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Working Paper — Digitized Version

Unemployment and the crisis of the German model: A long-term interpretation

Kiel Working Paper, No. 655

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Suggested Citation: Paqué, Karl-Heinz (1994) : Unemployment and the crisis of the German model: A long-term interpretation, Kiel Working Paper, No. 655, Kiel Institute of World Economics (IfW), Kiel

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Kieler Arbeitspapiere

Kiel Working Papers

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**Unemployment and the Crisis of the German Model.
A Long-Term Interpretation***

by
Karl-Heinz Paqué

September 1994



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

ISSN 0342 - 0787

The Institute of World Economics
Düsternbrooker Weg 120, D-24105 Kiel

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- * Paper presented at the symposium of the EGON-SOHMEN-FOUNDATION "Fighting Europe's Unemployment in the 1990s" in Salzburg, Austria, on August 27-28, 1994. Thanks are due to the participants of this symposium – notably to Richard Freeman, Michael Burda, Richard Cooper, Patrick Minford and Charles Wyplosz – for valuable comments. The author is also grateful to Alfred Boss for suggestions on an earlier draft of this paper.

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Contents

	<i>Page</i>
1. <i>What Crisis of Collective Bargaining?</i>	2
2. <i>Structural Change and Unemployment in the Long Run</i>	4
(a) <i>The emergence of unemployment</i>	5
(b) <i>Collective bargaining and unemployment insurance</i>	9
(c) <i>The 'good-weather' period 1948-73</i>	12
(d) <i>The 'bad-weather' period since the mid-1970s</i>	14
(e) <i>Will the 'weather' improve again?</i>	17
3. <i>Some Guidelines for Reform of the 'German Model'</i>	19
(a) <i>Raising labour productivity</i>	19
(b) <i>Lowering the wage</i>	20
<i>References</i>	29
<i>Appendix</i>	

This paper presents an account of the reasons why the so-called German model finds itself in a serious and persistent crisis. The main point of the paper is that there are powerful long-term forces changing the structure of the German economy in a way which is at odds with the egalitarian philosophy of German-style collective wage bargaining and the relevant provisions of the welfare state. With appropriate qualifications, the point may equally apply to other European countries with a similarly constructed set of 'corporatist' labour market institutions.

In essence, the paper is no more than an evaluative survey of arguments that draws heavily on ideas and pieces of empirical evidence scattered in the relevant literature. It consists of three parts: section 1 gives a definition of what the term 'crisis' can and should mean with respect to a system of collective bargaining; section 2 elaborates the main line of reasoning that underlies the diagnosis of a crisis; and section 3 draws policy conclusions on whether and possibly how industrial relations and the welfare state could be adjusted to meet the emerging challenges without a complete dismantling of what is commonly known as the 'German model'.

1. What Crisis of Collective Bargaining?

Applied to a system or practice of collective wage bargaining, the term *crisis* may have two different meanings, a positive and a normative one. In the *positive* sense, the system is in a crisis if an ever increasing share of all wage agreements in an economy is concluded outside the system, i.e., if the system is more and more deserted by its traditional members and/or bypassed by a fast-growing outsider competition of non-members. In the *normative* sense, the system is in a crisis if its very working leads to a persistent violation of some generally accepted political, economic or social goal which is impossible or at least very costly to redress by any compensatory policy measures.

In the positive sense, the German bargaining system has been remarkably stable over the almost half a century of post-World War II labour market history:¹ not only its constituent legal principles and institutional practices², but also its main economic characteristics have survived quite different unemployment regimes. In its core, the system can be characterized as a model of *regionalized industrial bargaining* - involving negotiations and agreements between the relevant industrial union and employers' association of an industry on a regional basis, roughly speaking on the level of states ('Länder'). About a quarter of all collective agreements are concluded on a company basis; on the other hand, some industries like construction and printing have (quasi-)nation-wide agreements. In theory, the existence of roughly 800 (sectoral and regional) bargaining districts and a large number of company-specific agreements allows for a high degree of structural wage flexibility, but the long-standing wage leadership of metal manufacturing in some major bargaining district (nowadays typically northern Baden-Württemberg) has secured a rather uniform growth of wages across sectors and regions.³ Hence, though not formally centralized, the German bargaining system is - and has always been - *highly synchronized*.

¹ With some minor qualifications, most national bargaining systems of continental European countries remained quite stable over this period. For a rich survey of the relevant systems and their development over time in all major industrial countries, see the various contributions in Hartog, Theeuwes [eds., 1993].

² On these in detail, see Paqué [1993a], 214-24.

³ For econometric evidence on the intertemporal stability of the relevant wage structure in Germany and its rigidity with respect to sectorally and/or regionally concentrated labour market shocks, see Paqué [mimeo] and Burda [mimeo].

Outsider competition to the system has remained very limited in the past: while the share of union members among employees did never surpass 40 percent over any longer period of time, it was above all the high degree of organisation among *employers* that guaranteed a quite encompassing coverage of the economy with collectively agreed contracts. A rough guess is that, in western Germany, about two thirds of all employers are members of some employers' association, and that nine out of ten employees work on terms fixed in some collective agreement.⁴ Basically all sectors of the western German economy - with the exception of parts of retail trade and household (and related) services that employ a predominantly female labour force - have been covered by collective agreements all over the post-war period; thus the distinction between 'unionized' and 'non-unionized' sectors or firms, which is used in the literature on American labour markets as an analytical means to estimate 'union relative wage effects'⁵, makes no real sense in the German context.

It is a most remarkable fact that neither the high unemployment in the early 1950s nor the rise of unemployment in the 1970s and early 1980s and its subsequent persistence at historically high levels destabilized the system in the sense that many established or new firms found it profitable to quit or stay out of the employers' associations and hire unemployed persons at subcontractual wage levels. As there are in principle no major *legal* obstacles to do this⁶, there is at present no real reason to speak of a crisis of collective bargaining in the above positive sense, at least not for western Germany. For the eastern part of the country after German unification in 1990, the situation may become somewhat different in due course: with factual rates of underemployment of 20-30 per cent (including various forms of hidden unemployment not counted in the official jobless statistics)⁷, outsider competition may grow

⁴ See *Paqué [1993a]*; pp. 217, who quotes estimates provided by the federation of German employers' associations. Note that the statistical basis of these estimates is remarkably poor: no systematic polls or surveys are conducted on a regular or at least an occasional basis to verify the numbers.

⁵ See i.a. *Lewis [1986]*.

⁶ Under certain restrictive conditions, collective agreements can be extended to third parties by a declaration of the Federal Minister of Labour (for details, see *Paqué [1993a]*, pp. 218-20). However, there are good reasons to suspect that this legal option, which is in fact rarely used in practice, was *not* a decisive threat to be made responsible for the conspicuous lack of outsider competition. We shall return to this matter below in Section 3.

⁷ See *Paqué [1993b]* for various measures of this kind.

into a new dimension and thus a more serious threat to the stability of the system. Recent polls on the degree of organization of employers and on the frequency of subcontractual payment practices in eastern Germany seem to support such a conjecture.⁸ For the time being, however, this remains a matter of speculation because the basis of information is still very shaky.

In any case, a diagnosis of crisis of collective bargaining must be based mainly on normative, not on positive grounds: while the system is still essentially stable, it may be unable to prevent or it may even lead to persistent unemployment.

2. Structural Change and Unemployment in the Long Run

The 1980s have undoubtedly been a boom time for research in the causes of unemployment. In view of the stepwise increase of the unemployment rate that most European countries had experienced in the (then) recent past, the natural focus of this research lay first on the specific supply and demand shocks that led to the rise of unemployment and second on the asymmetric forces that supported its persistence well after the relevant shocks.⁹ This research lacked what might be called a *historical dimension*: usually, the econometric testing grounds for subjecting the theories to empirical scrutiny were time series stretching back to no earlier than the 1960s, and cross section and panel data of most recent vintage. The informational content of the important time series dimension was thus restricted to basically two major historical events, namely the two oil price hikes in 1973/74 and 1980/81, supplemented by the respective subsequent recessions in 1974/75 and 1981/83. This rather narrow focus gave the relevant research a high degree of empirical coherence and theoretical subtlety: crude early notions of 'Keynesian' demand gaps and 'neoclassical' wage gaps as explanations of unemployment gave way to more sophisticated theories of shock persistence and hysteresis as a consequence of physical capital shortage, of insider/outsider-wage determination and of declining search intensity of long-term unemployed persons.

⁸ See *DIW, IfW [1994], Table 1*. Note, however, that the methodology of these polls does not ensure their being representative in a strict statistical sense.

⁹ A by now classical example of the first type of research is *Bruno, Sachs [1985]*; major examples of the second type - among them the seminal papers *Blanchard, Summers [1986]* and *Lindbeck, Snower [1986]* - are reprinted in *Cross [ed., 1988]* and *Lindbeck, Snower [1988]*.

On the other hand, no more fundamental reason in terms of specific long-term trends of economic growth and structural change were sought for to understand the observed facts. In our view, this rather narrow focus is most unfortunate because it may stand in the way of a more comprehensive assessment of the deeper challenge that is associated with the observed changes of labour market regimes, say, from the 1950s and 1960s to the 1970s and 1980s (and beyond). In the following subsections, we summarize how such an assessment could plausibly look like.

(a) The emergence of unemployment

Historically, the perception of unemployment as a well-defined economic phenomenon and as a social and political problem is closely linked to the twin process of industrialization and urbanisation. Although it is difficult to identify precise periods of time and geographical places where unemployment first emerged and was understood in the modern sense of the term as *involuntary idleness*, it is probably a good guess to locate its birth in the course of the 19th century in the leading industrializing countries, i.e. in Britain and the United States, and somewhat later in Germany and its western neighbours France, Belgium, and the Netherlands. A well-known historical case study on the matter (Keyssar [1986]) comes to the uncontroversial conclusion¹⁰ that in the relevant region - the state of Massachusetts - unemployment in the modern sense became a fact of social life in the course of rapid urban and industrial growth that took place between, say, the first and the last quarter of the 19th century. It is worth recalling the reason for the emergence of unemployment in the words of a prominent economic and social historian:

At the beginning of the nineteenth century, industrial work ... was combined in close geographic and institutional proximity to domestic work and agriculture. It tended to be done in small household-based workshops or put out to farmers. Thus, when industrial activity was slack, industrial workers simply shifted to farm tasks or household maintenance; when demand picked up, they shifted back to industrial activity. In the course of the century, however, work moved off the farms and out of the household into factories that were separated socially, geographically, and institutionally. When factory work fell off, workers could not therefore easily shift. They were without a job and finding something else to do involved a distinct effort, a recognizable period of time and social space. That space came to be referred to as unemployment. (Piore [1987], p. 1839)

Hence the emergence of unemployment in the modern sense can be traced back to a specific form of structural change that can best be described in a two-sector model of an economy

¹⁰ See the approving review by Piore [1987].

consisting of a primary sector ('agriculture') and a secondary sector ('manufacturing'). In this model of stylized 'industrialization', an (exogenous) technical progress leads to a sharp rise of capital intensity, of labour productivity and of the wage in the secondary sector. Due to the specific characteristics of production in that sector, however, the wage rise goes along with a sharp rise of the cost of intersectoral mobility that subsequently consist of all pecuniary, social and psychic costs of geographically moving and personally adjusting from a rural to a fast growing urban environment. It is the rise of mobility cost that tends to make the reallocation of labour between the two sectors largely irreversible, a form of definite one-way migration. While the prospect of a permanently and substantially higher wage in manufacturing employment makes it profitable for workers to incur the cost of moving from agriculture to manufacturing, a wave of lay-offs in manufacturing does not lead to a symmetric movement back to agriculture: in an era of a long-term trend of 'industrialization', the wave will by definition be a cyclical one so that the workers can expect to be back in (comparatively well-paid) manufacturing employment within a relatively short period of time, which they can survive in a state of 'waiting', i.e., of genuine unemployment.

Analytically, one may thus say that unemployment in the modern sense of the term presupposes the existence of at least one sector that pays relatively high wages and that is reasonably well separated from the rest of the economy by a barrier of high costs of intersectoral mobility. As long as this sector does not exist, there can only be an 'underutilization' of labour in the sense that the workers would switch to different, better-paid jobs if these were available. Even this idea of 'underutilization' has its narrow limits: it is only sensible if the alternative jobs can realistically be taken to define the standard of normal employment and the taking of inferior jobs as a temporary deviation; if the 'underutilization' is permanent, however, it becomes a mere euphemistic description of (relative) poverty. In fact, with a historical focus on the labour market, one may describe the very process of industrialization in the 19th century as the transformation of the economy from a state of 'poverty-cum-full employment' into a state of 'prosperity-cum-unemployment', with unemployment here meaning temporary involuntary idleness.¹¹

¹¹ In this respect, there is a strong parallel in the emergence of unemployment between 19th-century Europe and America on the one side and the Third World today on the other: in developing countries, one can define a sensible concept of unemployment only for highly urbanized regions, where there is no easy substitution between agricultural and industrial work. Typically, migrants from rural areas recognize the prospect of well-paid work in urban centres and thus crowd in the slums of fast growing cities, 'waiting' for the opportunity of finding a relatively well-paid industrial job. Qualitatively, this is the same

For Germany - as for all other then industrializing countries - most of the 19th century remains a statistical blank space with respect to the actual extent of unemployment in the modern sense. Only for the time from 1887, some information is available, namely figures on unemployment among union members. They indicate that, by today's standards, full employment prevailed in Germany at least until World War I, with an average unemployment rate of union members for 1887-1913 of roughly 2.4 per cent and brief cyclical peaks in two recessions (1892, 1901) of 6-7 percent.¹² In terms of a 'modern' definition as the share of unemployed persons in the total labour force, these numbers probably mean an average unemployment rate of not much more than 1 percent and recession peaks of 3-4 percent, which comes close to the conditions of the 1960s, the decade generally regarded as the 'golden age of full employment'.¹³ Hence, while unemployment became a category separable

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process that has been going on in 19th-century Europe and America; however, due to its quantitative dynamics - notably the extremely fast and apparently self-reinforcing pattern of migration from rural to urban areas - the process seems to lead on average to somewhat higher equilibrium unemployment rates in the Third World today than was the case in 19th-century Europe and America. - All this is highly conjectural because the relevant statistical information is very poor indeed. For an empirical survey of unemployment in developing countries, see Turnham, Eröcal [1990].

- ¹² Own calculation with data from Mitchell [1981], p. 175, whose figures are based for 1903-13 on official union statistics published by the Imperial Statistical Office in its annual yearbooks (*Statistisches Reichsamt [various issues]*), and for 1887-1903 on estimates by Kuczynski [1962, p. 260; 1967, p. 315], who also uses union records as the basis for his calculations. See also Hentschel [1983], p. 104 and Faust [1982], p. 257.
- ¹³ As proxies for the economy-wide unemployment rate, the figures on unemployment among union members are likely to reflect two biases that pull in opposite directions. The upward bias: union membership was almost exclusively restricted to the industrial workforce, which was that part of the labour force with the highest incidence of unemployment in the modern sense (as argued in the text above). The downward bias: within the industrial workforce, union membership contained a disproportionately high share of skilled labour which has usually a lower rate of unemployment than unskilled labour. Given the still large share of agricultural employment in the German economy at the outset of the First World War (38 percent in 1913 according to the national accounts provided by Hoffmann [1965, p.205]), it is reasonable to assume that the upward bias dominates the downward bias. An estimate by Maddison [1991, Table C 6, p. 260] of unemployment as a share of the total labour force for Germany in the 1920s (see Table 1 of this paper's appendix) indicates that the unemployment rate of union members usually overstates that of the total labour force by slightly more than 100 percent. If this is

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from poverty in the course of industrialization of the German economy, it remained for the time being a purely *cyclical* phenomenon, with no traces of persistence over longer periods.¹⁴

Why was this so? From a bird's-eye view, a combination of two reasons stands out. First, there were only very modest systems of unemployment insurance which were run by various unions for their members and partly subsidized on a rather small scale by some local governments. While they provided a bare minimum of short-term emergency aid to alleviate the effects of unemployment on living standards, they did certainly not lay the economic ground for any extended phases of job search. Hence, quickly finding a job after having been laid off remained of existential importance for the vast majority of workers.¹⁵ Second, the forces of structural change as driven by the income elasticities of product demand, technical progress and newly emerging patterns of international trade were pulled in a direction which favoured a smooth labour market adjustment. Notably the fast trend growth of employment in industry at the expense of (low-productivity) agriculture and, within industry, of high-productivity branches like iron and steel, metal manufacturing, electrical engineering and the chemical industry ensured that structural change proceeded 'voluntarily': workers - skilled and unskilled ones - who were forced to change jobs via a spell of unemployment were likely to find rather soon a better paid alternative somewhere else in the economy. In this respect,

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assumed to hold for imperial times as well, the relevant average unemployment rate was roughly 1 percent.

¹⁴ Despite the statistical lacunae, casual historical evidence indicates that this statement is also true for the two decades before 1887. After the 'Gründerzeitboom' following German unification, there was a sharp business downturn in the mid-1870s, which led to a hefty increase of emigration and, according to one very crude estimate, to a rise of the unemployment rate up to 20 per cent (*Mottek [1966], p. 102*). However, time series data on unemployment of selected groups of union members (notably printers) indicates that, by 1880, unemployment had apparently reached more or less the level that is known from the time after 1887; other indicators point into the same direction. For details, See *Kuczynski [1962], pp. 262-3*.

¹⁵ On union-run unemployment insurance schemes in imperial times, see *Risch [1983], pp. 176-196*. Although the schemes varied greatly between different unions with respect to contribution and benefit rules, they were all very modest by modern standards. Official union statistics show that, in the decade 1904-13, roughly one half of all unemployed union members received benefits; in the same period, the average duration of a completed spell of unemployment was about 17 days, with very little variation over time. (Own calculations with data from *Statistisches Reichsamt, various issues*).

industrial growth led to a potential *revaluation* of the labour force that could be transformed into wage increases by a competitive labour demand pull, even without resort to collective bargaining which still played only a minor role in wage determination.

(b) Collective bargaining and unemployment insurance

The interwar-period brought two important institutional innovations: collective wage bargaining and compulsory unemployment insurance. The decisive 'displacement effect' from a basically free labour market to a collective bargaining system on a broad scale took place with the First World War, but the organisational roots on the union and the employers' side can be traced back to the 1890s, partly even back to the 1860s.¹⁶ During the first half of the 1920s, the legal framework and the 'culture' of today's industry-based bargaining took shape. Although most unions were still crafts-based, major branches of industry adopted a factual industry-organisation of the labour side in bargaining. E.g., metal workers, who at times made up 30 percent of all union members in the Weimar republic, were organized in the 'German Metal Workers Union' (the predecessor of the IG Metall and already at the time the largest single industrial union in the world), which was founded in 1891 as an industrial union and carried out its collective bargaining consistently on an industrial basis. The backbone of this union (as of all others) were skilled workers, who made up about 2/3 of the membership, but actual negotiations covered all skill groups (including unskilled and semi-skilled workers). Formally, there were still many different crafts associations or unions within any industry, but they were usually united under special cartel arrangements (e.g. in the branches related to metal manufacturing the so-called 'Metallkartell') which delegated their right to conclude collective agreements to the relevant 'leading' industrial union (e.g., the German Metal Workers Union).¹⁷ Hence the eventual formal move from crafts-based to industry-based unions, which took place after World War II, was not anymore of fundamental economic importance as a step towards more encompassing organization of collective bargaining in the sense popularized by Olson [1965, 1982].¹⁸

¹⁶ On the development of collective bargaining in imperial times, see Moses [1982], Vol. I.

¹⁷ On the structure of organisation of metal workers, see Hartwich [1967], pp. 65-72.

¹⁸ See Paqué [1994], pp. 11-26 for a detailed discussion of the 'Olson-thesis' that there was a deep institutional break concerning the influence of interest groups between the German economy of the 1920s and that of the 1950s. As to collective bargaining, the only major institutional innovation after World War II was the removal of compulsory arbitration as the last resort of solving a bargaining conflict, which was part of the Weimar labour

A state-run compulsory unemployment insurance was introduced by law in 1927. Although the structure of benefits has been repeatedly adjusted in detail, the basic construction principles of this insurance have remained unchanged until today (disregarding, of course, the Nazi period): on the contribution side, levying a payroll tax to be financed half by employer and half by the employee, with the government standing ready as a lender of last resort in case of high deficits; on the benefit side, payment of a specified share of the terminal net wage - depending above all on the person's family status, but usually well above 50 percent - for a limited period - at the time of its introduction 26 weeks, with the option of receiving support beyond that on a means-tested basis according to standard welfare criteria.¹⁹

In view of the persistent growth of industrial employment that had been going on for some decades, these institutional innovations appeared to be well justified on economic grounds. With the benefit of hindsight, an economic case for their introduction at the time could read like the following paragraphs.

- [i] *Collective bargaining.* Broadly speaking, theory and empirical evidence suggest that German-style collective bargaining involves two departures from wage setting in a free labour market, namely a greater monopolistic rent due to cartelization (the 'union wage effect') and a greater market power of employed insiders vis-à-vis unemployed outsiders (the 'group membership effect').²⁰ The union wage effect involves social costs in terms of lower employment and, ceteris paribus, higher unemployment levels compared to a free labour market. In turn, the group membership effect may involve benefits or costs in terms of employment because it tends to increase the persistence of (non-anticipated) exogenous shocks to the labour

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market constitution (and, in fact, used quite often in practice). Whether the relatively bad industrial relations of the 1920s were the cause or the consequence of the poor record of compulsory arbitrations remains a matter of controversy which deserves more economic research. For a detailed historical account of the system's working, see Bähr [1989].

¹⁹ For details on the system at the time of its introduction and on adjustments in later decades, see Hentschel [1983], pp. 111-118, 198-201.

²⁰ The first effect receives its theoretical rationale from standard monopoly union models (see Farber [1986], Oswald [1986]), the second one from insider/outsider-models (see i.a. Blanchard, Summers [1986], Lindbeck, Snower [1986]).

market, which may be positive or negative.²¹ In view of the four-decade long experience of fast growth of industrial employment at the expense of agriculture (i.e. the 'voluntary' structural change from a low- to a high-wage sector), an economic observer towards the end of imperial times (equipped with modern theory!) might have reasonably argued in favour of introducing collective bargaining: 'anticipating' a continuation of the pattern observed in the past, he/she would have assumed that the future would bring again a positive stochastic trend (i.e. a random walk with upward drift)²² of industrial employment whose labour market effect would be made persistent precisely via collective bargaining which transformed outsiders (notably former agricultural workers) into insiders. Given the observed size of the positive shocks in the past, this type of benefit may well have been conceived as overcompensating the employment cost of a union monopoly rent.

- [ii] *Unemployment insurance.* Similarly, a more generous provision of unemployment benefits may have been viewed as a reasonable means to bring the length and breadth of average job search closer to a social optimum: under the anticipated circumstances of long-term structural change from (low-wage) agriculture to (high-wage) manufacturing, but cyclical fluctuations of industrial employment, a more thorough and careful evaluation of emerging job options by temporarily unemployed persons was not unlikely to bring a social benefit in terms of a greater efficiency of labour reallocations that would outweigh the cost of longer average unemployment spells.

Up to the present, there have been basically three distinct historical testing periods for these two major pillars of the German labour market institutions, the time of the Weimar republic (excluding the years of Nazi rule), the post-war period up to 1973 and the last two decades

²¹ Note that we do not consider the 'standard' benefits of unionism in terms of a stronger voice of workers on the plant level and in the political process that may lead to higher productivity on the job and lower labour turnover (see *Freeman, Medoff [1984]* applying ideas on voice vs. exit by *Hirschman [1970]* to American unionism). For our case, these benefits are irrelevant because we do not see a plausible reason why they should have varied greatly over time (as we argue the costs have) between, say, the early 1920s and today.

²² Univariate time series tests for the period 1875-1913 show that the log of industrial employment appears to follow a stochastic trend of order one.

since the threshold year 1973. For the analysis of the link between long-term trends of structural change and equilibrium unemployment, the Weimar period is unfortunately too short and too much overlapped by violent cyclical fluctuations of economic activity, which had their roots outside the labour market: the relevant time span between the stabilization programme in late 1923 (following four years of inflationary chaos at full employment) and the onset of the Great Depression in 1929 covers just one business cycle with a very sharp rise and fall of industrial production and employment. If anything, the statistics point towards an equilibrium unemployment rate that looks higher than in imperial times: in the peak boom year 1928, 8.4 percent of all union members and roughly 3.8 percent of the labour force were still unemployed (see Table 1 of the appendix). However, it remains totally unclear to which rate of unemployment the economy would have converged in the longer run, had there not been the Great Depression and the subsequent rise of the Nazi command economy. Hence, while the labour market in Weimar times raises a host of interesting historical issues,²³ it does hardly add much insight to the questions at hand.

(c) The 'good-weather' period 1948-1973

The two and a half decades that followed the West German currency reform of 1948 brought a somewhat late, but almost perfect vindication of the positive economic scenario that provides the economic rationale for the institutional innovations of the 1920s. Due to the post-war influx of roughly ten million ethnic German refugees from Eastern Europe, the German economy started off with an unemployment rate of 8-10 percent in 1949/50; within ten years, however, the rate came down to 1 percent (and below) where it stayed until 1973, with just one very brief interruption in the recession year 1967 when it temporarily peaked at an annual average of around 2(!) percent.

In terms of structural change, the first half of the period can be regarded as a straight continuation and a final conclusion of the industrial growth that had been the hallmark of imperial times. With some minor qualifications, all of what has been said above about 'voluntary' sectoral shifts of workers in imperial times equally applies to the 1950s. Again, income elasticities of product demand, technical progress and above all a newly emerging

²³ There is in particular the important hypothesis put forward by *Borchardt [1979]* and *James [1986]* and contested by *Balderston [1993]* that the Weimar economy suffered from some inherent weaknesses (including uncooperative unions) which damaged its international competitiveness and made it particularly vulnerable to severe cyclical shocks like the subsequent Great Depression. For an evaluation of this controversy with a view to the labour market, see *Paqué [1994a]*, pp. 39-52.

pattern of international trade - this time driven by the fast growing intra-industrial division of labour within the nascent European Community - allowed a further forceful expansion of employment in virtually all branches of manufacturing, with high-productivity investment goods branches like mechanical and electrical engineering, metal manufacturing and most of all the production of vehicles standing out in terms of output and employment expansion. Again, agricultural workers - in 1950 still roughly one quarter of the total labour force - stood ready to accept relatively well-paid industrial jobs on offer, and so did the unemployed, many of them highly mobile refugees, who were crowded in the agrarian north of the country but, if required, quite easily moved to the growing industrial heartlands of western and southern Germany.²⁴

In these circumstances of fast industrial expansion, the institutions of collective bargaining and unemployment insurance were likely to have the positive effects described above. There can hardly be any doubt that the growth performance repeatedly surpassed prior expectations so that former outsiders could be enfranchised and subsequently exert a moderating influence on wage growth;²⁵ collective bargaining thus helped to move the labour market to a state of 'overfull employment' which might have been beyond reach under free market conditions. Besides, the unemployment insurance system is likely to have worked smoothly in the envisaged sense of allowing an efficient reallocation of labour from low- to high-productivity uses, simply because the incentive for overlong search activity remained small in view of the emerging high-wage job options.

The second half of the period- from the early 1960s to 1973 - 'conserved' the state of the labour market reached by the late 1950s. With industrial employment staying roughly constant and the domestic labour force shrinking due to demographic reasons, the decline of agricultural employment could rather easily be accommodated. Even more than that: given the persistent state of overfull employment, foreign workers took over the role of a supplementary labour force to fill industrial job slots, now mainly in the lower qualification segments which were left open by upwardly mobile domestic workers. Given the large and cyclically variable wage drift as well as the elasticity of the labour force gained through the cyclical 'buffer stock' of foreign workers, the German labour market of the 1960s had

²⁴ For a detailed account of structural change in the West German economy of the 1950s, see *Giersch, Paqué, Schmieding [1992], Section 3.A. and Paqué [1994a], pp. 31-33* with details on the intra-industry pattern of growth.

²⁵ On the link between non-anticipated positive shocks and the actual decline of real unit labour costs in the 1950s, see *Paqué [1994a], pp. 34-7.*

probably the maximum of flexibility that can realistically be achieved within the constraints of a collective bargaining system.²⁶

(d) The 'bad weather' period since the mid-1970s

In the last two decades, the state of the western German labour market has changed decisively and lastingly to the worse: from an average share of unemployment in the total labour force of 0.9 per cent in 1960-74 to 3.4 per cent in 1975-81 and 5.4 percent in 1982-93, and with no realistic prospect of any significant improvement in the years to come. At no time in the last twelve years did the unemployment rate fall below 4 percent, not even towards the end of the very powerful unification boom in 1991, when it reached 4.2 per cent - way above the boom time levels of the 1960s, though still relatively low by the contemporaneous standards of most other European countries.²⁷ Historically, the last two decades are by far the longest period of unemployment ever experienced in Germany; if the short and erratic record of the 1920s is excluded from consideration, they are in fact the *only* period in German history of persistent non-cyclical unemployment.

Much has been written about the actual reasons for the stepwise rise of unemployment and its subsequent persistence.²⁸ There is now general agreement that, after two major recessions that followed severe supply-side shocks, the labour markets in most western European countries *dualized*: part of the previously laid-off labour force soon found its way back into employment, a smaller part remained as a kind of sediment of long-term unemployment that lacked the (potential) productivity to be re-integrated at the then prevailing wage level. Matters of controversy were the deeper reasons for the dualization: some identified wage setting as the culprit, because it was insider-oriented on the part of the unions and/or efficiency wage-oriented on the side of the employers, others regarded a skill atrophy or

²⁶ For a more detailed account of the West German labour market in the 1960s, see *Giersch, Paqué, Schmieding* [1992], pp. 126-39. Note that the period 1960-73 has a major unsolved puzzle to offer: while the long persistence of the state of overfull employment may still be explained with positive 'ratchet-effects' within insider/outsider models, the sudden and extremely sharp wage increases in and after 1970 remain a mystery, which no econom(etr)ic model could so far account for in a convincing fashion.

²⁷ Note, however, that most of these countries had higher unemployment rates than Germany in the 1960s as well so that the extent of the *relative worsening* over time is in fact quite similar (see Table 1 in the appendix).

²⁸ See footnote 9 above.

decline of motivation of the outsiders in the course of the unemployment spell as the decisive factor.²⁹

At least for the case of West Germany, both theories of dualization run into some difficulties. The insider- and efficiency wage setting does not square nicely with the fact that, by historical standards, the decade since 1983 has *not* been a period either of poor employment growth or one of a rise of labour costs: in the period 1983-93, employment grew at an annual rate of 1 per cent, faster than at any time since the 1950s, creating a total of almost 3 million new jobs and thus allowing the rapid integration of the 'baby-boom' generation and of many immigrants from eastern Europe; and aggregate real labour costs (however measured) declined slowly and continuously from 1983 until the onset of the forceful unification boom in 1990, just as they did for the last time in the 1950s.³⁰ In turn, skill atrophy (or the like) in the course of the unemployment spell raises the question why it could not be observed in a period with a similar labour market disequilibrium: while long-term unemployment has been undoubtedly high since the mid-1980s, it had been even higher in the early 1950s, but at that time, it did not lead to a permanent dualization of the labour market.³¹ Apparently, there is something missing in both theories which helps to distinguish between 'good' and 'bad' outsiders.

Once again, the key to the puzzle may lie in the trend change of industrial employment: in the first half of the last two decades (1973-83), industrial employment shrank - with two million industrial jobs lost, in the second half (1983-93), it stagnated, though its share in the economy-wide total continued to decline; in turn, employment in trade and services grew at a fairly constant trend rate all throughout the two decades. Hence, while the brunt of the job losses in the first half hit industrial workers disproportionately, the subsequent employment growth took place exclusively in service sectors. If industry is on average the sector that pays the highest 'premium' on physical work, this structural change meant a *devaluation* of the

²⁹ The former standpoint is taken, e.g., by Lindbeck [1993], the latter by Layard, Nickell, Jackman [1991]. Note, however, that both sides would certainly concede that there is some truth in both views.

³⁰ See Paqué [mimeo], pp. 12-33.

³¹ In September 1953, when the only special survey on long-term unemployment in the early post-war period was held in West Germany, 32.3 percent of all jobless men and 22.4 per cent of all jobless women were unemployed for at least two years; since the mid-1980s, the corresponding figures are 15-18 percent for men and 14-16 percent for women. See Paqué [mimeo], p. 66.

market value of unskilled labour and of everything in workers' skills that is sector-specific to industry. If, in addition, there was a trend towards 'servicification' in industry itself - meaning that physical routine work is replaced by machine activity, which is supervised and serviced by a smaller number of better-skilled workers - then the respective devaluation becomes even more dramatic. Data on changes of employment disaggregated by skill levels and branches of economic activity strongly support the view that structural change in the last two decades has gone in these directions.³²

Given these trends, there are likely to be 'good' outsiders and 'bad' outsiders. The good ones are typically those who have an up-to-date vocational qualification or training, preferably in a professional service job, who are newcomers (and thus do not yet carry the 'scars' of industrial work), and who can be expected to adjust flexibly and with high motivation to the new working environment. Obviously, young labour market entrants - notably the many who have successfully finished an apprenticeship of two to four years - are at a clear advantage in these respects. Also, the immigrants of the late 1980s, who mainly came from eastern Europe, were still relatively good candidates. In turn, former industrial workers are at a competitive disadvantage, in particular when they are older or physically handicapped or have no formal qualification. In addition, they tend to have higher reservation wages because they held a rather well-paid industrial job before and because they are granted more generous support by the unemployment insurance, which makes notably the duration of benefit payments depend on the accumulated length of all prior spells of employment.³³

By and large, the structural statistics of unemployment in West Germany over the last two decades strongly confirm this picture: as far as the required data is available, it shows for the relevant period that unemployment, notably long-term unemployment, has been increasingly concentrated i.a. on unskilled (versus skilled) labour, on wage workers (versus salaried employees) and on persons who are older or physically handicapped.³⁴ In fact, by the early 1990s, about 80 percent of all long-term unemployed persons had an age above 55, a physical handicap and/or no vocational qualification.³⁵

³² See Paqué [1994b], pp. 197-8 (notably Tab. 45).

³³ See below in Section 3.

³⁴ See for statistical details Paqué [1994b], pp. 204-13.

³⁵ See Paqué [mimeo], P. 143a, Table 3.16 based on unpublished data provided by the Bundesanstalt für Arbeit.

In general, these trends in the labour market did apparently *not* lead to a corresponding wage differentiation that might have eased the re-integration of the disadvantaged outsiders: as far as there is wage data disaggregated by the relevant structural characteristics, it indicates a high degree of structural rigidity over the last two decades. In particular, there has not been any widening of the wage difference between high-skill and low-skill workers as it could be observed in the United States.³⁶ The reason for this high degree of structural wage rigidity is very likely to be found in collective bargaining, combined with a rather generous system of unemployment benefits. With structural change drastically devaluing the human capital of one part of the economy's outsiders, there is little incentive for the bargaining cartel to sacrifice insider interests and allow for a substantial wage differentiation to the disadvantage of those insiders with similar characteristics as the relevant outsiders (e.g. unskilled and/or older workers). This is all the more so because the unemployment insurance system is constructed so-as to allow long periods of low-intensity job search.³⁷

(e) Will the 'weather' improve again?

If one searches for the deeper 'exogenous' reasons for the drastic devaluation of unskilled labour in West Germany and other industrial countries over the last two decades, two major forces come to mind: *globalization* and *technological progress*. The former means that a growing group of newly industrialized and developing countries reached a level of industrialization, technical standards and labour skills that made them successfully compete in the markets for labour- and (physical) capital-intensive production and increasingly also in the lower market segments of human-capital intensive goods. The latter means that technological progress in industry has been labour-saving in the sense that it remained persistently profitable to replace manpower by modern (physical) capital equipment. Which of the two forces dominated is a matter of dispute,³⁸ which appears to be most relevant for some major issues of trade policy vis-à-vis the Third World, but much less so for a speculative assessment of future trends in the labour market. After all, the speed and the

³⁶ See, on basis of different data sets, *OECD [1993]* for the 1980s, and *Paqué [1994b]*, p. 204-214 for the last two decades.

³⁷ For crucial details of the system, see Section 3 below.

³⁸ See the antagonistic views of *Wood [1994]*, who regards the increasing North/South-trade as decisive, and *Freeman [1994]* (as quoted in *The Economist of April 2, 1994*), who holds that the driving force must have been technological change because, in the western countries, the import share of developing and newly industrialized countries is still too small to explain any dramatic effect on the labour market.

shape of technological progress is itself to a large extent the (endogenous) outcome of a competitive race on all levels - encompassing growing intra-industry trade within and between industrial countries as well as growing inter-industry trade between industrial and developing countries. Hence the process of globalization in a broader sense - meaning the world-wide trend towards the integration of product and service markets, which in turn is fuelled by the (technology-induced) decline of transportation and communication costs - may well be the right driving force to be identified behind the secular changes in virtually all labour markets of western industrial countries.

For the future, it is hard to imagine a change or a significant slowdown of this trend towards globalization in the broadest sense, not least because major population giants of the Third World - notably China and India - are now embarking on the way that a few much smaller Asian countries have gone through during the last three decades. Hence, if anything, the process is likely to speed up and will further accentuate structural change in the rich countries: industrial employment will continue to shrink notably in terms of low-skill jobs, service employment - in the upper 'professional' segment and in the lower 'low-productivity' segment - will tend to grow.³⁹ For former industrial workers, the upper segment will in general be beyond reach and the lower segment will be unattractive.

In this sense, the long historical period of 'voluntary' structural change, which involved the growth of a sector with high wages of unskilled labour and thus an almost automatic trend towards more equality of incomes, may have come to an end some time by the 1970s. For a country like Germany this has quite dramatic consequences for the viability of its labour market institutions: while there is a permanent improvement of the quality of its labour force through a 'generational exchange' - older, on average less skilled workers leaving and younger, on average better skilled ones entering the labour force - there seems to be no safeguard in the system to make sure that this 'natural' adjustment proceeds fast enough to avoid extended phases of high search (or better: structural) unemployment.

For this kind of external conditions, collective bargaining and the welfare state German style do not appear to be well equipped: as the viability of a pay-as-you-go system of old age insurance crucially depends on whether the population is growing or shrinking, so the

³⁹ There is also an 'industry-close' middle segment of services like transportation and wholesale trade, which is similar to industry in terms of the skill intensity of work and the level of wages. Unfortunately, it is also that part of the service sector that tends to shrink or at least stagnate.

viability of 'egalitarian' collective bargaining combined with generous welfare state provisions crucially depends on whether structural change has by itself egalitarian implications or not. If not - and provided the problem of chronic unemployment is to be seriously tackled - some major reforms of the 'German model' should be unavoidable.

3. Some Guidelines for Reform of the 'German Model'

From the analysis above, it follows that a return to full employment in (western) Germany as probably in many countries of the European Union would require a quite substantial reduction of the unit labour cost that firms have to incur when hiring formerly unemployed and a fortiori long-term unemployed persons. In principle, there are two non-exclusive ways to approach this intermediate aim: (a) raising the potential labour productivity and (b) lowering the prospective wage of the idle workforce.

(a) Raising labour productivity

Once there is persistent unemployment, a policy of improving the potential productivity of jobless persons is basically constrained to the use of two instruments: (re-)qualification measures and work-creation schemes. Since the early 1980s, both instruments have been used quite extensively in western Germany. In the most recent seven-year period 1987-93, an annual average of 170,000 unemployed persons participated in measures of (re)qualification and almost 100,000 in work-creation schemes so that, arithmetically, almost every seventh unemployed person at any point in time was matched by one person in any of these programmes.⁴⁰

It is extremely difficult to evaluate these programmes in terms of their costs and benefits because the lack of appropriate control groups prohibits any precise estimate of by how much the likelihood of an unemployed person to find a job is increased through the programme participation. So far, the available empirical evidence is far from unambiguous, but it does point in the direction that the programmes improve the re-integration chances, though

⁴⁰ Own calculations based on data published in *Bundesanstalt für Arbeit [various issues]*. After German unification, both types of programmes were used even more extensively in the eastern part of the country where, in the peak year 1992, more than 800,000 persons were either participating in (re)qualification or in work-creation schemes while 1.2 million were unemployed.

possibly only by a relatively small margin.⁴¹ Whether this justifies the cost of publicly organizing or subsidizing the private organisation of the programmes - on top of paying unemployment benefits - remains a completely open question.

In any case, the programmes are by construction no good candidates to solve a large-scale unemployment problem resulting from structural change: usually, they can only provide new qualifications 'in the neighbourhood' of old skills so that a large part of the structural deficiencies of long-term unemployed persons - complete lack of skills and formal education, physical handicaps and and above all age - remains untouched. In a way, it is precisely these deficiencies which limit the scope for (re)qualification in the first place so that labour market programmes remain typically focused on the more flexible part of an economy's stock of underutilized manpower and human capital. In fact, the basic rationale of (re)qualification has always been to smooth the intra-industry adjustment of workers from one job to another - a kind of skill updating - rather than to open the door for a re-integration into the labour market.⁴²

(b) Lowering the wage

In a country like Germany where wage setting is dominated by collective bargaining, the change in the wage level and structure that would be required to achieve a permanent reduction of unemployment should ideally be initiated by unions and employers associations at the bargaining table. As argued above, however, the experience of the last two decades has shown that the dominance of insider interests generally prevents the long-term victims of structural change from having any significant influence on the bargaining outcome. Given the group rationality of the behaviour both of unions and of employers' associations in terms of insider/outsider- and efficiency wage considerations, there is no obvious way how the

⁴¹ See Hofbauer; Dadzio [1987] and Kasperek, Koop [1991] on (re)qualification measures and Schmid, Krömmelbein, Klems, Gaß [1993] on work-creation schemes.

⁴² This is also the author's interpretation of the Swedish labour market programmes: these programmes were successful as long as there still was enough job creation in industry due above all to the hefty two-step devaluations in the early 1980s, a classical case of beggary-neighbour demand policy, which cut Sweden off from the continental recession-cum-industrial shrinkage. However, with the unemployment rate now being in the range of 8-9 percent and no macroeconomic 'emergency exit' available, the labour market programmes appear to be hopelessly overburdened as a prime policy instrument to restore full employment. For a similar view, see Lindbeck [*mimeo*].

outcome could be affected by macroeconomic policy.⁴³ Therefore, apart from moral suasion which also has obvious limits⁴⁴, the only major policy options available are changes in the institutional background against which collective bargaining operates.

In essence, this background consists of two major elements, the labour market constitution and the unemployment benefit system. As to the *labour market constitution*, a necessary step would have to be the removal of all legal or political obstacles against the working of outsider competition vis-à-vis the collective bargaining cartel. In particular, this would mean that the option of declaring a collective agreement 'generally binding' should once and for all be closed to the government - at best by simply repealing the relevant legal rule (§ 5 *Tarifvertragsgesetz*). This is a necessary condition to save future outsider competition from being strangled by government action on behalf of insider interests; however, it is by no means a sufficient condition to create this competition as some construction principles of the welfare state stand in its way (see below). At present, the rule is used very seldom, apparently because outsider competition is no powerful threat to collective agreements anyway.

43 Some early proponents of the hysteresis view of European unemployment made at the time a strong plea for engineering a non-anticipated macroeconomic demand expansion to 'enfranchise' the outsiders (see, i.a., *Blinder [1988]*). However, if our interpretation is correct that the remaining 'hard core' of non-cyclical unemployment is the long-term consequence of structural change, not just of cyclical bad luck, such an expansion would be useless, if not counterproductive.

44 In Germany, moral suasion has a long tradition going back to the so-called calls for moderation regularly issued by the first minister of economics Ludwig Erhard in the 1950s and later institutionalized in the 'concerted action' of government, employers and unions in the later 1960s and the early 1970s. At its best, the concerted action succeeded in tying up package deals of short-run macroeconomic policy shifts and wage moderation which helped for stabilization purposes; the boon to the unions of participating in the concerted action consisted of representing themselves as an essential, reliable and responsible (political) partner in a successful macroeconomic operation. This benefit could be expected to accrue in the short run - usually within no more than one phase of the business cycle - and to be politically well visible in a general public that was very open to ideas of demand management. (For details, see *Giersch, Paqué, Schmieding [1992]*, pp. 139-54.) In today's fight against long-term unemployment, there are no such benefits for the unions: the fruits of the fight concern a fringe group of society and they will accrue only after a prolonged adjustment process which tends to blur the link between the unions' goodwill and the outcome in the eyes of public. Hence the incentives for the union leadership to sacrifice membership interests for the uncertain and remote political benefit of a 'compact for wage flexibility and employment' are likely to be minimal.

In any case, the core of the reform would have to tackle the *unemployment benefit system*. To understand the practice and consequences of the current system and thus the starting-point for reform, some institutional details are indispensable; they concern above all replacement ratios, replacement periods and rules of job acceptability.

At present, the system provides a so-called unemployment money (*Arbeitslosengeld*) on a contribution-financed insurance basis as 60 percent of the terminal net wage (67 percent for persons with at least one child) for roughly 1-2.3 years, depending on age and length of prior employment.⁴⁵ When the unemployment money phases out, it is replaced by the so-called unemployment aid (*Arbeitslosenhilfe*) to be granted for the remaining - possibly indefinite - spell of unemployment on a means-tested basis as 53 percent of the terminal net wage (57 percent to persons with at least one child),⁴⁶ with a lower plafond implicitly defined by standard supplementary welfare payments (*Sozialhilfe*) granted also on a means-tested basis to persons not registered as unemployed (whether they work or not). In the seven-year period 1987-93, an annual average of one third of all unemployment benefit recipients received unemployment aid, the other two thirds unemployment money.⁴⁷ Note that, during the time of unemployment, any recipient of unemployment support ('money' or 'aid') remains a member of the public system of health, pension and accident insurance, provided he/she was a member before (which is usually the case); the person's contributions to the system are in part made by the unemployment insurance, in part simply discontinued, with the benefits remaining the same as in his/her last spell of employment.⁴⁸

The legal framework for the rules on 'job acceptability' (*Zumutbarkeit*) is provided in a special 'job acceptability order' (*Zumutbarkeits-Anordnung*), which is of great practical

⁴⁵ These replacement ratios apply since the beginning of this year. Until 1993, the relevant ratios were 63 and 68 percent respectively. Special rules apply to persons with very short periods of prior employment. For details, see *Arbeitsförderungsgesetz (AFG)*, § 106.

⁴⁶ For details, see *Arbeitsförderungsgesetz (AFG)*, § 136. Until 1993, the relevant replacement ratios were 56 and 58 percent respectively

⁴⁷ Own calculations based on data published in *Bundesanstalt für Arbeit [various issues]*. By comparison, the numbers for the low-unemployment seven-year period 1967-73 are 14 percent unemployment aid and 86 percent unemployment money, which at that time was still more strictly limited to one year.

⁴⁸ See *Arbeitsförderungsgesetz (AFG)*, §§ 155-166 for the (very complicated) details.

importance. In particular, it stipulates⁴⁹ that a job need not be accepted by an unemployed person

- if the wage is (i) below the level fixed in collective agreements or commonly practised in the relevant region for this type of work, or (ii) below the level of the unemployment aid he/she receives, or (iii) below the level of the unemployment money he/she receives unless this is unusually high by the standard of the relevant region in which case this standard applies, or
- if taking the job would significantly worsen his/her chances to return to a job identical or similar to the one he/she held before becoming unemployed, or
- if the level of qualification required for the job is significantly below the level of qualification for the job he/she held before becoming unemployed, with the criteria for an unacceptable 'downgrading' of the person slowly and gradually tightening with the length of the unemployment spell, or
- if the geographical location of the workplace is not within an acceptable distance from home, with a commuter time of 150 minutes (round-trip) being the standard maximum of acceptability for a full-time job.

By all common sense standards, this unemployment benefit system - as defined by its replacement ratios, the time spans for which benefits are granted, and the various criteria of acceptability - is very generous. Economically, it is almost tailor-made to invite to extended job searches, notably in those cases where an unemployed person has been for a longer period of time a (well-paid) industrial worker who has relatively little chance to find a comparative job in due course. While his manpower may be drastically devalued due to the shrinkage of industry, he finds his standing in the queue at the gates of the high-productivity sector highly subsidized first by the working population and then by the taxpayer. Even if indefinitely unsuccessful in his search, he will receive unemployment aid of at least 53 percent of his terminal wage provided he passes the means test, which he will usually do because the definition of 'need' is in practice invariably tied to his prior living standard that is typically linked to the relatively high wage he received before for an extended period of time. In no circumstances can he be forced to accept low-productivity service jobs that fall under the 53 (57) per cent threshold of his historical wage, which thus defines the long-term lower limit of his reservation wage; and even if the prospective wage is higher, the job may be unacceptable for one of the other broadly defined reasons. As a consequence, the growth of a

⁴⁹ See *Arbeitsförderungsgesetz (AFG)*, pp. 342-347, *Zumutbarkeits-Anordnung*, §§ 2 II, 3, 4, 5 I, 6 I, 8-12 I, all with further legal details.

low-productivity service sector is severely hampered: as many job offers in the lower wage segment can simply be disregarded by a large part of the unemployed, no such offers will be made by rational employers so that a whole potential segment of the economy (well-known in the United States) remains non-existent or relatively small.

For collective bargaining, the system as it stands has two straight ramifications. First - and quite obviously - the induced low search intensity of the unemployed reduces outsider competition from the labour supply side. Second, the rule that unemployed persons need not accept a job offered by any firm at a wage below the contractual minimum narrows the effectively available labour supply for non-organized employers, thus checking the outsider threat from the labour demand side as well. Hence the unemployment insurance system provides strong indirect support to the wage cartel, thus impeding the necessary reorientation of bargaining outcomes.

How could the system sensibly be reformed to reduce the incentives for overextended job search without undermining the philosophy of the 'German Model' or, for that matter, the 'European Model'⁵⁰ of the welfare state? If one of the core principles of this philosophy can be seen in providing all citizens who have lost their job with a minimum of subsistence that is not intolerably far below their prior standard of living, then a kind of minimalist reform of the German system may take about the following shape.

As ever, unemployed persons receive contribution-financed 'unemployment money', with replacement ratios as they prevail in the present system, though preferably for a somewhat shorter period of time ranging, say, from 9 to 15 months depending (as now) primarily on the age of the person. For this first stage of unemployment, the criteria of acceptability remain the same as in the present system, i.e. the unemployed person is still free to search exclusively 'in the neighbourhood' of his/her prior wage and working conditions and to turn down any offers of jobs with substantially inferior characteristics. If still unemployed after the first stage (i.e. 9-15 months), the person is entitled to receive tax-financed 'unemployment aid', again with today's replacement ratios applying. In this second stage of unemployment, however, the person is *not* entitled anymore to turn down *any* emerging job offer at whatever wage or working conditions, provided he/she is physically able to do the job. On the other hand, he/she is entitled to receive financial compensation for any net income loss incurred by taking a job: if the wage of the job is below the level of unemployment aid he/she obtains at the time of the offer, the person receives a government matching grant that makes up the

⁵⁰ See Emerson [1988].

difference, preferably even somewhat more to give the person a stronger incentive to include lower wage jobs into his/her range of search. The rationale of this matching grant is basically the same as the idea of various employment subsidy schemes that have recently been put forward:⁵¹ if the philosophy of the welfare state requires that part of the devaluation of manpower and human capital in the course of structural change is to be socialized, then it should be done by subsidizing *states of employment* and not states of (long-term) unemployment.⁵²

Subsidizing a relatively small part of total employment is somewhat more complicated than providing benefits to a well-defined group of registered unemployed persons. Four issues deserve particular attention: [i] the time horizon of employment subsidization and its costs, [ii] the lack of incentives for job change within the low-wage segment of the labour market, [iii] the potential for a joint misuse by employer and (prospective) employee, and [iv] the basis for assessing future unemployment benefits and old-age pensions.

Ad [i]: To be a valuable instrument to create a market for low-productivity labour on unlimited contracts, it is important that the matching grant be also given for a long, preferably an unlimited period of time. On first glance, this seems to imply an unbearable burden for the

⁵¹ See, i.a., *Phelps [1994]*, *Snower [1994]*.

⁵² Note that, to a very limited extent, there already exist employment subsidy schemes in Germany. Within the general framework of labour market programmes, employment subsidies may be granted to firms for hiring long-term unemployed persons of age above 55 years on an unlimited contract basis. If granted, the subsidies usually amount to 50 percent of the relevant contractual minimum wage; they are paid for a maximum of three years, with the rate of subsidization declining to 40 percent in the second and 30 percent in the third year. Under very restrictively defined circumstances, the subsidy may even be higher and paid for a longer period of time. (For details, see *Arbeitsförderungsgesetz (AFG)*, §§ 97-99.) Although no empirical assessment of the working of this rule is so far available, the general impression is that it played only a marginal part and did not mean a significant step in the direction of labour cost differentiation. The reasons are probably twofold. First, the subsidy is granted only for a fixed term, which may not be enough to compensate the employer for the disadvantage of being committed in the longer run to a worker with bad structural characteristics. Second, the subsidy has the character of an ad-hoc offer to firms that the job centres make for a particular person if funds are available, not of a reliable rule that signals potential employers a once for all change of the costs of this particular type of labour. - Besides this scheme, employment subsidies are only paid to commercial firms (i) for jobs whose output is in the public interest (*Arbeitsförderungsgesetz (AFG)*, §§ 91-96), which in practice rarely happens; (ii) for on-the-job training of labour market fringe groups (*FdA-Anordnung*, §§ 19-23).

government budget because the average length of a (subsidized) employment spell of a formerly long-term unemployed person should be many times longer than the average remaining spell of (fully financed) unemployment that the person would have otherwise spent in unemployment; what the government saves in unemployment aid would thus be vastly overcompensated by what he has to spend on matching grants. However, on second glance, this seemingly plausible argument is largely unfounded because it neglects the incentive to accept a high-wage job - i.e. a job with a wage above the critical threshold of unemployment aid - that should work *equally* in both systems: each (unsubsidized) job that is attractive enough to leave the state of long-term unemployment is also attractive enough to leave the state of (subsidized) employment because, by construction of the subsidization, the reservation wage of the same person is likely to be the same in both worlds. Only if one were to introduce implausibly high costs of changing jobs compared to taking up a job after a spell of unemployment (or some other 'biased' assumption)⁵³ could the above argument claim more than *prima facie* plausibility. Hence, if anything, the matching grant scheme is likely to be the fiscally cheaper system because, at roughly the same number of government subsidy recipients, the matching grant per person is lower than the respective unemployment aid.

Ad [ii]: Nevertheless, the matching grant system has a labour allocation problem of its own *within* the newly created segment of low-wage labour, i.e. of labour paid less than the unemployment aid threshold. Competition for low-wage labour may drive up its market wage and thus open up better-paid, but still low-wage job slots not only for the still long-term unemployed, who have no free choice anyway, but also for those already employed and receiving a matching grant; however, these have no pecuniary incentive to change jobs or to bid for higher pay on the plant level, at least as long as the market wage on offer does not rise above the wage plus matching grant that they currently receive. In fact, the market only 'works' from the labour demand, not from the labour supply side; and there is no way how the market could by itself make the subsidy burden shrink.

There are basically two potential (non-exclusive) ways out of this problem. The first and probably most fool-proof way is to make the paying of the matching grant contingent upon the readiness of the subsidized employee to accept any better-paid job (and conversely to

⁵³ For example the assumption that the search intensity of long-term unemployed persons is higher than that of an already employed person receiving the same net income so that the latter is less likely to 'notice' the emerging better-paid job opening. Given the notoriously low search intensity that could be empirically observed for long-term unemployed persons in the past, this assumption is very implausible indeed.

reject any worse-paid job) or alternatively to negotiate a higher wage with the current employer. Practically, this could be done by leaving the subsidized employees registered at the public job centres, subjecting them to an analogous code of acceptability as the unemployed, and possibly authorizing private commercial employment agencies - since recently not prohibited anymore in Germany - to watch the labour market for superior low-wage job alternatives open to the subsidized employees. The second way would be to give low-wage employees a stronger search incentive, e.g., by reducing the matching grant by less than the realized wage gain. However, such a strategy has its natural limits because it also gives some 'perverse' incentives: it would become attractive to deliberately start with the worst-paid job and then move up by job changes so as to 'privatize' part of the self-created potential for social gains; and after such a 'privatization', there would also be an unwelcome incentive to stay in the range of subsidized employment instead of searching for unsubsidized jobs above the unemployment-aid threshold. This is why the private gains would have to remain within reasonably narrow bounds and allowed to accrue only for a very limited period of time, say, a few months after a job change.

Ad [iii]: There is the possibility of a cartelization of potential employer and employee at the expense of the government: in private arrangements, they may agree to set the wage below the person's marginal product so as to maximize the share of the person's income that is covered by the matching grant. Again, the remedy lies in the competitive bidding for low wage labour from the demand side: if, for whatever reason, an employer/employee-cartel sets the wage well below the market level, then it is very likely that better-paid job offers for the respective employee will emerge in due course and push the wage up again, thus leading back to the solvable problem of making subsidized labour move from worse to better paid jobs (see [ii] above).

Similarly, it has been argued - and allegedly supported by empirical evidence - that there tend to be large deadweight losses involved in employment subsidy schemes because, typically, a large part of all employers who cash in subsidies for hiring long-term unemployed persons would have hired them anyway; in the same vein, there is supposed to be a strong substitution effect in the sense that employers have an incentive to replace unsubsidized workers by subsidized ones, thus in effect reducing labour costs at the expense of the taxpayer without increasing employment.⁵⁴ Even if one were to accept this empirical evidence, which is mostly based on rather small-scale case studies with many conceptual problems, it is hard to see how

⁵⁴ See the survey on various empirical studies of employment subsidy schemes in *OECD [1993]*, pp.63-4; see also *The Economist* of July, 16 and August 20, 1994.

the mischief could be more than a short-run problem within our matching grant system: if, as the evidence seems to suggest, long-term unemployed persons are after all relatively good substitutes for employed workers, then competitive pressures will push up their wages in the way described above and thus reduce the extent of subsidization.

Ad [iv]: A technical problem with economic significance is the question on what basis future unemployment benefits (and also pension rights) should be calculated if a person spends part of his working life in subsidized low-wage employment. Currently, all future claims against the social security system are kept at the level defined by the terminal *gross* income, no matter how long the unemployment spell; depending on the particular characteristics of the case, the cost of this generous rule is borne by different communities of insured people or by the taxpayer. If one wants to continue this practice within the matching grant system, one would simply have to supplement the matching grants by social security payments that just ensure that the person concerned can keep his/her prior level of entitlements. Economically, however, this may lead to odd situations notably for the unemployment insurance system because it would imply an absurdly high replacement ratio for persons laid off from subsidized low-wage employment.⁵⁵ Hence some phasing out of the 'historical' value of the demands on the social security system will have to be made, with a wide array of possible models ranging from a gradual downward adjustment to the immediate sharp fall of contributions and future claims down to a level that corresponds to the low wage. Incidentally, this would also re-establish some incentive for the employee to be hired at the highest possible wage because, in the end, this wage will be important for his/her future claims against the social security system, notably his/her pension after retirement.

⁵⁵ E.g., a person with at least one child would still receive unemployment money to the amount of 67 percent of his/her 'historical' net wage, i.e. about 15 percent more than his/her now terminal net income (wage plus matching grant).

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Appendix

Table 1: Unemployment as a Percentage of the Total Labour Force, 1920-1993

	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	UK	USA
1920	4.6				3.0	1.1		1.7		1.7		1.3		1.9	3.9
1921	5.9		6.1	5.8	10.0	1.8	2.7	1.2		2.6	5.6	6.4		11.0	11.4
1922	5.5		1.9	4.4	9.5	1.4		0.7		3.2	5.2	5.5		9.6	7.2
1923	4.9		0.6	3.2	6.5	1.0		4.5		3.3	1.3	2.9		8.0	3.0
1924	5.5	5.4	0.6	4.5	5.5	1.2		5.8		2.6	0.3	2.4		7.1	5.3
1925	5.6	6.3	0.9	4.4	7.5	2.0		3.0		2.4	3.4	2.6		7.7	3.8
1926	4.6	7.0	0.8	3.0	10.5	1.6	1.2	8.0		2.1	10.4	2.9		8.6	1.9
1927	5.2	6.2	1.1	1.8	11.0	1.5		3.9		2.2	11.3	2.9		6.7	3.9
1928	6.4	5.3	0.6	1.7	9.0	1.5		3.8		1.6	7.6	2.4		7.4	4.3
1929	8.2	5.5	0.8	2.9	8.0	2.8	1.2	5.9	1.7	1.7	5.4	2.4	0.4	7.2	3.1
1930	13.1	7.0	2.2	9.1	7.0	4.0		9.5	2.5	2.3	6.2	3.3	0.7	11.1	8.7
1931	17.9	9.7	6.8	11.6	9.0	4.6	2.2	13.9	4.3	4.3	10.2	4.8	1.2	14.8	15.8
1932	19.1	13.7	11.9	17.6	16.0	5.8		17.2	5.8	8.3	9.5	6.8	2.8	15.3	23.5
1933	17.4	16.3	10.6	19.3	14.5	6.2		14.8	5.9	9.7	9.7	7.3	3.5	13.9	24.7
1934	15.0	16.1	11.8	14.5	11.0	4.4		8.3	5.6	9.8	9.4	6.4	3.3	11.7	21.6
1935	12.5	15.2	11.1	14.2	10.0	3.7		6.5		11.2	8.7	6.2	4.2	10.8	20.0
1936	9.9	15.2	8.4	12.8	9.5	2.7	4.5	4.8		11.9	7.2	5.3	4.7	9.2	16.8
1937	8.1	13.7	7.2	9.4	11.0	2.6		2.7	5.0	10.5	6.0	5.1	3.6	7.7	14.2
1938	8.1	8.1	8.7	11.4	10.5	2.6	3.7	1.3	4.6	9.9	5.8	5.1	3.3	9.2	18.8

Table 1 ctd./...

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	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Japan	Nether- lands	Norway	Sweden	Switzer- land	UK	USA
1950	1.5	3.9	5.0	3.6	4.0	1.0	2.3	8.2	6.9	1.9	2.8	1.2	1.7	0.0	2.5	5.2
1951	1.3	3.5	4.4	2.4	4.6	0.3	2.1	7.3	7.3	1.7	3.2	1.5	1.6	0.0	2.2	3.2
1952	2.2	4.7	5.1	2.9	5.8	0.4	2.1	7.0	7.8	1.9	4.9	1.6	1.7	0.0	3.0	2.9
1953	2.5	5.5	5.3	2.9	4.4	1.5	2.6	6.2	8.1	1.7	3.5	1.9	1.9	0.0	2.6	2.8
1954	1.7	5.0	5.0	4.5	3.8	1.0	2.8	5.6	8.3	2.2	2.3	1.8	1.8	0.0	2.3	5.3
1955	1.4	3.6	3.9	4.3	4.5	0.4	2.4	4.3	7.0	2.5	1.5	1.6	1.8	0.0	2.1	4.2
1956	1.8	3.4	2.8	3.3	5.1	2.2	1.8	3.4	8.7	2.3	1.0	1.9	1.6	0.0	2.2	4.0
1957	2.3	3.2	2.3	4.5	4.9	2.2	1.4	2.9	7.0	1.9	1.5	2.1	1.7	0.0	2.4	4.2
1958	2.7	3.4	3.3	6.9	4.5	2.2	1.6	3.0	6.0	2.0	3.0	3.3	2.0	0.0	3.0	6.6
1959	2.6	3.1	4.0	5.8	3.1	2.1	1.9	2.0	5.2	2.2	2.1	3.2	1.8	0.0	3.0	5.3
1960	2.5	2.3	3.3	6.8	2.1	1.4	1.8	1.0	3.9	1.7	1.2	2.3	1.7	0.0	2.2	5.4
1961	2.3	1.8	2.5	7.0	1.9	1.2	1.5	0.7	3.4	1.4	0.9	1.8	1.5	0.0	2.0	6.5
1962	2.2	1.9	2.1	5.8	1.6	1.3	1.4	0.6	2.9	1.3	0.9	2.0	1.5	0.0	2.8	5.4
1963	1.8	2.0	1.7	5.4	2.1	1.5	1.3	0.7	2.5	1.2	0.9	2.4	1.7	0.0	3.4	5.5
1964	1.6	1.9	1.3	4.3	1.2	1.5	1.1	0.6	3.9	1.2	0.8	2.1	1.6	0.0	2.5	5.0
1965	1.5	1.9	1.5	3.6	1.0	1.4	1.3	0.5	5.0	1.1	1.0	1.7	1.2	0.0	2.2	4.4
1966	1.7	1.7	1.6	3.3	1.1	1.5	1.4	0.6	5.4	1.3	1.4	1.6	1.6	0.0	2.3	3.7
1967	1.8	1.8	2.3	3.8	1.2	2.9	1.8	1.7	5.1	1.3	2.8	1.5	2.1	0.0	3.4	3.8
1968	1.7	1.6	2.7	4.4	1.6	3.9	2.1	1.2	5.3	1.2	2.5	2.2	2.2	0.0	3.3	3.5
1969	1.7	2.0	2.1	4.4	1.1	2.8	2.3	0.7	5.2	1.1	1.8	2.1	1.9	0.0	3.0	3.5
1970	1.6	1.4	1.8	5.6	0.7	1.9	2.4	0.6	4.9	1.1	1.6	1.5	1.5	0.0	3.1	4.9
1971	1.8	1.3	1.7	6.1	1.1	2.2	2.6	0.7	4.9	1.2	2.3	1.5	2.5	0.0	3.8	5.9
1972	2.6	1.2	2.7	6.2	0.9	2.5	2.8	0.8	6.3	1.4	3.9	1.7	2.7	0.0	4.0	5.5
1973	2.3	1.1	2.7	5.5	0.9	2.3	2.7	0.8	6.2	1.3	3.9	1.5	2.5	0.0	3.0	4.8

Table 1 ctd./...

.../ctd. Table 1

	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Japan	Nether- lands	Norway	Sweden	Switzer- land	UK	USA
1974	2.6	1.3	3.0	5.3	3.5	1.7	2.8	1.6	5.3	1.4	4.4	1.5	2.0	0.0	2.9	5.5
1975	4.8	1.8	5.0	6.9	4.9	2.2	4.0	3.6	5.8	1.9	5.9	2.3	1.6	0.4	4.3	8.3
1976	4.7	1.8	6.4	7.1	6.3	3.8	4.4	3.7	6.6	2.0	6.3	1.8	1.6	0.7	5.6	7.6
1977	5.6	1.6	7.4	8.0	7.3	5.8	4.9	3.6	7.0	2.0	6.0	1.5	1.8	0.4	6.0	6.9
1978	6.2	2.1	7.9	8.3	8.3	7.2	5.2	3.5	7.1	2.2	6.2	1.8	2.2	0.3	5.9	6.0
1979	6.2	2.1	8.2	7.4	6.0	5.9	5.9	3.2	7.6	2.1	6.6	2.0	2.1	0.3	5.0	5.8
1980	6.0	1.9	8.8	7.4	6.9	4.6	6.3	3.0	7.5	2.0	6.0	1.6	2.0	0.2	6.4	7.0
1981	5.7	2.5	10.8	7.5	10.3	4.8	7.4	4.4	7.8	2.2	8.5	2.0	2.5	0.2	9.8	7.5
1982	7.1	3.5	12.6	10.9	11.0	5.3	8.1	6.1	8.4	2.4	11.4	2.6	3.2	0.4	11.3	9.5
1983	9.9	4.1	12.1	11.8	11.4	5.4	8.3	8.0	8.8	2.6	12.0	3.4	3.5	0.9	12.4	9.5
1984	8.9	3.8	12.1	11.2	8.5	5.2	9.7	7.1	9.4	2.7	11.8	3.1	3.1	1.1	11.7	7.4
1985	8.2	3.6	11.3	10.4	7.3	5.0	10.2	7.2	9.6	2.6	10.6	2.6	2.8	0.9	11.2	7.1
1986	8.0	3.1	11.2	9.5	5.5	5.3	10.4	6.4	10.5	2.8	9.9	2.0	2.7	0.8	11.2	6.9
1987	8.0	3.8	11.0	8.8	6.9	5.0	10.5	6.2	10.9	2.8	9.6	2.1	1.9	0.7	10.3	6.1
1988	7.2	3.6	9.7	7.7	7.2	4.5	10.0	6.2	11.0	2.5	9.2	3.2	1.6	0.6	8.5	5.4
1989	6.1	3.1	8.1	7.5	7.8	3.4	9.4	5.6	10.9	2.3	8.3	4.9	1.4	0.5	7.1	5.2
1990	6.9	3.2	7.2	8.1	8.0	3.4	8.9	4.8	10.3	2.1	7.5	5.2	1.5	0.5	6.8	5.4
1991	9.5	3.5	7.2	10.2	8.7	7.5	9.4	4.2	9.9	2.1	7.0	5.5	2.7	1.1	8.7	6.6
1992	10.7	3.6	7.9	11.2	9.3	13.0	10.3	4.6	10.5	2.2	6.8	5.9	4.8	2.5	9.9	7.3
1993*	10.9	4.8	9.1	11.1	10.1	17.8	11.6	5.3	9.4	2.5	8.2	6.0	7.4	4.5	10.2	6.7

Source: 1920-38, 1950-89 *Maddison* (1991), pp. 262-5, Table C.6; 1990-93 *OECD Economic Outlook* (various issues); *preliminary.