), pp. 190-201.

5. Structural Rigidities

Clearly, a structural explanation of West German unemployment is limited in one important dimension: by its very nature, it cannot account for the sudden bursts of unemployment in the mid-seventies and early eighties which must no doubt be attributed to cyclical forces. It can only deliver a set of microeconomic reasons why irresistible long-term forces loom behind these short-term bursts, and why after the bursts, a core of long-term unemployment remained even in the course of a pronounced recovery. In this respect, both the sectoral and the regional components of structural change are relevant.

As to sectors, we must go back to the empirical argument in Section 2 that, since the mid-70s, the growth of the wage gap has predominantly been a structural phenomenon, with manufacturing - and not the modern service sector - bearing the main share of the burden. The question then arises: can a 'structural' wage gap explain aggregate unemployment? After all, the net loss of about two million jobs in the recessions 1974-75 and 1981-83 was almost exclusively due to the shrinkage of industrial - above all manufacturing - employment while the moderate employment gains in the recovery periods 1976-80 and 1983-88 were mostly - though not exclusively - made in service sector employment.²⁶ A tentative answer to the question lies in a comparison of the West German case with a country which experienced a rapid structural change between sectors without persistent unemployment, the United States. Between 1973 and 1987, American manufacturing employment (excl. self-employed) stagnated, but private service sector employment grew at an annual rate of 3.3 % which amounts to a net gain of about 22.3 million service sector jobs, with the growth proceeding at a fairly constant rate all throughout cyclical booms and recessions; in the same period, West German service sector employment (also excl. self-employed) grew by just 0.9 % p.a., i.e. by about 800,000 jobs in the course of 14 years.²⁷ The American employment success story had its counterpart in terms of a marked increase of intersectoral wage

²⁶ See Glyn, Rowthorn (1988), pp. 146 and Part II of this paper.

²⁷ Note that the sectoral classification schemes are somewhat different in the U.S. and West Germany. However, this does not lead to any serious distortion of the empirical picture. See Hoffmann (1988) for details.

dispersion between manufacturing and services which also finds no parallel in West Germany where the dispersion remained roughly constant. Apparently, intersectoral wage flexibility allowed a rapid expansion of employment in the United States while intersectoral rigidity did not in West Germany. As a consequence of the fast service sector expansion, the economy-wide labour productivity growth slowed down much more dramatically in the American than in the West German service sector.²⁸ Also, a good part of the exceptionally bad overall productivity growth of the US-economy in the last two decades and the disproportionately large increase of low-wage employment may be explained by this rapid structural change.²⁹

With the West German manufacturing sector bound to shrink due to a high wage gap and, on top of it, two sharp recessions, the private service sector was due to take over the labour load. It did to a modest extent, with a growth rate of employment (excl. self-employed) of about 1.9 % p.a. in 1976-80 and 1.6 % p.a. in 1983-88. This was not sufficient to cut back unemployment as labour force growth speeded up due to a rising participation ratio and - most recently - a rising influx of immigrants from East Germany and Eastern Europe. Hence, at a given trend growth of labour productivity and at a persistent structural wage gap in manufacturing, a return to full employment could only happen in two different ways: either the wage level in the service sector was reduced relative to manufacturing so that low productivity laid-off workers could find a service job, or the wage level was reduced altogether so that - at a given relative wage distortion between manufacturing and services - both sectors could expand. Thus, in the seventies and eighties West Germany had and still has two alternatives: either it imitates the United States by allowing some more intersectoral wage flexibility to give service sector employment an additional boost above its trend growth, or it imitates its own past in the early sixties when the relatively low wage level allowed structural change to proceed in a state of over-

²⁸ For a detailed comparison of intersectoral wage flexibility and productivity growth in the U.S. and West Germany, see Burda, Sachs (1987), pp. 27-31.

²⁹ See Bluestone, Harrison (1988), Freeman (1988), and The Economist of Nov. 12, 1988, p. 86-87 "America's Shrinking Middle".

Table 5: Average Annual Unemployment Rates in West German State Labour Offices (in %)

	1973	1976	1980	1983	1988
Schleswig-Holstein ¹	1.2	4.6	3.8	10.3	11.1
Lower Saxony ²	1.7	5.4	4.7	11.4	11.5
Northrhine-Westfalia	1.3	4.9	4.6	10.6	11.0
Hesse	1.0	4.4	2.8	7.6	6.4
Rhineland-Palatine ³	1.3	5.2	4.4	9.2	8.5
Baden-Württemberg	0.5	3.4	2.3	5.9	5.0
Northern Bavaria	1.3	5.7	4.0	9.4	7.0
Southern Bavaria	1.3	4.5	3.1	7.1	5.8

¹ incl. Hamburg

² incl. Bremen

³ incl. Saar

Source: Own calculations from Bundesanstalt für Arbeit, Arbeitsstatistik

employment.³⁰ Note that both ways amount to a reduction of labour costs at least somewhere in the economy to compensate for the employment effect of the wage gap in manufacturing. Hence, if we are ready to assign explanatory power to the vast difference of the experiences of the two countries in question - and it would be hard not to do so - then a structural wage gap combined with a fairly rigid wage structure between sectors may well explain at least part of the persistent unemployment in West Germany.³¹

As to regions, there is no doubt that the emerging labour surplus has been distributed quite unevenly in the last fifteen years (see Table 5): by 1988, a clearcut north-/south divide has taken shape, with the three northern regions being hit much harder by unemployment than the southern ones. This corresponds to the sectoral incidence of job creation: the regions with a concentration of modern service and industrial sectors (above all Baden-Württemberg, Hesse and Southern Bavaria) took the lead in the fight against unemployment, while the main steel-, coalmining- and/or shipbuilding regions (Schleswig-Holstein, Lower Saxony, Northrhine Westfalia and - to

³⁰ See Paqué (1988).

³¹ In essence, we share this conclusion with Burda, Sachs (1987); however, they fail to stress the fact that the wage gap appears to be structural, not aggregate.

Table 6: Average Annual Employment Growth Rates in West German State Labour Offices for Selected Periods (in % p. a.)

	1974-80	1980-88	1976-80	1983-88
Schleswig-Holstein ¹	+0.1	-0.3	+1.2	+0.5
Lower Saxony ²	+0.1	-0.2	+1.3	+0.8
Northrhine-Westfalia	-0.4	-0.1	+0.3	+0.8
Hesse	+0.2	+0.4	+1.4	+1.6
Rhineland-Palatine ³	+0.5	-0.1	+1.8	+0.6
Baden-Württemberg	+0.2	+0.6	+1.8	+1.5
Northern Bavaria	+0.6	+0.5	+1.8	+1.4
Southern Bavaria	+1.3	+0.9	+2.6	+1.6

- ¹ incl. Hamburg
² incl. Bremen
³ incl. Saar

Source: Own calculations from Bundesanstalt für Arbeit, Arbeitsstatistik (employment statistics of social security administration).

some extent - Rhineland Palatine/Saar) fell behind. Thereby, all northern regions faced a further rise of their unemployment rates in the recovery period 1983-88, while all southern regions managed to achieve a reduction. Note that the straight north/south pattern took shape only gradually in the last fifteen years. It is not yet quite discernible for 1973 and 1976 when the interregional variation of unemployment rates was still quite small, with only one southern state (Baden-Württemberg) showing a clearly better unemployment record than the West German average.

Table 6 indicates that the emergence of the present interregional pattern of unemployment is in fact mostly due to differences in employment growth, i.e. of labour demand, not supply: since the mid-seventies, most southern regions persistently outpaced the northern ones in employment growth. The sole exception is the region Rhineland-Palatine/Saar which, after all, hosts the ailing Saar steel and coalmining industries. Note also that the interregional growth differential has increased over time, with the dispersion being more pronounced in the eighties than in the seventies.

The picture conveyed by Tables 5 and 6 somewhat contradicts the received wisdom in the modern macroeconomic literature that regional imbalances are no important elements of the unemployment malaise in West Germany (and Europe

in general).³² The standard evidence is based on the so-called indices of mismatch between unemployment and vacancies. Regional balance is assumed to prevail whenever it is impossible to increase the rate of job hirings and thus to reduce unemployment through interregional movements of the unemployed. The rationale behind this definition has some intuitive appeal: only to the extent that the particular (mal-)distribution of unemployed and vacancies contributes to overall employment, may it make sense to speak of unemployment caused by an existing regional imbalance. On the grounds of this philosophy, some measures of mismatch are calculated for 142 West German local labour offices. In general, they indicate that from 1973 to the mid-eighties, there was no more than a minor increase of regional mismatch.³³

This type of evidence hides an important qualitative issue. If one explicitly distinguishes two types of regional balance, namely the balance between selected large units of the whole (e.g., state labour offices) and the balance within these units (between local labour offices), a much more differentiated picture emerges: between the states, there has been a substantial increase of regional imbalance, but just the reverse holds within states.³⁴ The consequence is apparent: there has been a significant qualitative shift of regional unemployment from a 'spot issue' to a 'cluster issue'. In the early seventies, regional imbalance was above all a problem of many small backward areas more or less evenly scattered all over the country while, by the mid-eighties, it has become a problem of many backward areas clustered in those regions where the declining industries like coalmining, steel and shipbuilding tend to be concentrated. Naturally, the same measured 'absolute amount' of overall mismatch constitutes a much more severe obstacle to any macroeconomic fight against unemployment when it is regionally clustered since spill-over effects of regional growth centers cannot be relied upon to accelerate economic development in backward areas. In fact, the main structural issue which has gradually moved into the foreground of the economic policy debate during the seventies and eighties in West Germany is not regional imbalance

³² For this opinion, see, i. a., Franz (1987), Franz, König (1986), Jackman, Roper (1987), Layard, Nickell, Jackman (1985).

³³ For theoretical details, see Jackman, Roper (1987), pp. 11-16. For a methodological critique of the measures, see Paqué (1989a), pp. 6-20.

³⁴ For the numerical evidence, see Paqué (1989a, b).

itself, but rather the broad north/south divide which has completely pushed aside the questions of how to support small backward areas, above all those close to the 'inner-German border'.³⁵

Viewed as a whole, the evidence on the composition of long-term unemployment, on the sectoral employment growth pattern and on regional imbalances do point to a significant and still increasing structural dimension of the West German unemployment malaise. If one further recognizes the fact that official estimates now put the number of vacancies around 550000,³⁶ a level not reached since the early seventies at a time of extreme labour shortage, there remains not much doubt that the core of the problem as it appears today is structural or micro, not macro.

6. Summary of Diagnosis

Our main diagnostic points from the preceding analysis may be summarized as follows:

- a. The bulk of West German unemployment arose in the course of the two severe macroeconomic stabilization crises 1974-75 and 1981-83. At its new dimension, the labour market disequilibrium subsequently took on hysteretic macro features, i. e.
 - nominal wage inflation resumed its normal path despite a persistently high unemployment rate, and
 - a dual labour market developed, with a growing share of long-term unemployed.
- b. The main reasons for the hysteretic macro picture lie in a combination of microeconomic or structural factors:

³⁵ For another type of evidence for the increase of regional disparities based on intertemporal shifts of Beveridge-curves, see Paqué (1989b,c).

³⁶ In June 1989, the number of officially registered vacancies was on average about 260000. Due to vast underreporting, the true number of vacancies must be considered to be much higher. The Institut für Arbeitsmarkt und Berufsforschung, Nürnberg, estimates the true number to be around 550000 (see Handelsblatt of April 18, 1989, "Experten halten die Zahl von einer bis 1,5 Millionen offener Stellen für unrealistisch").

- (i) In the West German economy with its extensive dismissal protection for labour in normal times, there is likely to be a strong asymmetry between lay-offs and reemployment: firms use sharp cyclical downturns to purge their labour stock of the least productive workers, but do not reemploy them as soon as a 'fresh' (and prospectively more productive) labour becomes available in the market as in fact happens when the labour force grows. Hence a recession uncovers a human capital devaluation which has already taken place on the job due to e.g. age, impaired health or, to a lower extent, lack of qualification, but which is tolerated by firms under normal cyclical conditions because dismissal protection impedes a more continuous adjustment and regeneration of employment.
 - (ii) As the net loss of about two million jobs in the recessions 1974-75 and 1981-83 occurred in manufacturing where the pressure of labour costs was particularly pronounced due to unfavourable terms-of-trade effects, more jobs were to be created in the service sector to prevent laid-off industrial workers from sliding into long-term unemployment. This happened, but - compared to the US-economy - to a very modest degree mainly because intersectoral wage rigidity did not allow low wage service sector employment to grow as it did in the United States.
 - (iii) Measured properly, regional disparities in West Germany have grown since the mid-seventies so that, to an increasing extent, long-term unemployment is not only the outcome of a genuine devaluation of human capital, but also of a lack of labour demand in regions with a particularly bad structural mix of economic activity.
- c. For diagnostic purposes, the standard explanation of hysteresis - too high a wage level in an insider-outsider framework and human capital devaluation in the course of an unemployment spell - are only of secondary importance since
- estimates of aggregate wage gaps do not support the view that the current wage level is much too high, and
 - the incidence of long-term unemployment is so strongly related to identifiable structural characteristics that it would be far-fetched to place much explanatory weight on processes of endogenous dequalification or demotivation.

IV. Employment Policy Options

For analytical purposes, we shall broadly distinguish five categories of policy responses to the current (un-)employment malaise in West Germany which are worth discussing in the light of our prior analysis:

- (1) Wage differentiation,
- (2) active labour market policies,
- (3) liberalization of labour market regulations,
- (4) supply side measures to promote economic growth, and
- (5) expansionary monetary and/or fiscal policies.

Of course, these are not mutually exclusive policy options, but rather analytically separate tool boxes which may be (and partly have been) used simultaneously in actual practice.

1. Wage Differentiation

On economic grounds, the apparently large differences in value productivity between labour of different age, health status and qualification call for more wage differentiation. In the extreme - abstracting from actual institutional constraints - , anybody with a structural handicap of these kinds could offer his labour at a wage which corresponds to his marginal value productivity as seen by any potential employer. As a consequence, the type of heterogeneity in the labour force which is most relevant for reemployment prospects could enter wage formation and thus open up additional submarkets for 'structurally handicapped labour'. In essence, this comes down to removing all minimum wage restrictions as they de-facto apply in West Germany's collective bargaining system. Taking as a rough guide the American experience after 1981 when the (nominally) constant minimum wage was gradually eroded through price inflation, one should expect low-wage service sector employment to profit most from this policy.

There are at least three standard objections against this kind of proposal: Firstly, on theoretical grounds, efficiency wage considerations may prevent firms from taking advantage of the potential for (downward) differentiation of wages since the consequence of having a two-tier wage system may worsen a company's working climate and the motivation of the employed labour force. This is probably why not only unions, but also employers' associations usually

oppose the idea of wage differentiation, thereby stressing the cherished principle of equal pay for equal work as a means to preserve industrial peace.³⁷ This objection is convincing as far as it goes: there can be no guarantee that existing firms will in fact employ outsiders at lower wages. On the other hand, new firms may be established which profitably employ the surplus labour. This is essentially what happened in the United States and there are no reasons why it could not happen in West Germany as well. At any rate, there is no way of ascertaining the effectiveness of the proposed reform without trying it.

Secondly, most critics argue that such a reform, if successful, would come down to a virtual dismantling of the West German collective bargaining system. There is an element of truth in this objection since any explicit wage discrimination between in- and outsiders runs counter to the spirit of collectivized wage-setting. However, a reform along these lines may have quite pragmatic features which could preserve the essentials of the present system: wage discrimination may be explicitly restricted to new hires of long-term unemployed and limited in time until - hopefully - labour market conditions have fundamentally changed due to the expected massive demographic shifts in the late 1990s; just like any other employment contract, they may be subject to regular collective bargaining agreements so that, after all, unions and employers' associations could keep control over them.

Thirdly, given the current systems of unemployment insurance in West Germany, any drastic wage cut for labour market fringe groups could lead into what may be called a reservation wage trap. Right now, unemployment support of 63 % of the last net wage (for unemployed with at least one child: 68 %) is paid on an insurance basis for a limited period, mostly 12-24 months, depending i.a. on age; thereafter means tested unemployment aid of 56 % (58 % respectively) is paid indefinitely out of taxpayers' money. Clearly, a job offer of, say, 50 % of the unemployed person's last net wage means a net income loss. If there is no legal chance of cutting unemployment aid to force the unemployed person into the new job, then a reservation wage trap emerges. Right now, West German law gives an unemployed person the right

³⁷ Frankfurter Allgemeine Zeitung of July 31, 1989, "Keine untertarifliche Bezahlung für vormals Arbeitslose - Arbeitgeber und Gewerkschaften lehnen Tariföffnung einhellig ab".

to decline a job offer without losing his claim to aid, if, i. a., the job would significantly worsen his long-term chances to return to the kind of work he did before or to a job of comparable professional status.³⁸ It is evident that, for many low-wage offers - at least to persons of age or bad health - this condition will be met. Of course, adjusting the law so as to avoid the trap is a matter of social value judgement, not economics: if one prefers to get the long-term unemployed back to work even at the price of some painful individual adjustment, then some tougher rules may be justified; if one regards this sort of social pressure as unacceptable, no change would be required. Again, pragmatic compromises could be struck by offering some kind of gradually phasing-out unemployment aid for the time after a low-wage job has been accepted. However, even without avoiding the trap, a job market purged of minimum wage restrictions for structurally handicapped persons would clarify the costs of a social system which anchors the level of unemployment aid in historical, not actual human capital valuation.

In West Germany, the most widely discussed type of structural wage differentiation is the one between regions. Economically, it would have above all the task of compensating inherent differences in local conditions which, in the eyes of a potential investor, make the expected value productivity - though mostly not the expected physical productivity - of the same kind of work differ between regions. In an idealized setting, the perfectly mobile factor capital moves to the place where the profitability of investment is highest due to a whole bunch of diverse local conditions, including labour costs and real estate prices. If labour is an essentially immobile factor - a quite realistic assumption for West Germany, at least between her larger regional units - , wages have an important function for the allocation of capital in space, just like real estate prices: when wages are kept the same everywhere, capital moves *ceteris paribus* to the regions with the highest value productivity of labour, with the load of price adjustment being exclusively on real estate; thus regions with a locational disadvantage forego investment and become depressed areas with low real estate prices, but high unemployment.

³⁸ See § 103 Arbeitsförderungsgesetz (AFG) and § 2 Zumutbarkeits-Anordnung.

There is a somewhat curious economic debate about the extent and recent development of interregional wage differentiation in West Germany.³⁹ Thereby, too much attention has been directed to differentials in actual earnings which are heavily influenced by regional differences in the sectoral and industrial structure of economic activity. Typically, urbanized regions with a high concentration of modern industries and services have a particularly high value productivity and wage level per worker. However, for locational investment decisions, this information is only of minor interest. What is relevant instead are comparative wage levels in the one particular sector of economic activity where investment will take place. Hence, only a sector-by-sector comparison - preferably on a very low level of aggregation - has any substantial bearing on the issue at hand. This kind of structural analysis shows that both the minimum wages as fixed by collective bargaining for different labour categories and the respective effective wages as actually paid have a very low spread across regions, with a coefficient of variation mostly around 5 %. Still more importantly, the regional pattern is quite uniform and stable over time, with the urbanized states Hamburg, Northrhine-Westfalia, Hesse, and Baden-Württemberg in the lead, and the rural states - especially Bavaria - somewhat behind.⁴⁰ Quite obviously, this structure does not adequately reflect the changes of labour market and general economic conditions like the emerging north-south divide in West Germany which can be nicely read off the statistics on real estate prices.⁴¹

Given the usually high share of labour in total costs of an industrial or service sector company, a moderate, but significant and persistent wage differential of, say, 20-30 % between two regions like booming Württemberg and depressed Ostfriesland could probably initiate a quite dramatic regional diversion of investment, just like a once-for-all currency devaluation in real terms normally leads into an investment boom. West German unions oppose this

³⁹ See i. a. Bell, Freeman (1985), Gundlach (1986), Koller (1987), Harges (1988), Soltwedel (1988), and Bellmann, Buttler (1989).

⁴⁰ Own calculations on basis of data of the Statistisches Bundesamt. Thanks are due to C.-F. Laaser for some guidance through the data. See also Soltwedel (1988), pp. 178-180.

⁴¹ See Deutsche Bundesbank (1989), p. 39 where it is shown that, in 1988, the real estate price level was on average about 40 % higher in cities of southern than of northern Germany.

policy on basis of the notion of (nominally) equal living conditions all over West Germany. In view of the wide differences between real estate prices and rents across regions, this notion looks increasingly antiquated; after all, a car worker in depressed Bremen may be better off in real terms than a car worker in booming Stuttgart simply because housing is so much cheaper in depressed than in booming areas. Hence, even on the fuzzy grounds of 'interregional fairness', a strong case for wage differentiation can be made.⁴²

2. Active Labour Market Policies

Theoretically, the employment effects of wage differentiation can also be achieved by manipulating the relevant unit labour costs through appropriate labour market policies. Within the standard arsenal of labour market policy instruments which are all commonly applied in West Germany,⁴³ the most important ones at present are wage subsidies and qualification measures.

According to the West German 'labour promotion act' (Arbeitsförderungsgesetz) any firm employing an elderly long-term jobless person (age above 50) may receive wage subsidies amounting to 50 % in the first down to 30 % in the third year of a new (unlimited-term) employment contract. In addition, the West German labour ministry recently announced a more broadly based program to support the reintegration of all types of long-term unemployed by granting wage subsidies of up to 80 % over one year for employment contracts of unlimited duration;⁴⁴ for this purpose an additional 1.5 billion DM will be supplied by the West German government. Although these provisions and programs look generous in scope and well-targeted, their beneficial effects

⁴² In principle, wage differentiation of any kind may also be achieved through an across-the-board wage moderation, so that enough scope is left for wage drift to give market forces a sufficient say. However, in view of the great potential for social conflict which an 'uncontrolled' rise of wage drift may have - think of the West German experience of the late sixties when drift was followed by a dramatic rise of contract wages (see Swenson, 1989, pp. 72-84) -, an 'official' differentiation of contract wages should be preferable, at least in the present West German institutional environment.

⁴³ See Werner (1987b) for a summary.

⁴⁴ See i.a. Wirtschaftswoche of June 9, 1989, "Langzeitarbeitslosigkeit - Neuer Anlauf".

may be hampered by the - unavoidably - temporary nature of subsidization: for a firm, a temporary cut of labour costs at the early stage of a new contract may not outweigh the long-term disadvantage of being stuck with a low-productivity worker, at least as long as there are ample superior alternatives in the market due to immigration-led growth of the labour force. After all, the generous provisions for subsidizing the employment of elderly persons did not noticeably slow down the emergence of a dual labour market. In fact, only open-ended subsidies could fully copy a wage differentiation, but they can hardly be recommended on economic efficiency grounds since they involve a permanent socialization of employment costs.

As to qualification measures, there has been quite a boom in recent years: the amount spent by the West German labour administration on supporting vocational training doubled in the period 1983-88, from 5.4 to 10.7 billion DM.⁴⁵ To smooth structural adjustment by facilitating occupational, sectoral and also regional mobility as a partial substitute for wage differentiation, this makes good economic sense, although the actual returns to this kind of public investment are not well-known. However, as an initiative targeted at long-term unemployment, it may simply miss the core of the problem. Most qualification measures are naturally not training per se, but some sort of retraining. Hence, the about 55 % of all long-term unemployed who have no qualification in the first place, do hardly profit from the additional options. To a large extent, this conclusion also applies to the other major fringe groups of long-term unemployment: obviously, the main structural handicap of older or chronically ill persons is not a wrong qualification, but age or bad health. Hence, after all, labour market policies may not figure as more than mere supplementary measures which alleviate the problem a little bit, but are no significant step towards its solution.⁴⁶

⁴⁵ See Lampert (1989), p. 187.

⁴⁶ With a view to Sweden, some labour market observers make a plea for a drastic extension of active labour market policies in West Germany. They tend to overlook that the extraordinary Swedish success story of the 1980s was made possible above all by the hefty devaluation of the Swedish currency in 1981/82, a kind of beggar-thy-neighbour policy which cut the country off the train of world-wide recession and - with union consent - allowed the real wage level in the large Swedish traded-goods sector to fall by more than 10 %. The immediate consequence was an early export-led growth push combined with a boom of investment. Without this kind of
contin. footnote

3. Liberalization of Labour Market Regulations

By international standards, the West German labour markets are heavily regulated, with the complex framework of dismissal protection being the main legal constraint.⁴⁷ By passing the 'Employment Promotion Law' (Beschäftigungsförderungsgesetz (BeschFG)) in 1985, the West German legislator made a first move towards liberalization; i. a., the period for which fixed-term contracts are generally permitted was extended from 6 to 18 month (and in special cases to 24 month). Thus private firms were given the chance to circumvent at least the cost of long-term dismissal protection when hiring new workers. The law was originally intended to expire in 1990, but is now due to apply for another five-year term.

By the time of its passing, the law was the object of a fierce debate in the public, with the frontline running along the familiar political union/social democratic versus liberal/conservative boundaries. By now, a fairly detailed statistical stocktaking by the Wissenschaftszentrum, Berlin (Büchtemann 1989), shows that, broadly speaking, the law has been a success, albeit by no means a spectacular one. In the two-year sample period May 1985 to April 1987, about 850000 employment contracts, i. e. about 9 % of all new employment contracts in the private sector, were made on a fixed-term basis according to the BeschFG. Only about 30 % of these contracts would have been prohibited with certainty under the prior case law jurisdiction on fixed-term contracts, but firms apparently preferred the clearcut rules of the BeschFG over unpredictable court decisions. Thereby, 56 % of all employees first hired on a fixed-term contract were later taken over on a permanent basis. Hence, to a large extent, firms used an introductory fixed-term as a prolonged trial period to check the productivity of the newly hired work force; in addition,

contin. footnote

fortuituous macroeconomic move which has always been out of reach for EMS-bound West Germany, Sweden's labour market record of the eighties would certainly look much less impressive, maybe like her fairly mean record in the seventies when only a disproportionate increase of public sector employment prevented unemployment to rise to the levels of other countries. For details on Swedish labour market policies, see Werner (1987b) and Schmid (1989). For a general evaluation of the Swedish model, see Lundberg (1985).

⁴⁷ See Emerson (1988) who reports employers' relative evaluations of different regulatory systems of labour markets in EEC-countries.

firms regarded fixed-term employment as a useful buffer stock for times of cyclical downturns. Although the net employment effect of the BeschFG is naturally very difficult to calculate, a tentative estimate in the range of 170000 new hires in two years, with about 90000 more permanent jobs looks quite reasonable⁴⁸.

All in all, the BeschFG has added a significant element of flexibility to West German labour market regulations. Still then, the core of the dismissal protection laws has been left untouched; as it most forcefully applies to those labour market fringe groups which are hit hardest by long-term unemployment, they figure as a persistent impediment to employment growth, at least as long as a compensatory wage differentiation is not feasible.

4. Supply Side Measures to Promote Economic Growth

All economic policies which increase the (price) elasticity of aggregate supply will in the long run help to alleviate the unemployment problem through an acceleration of economic growth. In the West German economy, there are no doubt plenty of reasonable policy options in the supply side realm, and the present government has so far taken only very minor and timid steps in this direction.⁴⁹ In particular,

- a more daring income tax reform aimed at lowering marginal tax rates above all in the middle income ranges may help to remove constraints on that part of the labour supply (mostly consisting of skilled workers) which is in high demand;
- a thorough cut of subsidies to ailing industries (i.e. coal mining) and agriculture would allow to reap the productivity fruits of a speeded-up structural change;
- a deregulation of some heavily regulated service sectors such as communications, transport, and insurance would initiate a productivity push

⁴⁸ See Büchtemann (1989), Chapter IV.

⁴⁹ For a summary evaluation of economic policy in West Germany since the change of government in 1982, see Hellwig, Neumann (1987).

and, if this push were not anticipated by collective bargaining, a reduction of unit labour costs and thus an upsurge of service sector employment.⁵⁰

Of course, these are all measures aimed at improvements in the long run; in the short run, they may even require painful adjustments. Nevertheless, they are clearly warranted if the full output and employment growth potential of the West German economy is to be tapped in the future.

5. Expansionary Monetary and/or Fiscal Policies

As to monetary demand policy, it is hard to see what it should do in the present boom period other than passively complementing any prospective expansion of aggregate supply. Clearly, with high capacity utilization as it prevails, any deliberate monetary expansion to increase employment would lead right into inflationary bottlenecks, just as it did in the cyclical overheating at the end of the seventies when the West German economy took over the role of an international demand locomotive. At that time, the unemployment rate could be cut down by just one percentage point in a two-year expansion which pushed up the inflation rate from 2.8 % in 1978 to almost 6 % in 1980, thus providing the rationale for the then following sharp contractionary monetary measures with all their far-reaching consequences.⁵¹

As to fiscal demand policy, things look hardly different. Whatever the long-term merits of income tax cuts may be as a supply side measure, they are hardly needed to support an ongoing boom; if they had an expansionary effect, it is now likely to foster price inflation, not output and employment

⁵⁰ See Soltwedel et al. (1986) for an appraisal of the potential for deregulation in the West German economy.

⁵¹ Even at the peak of a boom, expansionary policies may still be considered if the policy maker is ready to introduce price controls as an emergency measure against inflation. Some prominent Keynesian economists (e.g. Blinder, 1988) in fact argue that the allocative damage done by price controls should be outweighed by the macroeconomic gains from expansion. At any rate, we do not share this view as we think that the dismal historical record of repressed inflations speaks for itself.

growth.⁵² The same holds a fortiori for an increase in public spending, even if it is on infrastructure investment. There may be arguments for this kind of public investment to remove bottlenecks on the supply side, although even these arguments are weak for a country like West Germany with its very good infrastructure; however, it looks misplaced and ill-timed as a deliberate expansionary demand policy.

To summarize, only long-term structural (or micro) policies can now help to alleviate the West German unemployment problem. To be sure, nothing miraculous should be expected from any move to more structural differentiation and flexibility as it is advocated here. Any such move will only help to speed up the reintegration of those unemployed who still have some realistic chance of finding a job. Needless to emphasize that all proposals to restrain the labour supply, as they are very popular among union officials in West Germany, are obviously no adequate economic solution: apart from the many structural tensions they create by reducing the supply of skilled labour, they amount to a simple rationing device which does not create additional jobs, but rather - at best - redistributes a given labour volume. This is true for early retirement schemes, but even more so for a flat shortening of the work week. After all, employment policy should aim at increasing labour demand, not at artificially trimming labour supply.

⁵² The income tax cut at the beginning of 1990 will per se have some expansionary effects. However, the impact is likely to be counterbalanced or even overcompensated by the slightly contractionary effects of the monetary measures taken by the German Bundesbank. See Institut für Weltwirtschaft (1989), pp. 22-26.

References

- ARTUS, Jacques R. (1984), "The Disequilibrium Real Wage Rate Hypothesis. An Empirical Evaluation". IMF Staff Papers Vol. 31 (1984), pp. 249-302.
- BELL, Linda A., Richard B. FREEMAN (1985), Does a Flexible Industry Wage Structure Increase Employment?: The U.S. Experience. National Bureau of Economic Research. Working Paper No. 1604.
- BELLMANN, Lutz, Friedrich BUTTLER (1989), "Lohnstrukturflexibilität - Theorie und Empirie der Transaktionskosten und Effizienzlöhne". Mitteilungen aus der Arbeitsmarkt- und Berufsforschung, Vol. 22 (1989), pp. 202-217.
- BLANCHARD, Olivier, Lawrence H. SUMMERS (1986a), Hysteresis and the European Unemployment Problem. NBER Macroeconomic Annual 1986. Cambridge, Mass. 1986.
- , -- (1986b), Hysteresis in Unemployment. NBER Working Paper No. 2035. Cambridge, Mass. 1986.
- , -- (1986c), Fiscal Increasing Returns, Hysteresis, Real Wages and Unemployment. Harvard Institute of Economic Research. Discussion Paper No. 1266. Cambridge, Mass. 1986.
- , -- (1988), "Beyond the Natural Rate Hypothesis". American Economic Review, Papers and Proceedings Vol. 78 (1988), pp. 182-187.
- BLINDER, Alan S. (1988), "The Challenge of High Unemployment". American Economic Review, Papers and Proceedings Vol. 78 (1988), pp. 1-15.
- BLUESTONE, Barry, Bennett HARRISON (1988), "The Growth of Low-Wage Employment: 1963-86". American Economic Review, Papers and Proceedings, Vol. 78 (1988), pp. 124-128.
- BRUNO, Michael (1986), "Aggregate Supply and Demand Factors in OECD Unemployment: An Update". *Economica*, Vol. 53 (1986), No. 210, pp. S35-S52.
- , Jeffrey D. SACHS (1985), *Economics of Worldwide Stagflation*. Cambridge, Mass. 1985.
- BÜCHTEMANN, Christoph F. (1989), "Befristete Arbeitsverträge nach dem Beschäftigungsförderungsgesetz (BeschFG 1985)". *Forschungsbericht (Sozialforschung)* 183. Wissenschaftszentrum Berlin, Berlin 1989.
- BURDA, Michael C., Jeffrey D. SACHS (1987), Institutional Aspects of High Unemployment in the Federal Republic of Germany. NBER Working Paper 2241. Cambridge, Mass. 1987.
- COE, David T. (1985), "Nominal Wages, the NAIRU and Wage Flexibility". OECD Economic Studies No. 5 (1985), pp. 85-126.
- (1988), "Hysteresis Effects in Aggregate Wage Equations". In: CROSS, Rod (Ed.), *Unemployment, Hysteresis and the Natural Rate Hypothesis*. Oxford 1988, pp. 284-305.

- COEN, Robert M., Bert G. HICKMAN (1988), "Is European Unemployment Classical or Keynesian?" *American Economic Review, Papers and Proceedings*, Vol. 78 (1988), pp. 188-193.
- CROSS, Rod (1988) (Ed.), *Unemployment, Hysteresis and the Natural Rate Hypothesis*. Oxford 1988.
- DEUTSCHE BUNDESBANK (1989), *Monatsberichte der Deutschen Bundesbank*. Frankfurt, August 1989.
- THE ECONOMIST of Nov. 12, 1988, pp. 86-87. "America's Shrinking Middle".
- of Feb. 4, 1989, p. 65, "Still Waiting for the Locomotive".
- EMERSON, Michael (1988), "Regulation or deregulation of the labour market: Policy regimes for the recruitment and dismissal of employees in the industrialized countries". *European Economic Review*, Vol. 32 (1988), pp. 775-817.
- FITOUSSI, Jean P., Edmund S. PHELPS (1988), *The Slump in Europe - Reconstructing Open Economy Theory*. Oxford 1988.
- FRANKFURTER ALLGEMEINE ZEITUNG of July 31, 1989, "Keine untertarifliche Bezahlung für vormals Arbeitslose - Arbeitgeber und Gewerkschaften lehnen Tariföffnung einhellig ab".
- FRANZ, Wolfgang (1987), *Strukturelle und friktionelle Arbeitslosigkeit in der Bundesrepublik Deutschland: Eine theoretische und empirische Analyse der Beveridge-Kurve*. In: BOMBACH et al. (Eds.), *Zur Theorie und Politik der internationalen Wirtschaftsbeziehungen*. Tübingen 1987.
- , Heinz KÖNIG (1986), "The Nature and Causes of Unemployment in the Federal Republic of Germany since the 1970s: An Empirical Investigation". *Economica*, Vol. 53 (1986), pp. S219-S244.
- FREEMAN, Richard B. (1988), "Evaluating the European View that the United States Has No Unemployment Problem". *American Economic Review, Papers and Proceedings*, Vol. 78 (1988), pp. 294-299.
- GLYN, Andrew, Bob ROWTHORN (1988), "West European Unemployment: Corporatism and Structural Change". *American Economic Review, Papers and Proceedings*, Vol. 78 (1988), pp. 194-199.
- GORDON, Robert J. (1988), "Wage Gaps versus Output Gaps: Is There a Common Story for All of Europe?". In: GIERSCH, Herbert (Ed.), *Macro and Micro Policies for More Growth and Employment*. Symposium Kiel 1987. Tübingen 1988.
- GUNDLACH, Erich (1986), "Gibt es genügend Lohndifferenzierung in der Bundesrepublik Deutschland?" *Die Weltwirtschaft*, Heft 2, pp. 74-88.
- HANDELSBLATT of April 12, 1989, "Experten halten die Zahl von einer bis 1,5 Millionen offener Stellen für unrealistisch".
- HARDES, Heinz-Dieter (1988), "Vorschläge zur Differenzierung und Flexibilisierung der Löhne". *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, Vol. 21 (1988), pp. 52-73.

- HELLWIG, Martin, Manfred J.M. NEUMANN (1987), "Economic Policy in Germany: Was There a Turnaround?" *Economic Policy*, Vol. 5 (Oct. 1987), pp. 105-140.
- HOFFMANN, Edeltraud (1988), "Beschäftigungstendenzen im Dienstleistungssektor der USA und der Bundesrepublik". *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, Vol. 21 (1988), pp. 243-267.
- INSTITUT FÜR WELTWIRTSCHAFT (1989), *Abstieg vom Konjunkturgipfel - Thesen zum 40. Kieler Konjunkturgespräch*. Kiel Discussion Papers 155, Institut für Weltwirtschaft, Kiel 1989.
- JACKMAN, Robert (1988), Review of "The Slump in Europe: Reconstructing Open Economy Theory" by Fitoussi, Jean-Paul, Edmund S. Phelps. *Economic Journal*, Vol. 98 (1988), pp. 1248-49.
- , Steven ROPER (1987), "Structural Unemployment". *Oxford Bulletin of Economics and Statistics*, Vol. 49 (1987), pp. 9-36.
- KATZ, Lawrence (1986), *Efficiency Wage Theories: A Partial Evaluation*. NBER Working Paper 1906. Cambridge, Mass. 1986.
- KLÖS, Hans-Peter (1989), "Der Einfluß unterschiedlicher Erhebungskonzepte auf die Arbeitslosenstatistik". *IW-Trends* 3/1989, pp. B1-B14.
- KOLLER, Martin (1987), "Regionale Lohnstrukturen". *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, Vol. 20 (1987), pp. 30-44.
- LAMPERT, Heinz (1989), "20 Jahre Arbeitsförderungsgesetz". *Mitteilungen aus der Arbeitsmarkt- und Berufsförderung*, Vol. 22 (1989), pp. 173-186.
- LAYARD, Richard, Steven NICKELL (1985), "Unemployment, Real Wages and Aggregate Demand in Europe, Japan and the United States". *Carnegie-Rochester Conference Series on Public Policy*. Vol. 23 (1985), pp. 143-202.
- , --, Robert JACKMAN (1985), *European Unemployment Is Keynesian and Classical, But Not Structural*. Center of European Policy Studies, Working Documents 13. Brussels 1985.
- LINDBECK, Assar, Dennis SNOWER (1986), "Wage Setting, Unemployment and Insider-Outsider Relations". *American Economic Review*, Vol. 76 (1986), pp. 235-239.
- LUNDBERG, Erik (1985), "The Rise and Fall of the Swedish Model". *Journal of Economic Literature*, Vol. 23 (1985), pp. 1-36.
- PAQUE, Karl-Heinz (1988), *The Mixed Blessing of Labour Shortage. German Overemployment in the Sixties*. Kiel Working Papers 332. Institut für Weltwirtschaft. Kiel 1988.
- (1989a), *Is Structural Unemployment a Negligible Problem? A Critical Note on the Use of Mismatch Indices*. Kiel Working Papers 357. Institut für Weltwirtschaft. Kiel 1989.
- (1989b), *Wage Gaps, Hysteresis and Structural Unemployment. The West German Labour Market in the Seventies and Eighties*. Kiel Working Papers, 332, Institut für Weltwirtschaft. Kiel 1988.

-- (1989c), "Micro-Macro Links in West Germany's Unemployment". Kiel Working Papers 378. Institut für Weltwirtschaft, Kiel 1989.

RHEINISCH-WESTFÄLISCHES INSTITUT FÜR WIRTSCHAFTSFORSCHUNG (1989), RWI-Konjunkturberichte, 1989/1, Berlin 1989.

SCHMID, Günther (1989), "Modell Schweden als Vorbild? Licht- und Schattenseiten der schwedischen Arbeitsmarkt- und Beschäftigungspolitik". Mitteilungen aus der Arbeitsmarkt- und Berufsforschung, Vol. 22 (1989), pp. 75-84.

SOLTWEDEL, Rüdiger (1980), Rückwirkungen sozialpolitischer Maßnahmen der Tarifpartner und des Staates zugunsten bestimmter Erwerbstätigengruppen auf dem Arbeitsmarkt - Identifikation und Vorschläge. Kiel 1980.

-- (1988), "Employment Problems in West Germany - The Role of Institutions, Labour Law and Government Intervention". Carnegie-Rochester Conference Series on Public Policy. Vol. 28 (1988), pp. 153-220.

-- et al. (1986), "Deregulierungspotentiale in der Bundesrepublik". Kieler Studien 202, Tübingen 1986.

SUMMERS, Lawrence (1988), "Relative Wages, Efficiency Wages, and Keynesian Unemployment". American Economic Review, Papers and Proceedings, Vol. 78 (1988), pp. 383-388.

SWENSON, Peter (1989), Fair Shares - Unions, Pay and Politics in Sweden and West Germany. London 1989.

VAUBEL, Roland (1989), "Möglichkeiten für eine erfolgreiche Beschäftigungspolitik". In: Schriften des Vereins für Socialpolitik, Gesellschaft für Wirtschafts- und Sozialwissenschaften, Neue Folge 178, Beschäftigungsprobleme hochentwickelter Volkswirtschaften. Berlin 1989.

WERMTER, Winfried, Ulrich CRAMER (1988), "Wie hoch war der Beschäftigungsanstieg seit 1983? Ein Diskussionsbeitrag aus der Sicht der Beschäftigungsstatistik der Bundesanstalt für Arbeit". Mitteilungen aus der Arbeitsmarkt- und Berufsforschung, Vol. 21 (1988), pp. 468-497.

WERNER, Heinz (1987a), Ermittlung der Arbeitslosigkeit und Leistungsbezug in der EG. Beiträge zur Arbeitsmarkt- und Berufsforschung 108. Nürnberg 1987.

-- (1987b), "Arbeitsmarktpolitische Maßnahmen in den Ländern der Europäischen Gemeinschaft und in Schweden - Eine Übersicht". Mitteilungen aus der Arbeitsmarkt- und Berufsforschung, Vol. 20 (1987), pp. 441-452.

WIRTSCHAFTSWOCHE of June 9, 1989, "Langzeitarbeitslosigkeit - Neuer Anlauf".