# UNEMPLOYMENT EBBS IN GERMANY: EXPLANATIONS AND EXPECTATIONS

edited by Stephen J. Silvia

ECONOMIC STUDIES PROGRAM SERIES VOLUME 7

American Institute for Contemporary German Studies The Johns Hopkins University

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### FOREWORD

While there is no one who believes that the political stability of the Federal Republic hinges on unemployment, as many Germans did as late as the mid 1980s, the issue has been a divisive one in German politics. High unemployment was a central factor contributing to the end of the chancellorships of Helmut Schmidt in 1982 and Helmut Kohl in 1998. Gerhard Schröder has repeatedly declared that his priority is reducing unemployment and that German voters should judge him on his success in doing so.

Recently the labor market has seen modest signs of improvement with net employment having increased since the fall of 1999 and falling below the four million level in the following spring. Arguments between the government and opposition in Berlin over the explanations for this trend remain contentious. The real picture is one of a very complex set of developments, leaving some areas making progress and others still unable to overcome difficulties, particularly in eastern Germany,

Within the framework of the Institute's P.J. Hoenmans Economic Studies program, we are pleased to present this volume: <u>Unemployment Ebbs in</u> <u>Germany: Explanations and Expectations</u>. Based on a conference sponsored by the Institute on June 2, 2000, these four contributions focus on different aspects of Germany's efforts to deal with the unemployment menace in German society. In his sketch of unemployment trends in Germany, Professor Steven Silvia points out the importance of understanding how demographic and exchange rate developments have been major forces determining the unemployment rate in Germany. He examines how to evaluate Chancellor Schroeder's policies during the last two years and emphasizes the major divergence in problems in eastern and western Germany.

Dr. Matthias Knuth's analysis focuses on the factors behind worker displacement and job mobility in Germany and concludes that efforts should be concentrated on facilitating the re-employment process rather than slowing down the process of change. Claus Schnabel, in his examination of the comprehensive collective bargaining agreement, shows both the advantages and disadvantages of such an agreement, namely that it allows negotiations to take place above the level of the firm and the fact that it has also been blamed for the compression of wages, thereby contributing to joblessness. Dr. Werner Sesselmeier pointed out the institutional obstacles to increasing employment in Germany, including a high marginal tax burden to employment. Sesselmeier concludes with his recommendation in favor of establishing a low wage sector, arguing that it would lead to a higher level of employment.

During the next two years, the German debate over unemployment policies will increase as important *Land* elections approach in 2001 and the beginnings of the federal election campaign begins the following year. However, the crucial measure of real success will be achieving a more flexible labor market if unemployment is to be ultimately overcome.

The Institute wishes to express its appreciation to Professor Silvia for his efforts in organizing the conference and this publication. We are also grateful to the German Marshall Fund of the United States and the P.J. Hoenmans Economics Studies Program for their generous support of this event.

Jackson Janes Executive Director

December 2000

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#### UNEMPLOYMENT EBBS IN GERMANY: AN INTRODUCTION

Unemployment remains one of the most important issues in Germany today. For several years running, unemployment has topped opinion polls as the Federal Republic's single most pressing problem. Most election analysts have concluded that the inability of the Kohl government to bring down high unemployment was the primary factor that brought it down in the fall of 1998. Since coming to power, German Chancellor Gerhard Schröder has repeatedly identified joblessness as his "most pressing matter of political concern" and has consistently maintained that reducing unemployment should be the principal measure of his performance when Germans go to the polls again in 2002.

After many years of persistently poor performance, the German labor market has recently shown signs of improvement. Employment in Germany has increased every month since October 1999. In April 2000, the number of German jobless fell below four million for the first time since 1996 and by year's end was rapidly approaching 3.5 million. The unemployment rate is down by roughly two and one-half percentage points from its peak of 11.8 percent in the final quarter of 1997. Still, a more detailed analysis of recent labor market trends reveals that the decline in unemployment has been uneven. Joblessness remains stubbornly high in traditional industrial districts and especially in eastern Germany.

The American Institute for Contemporary German Studies held a daylong workshop on June 2, 2000 entitled, "Unemployment Ebbs in Germany: Explanations and Expectations," to explore employment issues in Germany today. This volume contains revised, edited and updated versions of three of the five presentations given at the workshop plus an additional chapter written by the editor.

The first substantive chapter, by Stephen J. Silvia, Associate Professor at American University and Director of Regulatory Studies at AICGS, investigates the causes of the recent declines in German unemployment. Silvia first traces German employment developments since 1995 and then investigates their causes. He concludes that the primary factors responsible for the improvements in the German labor market since 1997 were not government policies, but instead a positive shift in demographic trends and a weak currency. As a result, the reduction of unemployment has been uneven. Joblessness has been declining particularly rapidly in western Germany, but it remains stubbornly high in eastern Germany.

Ironically, the Schröder government's early labor market policies have failed to contribute significantly to the improvement in German labor market conditions. The much heralded "Alliance for Jobs" tripartite forum has failed to produce any consequential results. Some of the Red-Green government's earliest policies, namely, measures revising the policies governing so-called 630-mark jobs and "pseudo self-employment," have actually proven counterproductive to reducing unemployment. Other Schröder government policies, however, such as the 2000 tax reform and, to a lesser extent, the ecological tax reform and the proposed pension reform, may ultimately help to reduce unemployment. It is too soon to assess their ultimate impacts. Still, the failure of the Schröder government to undertake direct labor market reforms that would make hiring easier and reduce the relative cost of labor to employers severely restricts the possibilities for accelerating the reduction in Germany's unemployment rate.

The chapter by Dr. Matthias Knuth of the Institut für Arbeit und Technik, Gelsenkirchen is entitled, "The Toll of Change: Economic Restructuring, Worker Displacement, and Unemployment in West Germany." Knuth's chapter points out a number of paradoxes that stand in sharp contrast to the news of mass layoffs in leading German companies and growing unemployment paired, ironically, with a stock market boom. Knuth finds that dismissals for economic reasons account for only a fairly small share of separations. The shrinking sectors, furthermore, produce less job destruction, have less labor turnover, make less use of dismissals and produce below-average additions to the unemployment rolls when compared to the economy as a whole. Knuth shows that among samples of unemployed people the percentage of those who lost their last job owing to a dismissal for economic reasons is rather high. It is not known, however, from which sectors these unemployed originated. From an analytical perspective, it must be concluded that the mechanisms by which structural change produces unemployment are still rather obscure. Event history analysis based on data sets of individuals is needed to shed more light on the unemployment process. From a policy perspective, however, the principle recommendation is that efforts should be concentrated on facilitating the re-employment process rather than slowing down the process

of change.

Dr. Werner Sesselmeier from the Department of Economics and Public Finance of the Technische Universität Darmstadt contributes a chapter entitled, "Would the Creation of a Low-wage Sector help to reduce German Unemployment?" Dr. Sesselmeier points out several of the institutional obstacles to more employment in Germany. These include a high marginal tax burden employment. After an initial 135 DM per month, the state deducts 85 percent of a social assistance recipient's earned income, so that the remaining monthly income can increase by a maximum of 270 DM. A similar transfer dilemma arises from the methodology for calculating income taxes. For lower incomes, a withdrawal of income-dependent transfer payments frequently results in a cumulative replacement rate that, in most cases, far exceeds the current maximum marginal income tax rate of 53 percent. Thus, it is rational in the short term for an individual not to take up work. Yet for the economy as a whole, this produces a sub-optimal allocation of state funds and an increasing loss of human capital.

Second, social assistance benefits function as a minimum wage, raising the reservation wage in Germany, which has contributed to higher unemployment. A disincentive to take up work results from too small a difference between social assistance benefits and low-wage incomes. Third, the so-called insignificance threshold serves as a further barrier to employment. Employees do not have to contribute payroll taxes if they earn a monthly wage below this threshold, which is currently set at 630 DM. An employee being paid above the insignificance threshold must earn at least 798 DM before the net wage once again equals DM 630. As a result, no jobs exist at monthly gross wages between 630 DM and 798 DM. Fourth, taxes and social security contributions insert a steadily growing tax wedge between total labor costs (the production wage) and the net wage (consumption wage). The wedge has widened substantially; nominal net wages amounted to 72.6 percent of the gross wage in 1960, but only 52.6 percent in 1996. The tax wedge is particularly damaging for unskilled employees because there is a higher elasticity of demand for their labor.

Dr. Sesselmeier reviews several prominent potential solutions to these problems. First, many have proposed subsidizing either the wages or the payroll tax contributions of low-wage earners. Some see this approach as too narrowly tied to existing employment, however. Others suggested that it would be more efficient to remove the disincentives to employment in the tax structure rather than build in additional subsidies to counter the existing distortions. Sesselmeier concludes that the pilot programs begun in four *Länder* seem designed to fail. The two eastern *Länder* are ill suited to wage subsidization as a means to reduce unemployment. The programs are too small and provide a subsidy for too short a duration to be effective, because they cannot raise the productivity of the individuals enough to permit placing them in the unsubsidized labor market upon completion. Second, a negative income tax has been discussed. Such a system would provide a more encompassing structure and allow for the creation of a basic standard of living, but the high cost and the absence of a means to ensure a better integration into the labor market have dissuaded policy-makers from embracing this approach.

All proposals currently under discussion have their specific advantages and disadvantages. The discussion of the low-wage sector in Germany, flanked by a subsidy, remains incomplete as long as further reregulating measures are not taken into account. A low-wage sector combined with income transfers is certainly no cure-all for unemployment in Germany. If incorporated into a comprehensive re-regulation of labor and social policy it may lead to a higher level of employment and thus to a higher level of well-being. This requires a long-term strategy and an understanding of the specific advantages and disadvantages of the German economy. Nevertheless, Sesselmeier recommends taking the risk of establishing a low-wage sector, since anything appears better than the current policy of passivism.

The title of the chapter by Prof. Claus Schnabel of the University of Erlangen-Nuremberg is, "The German System of Collective Bargaining under Stress: Reforming or Abolishing the *Flächentarifvertrag*?" (patternsetting collective bargaining agreement). The *Flächentarifvertrag* is a central pillar in Germany's postwar collective bargaining regime. A *Flächentarifvertrag* is a regional or national agreement between a trade union and a employers' association. If a majority of employees are covered under one of these contracts, the agreement sets the minimum wage for all employees in the relevant sector and region. Hence, the collective bargaining partners rather than the state set the minimum compensation and this floor rate varies from sector to sector, depending on the contract. The advantages of the *Flächentarifvertrag* are that it lowers the transaction

costs of negotiating collective agreements, creates a standard and helps secure labor peace in the workplace by undertaking collective negotiations above the level of the firm. Many, however, have blamed the *Flächentarifvertrag* for excessively compressing German wages, thereby contributing to joblessness.

Schnabel discussed the alternatives to the *Flächentarifvertrag*. First, some enterprises negotiate single-firm "house" collective agreements, as is most common in North America. The number of firms with single-company agreements has doubled since 1990. Still, they cover only nine percent of the western and 14 percent of the eastern work force. Moreover, a study by Wolfgang Meyer shows that company agreements are no more flexible than sectoral ones.

A second alternative is to increase the reliance on "opening clauses" in collective agreements. An opening clause is a portion of an agreement that permits re-negotiation to reduce wages and benefits if a firm experiences economic difficulties. Opening clauses enable firms to keep the transaction-cost savings of the *Flächentarifvertrag* as well as its capacity to preserve peaceful relations in the workplace, while permitting a greater degree of flexibility for firms. Since the mid 1980s, firms have used opening clauses at first in the field of working time and later in the area of wages and salaries.

The growing tendency of firms to shy away from joining employers' associations instead of concluding company agreements with trade unions and the introduction of opening clauses in collective agreements demonstrate that decentralization is taking place within the German system of labor relations. After neglecting its problems for too long, the social partners in most industries now have started to modernize their collective bargaining system to achieve a controlled decentralization. Although there exists so far only anecdotal evidence on the effects of these reforms, they seem to be a proper means to save employment, to prevent firms from leaving employers' associations and to stabilize the German system of collective bargaining.

These chapters present a comprehensive view of a wide range of labor market issues. They will help scholars and policy-makers alike to achieve a greater understanding of the German labor market.

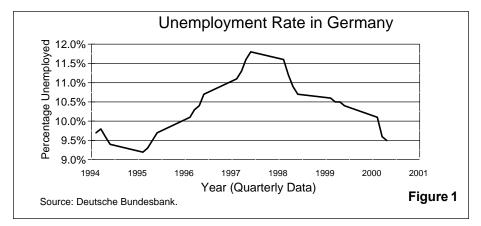
I would like to thank all the participants in the June conference. These include not only those who have chapters in this volume, but also Claudia

Dziobek, C. Randall Henning, Catherine L. Mann and Holger C. Wolf. I am particularly indebted to Jack Janes, Daniel Johnson, Carl Lankowski, Ilonka Oszvald and Jodi Smith for all their assistance in the organization and execution of the workshop and this publication. I would also like to thank P.J. Hoenmanns for providing the funding that made the workshop possible. Finally, I owe a deep debt of gratitude to my wife, Jennifer Paxton, and my sons, Christopher and Sean, who made sacrifices at several steps along the way to make the workshop and this volume possible.

#### THE CAUSES OF DECLINING UNEMPLOYMENT IN GERMANY: CAN THE SCHRÖDER GOVERNMENT TAKE CREDIT? Stephen J. Silvia

#### **1. INTRODUCTION**

Unemployment has finally begun to fall in Germany. After rising by



almost 30 percent over three straight years beginning in 1995, the German unemployment rate has declined steadily since the end of 1997. By the fall of 2000, the entire upsurge in German unemployment that had begun at mid decade had been all but erased (see figure 1).

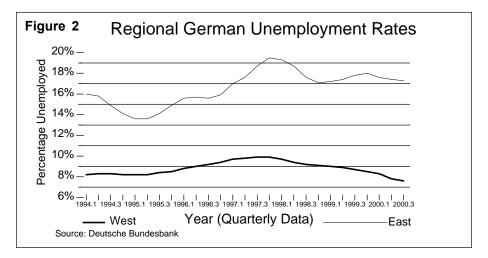
The positive turn in German unemployment statistics raises several questions. Why has unemployment fallen? Have the policies of the center-left governing coalition under the chancellorship of Gerhard Schröder, which came into power in the fall of 1998, contributed to the ebb in unemployment? What other factors account for the drop? Will unemployment recede below the cyclical low reached in 1995?

This paper addresses these questions. It begins with a brief statement of the importance of unemployment as an issue in Germany. It then discusses German labor market developments over the last five years in more detail. The chapter continues with an assessment of the causes of declining unemployment in Germany and the efficacy of the economic policies of the Schröder government in cutting joblessness. The central conclusions are that demographic and exchange-rate developments, which are out of the immediate hands of policymakers, have been the primary forces driving the German unemployment rate. The early policies of the Schröder government (in particular, the amendment of the provisions governing so-called 630 DM per month jobs and the narrowing of the definition of "pseudo self-employment") had, if anything, a mild counterproductive impact on the labor market. Recent policies-in particular, the 2000 tax reform act-hold promise for promoting future reductions in joblessness, but they are not the factors principally responsible for the decline in German unemployment of recent years. A second important observation is that progress in reducing unemployment has been geographically uneven. The preponderance of the decline in German unemployment since 1997 has come from western Germany. The concluding section of this chapter summarizes the analysis and discusses future labor market trends as well as the implications of regional divergence in labor market performance within the Federal Republic of Germany.

#### 2. THE IMPORTANCE OF THE ISSUE OF UNEMPLOYMENT IN GERMANY

Before reviewing the track record of the German labor market, it is worthwhile to state briefly why the issue is important. An old refrain from the 1960s and 1970s depicted the Federal Republic of Germany as a "fair weather" democracy that could not withstand sustained high unemployment. This fear was based on Germany's experience during the Weimar Republic. The past two decades, however, have proven this pessimistic view of German political culture wrong. Germany has sustained its democracy through not only several bouts of sustained severe unemployment, but also the tumults of German unification, European integration and the end of the Cold War.

Still, unemployment remains a salient issue in Germany for several reasons. First—beyond the obvious points that high unemployment places a relatively large share of the population in precarious material straits and reduces aggregate demand—unemployment represents a tremendous waste of talent and resources. Since the work hours of the unemployed cannot be warehoused, the time lost can never be recovered. Second, unemployment inflicts psychological as well as material harm on the jobless and their families. Long-term unemployment is particularly devastating because the severity of both the material and the psychological damage compounds over time. Third, unemployment is a basic measure of the health of any economy. Persistently high unemployment is most often the result of significant inefficiencies in the allocation of resources. Fourth, joblessness remains a prominent political issue in Germany. For years, Germans have consistently identified unemployment as the Federal Republic's single most pressing problem. An obvious reason for this is simply because it has been high. Beyond that, Gerhard Schröder has repeatedly stated since coming into office that German voters should measure his government's success first and foremost by its ability to cut the rate of unemployment.<sup>1</sup>



Having established the importance of unemployment to the German

economy and society, the following section details labor market developments in Germany since the mid 1990s.

#### **3. LABOR MARKET DEVELOPMENTS IN GERMANY**

Between the first quarter of 1995 and the fourth quarter of 1997, the German civilian unemployment rate rose from 9.2 percent to 11.8 percent.<sup>2</sup> In nominal terms, the ranks of the jobless swelled by more than one million, peaking at 4.5 million. During this period, the number of jobs in Germany declined by 600,000 to 35.8 million. Since October 1997, labor market

conditions have improved. Unemployment in Germany has declined, dipping below four million in the first quarter of 2000 and shrinking further to 3.8 million in October 2000, and more than 400,000 jobs have been added to the economy. Yet, despite almost three years of steady improvement, the German unemployment rate still amounted to 9.5 percent in the third quarter of 2000.

Aggregate German unemployment data conceal as much as they reveal, however, because of significant regional differences, the most prominent of which is the gap between east and west. Western German unemployment trends track closely with those of Germany as a whole. This is no surprise, since roughly eighty percent of the population lives in western Germany. The only notable variance has been the accentuated drop in the western German unemployment rate since 1997. Western German unemployment fell to 7.6 percent in the third quarter of 2000, which is the lowest rate it had reached since the brief unification boom of 1990-91 (see figure 2). The unemployment rate for Germany as a whole, in contrast, still had not quite returned to the low reached in late 1995 (see figure 1).

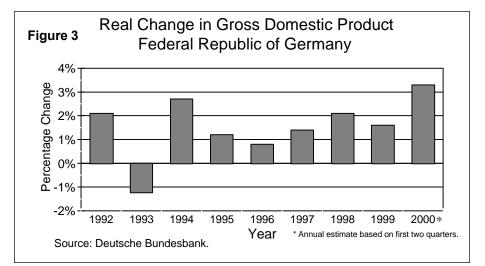
Unemployment trends in eastern Germany follow a different trajectory from those in the west. In the initial aftermath of German unification, the unemployment rate in the former territory of the German Democratic Republic burgeoned, climbing from an artificial low of 2.6 percent in 1990 to 16 percent in early 1994. The number of employed contracted from more than ten million in 1990 to 6.3 million during this initial transition. The jobless rate east of the Elbe edged briefly downward over the course of 1995, dipping to 13.6 percent during the first half of that year, while the number of employed inched upward to 6.4 million.

Between the first quarter of 1995 and the last quarter of 1997, the eastern German unemployment rate resumed its upward climb, peaking at 19.5 percent (see figure 2). Employment slipped to 6.1 million in 1997. Thereafter, unemployment in the five new *Länder* and East Berlin fell steadily for a year and reached 17.1 percent by the fourth quarter of 1998. Since then, the eastern German jobless rate has drifted between 17 and 18 percent. The number of jobs in eastern Germany has remained stubbornly stable at roughly six million.

Unemployment rates also diverge between north and south throughout Germany. Unemployment rates in Saxony and Thuringia, which comprise southeastern Germany, have been roughly 15 percent in 2000. This is a good five percentage points lower than the jobless rate in the rest of eastern Germany, except the area surrounding Berlin. Similarly, the unemployment rate in southwestern Germany (i.e., Baden-Würtemberg and Bavaria) has hovered at just above 5 percent in 2000, while the unemployment rate in the northwestern city-state of Bremen is stuck at thirteen percent. There are a few exceptions to this north-south divergence. Monoeconomic districts that specialized in traditional industrial products, such as the Saar in western Germany and the Lausitz in southeastern Saxony, have suffered despite their geographic location. However, these aberrations comprise a relatively small share of the workforce. Moreover, unlike the east-west gap, the north-south divide has remained largely unchanged over the course of the last decade. The latter therefore cannot be a factor contributing to the recent decline in unemployment.

Beyond the labor market divergences that manifest themselves along geographical lines, it is also useful to be aware of the demographic unevenness in the distribution of unemployment and job creation in the Federal Republic. Joblessness is disproportionately heavily concentrated among blue-collar workers, women in eastern Germany and those who are fifty and older.<sup>3</sup> Germany has an exceptionally low youth unemployment rate, particularly in the western *Länder*. This lower unemployment rate is largely a product of the apprenticeship system.

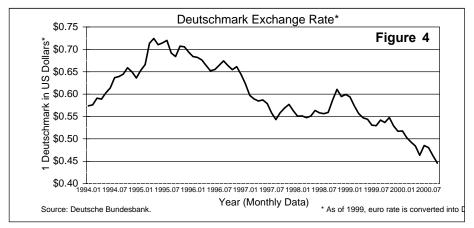
In summary, labor market trends in Germany have become increasingly bifurcated between east and west in recent years. Germany's unemployment



rate has declined since late 1997 principally because of developments in western Germany. Both employment and unemployment have remained remarkably constant in the former territory of the German Democratic Republic. The next section assesses the potential causes of these employment developments, including an effort to establish the impact of government policy on the outcome.

#### 4. THE CAUSES OF GERMAN EMPLOYMENT DEVELOPMENTS

This section assesses the various potential factors that may account for recent employment developments in Germany. The variables to be discussed are demographic developments, growth rates, exchange-rate movements, monetary policy, fiscal policy and labor market regulation. They are arranged according to the degree to which individual policy decisions by elected officials can influence them. Many of these variables affect each other. The analysis is sensitive to the dangers of discussing partial equilibria. Since the ultimate purpose of this chapter is to assess the contribution of the policies of the Schröder government to recent declines in the German unemployment rate rather than to create a full econometric model, these modest partial treatments should suffice in at



least eliminating some possibilities. This chapter also relies on the full econometric estimates of the German Federal Labor Office (*Bundesanstalt für Arbeit*) and other sources whenever possible in its discussions of the contributions of individual factors to labor market trends, in order to avoid falsely attributing causation through a partial equilibrium analysis.

#### 4.1. Demographics

In recent years, demographic developments have made an important contribution toward reducing joblessness in Germany. During the latter half of the 1990s, the size of the potential labor force (i.e., the potential supply of labor) began to shrink for the first time in over a decade. This trend is principally the product of the ebbing of the entry of the German baby boom (which came a full decade after its American counterpart) into the labor market and the secular decline in the postwar fertility rate. From 1996 to 2000, the potential labor force shrank each year by between 150,000 and 200,000. Potential labor force reductions will continue at this rate until 2010, after which the decreases will accelerate to an estimated average annual pace of 600,000. "An increase in the labor force participation rate [principally by women] will not essentially change this decline in the potential size of the labor force."<sup>4</sup>

In the year 2000 alone, the German Federal Labor Office's Institute for Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung*) estimates a contraction of the potential labor force of 200,000, which is equivalent to the lion's share of the decline in unemployment for that year.<sup>5</sup> This observation is important, since these demographic developments have unfolded largely independent of specific short-term government economic policies.

#### 4.2. German Economic Growth

Macroeconomic performance has a powerful impact on the unemployment rate. Joblessness in Germany does indeed track closely with changes in the real gross domestic product (GDP) (see figure 3). Employment developments typically lag behind movements in the gross domestic product by six months to one year. So, the impact of the 1993 recession and the anemic growth rates of 1995 and 1996 materialized in the form of higher unemployment in subsequent years (see figure 1). Similarly, the relatively stronger growth rates of 1994 and 1998 bore fruit in the following year. The strong preliminary estimates of GDP growth for 2000 bode well for further reductions of unemployment in subsequent years. The question that logically arises from this analysis is: what factors are driving changes in the gross domestic product? Specifically, can the changes be attributed to government policy or are other factors responsible for recent modest GDP improvements?

#### 4.2.1. Exports

There is strong evidence that increased exports are largely behind the German economic recovery. The Federal Labor Office's recent assessment of labor market conditions in western Germany concluded as much: "The brightening cyclical (*konjunkturelle*) picture is in essence being supported by demand abroad for industrial goods. The revival of the world economy has accounted for this as well as the lower valuation of the euro"<sup>6</sup> (see figure 4). University of Magdeburg economist Karl-Heinz Paqué concurred with this assessment—albeit with far more pith—stating, "The recovery is a gift from abroad."<sup>7</sup>

Exchange rate developments starting in early 1995 (which manifest their long-term economic impact only 12 to 18 months after they take place) have favored export dependent and import-sensitive sectors in the Federal Republic, so long as they are not heavily dependent on raw materials imported from outside the euro-zone. The *Deutschmark* (and since 1999, the euro) has depreciated by 38.4 percent against the U.S. dollar between May 1995 and September 2000. The currency used in Germany has experienced comparable declines against the other major currencies outside the euro-zone (e.g., the British pound sterling and the Japanese yen).

The central role of exports in the current economic recovery has important regional implications for the German labor market. Virtually all of the Federal Republic's export centers are in western Germany. As a result, as the Institute for Employment Research has pointed out, "The revival of demand for labor is concentrated in the old federal states."<sup>8</sup> A recovery of the eastern German labor market may eventually take place, but only as a derivative of the western German export boom.

#### 4.2.2. Fiscal and Monetary Policy

Fiscal and monetary policy can also have a powerful impact on the gross domestic product. Developments of these two factors during the

latter half of the 1990s have worked largely at cross purposes.

Between February 1994 and April 1996, the German *Bundesbank* gradually eased interest rates. The discount rate dipped from 5.25 percent to 2.5 percent and the marginal lending facility (Lombard) rate descended from 6.75 percent to 4.5 percent. These relatively favorable interest rates remained unchanged until January 1999 (i.e., for more than two and one-half years), when the transition to the single European currency took place. The relatively low and stable interest rates did little to stimulate the German labor market.

Soon after the single European currency was born on January 1, 1999 interest rates began to move again. The rates for the deposit facility and for the marginal lending facility of the European Central Bank—which have replaced the German discount and Lombard rates, respectively—fluctuated briefly in early 1999 before settling at a still lower 1.5 percent and 3.5 percent in April 1999. These favorable rates did not last long, however. Between November 1999 and October 2000, the European Central Bank has increased the deposit facility and the marginal lending facility rates seven times, bringing them to 3.75 percent and 5.75 percent respectively.

The brief period of low interest rates during 1999 may have contributed marginally to the accelerated decline in unemployment experienced this year. The fact that net job creation has only taken place in western Germany is strong evidence that a weak currency rather than low interest rates are responsible. It is too soon to tell whether the tighter European monetary policy of the past year will choke off future reductions in the German unemployment rate.

Germany has managed to make "mixed progress" toward fiscal consolidation in recent years.<sup>9</sup> Reduced fiscal deficits have countervailing economic consequences. On the positive side of the ledger, lower budget deficits increase net national savings, frequently result in a more productive deployment of capital and help create an economic environment conducive to lower interest rates. Public deficit reduction, on the other hand, curtails immediate aggregate demand, which can slow economic growth. Germany at mid decade ran relatively high budget deficits as it continued to struggle to pay for German unification during a period of lackluster growth. The German fiscal deficit amounted to 3.3 percent of GDP in 1995 and 3.4 percent in 1996. Both figures exceeded the ceiling of three percent established in the Treaty on European Union (i.e., the Maastricht Treaty),

which had to be achieved in 1997 if a European Union member nation wished to qualify for participation in European monetary union (EMU).

Germany reduced its fiscal deficit to 2.7 percent of its GDP in 1997. Deficit reduction permitted Germany to participate in the EMU, but it did have a short-term deleterious impact on the German labor market, particularly in eastern Germany where the federal government cut back several active labor market programs (see figure 2). Germany's public deficit continued to decline. In 1998 it had fallen to 2.1 percent of GDP, and it dropped to 1.4 of GDP in 1999. Stronger economic growth, driven by the export boom, and further budgetary consolidation were the main factors contributing to this trend.

In summary, changes in monetary and fiscal policy have had, at best, a relatively small impact on the German unemployment rate during the second half of the 1990s. Have other government policies had a bigger impact? In particular, have the policies of the Schröder government affected labor market conditions?

#### 4.3. Employment Policies of the Schröder Government

This section assesses the efficacy of the employment policies of the Schröder Government. It does not appraise the general efficacy of active labor market policy, of which there are already many excellent studies.<sup>10</sup> The objective of this section is more modest, since it focuses on evaluating the measures enacted by the current German government that have a major component designed to help reduce unemployment, specifically, the Emergency Program to Reduce Youth Unemployment (*Sofortprogramm zum Abbau der Jugendarbeitslosigkeit*, JUSOPRO), the "Alliance for Jobs" (*Bündnis für Arbeit*) and the ecological tax reform. Before assessing these programs, it is important to discuss two government measures designed to shore up the German welfare state that had a negative effect on the German labor market, namely, the so-called 630 DM job law and the redefinition of self-employment.

#### 4.3.1. The 630-Mark Job Law and "Pseudo Self-employment"

In early 1999, the Schröder government, at the initiative of the federal labor minister, Walter Riester, passed two pieces of legislation designed

to end free riding on the German welfare state. The first measure revised legislation governing the taxation of "small jobs" (*geringfügige Beschäftigung*). Previously, German law exempted individuals working part-time at a job that paid a maximum of 630 DM per month from any payroll taxes. German payroll taxes at the time amounted to equal employer and employee contributions that **each** exceeded 20 percent of the gross wage. The tax waiver, which had been enacted in the 1970s, made the "minijobs" quite popular, particularly as German payroll taxes began to creep up in the 1980s and 1990s. In 1999, 4.5 million Germans were employed in a 630 DM per month job, mostly in the service sector.<sup>11</sup>

The new act set minimum payroll-tax rates for the various categories of small jobs (e.g., a small job as a sole means of employment versus a small job as a second job) and provided minimum welfare-state benefits in return.<sup>12</sup> By November 1999, the labor ministry had registered 3.7 million 630 DM jobs. Although this figure was some 700,000 below the estimate of April 1999, research showed that some small jobs had been converted into part-time and even some full-time jobs, but the net impact on the labor market was still negative. However, the government did collect an additional DM 2.1 billion in payroll taxes.<sup>13</sup>

The second new law, which came into force on January 1, 1999, narrowed the definition of self employment. Unlike in the United States, the self-employed in Germany are not required to make payroll-tax contributions. The new law redefined approximately 3.6 million individuals who claimed to be self-employed because they worked repeatedly but not regularly for the same employer as "pseudo self-employed" (*scheinselbständig*). The pseudo self-employed and their employers became immediately liable to payroll taxation. Retailers, the media and other service businesses were particularly hard hit by this change.

These two new laws plugged tax loopholes in the German welfare state, but by doing so increased the rigidity of the German labor market. German business representatives and right-wing editorialists complained loudly that these new laws placed additional burdens on firms that would make it harder not only to hire new employees, but also to maintain many current 630 DM per month and newly declared pseudo self-employed employees on the payroll. Polls have shown widespread public dissatisfaction with these measures.<sup>14</sup> Those affected saw the changes as an additional restriction on their freedoms. Opaque language and numerous

revisions owing to mistakes in the initial drafting of the legislation have deepened the negative impression of the laws among the public.

The two laws also produced divisions within Gerhard Schröder's Social Democratic Party between "traditionalists," who supported the new laws because they shored up the welfare state, and "modernizers," who preferred loosening the labor market (most members of the junior party in the current German government, the Alliance Greens, have tended to side with the modernizers).<sup>15</sup>

No one has denied that the revision of the provisions regulating 630 DM jobs and self-employment have made the task of reducing unemployment more challenging. Since the laws also significantly increase the incentives to work "off the books" in the underground economy, Riester's reforms may actually exacerbate the financial pressure on the welfare state as well. Proponents of the changes acknowledge their deleterious effect on employment, but argue that fairness and the greater good of preserving the welfare state required the reforms. The Schröder government has enacted three additional measures since coming into office intended either directly or indirectly to promote employment. The following sections assess each.

#### 4.3.2. JUSOPRO

The November 1998 Emergency Program to Reduce Youth Unemployment was one of the first pieces of legislation passed by the Schröder Government. The objective of the 2 billion DM JUSOPRO program has been to subsidize the creation of 100,000 jobs and apprenticeship places for youths up to 25 years of age.<sup>16</sup> The expensive and bureaucratically top-heavy JUSOPRO has never lived up to the expectations of its proponents. At its peak, JUSOPRO created a mere 64,000 jobs. A recent IAB study concluded that JUSOPRO has played "only a modest role" in reducing unemployment.<sup>17</sup>

#### 4.3.3. The Alliance for Jobs

The centerpiece of the Social Democrats' original jobs program was a promise to resurrect a revised version of the Alliance for Jobs, a labormanagement-government forum that had collapsed in 1996. The Alliance for Jobs is essentially a combination of corporatist and so-called "Third Way" elements. It is corporatist insofar as it is tripartite (i.e., top business, labor and government representatives are the exclusive participants), and its structure grants considerable policymaking authority to the non-governmental participants.<sup>18</sup> In contrast to the European corporatist arrangements from the 1970s, however, the Alliance for Jobs has not been designed to serve as a vehicle to facilitate Keynesian macroeconomic demand management. The purpose of the Alliance is to eliminate **structural** causes of unemployment in Germany by identifying and adopting a generally acceptable set of "best practices" to stimulate **private-sector** job creation.<sup>19</sup>

In practice, the Alliance for Jobs has produced little of substance. An awkward architecture, constant squabbling between the social partners and a lack of engagement by the chancellor have all undermined the effectiveness of the Alliance. Only a major structural simplification and a newfound willingness of the participants to embrace innovative solutions to labor market problems could transform the Alliance for Jobs into an institution that could lay the groundwork for a significant reduction in unemployment. The odds of these changes taking place are, however, extremely long.

#### 4.3.4. The Ecological Tax Reform

The ecological tax is an attempt to kill two birds with one stone. Its objectives are to reduce pollution through higher energy taxes and to promote employment by using the additional tax money to replace part of the payroll tax that has traditionally funded the German welfare state. The resulting reduction in labor costs, if substantial enough, should stimulate employment. In 1999, the German government enacted two ecological tax-reform measures. The complexities of ecological tax reform were enormous. The German government tried to strike a balance along several fronts: attaining at least a semblance of equity in sharing the burden of the new tax, preserving economic competitiveness, creating a new incentive system that actually promotes significant energy conservation and generating enough revenue to produce a significant enough reduction in payroll taxes to stimulate employment. When the ecological tax is fully implemented in 2003, its authors estimate that it will yield 30 billion DM

each year. This will ultimately permit a combined payroll tax cut of 4.4 percent of the gross wage. Economists disagree about the power of the full payroll tax cut as an employment stimulus and the impact of the ecological tax on economic efficiency. There is no disagreement, however, that the payroll tax reductions that have thus far taken place have done little to reduce unemployment.<sup>20</sup>

#### **5. CONCLUSION**

The evidence presented in this chapter shows that recent improvements in labor market conditions are primarily the product of favorable demographic developments (i.e., a shrinking potential labor force) and an export-led expansion sparked by a favorable exchange rate. This has produced an expansion of the labor market and a decline in unemployment concentrated in the heavily export-dependent regions of western Germany. In contrast, joblessness has remained persistently high and employment has remained flat in eastern Germany.

The analysis of the Schröder government's labor market policies has shown that they are not responsible for the recent reductions in unemployment. The JUSOPRO has made at best a minor contribution to employment reduction, and it is unlikely that the Alliance for Jobs will bear any fruit. Some of the current government's policies may have even blunted the decline in joblessness (i.e., the revisions to the law governing 630 DM jobs and self-employment).

The payroll tax reductions accompanying the full implementation of the ecological tax in 2003 may ultimately help to reduce unemployment significantly, but it is too soon to tell with any certainty. One should also note that the Schröder government's general tax reform of 2000 and further payroll tax reductions that may result from pension reform may both make significant additional contributions to reducing unemployment in Germany. They were not included in this chapter's analysis because the former was only enacted in July 2000 and the latter is still draft legislation, so they cannot have contributed to recent declines in unemployment.

Will unemployment continue to ebb in Germany? Favorable demographics and the general tax reform of 2000 make it likely, but the euro remains an unpredictable wild card. Still, the Alliance for Jobs and private talks among the collective bargaining partners have thus far failed

to produce the crucial missing piece: labor market reform. For, as Klaus Zimmermann, president of the *Deutsches Institut für Wirtschaftsforschung*, has rightly pointed out, "Full employment will stay a *Fata Morgana* if the labor market is not made more flexible."<sup>21</sup>

#### ENDNOTES

1. For example, *Süddeutsche Zeitung*, 29 September 1998; and *Frankfurter Allgemeine Zeitung*, 4 January 2000.

2. All statistical data, unless otherwise noted, come from *Deutsche Bundesbank*, *Saisonbereinigte Wirtschaftszahlen* (Frankfurt/Main: *Deutsche Bundesbank*, various years).

3. See Matthias Knuth's contribution to this volume and Wolfgang Franz and Viktor Steiner, "Wages in the Eastern German Transformation Process – Facts and Explanations," Zentrum für Europäische Wirtschaftsforschung, Mannheim, April 2000. 4. Johann Fuchs and Manfred Thon, "Potential Projektion bis 2040," *IAB-Kurzbericht*, no. 4, 20 May 2000, p. 3.

5. Autorengemeinschaft, "Bundesrepublik Deutschland. Der Arbeitsmarkt im Jahr 2000," *IAB-Kurzbericht*, no. 1, 29 February 2000, p. 7.

6. Bundesanstalt für Arbeit, "Die Entwicklung des Arbeitsmarktes im September 2000 sowie in den alten und in den neuen Ländern," *Pressemitteilung*, no. 65, 5 October 2000.

7. Wirtschaftswoche, 25 May 2000.

8. Autorengemeinschaft, "Bundesrepublik Deutschland. Der Arbeitsmarkt im Jahr 2000," *IAB-Kurzbericht*, no. 1, 29 February 2000, p. 1.

9. Organization for Economic Cooperation and Development, OECD Economic Surveys, 1998-1999: Germany (Paris: OECD, 1999), pp. 50-55.

10. For example, Matthias Knuth, "Active Labor Market Policy and German Unification: The Role of Employment and Training Companies," in Lowell Turner, ed., *Negotiating the New Germany: Can Social Partnership Survive?* (Ithaca, New York: Cornell University Press, 1997); and Heinz Werner, "Countries with Successful Employment Policy – What is behind their Success?" *IAB Topics*, no. 33 (1999).

11. Süddeutsche Zeitung, 18 January 2000.

12. *Focus*, 29 March 1999; and Bundesministerium für Arbeit und Sozialordnung, *Das 630-Mark-Gesetz* (Bonn: BMA, 1999).

13. Süddeutsche Zeitung, 18 January 2000.

14. Süddeutsche Zeitung, 15 June 1999.

15. Welt, 12 March 1999 and 6 May 1999.

16. Süddeutsche Zeitung, 19 November 1998; and Handelsblatt, 26 November 1998.

17. Autorengemeinschaft, "Bundesrepublik Deutschland. Der Arbeitsmarkt im Jahr 2000," *IAB-Kurzbericht*, no. 1, 29 February 2000, p. 4.

18. Norbert Berthold and Rainer Hank, *Bündnis für Arbeit: Korporatismus statt Wettbewerb*, Walter Eucken Institut, Beiträge zur Ordnungstheorie und Ordnungspolitik, no. 159 (Tübingen: Mohr Siebeck, 1999), pp. 40-49.

19. Stephen J. Silvia, "The Alliance for Jobs: Social Democracy's Post-Keynesian/ Process-oriented Employment-Creation Strategy." *German Politics and Society* 17, no. 1 (Spring 1999), pp. 87-89.

20. Michael Kohlhaas, *Ecological Tax Reform: From Theory to Policy* (Washington, D.C.: AICGS, 2000).

21. Wirtschaftswoche, 25 May 2000.

#### THE MOUNTING BURDEN OF PASSIVE ADAPTATION ECONOMIC RESTRUCTURING, WORKER DISPLACEMENT, AND UNEMPLOYMENT IN WEST GERMANY IN THE LAST DECADE OF THE TWENTIETH CENTURY Matthias Knuth

Data analysis and graphic presentations by Thorsten Kalina, Angelika Müller, Gernot Mühge and Jörg-Peter Schräpler

#### ABSTRACT

In our era of "shareholder value," news of redundancies in leading global companies is good news for the stock market. The coincidence of this kind of news with growing unemployment creates the impression of a direct and simple relationship between the two developments. In this paper, we use official data on employment and unemployment and utilize a number of surveys of establishments, individuals and, more specifically, unemployed persons in order to point out several paradoxes. We find that dismissals for economic reasons account for only a fairly small share of separations. Furthermore, the contracting sectors produce less job destruction, have less labor turnover, make less use of dismissals and produce below-average unemployment inflows.

In contrast, we find that among samples of unemployed persons the percentage of those who lost their last job due to a dismissal for economic reasons is rather high. We do not know, however, from which sectors these unemployed originated. From an analytical perspective, it must be concluded that the mechanisms by which structural change produces unemployment are still rather obscure. Event history analysis based on data sets of individuals is needed to shed more light on the unemployment process. Some preliminary steps in this direction will be presented insofar as the significance of unemployment as a means of transition from employment to a pension ("early retirement") will be examined.

#### **1. INTRODUCTION**

Unemployment has been persistent and rising in the EU since the mid-1970s. Job growth in the second half of the 1980s brought only temporary relief. In West Germany, in contrast to its neighbors, the boom caused by German unification extended this period of employment increase into the early 1990s. However, western Germany's gain was eastern Germany's loss. Within only four years, 40 percent of the jobs that had existed in East Germany in 1989 were destroyed (Knuth/Bosch 1994). Unemployment in the east has remained above one million since, reaching a new peak of almost 1.4 million in 1997.

After the damage had been done in the east, the west German job machine also started running backwards. From 1993 to 1996, Germany's top one hundred companies alone shed 560,000 jobs.<sup>1</sup> In the west, 1.2 million jobs (five percent of dependent employment) fell prey to what was then described as "globalization" and "lack of competitiveness." Unemployment grew simultaneously by almost the same magnitude, and long-term unemployment mounted even faster. In a survey of works councils undertaken in the winter of 1997/1998, redundancy was found to have been the most frequent problem since 1994. Staff cuts had been a major concern in two thirds of the establishments<sup>2</sup> whose works councils responded (WSI-Projektgruppe 1998).

Facts like these appear to be obviously interrelated. At first sight, they suggest something like the following chain of reasoning:

(1) Decline of employment at the macro level results from workforce reductions at the micro level;

(2) Major job losses at the establishment level will be brought about, in most cases, by dismissals;

(3) Workers dismissed for economic reasons will, in many instances, become unemployed;

(4) In times of declining employment, with job seekers outnumbering job vacancies and an already high level of unemployment, the prospects of displaced workers finding new jobs will be very bleak;

(5) Individual unemployment resulting from employers' negative selection is very likely to turn into long-term unemployment;

(6) Long-term unemployment entails lasting exclusion from economically rewarding and socially validated activity. It is, therefore, a major cause of social exclusion.

(7) In short, workforce reductions are a major factor in social exclusion.<sup>3</sup>

In this paper, some of the above assumptions will be questioned and

challenged. Our examination will be restricted to former West Germany because the bulk of East German unemployment is still attributable to the collapse of the former economic and political system rather than the normal structural dynamics of capitalist development. Practical considerations suggest the same restriction because, for obvious reasons, long series of data for Germany as a whole are not available.

The research project in the course of which this paper originated consisted of a four-country-comparison (France, Italy, Spain, Germany) on "Redundancy as a factor in social exclusion."<sup>4</sup> Even more specifically, and inspired by work done previously by the French coordinating team (Mallet et al. 1997), the notion of "dismissal for economic reasons" *(licenciement économique)*, which is codified in French labor law and registered in French labor market statistics was hypothetically linked to social exclusion. The project was funded by the TSER program (Targeted Socio-Economic Research) of the European Commission, DG XII, during the years 1998 and 1999.

The paper stresses some points that may not be surprising to a labor economist but that needed to be emphasized in the context of a project inspired by legal concepts and social policy concerns.

Our analysis will begin by exploring the genesis, the degree of comprehensiveness, and some of the drawbacks of the employment data that are available in Germany (section 2). We will then describe the employment shifts between the sectors of economic activity and between the size categories of establishments (section 3). Net changes in employment levels at the meso level result from job creation and job destruction at the micro level of the establishment. This volatility of jobs, measured as job turnover (section 4), defines the minimum level of manpower mobility into and out of employment relationships in individual establishments, although labor turnover is actually much higher and counter-cyclical (section 5). Among the many ways in which employment relationships may be terminated, dismissals—and especially those effected for economic reasons—are of particular interest to us in this paper (section 6). Finally,

we will attempt to shed some light on the movements between employment and unemployment (section 7). We conclude that the nexus between dismissals and unemployment is much more intricate than the starting hypotheses imply. Official statistics on employment and unemployment afford, at best, mere glimpses of this relationship. The "production of unemployment" and, in particular, long-term unemployment, through the dynamics of structural change is still a largely obscure process that is barely reflected in the "hard data" available (summary in section 8).

#### 2. CHARACTERISTICS OF GERMAN EMPLOYMENT STATISTICS

#### 2.1 Employment subject to social security contributions (ESS)

For the sake of brevity, the abbreviation "ESS" for "Employment subject to Social Security contributions" will be used from here on.

The most comprehensive statistics on employment in Germany are based on the employment returns submitted by establishments<sup>5</sup> to the social security authorities. The beginning as well as the termination of every employment relationship subject to social security contributions must be reported, and ongoing employment relationships are monitored at the end of each year (Bender et al. 1996). Since individuals keep their social security numbers throughout their lives, continuous employment careers can be followed, in principle, without gaps.<sup>6</sup> As we will see below (2.3), however, employment careers interrupted by unemployment or inactivity are more difficult to trace.

The vast ESS database is administered and hosted by the Federal Employment Agency. The data has been recorded electronically since 1973, and it allows for reliable computations starting from 1976 (Bender et al. 1996: 22). Since this base contains data relative to the persons employed as well as (since 1977) to some of the characteristics of the establishments employing them, the data can be used for types of analyses not possible with surveys of individuals or firms.

In addition to statistics on ESS from the Federal Employment Agency, there are also statistics provided by the Federal Bureau of Statistics, which include those categories of gainful employment that are not subject to social security contributions. These statistics on gainful employment in the broader sense produce only stock data; they do not allow flow analyses. This is why we restrict much of our analysis to ESS data, which cover about 80 percent of total gainful employment. The remaining categories of economic activity will be briefly examined in the next paragraph.

# 2.2 Statistics on gainful employment in the broader sense (economically active population)

Our analyses based on ESS data will omit the following categories of economic activity:

(1) The health care costs and pensions of public officials with the special status of *Beamte* (as well as those of judges and military personnel) are paid directly by their public employers. Their particular relationship with the state excludes the risk of becoming unemployed. No social security contributions are paid for them. Consequently such employment relationships are not registered in the social insurance system.<sup>7</sup>

(2) Self-employed persons<sup>8</sup> and unpaid family helpers are not obliged to pay social security contributions.<sup>9</sup> They are, therefore, not included in ESS statistics.

(3) Finally, employment relationships with a working time of no more than fifteen hours per week and with monthly earnings below an annually adjusted threshold (630 DM  $\approx$  322 ECU in 1998) are exempt from social insurance contributions.<sup>10</sup> The same applies to student jobs involving fewer than twenty hours per week during term time as well as to seasonal jobs with fewer than fifty workdays per year if the person doing the job is not seeking more permanent employment. These marginal temporary or part-time workers are, therefore, not included in ESS statistics (Bender et al. 1996: 8).<sup>11</sup>

Table 1 illustrates the gap between ESS and gainful employment in the broader sense. In the context of our analysis of redundancy as a cause of unemployment, omitting the self-employed, their unpaid family helpers and *Beamte* is no serious problem, since these categories cannot be made redundant in the regular sense of the word. It is only the exclusion of marginal part-timers from ESS statistics that presents a substantial drawback. It should be noted, however, that 25 percent to 30 percent of marginal part-timers work in private households where "redundancy for economic reasons" can hardly occur in the sense which is the focus of our research.

1990	1995
78.4	79.3
62.4	59.5
10.5	14.3
5.5	5.5
3.2	3.1
7.7	6.1
10.8	11.3
2.6 8.2	2.1 9.2
100.1	99.8

Table 1. Gainful employment by category, percentages, West Germany

### 2.3 ESS and unemployment statistics

The exemptions from social insurance contributions have (1) a direct as well as (2) an indirect effect on stock as well as flow data on unemployment:

(1) Persons who have not paid contributions will not receive unemployment benefits. Although the legal definition of the status of "unemployed" is independent of the eligibility for unemployment compensation, persons who are not eligible for any benefits may not see any need to register as unemployed. As long as they are out of work, they may disappear from statistics as "discouraged workers."

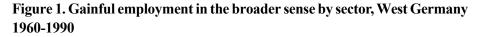
(2) Persons without work who are seeking no more than marginal part-time work (below the threshold of liability to social insurance contributions) are, by legal definition, not considered as job-seekers and are not, therefore, registered as unemployed.

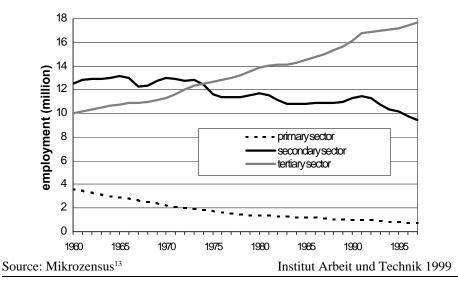
### **3. THE CHANGING STRUCTURE OF EMPLOYMENT**

As our analysis will show, the incidence of job loss, of dismissal as a specific means of separation, and of entries into unemployment after job loss differs widely according to sector and establishment size. National differences of the degree of "churning" in the employment system can, to a large extent, be explained by different national employment structures in terms of sector and size distribution. It seems appropriate, therefore, to take a brief look at the structural composition of German employment and its changes over time. We will first investigate the change of the employment structure by sector, and then examine the gradual rise of small and the diminishing importance of large establishments as employers (3.2).

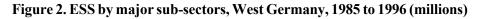
### 3.1 Sectoral shifts

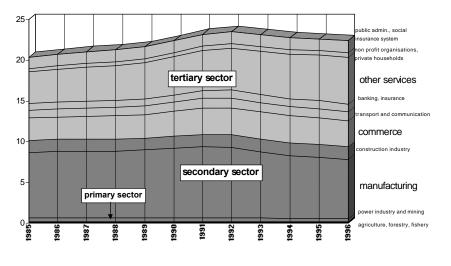
As in almost all developed and formerly "industrial" societies, services in western Germany overtook manufacturing in terms of employment some time ago. As Figure 1 illustrates, the crossing of the lines occurred in the mid-seventies.





By international standards, however, West Germany's share of employment in the secondary sector is still rather high. Figure 2 illustrates the distribution of employment subject to social security contributions, broken down by sub-sectors.

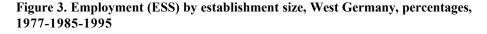


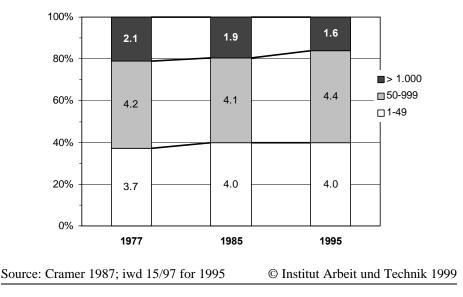


Source: Annual figures from the Official Bulletin of the Federal Employment Agency © Institut Arbeit und Technik 1999

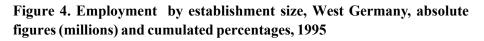
### 3.2 Employment distribution by establishment size

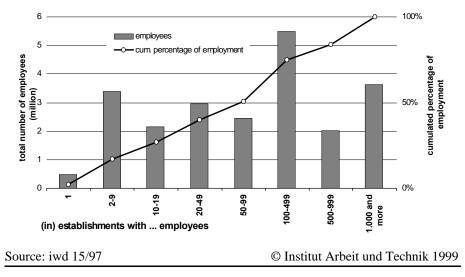
The sectoral changes in employment levels were accompanied by shifts in the distribution of employees between the size categories of establishments employing them. The percentage of employment relationships in "small" establishments with fewer than fifty employees grew between 1977 and 1985 but has almost stagnated since then (Fig. 3). The percentage of employment in "medium-sized" establishments with between fifty and just under 1,000 employees increased between 1985 and 1995, while the percentage in "very large" establishments with 1,000 and more employees declined considerably between 1985 and 1995 (and has continued to decline according to more recent figures). It can be assumed that the relative growth of the "medium-sized" category has been brought about, to a great extent, both by former very large establishments shrinking below the 1,000 threshold and by former small establishments surpassing an employment level of fifty.





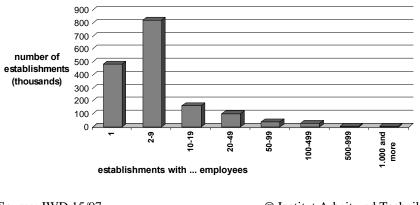
The distribution of employees by establishment sizes in 1995 is portrayed in a more differentiated way in Figure 4. The vertical bars indicate the absolute numbers of ESS for each size category of establishment, while the ascendant line shows cumulated percentages of employment distribution. Slightly more than 50 percent of western Germany's wage and salary earners are employed in establishments with a workforce of fewer than 100, and slightly over 75 percent in establishments below 1,000 employees. In the classification chosen for this graph, the size category of 100 to 499 employees is the most important locus of employment, followed by establishments with 1,000 and more. By international standards, large establishments are still relatively important employers in Germany.





A contrasting picture is obtained, of course, if the same data are depicted as a distribution of establishments over size categories. Small establishments with fewer than ten employees now come to the fore, whereas establishments with 500 and more become almost invisible (Figure 5).

### Figure 5. Establishments by size category, West Germany, 1995



Source: IWD 15/97

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In Germany, as in France and Italy, mainly small establishments that are contributing to employment growth—or rather, since 1992, they have continued to produce net employment growth without being able to offset the macro trend. Since 1993, the Establishment Panel<sup>14</sup> of the IAB<sup>15</sup> has shed more light on the distribution of job creation by establishment size. During the downswing, which, from 1992 onwards, succeeded the west German "unification boom," only establishments in the 1-20 category reported net employment growth. Net reductions in employment began in the categories from fifty employees upward, and employment cuts became more marked in the larger size categories (Kühl 1995). As the downswing lost momentum, the pattern of employment records by establishment size became a bit more scattered, but the highest percentage of employment gains was still found in the 20-49 category (Bellmann/Kölling 1997: 96). As for employers' expectations, it was only in establishments with fewer than fifty employees that consecutive series of the panel produced positive employment prospects (Projektgruppe Betriebspanel 1995: 47; 1997: 51). Thus the importance of small establishments as employers seems to be growing, even though some of them will ultimately expand to a point where they are no longer so small. In general, the varied potential for job growth (or job elimination) of the different establishment sizes does not adequately show up in cross-sectional size distributions like those depicted in Figure 3 because establishments move from one size category to another as they grow or shrink.

If smaller establishments and new service industries become increasingly important as employers, this should have consequences for average job stability. This hypothesis will be explored in the next section.

### 4. ECONOMIC TURBULENCE: JOB TURNOVER, ITS COMPONENTS AND DETERMINANTS

In Germany, unlike in France, dismissals are not recorded in official statistics. Because of this unsatisfactory situation we will in this section attempt to locate the risk of job loss for economic reasons by pursuing a more indirect approach. We will look for job turnover with its two components, job creation and job destruction, regarding the latter as an indicator for situations that might result in redundancy. First, we will explain the concept and measurement of job turnover (4.1), and then we will locate Germany's job turnover in an international comparative perspective (4.2). Germany's relatively low job turnover rate can largely be explained by the effects of establishment size and sector (4.3). This allows us to identify the locus of employment insecurity—which is not where net employment reductions occur (4.4).

### 4.1 The concept and measurement of job turnover

Aggregate negative employment changes in certain divisions or categories of establishment size indicate that employees must have separated from their jobs in one way or another. However, this gives only a very vague hint as to where redundancy for economic reasons might have occurred. A closer analysis reveals that, even in periods of net employment growth, there are establishments that reduce employment or even cease to exist, and vice versa. This is true for a national economy as well as for any subdivision of sectors, establishment size categories or regions. The level of "milling" and "churning" of employment at the level of individual establishments—and this is where the hiring and firing occurs—is always much higher than any aggregate net change.

Therefore, in order to identify instances of employment loss (which may or may not be brought about by redundancy for economic reasons) we have to extend our analysis to the level of individual establishments. The tool for such a task is job turnover analysis.<sup>16</sup> Since "jobs" or "posts" are not statistically observed in a direct way, the existence of an employment relationship (for Germany: ESS) is assumed to signify the existence of a "job." The numerical change in employment relationships in a given establishment between two points of observation, usually a

year apart is regarded as the "loss" or "gain" of jobs in that particular establishment.<sup>17</sup> While the measurement of **labor turnover** (see section 5) reflects the movements of individual workers into and out of establishments, job turnover measures only annual changes in the number of workers. Labor turnover cannot be lower than job turnover, but it will normally be higher.

In any aggregate of establishments, there will be some that will have been newly set up<sup>18</sup> in the period observed, while others will have shut down; some will have created additional jobs, while others will have eliminated jobs. In order to compute an aggregate measure of this turbulence or "churning" for a given period, the absolute magnitudes of change in each individual establishment in the aggregate are added, irrespective of sign, and divided by twice the aggregate number of jobs at the beginning of the period.<sup>19</sup>

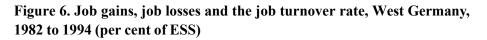
The following formula has been used for computing the job turnover rate:

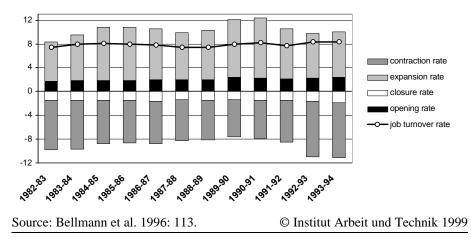
$$JTR = \frac{\sum |E_t - E_{t+1}|_i}{2\sum E_{i,t}}$$

in which  $E_t$  and  $E_{t+1}$  are the employment levels in an individual establishment at the two points of observation and is the running index of the establishments under observation. This formula allows direct comparisons with labor turnover, which is also computed with twice the initial stock in the denominator.<sup>20</sup>

### 4.2 Job turnover in an international comparative perspective

The west German job turnover rate is fairly stable at around eight percent (Fig. 6). Leaving aside the ups and downs of the business cycle and the resulting net employment changes, a job turnover rate of eight percent means that every year one out of twelve jobs is "re-allocated" from one establishment to another. This is the minimum of labor force reallocation since "jobs" (measured as a unit of employment subject to social security contributions) cannot disappear from an establishment or emerge in another establishment without the equivalent number of workers leaving or entering.





The relative stability of national job turnover rates over time is not just a German phenomenon but also quite common among the countries for which such data are available. This makes it possible to conduct crossnational comparisons based on job turnover rates averaged over periods of several years. From such an international perspective (Fig.7), job turnover appears to be very low in west Germany. In other words, the west German economy seems to be rather sluggish both in terms of job creation and job destruction.

Many authors have repeatedly advanced the view that this is due to "over-regulation," namely employment protection. An empirical study of dismissal procedures has clearly demonstrated, however, that German employment security regulations do not prevent dismissals (Falke et al. 1981). An econometric analysis of employment adjustment patterns (Kraft 1994) ranked the reactiveness of the German employment system to changes in output close to the UK and far above France. The OECD (1987, 1996) tends to explain the differences between national job turnover rates primarily in terms of the differing distributions of national workforces among the various sizes of establishments.

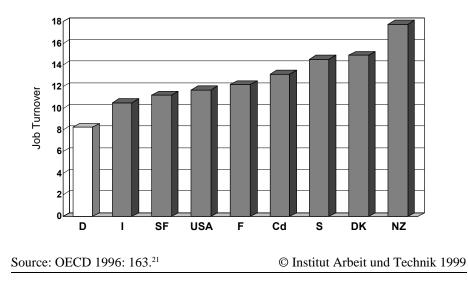


Figure 7. Average job turnover rates of selected OECD countries, 1983 to 1991

### 4.3 Job turnover by establishment size and sector

In a national comparison across different categories of establishment size, the effect of size can be clearly demonstrated (Table 2). Smaller establishments have a higher rate of job creation (new openings and expansions) as well as a higher rate of job destruction (closures and contractions). In other words, their employment performance is much more turbulent. The smallest category of German establishments with workforces of fewer than twenty employees has job turnover rates of the same order of magnitude as the national rates of Denmark or New Zealand (cf.Fig. 7). The low national job turnover rate of Germany can, to a great extent, be explained by the fact that large establishments still tend to dominate (cf. Fig. 3).

		establishme	nt size (number	of employees
	1-19	20-99	100-499	greater/equ- al to 500
Expansion rate Opening rate Contraction rate Closure rate	11.7 6.6 -8.7 -5.6	5.8 2.6 -7.1 -1.9	3.9 1.4 -5.3 -1.0	2.6 0.8 -3.8 -0.6
Job turnover rate	16.3	8.7	5.8	3.9
Source: Cramer/Ko	ller 1998: 36	55		

### Table 2. Job turnover rates and their components by establishment size,West Germany, 77 to 1985

The variation in job turnover rates by sector (Table 3) is almost as widespread as that by establishment size. It is higher in the tertiary sector than in the secondary. Within manufacturing, there seems to be a ranking according to the closeness to the consumer. In services, the internal differences between non-profit services (mainly public and social insurance administrations) and services to private customers are very marked.

Sector/sub-sector	Job turnover rate
primary sector	15.0
secondary sector	6.9
raw materials	5.2
investment goods	6.2
consumer goods	7.4
foodstuffs	7.9
construction	10.4
tertiary sector	8.6
Distributive services	9.7
business services	9.2
Services to private households	14.2
non-profit services	5.7
all sectors	7.9
Source: Bellmann et al. 1996: 113.	

Table 3. Job turnover rates by sectors and sub-sectors, averages 1982 to1994, West Germany

To the best of our knowledge, no statistical test has been applied to job turnover data with a view of separating out sectoral influences from those of establishment size. It appears, however, that both factors are closely linked to each other: establishments tend to be smaller in sectors where high numerical flexibility is a condition of survival.

#### 4.4 Job turnover analysis: critique and conclusions

To some degree, the low job turnover rates of large establishments may appear to be a statistical artifact. When a larger establishment, in a given year, eliminates ten jobs on the assembly line and creates ten new jobs in product design, then this will be counted as a job turnover of zero. This is because the number of jobs in the establishment does not change even though it is not very likely, in this case, that assembly workers will be transferred to the design department. If, however, product design has been contracted out to a different establishment, the same kind of shift will be counted as a loss of ten jobs in establishment A and a gain of ten jobs in establishment B. Relatively low job turnover rates may, then, reflect a relatively high level of functional integration within establishments that tend in consequence to be larger. In the light of recent changes in industrial philosophies, a relatively low level of job turnover may be associated with a relatively low level of outsourcing. Indeed, there is some evidence that outsourcing, in Germany, has by no means gone as far as the treatment of this issue in management journals and academic conferences might lead us to believe (DIW 1996; Flämig/Hesse 1998).

What appears at first sight to be a weakness of job turnover measurements does have some real meaning in our context of redundancy as a possible result of structural change. If job loss and job creation take place in the same enterprise, and, in contrast to the example given above, on the same functional and skills level, there is some chance that this shift will be accomplished by an internal reassignment of workers, with fewer or no exchanges with the external labor market. If, on the other hand, job gains and losses take place in different enterprises, workers inevitably will have to shift their contractual relations from one employer to another, even though the location of their workplace might not change. In this case, there will be fewer mechanisms to assist such a move and tougher adverse selection. The reallocation will be mediated more through the market than through the organization.<sup>22</sup>

Thus, in our attempt to locate the risk of becoming unemployed as a result of redundancy for economic reasons we arrive at a somewhat contradictory result:

• In an aggregate analysis of employment change, it is the large industrial establishments that reduce employment most substantially. So it would seem appropriate to look for redundancies there, concentrating on the sectors with a negative employment record.

• An analysis of job creation and destruction at the micro level of individual establishments leads us to the opposite conclusion: even though small establishments have the highest job creation rates and are expanding their share of total employment, it is also this category of establishments that has the highest rates of job destruction. The same may be said of the

expanding private service sectors.

In the next step of our analysis, we will look at movements of people rather than jobs in order to ascertain whether there are similar patterns of stability and turbulence.

### 5. WORKFORCE MOBILITY: LABOR TURNOVER AND JOB-TO-JOB CHANGES

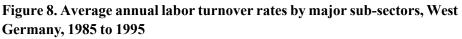
As explained in 4.1 above, job turnover measurements reflect only the numerical variations in the number of employment relationships ("jobs") in individual establishments. Employee flows into or out of these individual establishments cannot be smaller in number and will usually be greater. Over and above job creation and destruction, there are many other reasons for beginning, terminating or interrupting employment relationships. On the employees' side, retirements, deaths, new entries into the labor force, parental leave, and moves to a more attractive job or to another area must be considered. Employers, for their part, may hire permanent or temporary replacements for workers who quit or take leave. Because of conflicts or poor performance, they may dismiss individuals whom they will then replace. Finally, seasonal effects may cause shortterm variations in the workforce which are not captured in the annual observations of job turnover but are included in the measurement of worker flows.

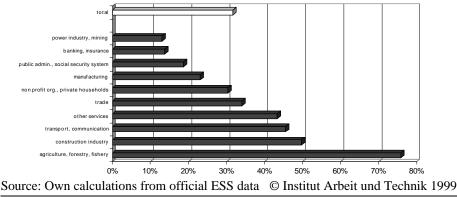
In this section, we will first analyze the overall movements of wage and salary earners into and out of employment relationships using official ESS statistics for labor turnover analysis, differentiated by sector and establishment size (5.1). Breaking down labor turnover by its components and comparing it with employment levels, we will explore the relationship between workforce movements and net employment change (5.2). We will then present data on job-to-job mobility and occupational changes which display the same cyclical pattern. We conclude that employment restructuring which results in a net contraction of employment does not increase but stifles mobility.

### 5.1 Labor turnover rates by sector and by establishment size

The overall rate of annual labor turnover in west Germany<sup>23</sup> based on

ESS data is around 30 percent.<sup>24</sup> It was higher in the seventies than in the eighties or nineties. Even today it is higher than in many other western European countries (OECD 1994: 64) and above the EU average (*Europäische Kommission* 1998: 21).





A comparison of labor turnover rates in sub-sectors of the national economy (Fig. 8) reveals characteristic differences between sectors:

- Industries, which are affected by natural seasonal rhythms (agriculture, forestry, fishing, and construction), have the highest rates of labor turnover. As we saw before, these are also the ones with the highest job turnover rates (cf. Table 3). Apart from construction, these industries are very small and not characteristic of the employment system at large (cf. Figure 2).
- Some service industries have labor turnover rates that are above average and higher than those of manufacturing, whereas "mature" and currently contracting service industries—the public and social security administrations as well as banking and insurance—have low labor turnover rates that are both below average and also below that of manufacturing.
- This applies also to the power industry and to mining: although the level of employment is declining, the rate of workforce turnover is the lowest.
- Despite its decline, manufacturing has below-average turnover rates.

Labor turnover rates by establishment size are only available as survey data from the IAB establishment panel for the years 1993 to 1995 (Bellmann et al. 1996: 12). The differences are not quite as distinct as those between sectors, and the pattern is clear and consistent with the pattern of job turnover: Labor turnover is highest in the smallest establishments and lowest in the largest with 5,000 and more employees.<sup>25</sup> Downsizing programs in larger establishments do seem to leave their mark, however: during the three years 1993 to 1995, labor turnover had a tendency to increase in establishments with workforces of 200 and more, whereas it tended to decrease in smaller establishments.

Using the graphic information from Figure 8 and Figure 2, we end up with a paradox quite similar to the one we derived from job turnover analysis:

- Leaving seasonal influences to one side, the highest rates of labor turnover are to be found in the growing "new" service sectors that are bundled together as "other services."
- Low labor turnover rates, on the other hand, seem to be associated with declining employment levels in an industry. It is definitely not the shrinking industries that produce the highest labor force mobility.

In the next section, a comparison of periods of employment expansion and compression will reveal the same pattern at macro level.

### 5.2 Labor turnover and net employment change at the macro level

The idea of workers being pushed into the labor market by dismissals suggests that labor turnover increases at times when the downsizing programs implemented by many establishments lead to a net reduction in total employment. However, as Figure 9 illustrates, this is not true at all. By breaking down labor turnover into its two components—hiring and separations—the underlying mechanism is revealed.

Net employment growth results when hirings outnumber separations, while a net reduction in employment results when separations outnumber hirings. Nevertheless, separation rates are higher in periods of employment growth than in periods of employment decline, resulting in higher overall turnover rates in periods of expansion as compared to periods of contraction. This may be explained as follows: During a depression, workers tend to hold on to their jobs if they can because they have no attractive alternatives. As a result, voluntary mobility collapses faster than involuntary mobility is forced upon workers, resulting in a decline of separations. By contrast, in periods of growing employment, incumbent workers leave their jobs to accept more favorable job offers. In this way they create vacancies which are then filled in a new round of hirings, some of which may again create new vacancies. The length of the hiring chain (Schettkat 1992 and 1996) varies with manpower demand, and it works as a multiplier, which creates cyclical variations in labor turnover with amplitudes much greater than those of employment levels do. It might also be said that mobility in and out of jobs is primarily a "pull," not a "push" phenomenon. The latter, i.e. dismissals or other kinds of separations initiated by employers, will not produce the same magnitude of labor turnover as attractive offers from new employers.<sup>26</sup> This will be true at the macro as well as at the sectoral level.<sup>27</sup> At the micro level, however, allowance will have to be made for the exceptions of bankruptcies, closures or massive staff cuts, which will, inevitably, serve as "pushes" into the labor market.

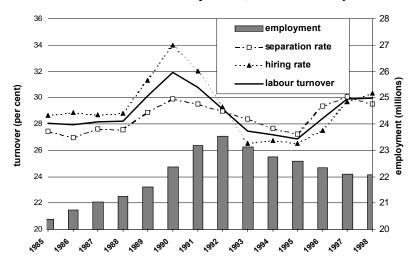


Figure 9. Labor turnover and its components,<sup>28</sup> West Germany 1985 to 1998

Source: Federal Employment Agency; own calculations

<sup>©</sup> Institut Arbeit und Technik 2000

Recent developments in the second half of the nineties might indicate a change in the pattern just described: The labor turnover rate went up by three percentage points even though separations were still outnumbering hiring and employment was still declining. Unlike in the early eighties, the crossing of the separation and hiring curves occurred at an already high level of turnover, not at its bottom turning point. This pattern might be indicative of a period of accelerated restructuring in the second half of the nineties.

### 5.3 Job-to-job mobility and changes of occupation

The labor turnover rate at macro level contains all accessions and separations into and out of employment, no matter whether these movements occur from job to job, from a job into unemployment or inactivity, from unemployment into a job or from inactivity into a job. A recent sample from ESS statistics, the IAB Employee Sample (cf. Bender/Hilzendegen 1995), makes it possible to distinguish between these different types of movements. Figure 10 illustrates the direct job-to-job movements between 1985 and 1995, differentiating between changes of employer only or simultaneous changes of employer and occupation.<sup>29</sup> The basis for computing percentages is, in this case, not the average stock of employment relationships but the somewhat higher number of individuals (between 13 and 14 percent) who have been reported as employed at any time of the given year (Bender/Haas/Klose 1999).

Direct job-to-job changes involve between ten percent and 16 percent of these persons "in the game." The amplitude of the cyclical variation in job-to-job changes is wider than that of gross labor turnover. Whereas the "employer only" changes are only slightly affected by the employment cycle, the incidence of simultaneous changes of employer and occupation was almost halved between 1990 and 1995. If we regard this period as one of accelerated structural change, such a decline in occupational mobility appears to be alarming since the decline seems to occur when mobility is most urgently needed.

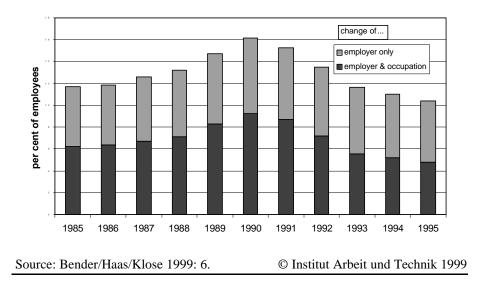


Figure 10. Annual job-to-job changes as percentages of persons employed for any period of a given year, West Germany, 1985-1995

The deceleration of labor turnover is not merely a cyclical phenomenon: The IAB Employee Sample allows us to trace the kind of analysis depicted in Fig. 9 back to 1976. It appears that turnover was much higher in the 1970s and dropped sharply between 1979 and 1983. Neither can decreasing labor turnover be simply explained by the aging of the workforce or by the level of unemployment: A comparison of the first ten years of the employment careers of four birth cohorts (1930, 1940, 1950, and 1960) shows that inter-firm mobility became less and intra-firm mobility became more important from cohort to cohort (Zühlke/Goedicke 2000).

### 5.4 Conclusions from the analysis of workforce mobility

In the first half of the 1990s, occupational mobility seems to have been more heavily discouraged than mobility from one employer to the other. There is a decline not only in hirings—as would be expected—but also in separations. Employment contraction does not increase workforce mobility; rather it has the opposite effect—with the possible exception of the second half of the 1990s. A similar pattern is revealed by crosssectoral comparison: sub-sectors with contracting employment tend to have below-average labor turnover rates.

So how do these sectors contract and how do they shed their surplus labor?

### 6. REDUNDANCIES FOR ECONOMIC REASONS: JUGGLING THE DATA

Even with low labor turnover rates, the industrial dinosaurs with huge but declining workforces might be notorious for separations forced by employers. They might have no accessions and thus succeed in shrinking with relatively few separations, although most of them might be effected through dismissals or other forms of redundancy. How could they otherwise shed their surplus manpower?

In order to explore these questions, data from surveys of employers (6.1) and unemployed persons (6.2) will be presented concerning the ways employment relationships were terminated. The data on employer-induced separations will be broken down by sector and size of establishment (6.3). This will not produce a reliable estimate of the significance of redundancies. However, it will corroborate the impression that it is not the shrinking "old" industries that are most notorious for sacking their employees (6.4).

### 6.1 Modes of separation from employment relationships: the employers' view

Once again survey data from the IAB Establishment Panel will be used to examine how employment relationships were terminated in recent years. Employers on the panel were repeatedly questioned as to how employment relationships had been terminated in the preceding year (Table 5). Not surprisingly, resignations by the employees themselves are the most important category. Dismissals by employers come second.

Unfortunately, in this survey, respondents were not questioned about the (economic or personal) motives for terminating an employment relationship. It can be assumed that among the "voluntary annulments" in Table 5, there is a substantial proportion of separations that were induced by employers offering severance payments or threatening the employee with dismissal for misconduct or poor performance.<sup>30</sup> Whereas the first alternative is likely to be associated with a downsizing program for economic reasons, the second may be aimed at getting rid of an individual who is later replaced. The same ambiguity clouds the roughly ten percent of separations caused by the termination of fixed-term contracts. There will be cases in which economic reasons prevented the prolongation of the contract or its conversion into a permanent one, and there will be other cases when the fixed-term contract was used as a trial period during which the candidate was judged by the employer to have failed.

	1993	1994	1995	1996	1997	1998
Resignations	36.0	31.8	37.9	33.3	33.6	35.7
Retirement because of age or disability	9.0	10.3	11.0	10.5	10.6	11.1
Transfer to another establishment of the same enterprise	0.031	3.6	3.6	3.8	4.3	4.5
Completion of apprenticeships <sup>32</sup>	4.0	4.2	3.8	5.6	3.4	4.8
Expiration of fixed term contracts	9.0	7.6	9.8	10.7	10.4	10.0
Voluntary annulments	14.0	13.9	8.0	9.3	8.8	7.9
Dismissals	24.0	24.7	22.2	22.5	24.0	22.4
Other reasons	4.0	4.0	3.7	4.5	5.0	3.6

Table 4. Types of separations, West Germany

Source: Verbund sozialwisssenschaftliche Technikberichterstattung 1999

### 6.2 How did unemployed persons lose their jobs? The victims' view

What stories do the unemployed tell about how they lost their last job? We now turn to three surveys of unemployed persons—or rather, in one case, of formerly unemployed individuals on the occasion of their reemployment—in our search for clues as to the importance of economic redundancy. When interpreting these data it must be borne in mind that in any sample of persons who are in the **state** of unemployment, disadvantaged persons will be over-represented relative to a sample of persons who are in the course of **entering** unemployment or, more particularly, about to **separate** from their current employment relationship (without necessarily becoming unemployed). Furthermore, the design of the surveys and the questionnaires used are not identical. Comparisons between the different years must be made with caution, and only the data from the 1990s, which come from one source, may be interpreted as a time series.

	1977/7833	1988	1994	1995	1996
Resignations	35	35	12.6	14.8	11.7
Voluntary annulments	10	not asked	10.5	10.6	5.6
Expiration of fixed term contract or completion of apprenticeship	10	21	15.2	15.9	16.1
Dismissal	45	44	54.1	56.6	62.6
For economic reasons <sup>34</sup>	30		46	47	52
For personal reasons	9		8	9	11
Unknown			7.7	2.1	4.0
Total	100	100	100.1	100	100

 Table 5. Samples of unemployed persons by type of termination of last

 employment relationship (W. Germany, %, various surveys)

Sources: 1977/78: Rosenbladt/Buechtemann 1980:562 1998: own calculations from Rosenbladt/Babel/Haebler 1990:46 1994-96: Frister/Liljeberg/Winkler 1996:42 and 44.

With these precautions in mind, the following observations can be made:

• In keeping with the patterns of labor turnover, resignation by employees themselves is a much more common way of becoming unemployed in periods of expanding employment (1977/78 and 1988) than in periods of reduced employment. People were more cautious and, therefore, less mobile during the downswing of the 1990s. In all periods, however, erroneous assumptions about labor market prospects or, possibly in some cases, the intention of using unemployment as a period of "time off" are a considerable source of unemployment.

• The significance of voluntary annulments appears to be remarkably stable except for 1996. Assuming that a large share of the persons unemployed in 1996 experienced their separation by voluntary annulment in 1995, this would be consistent with the pattern derived from the IAB establishment panel, which found a drop in voluntary annulments in 1995 (cf. Table 5).

• Fixed-term contracts were not as important in the 1970s as they became later, but they appear to be a more significant source of unemployment in periods of employment expansion like 1988, than in periods of employment contraction. Since fixed-term contracts in Germany are mostly used for new entrants, there are fewer such contracts in periods with fewer hirings. This might explain the apparently paradoxical development.

• Dismissals by employers appear to be on the rise, according to unemployed respondents. Not only were they more important in the 1990s than at the two earlier points in time for which data are available, but they were also gaining importance in three consecutive years in the 1990s—contrary to employers' answers in Table 5.

• Finally, dismissals for economic reasons seem to be more significant as a source of unemployment in the 1990s than they were in the 1970s.

In order directly to compare employers' answers with those of unemployed persons, the answers from three consecutive years have been averaged in Tables 5 and 6 and employers' answers recomputed to add up to 100 percent, excluding the two forms of separation which cannot, by definition, lead to unemployment, namely retirements and transfers to another establishment in the same company.

	Empl	loyers	Unemployment
	average 1993-1998	recomputed to 100 percent without retirements and transfers	averages 1994 -1996
Retirements	10.4		
Transfers	3.3		
Resignations	34.7	40.2	13.0
Voluntary annulments	10.3	11.9	8.9
Expiration of fixed-tem contract or competition of apprenticeship	13.9	16.1	15.7
Dismissal	23.3	27.0	57.8
For economic reasons	??	??	48
Unknown/other	4.1	4.8	4.6
Totals	100.0	100.0	100.0
For sources, see Tables 5	and 6	-	

 Table 6. Comparison of answers from employers and unemployed (tables 5 and 6), adjusted for retirements and transfers (per cent)

In the 1990s, persons remaining unemployed after a separation report roughly twice the proportion of dismissals by their last employer than employers did. There are three complementary explanations for this finding:

(1) involuntary separations entail higher unemployment risks than voluntary separations. Therefore, victims of dismissals will be overrepresented among those who become and remain unemployed after a separation;

(2) persons with reduced "employability" are both more likely to be dismissed and to remain unemployed afterwards. Therefore, these persons will be over-represented in any cross-sectional sample of unemployed persons whose preceding status was employment; and

(3) employers and former employees tell different stories about the same event. Former employees may see themselves as "dismissed" even though they were coaxed into a voluntary annulment. Employers report relatively more voluntary annulments than the unemployed respondents do.

Unfortunately, we have no answers from employers concerning their reasons for dismissals. According to the unemployed respondents, more than 80 percent of the dismissals leading to the loss of their last job were for economic reasons. But here again, both sides may be telling different stories. Unemployed respondents may tend to believe that dismissals that were declared for personal reasons really had economic motives. In a condition of manpower surplus, employers may deliberately react very strictly to any situation or incidence that might give grounds for a dismissal for reason of bad conduct or poor performance. Similarly, unemployed persons may seek to justify themselves by claiming that a dismissal for which they themselves gave due cause was economically motivated.<sup>35</sup>

In an earlier study of dismissals (still the only comprehensive one) it was found at the end of the 1970s that a dismissal often has several reasons and that employers' and employees' interpretations as to which reason was prominent tended to differ (1983: 17).<sup>36</sup> According to employers, in those days, one third of dismissals were effected for economic reasons. Even if we admit that this ratio may have risen considerably over a period of almost twenty years, it will not have risen to 80 percent (48 of 57.8 percent) as the answers of the unemployed suggest. Beyond that, we can say only that we do not know the reasons.

# 6.3 Employer-induced separations: the effects of sector and establishment size

Accepting that uncertainty remains as to the legal aspects of separations—dismissals or voluntary annulments, dismissals for personal or for economic reasons—we will now aggregate the three categories of separations undoubtedly induced by the employer which are:

• completion of apprenticeships without subsequent hiring of the former apprentice as a worker,

• expiration of fixed-term contracts without conversion to open-ended employment relationships,

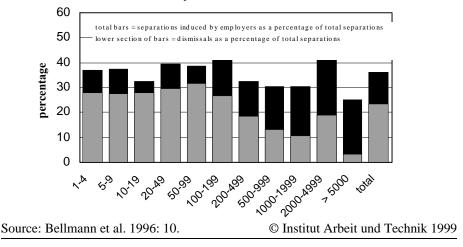
• dismissals.

Computing averages over the three years reported on these categories in Table 5 (source: IAB Establishment Panel), but breaking the data down by establishment size, we arrived at Figure 11, in which the whole bars indicate the shares of employer-induced separations in total separations, while the grey parts of the bars represent dismissals.

In terms of separations induced by employers, the pattern is not very clear: in general, larger establishments with 200 and more employees

tend to have relatively fewer employer-induced separations. However, the category of establishments with 2,000 to 4,999 employees disrupts this pattern by having the highest record of separations induced by the employer. According to the original data for the three years that were averaged to draw Figure 11, this is the result of a wave of dismissals in 1994 in this size category.

# Figure 11. Dismissals and other forms of employer-induced separations, average percentages of total separations, 1993 through 1995, by sizes of establishments, West Germany



As far as dismissals only are concerned, it is clear that the larger establishments make relatively less use of this mechanism for separations. For establishments with workforces of 500 and more, expiration of fixedterm contracts was the major instrument of numerical flexibility. This does not imply, however, that fixed-term contracts and other "flexible" forms of employment are relatively more frequent in large establishments quite the opposite is true, according to the same source (Bellmann et al. 1996: 15). We would interpret it to mean that larger establishments make more strategic use of fixed-term contracts which, computed as a percentage of a relatively smaller total of separations, results in a higher proportion.

The percentage of separations brought about through dismissals by the employer differs greatly by sector (Table 8). The ranking is roughly similar to those in Table 3 and Figure 8. Some sub-sectors (public and social insurance administrations, financial services or mining/energy/water supply) have low job turnover, low labor turnover, albeit with low separation rates, and they also have a very low proportion of dismissals among their few separations. At the other extreme, sub-sectors with high job turnover and high separation rates, like the construction industry, also have a very high proportion of dismissals among their many separations. Here again, the industries with a secular trend of employment decline are not the ones that stand out as having high rates of dismissals.

1993	1994	1995	Average
6	3.4	3.1	402
10	7.5	7.7	8.4
11	9.5	6.3	8.9
15	8.1	4.2	9.1
4	20.6	8	10.9
11	9.7	18.8	13.2
13	27.8	6.3	15.7
22	23	20.9	22.0
24	22.7	23	23.2
24.0	24.3	22.2	23.5
27	25.2	22.7	25.0
27	31.9	24.1	27.7
25	33.3	27.6	28.6
31	33.9	29.1	31.3
47	34.3	44.6	42.0
	6         10         11         15         4         11         13         22         24         24         27         27         25         31	6       3.4         10       7.5         11       9.5         15       8.1         4       20.6         11       9.7         13       27.8         22       23         24       22.7         24.0       24.3         27       25.2         27       31.9         25       33.3         31       33.9	6       3.4       3.1         10       7.5       7.7         11       9.5       6.3         15       8.1       4.2         4       20.6       8         11       9.7       18.8         13       27.8       6.3         22       23       20.9         24       22.7       23         27       25.2       22.7         27       31.9       24.1         25       33.3       27.6         31       33.9       29.1

Table 7. Dismissals as percentages of total separations by major sub-sectors,<sup>37</sup> ranked by average 1993 to 1995, West Germany

### 6.4 Conclusions from separation analysis

(1) Our attempts to assess the order of magnitude of dismissals for economic reasons have proven inconclusive. Different approaches lead to a dramatically wide range of results: • In samples of unemployed persons who were formerly employed, between 30 per cent in the 1970s and over 50 percent in the 1990s claim a dismissal for economic reasons to have been the origin of their unemployment

• Provisional notifications of imminent mass redundancies in North Rhine-Westphalia in 1998 add up to no more than two percent of separations.

• Almost twenty years ago, the percentage of dismissals for economic reasons among all dismissals was established at around one third. Assuming it to be one half today, and accepting data from the establishment panel on the share of dismissals in total separations, it can be estimated that 12 percent or one out of eight separations is attributable to dismissals for economic reasons.

(2) Even given the uncertainty surrounding the significance of economic redundancy, it may be inferred that:

• Economic redundancy is not a major cause of separations from employment relationships

• However, it is much more important as a trigger of unemployment of some duration. In any cross-sectional sample of unemployed persons there will be a much higher proportion of victims of economic redundancies than in a sample of persons who have left their jobs within a certain period or even in a sample of persons who entered unemployment within such a period

(3) Without yet knowing their respective contribution to unemployment, we can identify the subsectors that are prone to dismissals due to demands for numerical flexibility. These sub-sectors appear to be:

• construction

• for-profit services to the private consumer (for example, hotels, restaurants)

• services to firms (not the traditional financial services like banking and insurance, but rather services such as cleaning, security, consultancy, legal advice and accountancy)

• commerce

• transport and communication

These sectors are by no means at the top of the list of shrinking industries, even though some of them (construction, commerce) display some weaknesses.

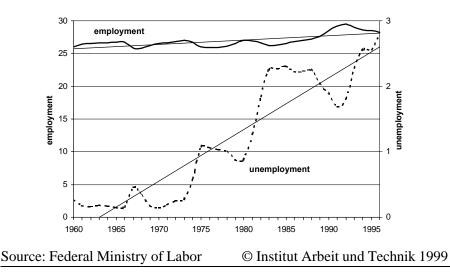
### 7. EMPLOYMENT, UNEMPLOYMENT, AND RETIREMENT

This section will focus on the relationship between employment and unemployment, first by means of an aggregate comparison over time, then by looking at the direct flows between the two stages. We will then break down the unemployment inflows by sector of origin. Since long-term unemployment among men in their late fifties in Germany cannot be adequately discussed without regard to the pension system, some information on early retirement for reasons of unemployment is added. We conclude that the relationship between structural change and workforce reductions, on the one hand, and unemployment duration and volume on the other hand is still rather obscure.

# 7.1 Employment and unemployment: parallel trends in the medium term

In certain aspects of popular discourse, unemployment is seen as an immediate result of employment reductions. The "end of work" (Rifkin 1995) is a topical notion and suggests that, due to rising productivity and global competition, jobs are constantly being destroyed and rising unemployment is inevitable.

### Figure 12. Domestic gainful employment in the broader sense and unemployment, 1975 to 1995, West Germany (millions, scale 10:1)



Over the relatively short period of a business cycle there is, indeed, a strong inverse relationship between employment and unemployment. In a medium-term perspective, however, this does not hold true (see Figure 12). Between 1975 and 1995 (over a period of twenty years), employment in West Germany grew by 2.5 million or almost 9.5 percent. During the same period, unemployment grew by 1.5 million or almost 140 percent. To attribute this rise of unemployment to the poor employment record is merely to say that with more employment growth there would have been less unemployment. While this is probably true, this contention does not contribute much to our understanding of the "unemployment process." As was the case with our analysis of employment, it will be necessary to proceed from a comparison of stock data to the analysis of flow data.

### 7.2 Flows between employment and unemployment

It would appear logical, indeed commonsensical, that people become unemployed because they lose their jobs. On reflection it will be evident that persons entering the labor force for the first time or reentering after a period of inactivity, military service, imprisonment etc. may be considered and officially registered as unemployed if they cannot find a job. Statistically, there are even more pathways into and out of unemployment. As legal definitions of unemployment became stricter and as the administrative procedures for recording the inflows into and outflows from unemployment became more refined, numerous occasions for temporary exclusion from unemployment statistics and, not surprisingly, from unemployment benefits arose. Since 1986, when the Federal Employment Agency first began to record the preceding status of entrants into unemployment,<sup>38</sup> the percentage of those entering directly from employment as wage or salary earners has been declining steadily, coming down to around 50 percent in the 1990s (see table 9). While the absolute number of annual entries into unemployment of wage and salary earners rose by almost 500,000 between 1990 and 1993, the share of this category among the total entries remained unchanged because the entries from inactivity rose by the same order of magnitude. Since there has also been a similar increase in exits from unemployment into inactivity, it may be inferred that rotation between unemployment and "inactivity" has increased.

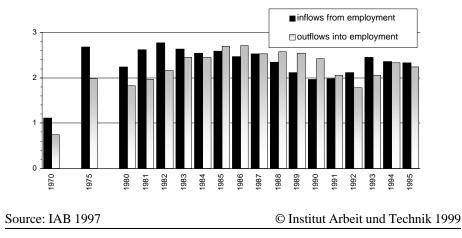
A great deal of this fluctuation among the registered unemployed appears to result from administrative or penal interruptions of unemployment careers and does not stand for any "real" movement of persons within the employment system.<sup>39</sup>

Because of this situation, meaningful interpretations of the relationship between the volatility of employment and unemployment must necessarily be restricted to the direct flows between these two states. Figure 13 suggests that the level of immediate exchange between employment and unemployment varies much less than the level of unemployment as such, and, surprisingly, in the opposite direction. In the twenty years since the end of the era of "full employment," i.e. from 1975 to 1995, unemployment in west Germany more than doubled, and the annual unemployment inflows and outflows have almost tripled. Annual inflows into unemployment from employment, by contrast, remained in the range between two and 2.8 million, and the overall trend seems to point slightly downward.<sup>40</sup> The turn of the employment tide since 1992 has resulted in rising inflows from employment into unemployment—but they have not attained the magnitude of the early 1980s, when the level of unemployment was still lower.

Even more contrary to common wisdom is the fact that the annual outflow from unemployment into employment **decreased** from 1986 to 1992 while employment was **increasing**. On the other hand, it **increased** from 1992 to 1994 while employment was going **down**. Both flows seem to behave countercyclically, but with some degree of time lag in unemployment outflow compared with inflow. During the two periods of recession in the graph (1981 to 1983 and since 1992), inflow into unemployment from employment rose and outnumbered the flow in the opposite direction, but the latter rose, too. The annual outflow from unemployment into employment level stabilized and then began to increase again (in the mid-1980s), while inflow from employment fell. As the cycle approached its peak (1990 to 1992), the outflow from unemployment into employment dropped sharply, whereas the opposite flow was already starting to grow again.

Our explanation for this is that during an employment upswing the reservoir of "attractive" unemployed persons is soon exhausted and hirings from unemployment go down considerably. During a depression, on the other hand, redundancies deliver a "fresh supply" of able unemployed and therefore a greater number of new hires are made from unemployment than during an upswing, even though the number of total hirings goes down (cf. Figure 13). On average, in terms of the rate of unemployment turnover and average unemployment duration, unemployment appears to become more fluid while it is on the rise.

### Figure 13. Annual inflows from employment into unemployment and vice versa, 1970-1975-1980 to 1995, W. Germany (millions)



Recalling a metaphor used earlier concerning labor turnover, it might be said that voluntary labor mobility ("pull" labor turnover) tends to take place without intervening spells of unemployment, whereas involuntary labor mobility ("push" labor turnover) induced by redundancy is more likely to entail spells of unemployment. "Frictional" or "search" unemployment of moderate individual duration increases, but in a considerable number of cases, these incidences of unemployment extend and solidify into individual long-term unemployment. As a result, shortterm and long-term unemployment grow simultaneously; unemployment becomes more fluid at the "high end" and more petrified at the "low end."

# Table 9. Completed unemployment periods ordered by duration: Average individual duration and contribution to macro volume by percentiles

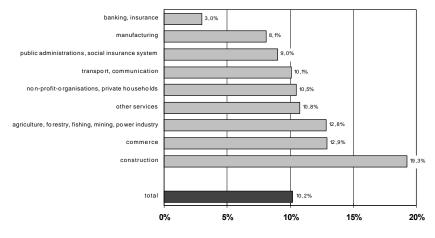
	19	88	1	996
Completed unemployment spells ordered by duration (percentiles)	average individual duration (weeks)	percentage of macro volume	average individual duration (weeks)	percentage of macro volume
1 - <50	7.8	12.2	7.5	11.5
50 -90	31.7	44.8	34.1	41.8
91 - 100	124	43	144.5	46.7
Sources: Karr 1990 and 1999 (1	1990 taken from Hei	ise 1997:117)		

A comparison of unemployment spells completed in 1988 (a period of growing employment) and 1996 (a period of declining employment) shows that the average individual duration and contribution to the overall unemployment volume of the shorter half of spells was lower in 1996 than in 1988, while the opposite holds true for the uppermost ten percent of spells.

### 7.3 Sectoral sources of unemployment inflows

There have been frequent attempts in this paper to look for sectoral differences in job turnover, labor turnover, and dismissals. To complete the picture already obtained, it might be appropriate to ask how much the different sectors contribute to unemployment inflow.<sup>41</sup> Unfortunately, in the annual "structural analysis" of unemployment flow undertaken only in May/June, the data gathered on the establishments that previously employed the new entrants into unemployment are very incomplete and cover just over half of the cases of unemployed people coming directly from an "employed" status.

Figure 14. Average annual Inflows into unemployment from employment by sector of origin, 1990 to 1996, weighted as percentages of employment in the respective sector in 1990, West Germany



Source: Official Bulletin of the Federal Employment Agency © Institut Arbeit und Technik 1999

Bearing this limitation in mind, we can identify the sectors, which, relative to their share of total employment, make an above or belowaverage contribution to the entries into unemployment (Fig. 14). We will recognize some old acquaintances from previous stages of our analysis:

• The primary sector<sup>42</sup> (insignificant in absolute terms), construction, and commerce rank above average.

• Most services rank around average. The position of public and social insurance administrations, at just below average, is surprisingly high.

And once again, the paradox that runs through our analysis rears its head:

• The "mature" sectors of manufacturing, public administration, banking, and insurance, where employment levels are declining, make a below-average contribution to unemployment inflow.

Nevertheless, unemployment resulting from job loss in one of these shrinking sectors of employment might last longer than unemployment after job loss in a sector with high labor turnover, i.e. high separation as well as high hiring rates. There are three reasons for this assumption:

(1) As we saw in. 5.1 above, the "mature" sectors with declining

	1990	1991	1992	1993	1994	1995
Total	3,7 03	3,6 60	3,9 62	4,5 49	4,5 14	4,6 55
from school or university	227	226	270	294	266	287
from apprenticeship	60	57	54	72	LT	75
from migration	399	240	218	195	204	201
from active labor market policy measures	369	369	377	427	418	473
self-employment	65	60	63	68	68	69
from inactivity	589	689	858	1,036	1,125	1,215
from employment	1,966	1,979	2,121	2,457	2,357	2,336
from employment per cent	53 percent	54 percent	54 percent	54 percent	52 percent	50 percent
Source: IAB 1997: 28/29						

# Table 8. Entries into registered unemployment by preceeding status, WestGermany, 1990-1995, thousands

employment levels have low labor turnover rates, which means that job duration is high. Losing a job one held for a very long time and perceived to be a "job for life" constitutes one of the major risk factors for long-term unemployment (Mutz et al. 1995: 297; Eberts/O'Leary 1997; Kieselbach et al. 1998). People who are in a "job for life" either lose or never develop the ability to market their productive potential because there is no need to practice this ability.

(2) If the whole sector in which a person loses her or his job is contracting, there will be few job openings in that sector. Someone who has lost his job in a steel mill, for example, is extremely unlikely to find a new job in another steel mill, of which there are not many left nowadays. The occupational, cultural, mental and geographical barriers a former steel worker has to overcome in order to find new employment are much greater than those a construction worker will have to overcome in order to find a new job in the volatile construction business.

(3) The difficulty of occupational mobility is one of the reasons why works councils and management in sectors like the steel industry collaborate to concentrate redundancies among older workers whose pathway into retirement is paved by a combination of unemployment compensation and severance payments. By constructing unemployment as a stage of early retirement, it is made even more lasting (cf. 7.5 below in more detail).

These three points are hypotheses in need of further research, since official statistics give only hints of this. In the next section, some preliminary results of ongoing statistical analysis with the IAB Employee Sample will be presented.

# 7.4 Transitions from employment to unemployment by age and sector of origin

Whereas official statistics capture the origins of inflows into unemployment rather incompletely and do not lend themselves to multivariate analysis, the IAB Employee Sample enables us to follow the life-courses of individuals through different states and to combine personal and establishment data. The sample records periods of employment subject to social security contributions (ESS) as well as periods of receiving income support related to unemployment.<sup>43</sup> As a first step towards shedding more light on the process by which unemployment is produced in establishments, we have counted transitions from employment to unemployment compensation by age and sector of origin. In order to counterbalance demographic irregularities we have expressed these counts as percentages of employees of the same age in the same sector.<sup>44</sup>

Figure 15 illustrates such transitions for the West German labor force as a whole and for three selected sub-sectors. The three lines in each graph represent three different years characterized by depression (1980), upswing (1988) and depression again (1994). The following features should be taken notice of:

(1) The propensity of experiencing an employment-to-unemployment transition is high for the young (much of this is probably due to not being kept after completion of an apprenticeship), it decreases as persons grow older, and for the aggregate labor force it is high again in old age. For a country like Germany, where legal employment protection is based on both age and seniority, such a finding may come as a surprise.

(2) Whereas the pattern has not changed very much over time for the prime-age group twenty-five to forty-five, unemployment risk has grown somewhat for the younger and considerably for the older employees.

(3) This pattern stands out very clearly in engineering<sup>45</sup> and some other "mature" sectors not presented here which together stamp their mark on the aggregate pattern. In commerce as a "mature" service sector, the pattern of transition into unemployment in old age was not yet present in 1980, and it came but weakly to the fore in 1988 and 1994. In business services as a "young" and growing industry, there is as yet no clear pattern of exit in older age.

(4) The old-age peak of transitions into unemployment is just below sixty, and it seems to have shifted slightly "to the left" over time. It will be shown in the next paragraph why the age of sixty is so important for the understanding of passages from employment to unemployment and, finally, to a pension.

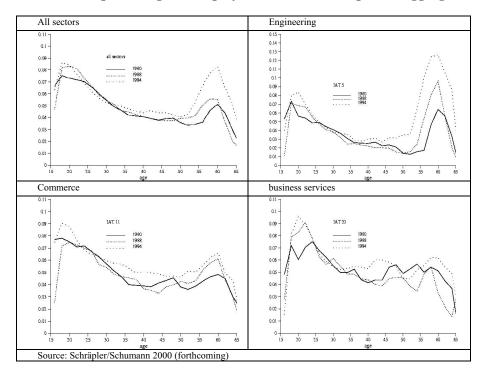
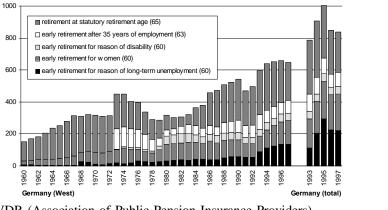


Figure 15. Transitions from employment to unemployment by age, 1980-1988-1994, as percentages of employees (ESS) in the respective aggregate

#### 7.5 Unemployment and "early retirement"

In the German context, the duration and age structure of unemployment cannot be adequately understood without examining the so-called "early retirement." Whereas the statutory age of retiring is sixty-five, unemployment lasting for at least twelve months gave entitlement until recently to a full old-age pension at the age of sixty. In addition, women had the option of retirement at sixty, irrespective of their employment situation, if they had contributed to the social security system for a sufficient number of years. Both sexes could receive a pension at sixty-three if they had paid contributions for at least thirty years.<sup>46</sup> Persons who cannot work because of chronic illness or disability receive a special category of pension until they are transferred to an old-age pension—prematurely at sixty, if they had managed to pay contributions for a sufficient period before the disability stopped them from working, and otherwise at age sixty-five.<sup>47</sup>

Figure 16. Entries into old-age pensions by category of entitlement, 1960 to 1997, West Germany (1995 to 1997 also for Germany as a whole) thousands



Source: VDR (Association of Public Pension Insurance Providers) www.vdr.de/Internet/vdr/Statistik © Institut Arbeit und Technik 1999

The relevant conclusion in our context is that for German males without an officially recognized physical handicap or disability unemployment of at least tw elve m on the duration is the only pathw ay to a pension at sixty.<sup>48</sup> In the context of social plans negotiated with works councils, "voluntary unemployment" was made attractive for male workers, especially for those who had started working and paying social security contributions early in their lives and could, therefore, opt for "early retirement"—until recently without suffering any loss to their pensions.<sup>49</sup>

As Figure 16 illustrates, the number of women taking early retirement at sixty has been fairly stable since the early 1970s. On the other hand, early retirement because of unemployment (in practice mostly for men) has grown steadily since the mid-1970s and it has exploded in the last downswing since 1992 (see the bottom part of the columns in Fig. 16).

If east Germany is included in our analysis (see the group of columns at the right of Fig. 16), the drama of the German pension system stands out even more clearly. East Germany accounts for about 25 percent the population of West Germany, but in the peak year of 1995 its contribution to early retirement because of unemployment was of an order of magnitude approaching west German levels.<sup>50</sup>

As Figure 16 suggests, the practice of retirement via unemployment has increased very strongly in the course of the restructuring process of the 1990s. In 1996, only 27 percent of men and 28 percent of women entering an old-age pension had been in employment subject to social security contributions at the end of the previous year, whereas 36 percent of the men and 11 percent of the women had been unemployed (Rehfeld 1998: 169f).<sup>51</sup> The figures for east Germany are even more dramatic, with 83 percent (men) and 77 percent (women) entering from unemployment or the special "out-of-the-labor-force" status explained in footnote 50. In other words, unemployment has become the most common status immediately before receiving an old-age pension.

## 7.6 Unemployment as a final stage in people's working life

The practice of early retirement via unemployment leaves a very marked stamp on the population of the long-term unemployed:

• In a 1992 survey, two thirds of the long-term unemployed in west Germany were found to be forty-five or over. Of these, 26 percent were not seeking reemployment but were waiting to draw a pension; the average age of this group of unemployed people was 58.4 (Bogai et al. 1994).

• In the 1994 micro-census, more than eight percent of the unemployed in west Germany (and almost ten percent of the long-term unemployed) reported that the main reason for terminating their employment was the prospect of retirement. It has been inferred from the age distribution of the unemployed in that year that one quarter of the unemployed aged fifty or over had early retirement in mind from the beginning of their unemployment (Wagner/Muth/Stackelbeck 1998: 122).

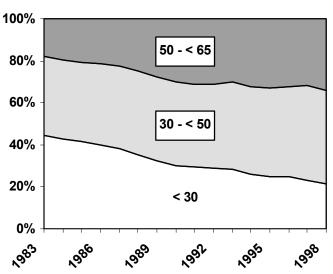
• In a representative analysis of exit paths from the labor force which occurred in west Germany during the period from 1975 to 1990 it was found that between 20 percent and 25 percent of men (but also between 17 percent and 21 percent of women) within each of the birth classes of 1920 to 1925 drew unemployment compensation immediately after their last job before retirement (Wübbeke 1999: 110). There was a strong and highly significant influence of establishment size. It can be concluded that male workers in establishments with 500 or more employees bear the highest propensity of early retirement (op. cit.: 115).

• In a 1997 sample of unemployment assistance recipients,<sup>52</sup> almost one quarter (23 percent) of the respondents in Germany as a whole reported that their principal motive for registering as unemployed was "bridging

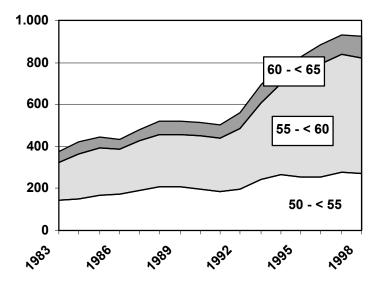
until retirement." The average age of this retirement-oriented group was fifty-five, their average duration of unemployment was 6.3 years, and majorities of 51 percent of this group, respectively, had no formal training, reported impairments of their health, and were unemployed for the first time in their lives—all of these values being the highest of the five groups identified. The percentage of women in this group was 44 percent (as compared to 49 percent in the sample as a whole), and the net family income was the lowest of all groups (Gillberg et al. 1999 table 27). In other words, early retirement via registered unemployment accounts for a large proportion of long-term unemployment. The typical unemployed person on the path of early retirement is male, unskilled, has a stable employment record well into his forties, experiences poor health and does not actively search for a job.

This pattern has left a conspicuous trace on the composition of the unemployed by age. The dramatically growing share of old-age unemployment is primarily caused by the age group fifty-five to sixty (cf.Fig. 17), which is the "window of opportunity" for an early pension at sixty because of long-term unemployment.





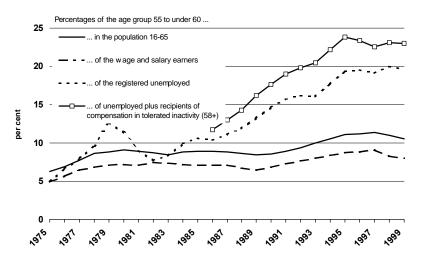
All age groups within working age (percentages)



Age groups 50 to under 65 (thousands)

Source: Official Bulletin of the Federal Employment Agency © Institut Arbeit und Technik 1999

Figure 18. Percentages of the age group 55 to under 60 in different categories of the population (West Germany, 1975 to 1999)



Source: Federal Employment Agency; own calculations © Institut Arbeit und Technik 2000

Against this analysis it might be argued that growing percentages of unemployed persons in older age reflect, to a considerable degree, demographic changes: with more older people in the labor force, a higher number of older unemployed will be natural. In order to test this argument, the shares of the critical age group fifty-five to under sixty in the population of working age, in the population actually employed, and in the unemployed are plotted in Figure 18. We also add those recipients of wage replacements who, since 1986, are dispensed from active job search and excluded from unemployment statistics (cf. Footnote 43). As the graph shows very clearly, the path of development continues along this upper line.

It can be concluded from Figure 18 that the gap between the shares of the relevant age group in the population of working age and in the active labor force has widened in the course of the 1990s. This partial decoupling of employment from demographic change has led to a highly overproportional growth of unemployment and, even more dramatically, of wage replacements related to joblessness in the age group fifty-five to under sixty which is, in Germany, the age group in which "early retirement" via unemployment occurs.

#### 7.7 Conclusions from unemployment analysis

Employment and unemployment are by no means directly connected concepts. As far as basic data are concerned, employment and unemployment have grown simultaneously over the medium term. Examination of flow data shows that the order of magnitude of a direct flow in both directions does not vary over the business cycle as much as might be expected, and it seems to display a slight secular trend downwards. As for the sectoral origins of unemployment inflow, the patterns revealed are familiar from job turnover and labor turnover analysis: sectors with a long-term downward trend in employment produce below average unemployment inflow.

By contrast, it can be hypothesized that these few unemployment inflow result in rather long periods of unemployment because the persons concerned are on their pathway towards early retirement. If this should hold true, it might turn out that the contracting sectors are actually responsible for a much higher share of unemployment volume than their share of unemployment inflow suggests. The pattern of early retirement via unemployment has been clearly identified at the macro level by statistical analysis as well as by examination of the regulations governing such transitions. It could also be demonstrated that the age structure of exits into unemployment in some declining sectors conforms exactly to the pattern to which social security regulations give incentives.

There is just one missing link on which ongoing statistical modeling with the IAB Employee Sample is concentrated: The volume of unemployment must be traced back to sectors of origin and broken down by age at the beginning and at the end of unemployment spells, and "final" old-age unemployment which ends in inactivity at a pensionable age must be identified. Preliminary results of such modeling corroborate the orders of magnitude already known from the surveys cited above. Using a fairly conservative definition of previous attachment to a single establishment,<sup>53</sup> around 40 percent of the annual unemployment volume (days spent receiving unemployment-related wage replacements) can be traced back to a single workplace and can therefore be analyzed in terms of sector and establishment size of origin.<sup>54</sup> A peak of around ten percent of the total unemployment volume (in 1993) also fulfills our definition of the "early retirement" type.<sup>55</sup>

#### 8. SUMMARY AND OUTLOOK

Repeating our initial hypotheses, we can now summarize the answers we have obtained and the questions we are left with.

# (1) Decline of employment at macro level results from workforce reductions at micro level.

This is pure arithmetic and cannot be disputed.

# (2) Major job losses at establishment level will be brought about, in most cases, by dismissals.

Only one quarter of separations is caused by dismissals. The larger part of workforce reductions is effected by refraining from hiring. Even massive employment cuts are often effected by voluntary annulments. "Voluntary," in these cases, does not mean "at free will" but it does mean that the workers affected are offered something that makes them prefer voluntarism to dismissal.

#### (3) Workers dismissed for economic reasons will, in many instances,

#### become unemployed.

We do not know. All we know is that among cross-sections of unemployed populations there is a high proportion of respondents who claim to have been dismissed for economic reasons.

# (4) In times of declining employment, with job seekers outnumbering vacancies and a level of unemployment that is already very high, the prospects of displaced workers finding a new job will be very bleak.

This is too sweeping a generalization. The prospects of reemployment after job loss are determined by the number of "fresh" job seekers and the number of vacancies in the relevant period, area and segment of the labor market. As sad as it is to say, the stock of the long-term unemployed is rather irrelevant as competitors for those who are just about to lose their jobs or who have just recently become unemployed. In other words, the chances of displaced workers finding new employment is dependent not so much on the level of unemployment as on job creation rates and labor turnover which create vacancies.

# (5) Individual unemployment, which has resulted from employers' negative selection, is very likely to petrify into long-term unemployment.

Again, we do not know this on statistical grounds. But we can infer from what is known about selection criteria in hiring decisions that a dismissal for economic reasons—and even more so in cases of bankruptcy or closure—is much less of a stigma on the labor market than some other ways of job loss, namely dismissal for cause. The issue of age discrimination is clouded by the specific mechanisms of early retirement.

## (6) Long-term unemployment entails lasting exclusion from economically rewarding and socially validated activity. It is, therefore, a major cause of social exclusion.

This is true for long-term involuntary unemployment, but not for the "technical" unemployment, which is used as a pathway to retirement. A realistic and honest debate on solutions for the problem of long-term unemployment will be impossible in Germany as long as "early retirement," which occupies a very paradoxical position in current debates is not dealt with honestly. Praised as a "socially acceptable solution" when discussing the downsizing of establishments, early retirement is seen as a privilege by many older workers in companies which grant high severance payments, but at the same time it is being denounced as an

intolerable burden on social security systems and, consequently, labor costs or decried as "the scandal of mounting long-term unemployment." It seems that many participants in these debates and public mourning rituals do not even know that they are talking about the same phenomenon in different frames of reference.

#### (7) In short, workforce reductions lead to social exclusion.

We tend to doubt that economic restructuring is a major source of social exclusion. To be in a position in which one can possibly become the victim of a dismissal for economic reasons signifies a fairly high degree of social integration to start with, and it entails social and financial resources far beyond the job itself. Some of these resources will still be available after the employment relationship has ended, and new proactive labor market policies should be aimed at mobilizing, preserving and enhancing these resources. The majority of the socially excluded are those who will never have the "opportunity" to be dismissed for economic reasons.

It appears, then, that the relationship between structural change, job elimination and dismissals is much more complex than stated in our initial hypotheses. Establishments in the sectors and size categories which, when aggregated, go on record as producing net employment losses are not the ones in which, at micro level, job elimination is most endemic. On the contrary, job elimination at the establishment level is most frequent in the fast growing sectors of the economy. Dynamic competition and innovation are processes of trial and error, of success and failure. Net employment growth within any aggregate of establishments is produced when successes slightly outnumber failures. Without these failures, there are no successes to outnumber them. So if we take the elimination of a job at micro level as an indicator of a situation of economic redundancy, then the problem of redundancy appears to be associated not primarily with decline but with dynamic development.

Much the same paradox applies if we shift our focus from jobs to people: We find the highest levels of labor turnover not in those industries that are notorious for employment losses, but in those that are operating in volatile environments. Some of these, like the communications industry or parts of the statistical melange of "other services," are new economic environments with a positive employment record (cf. Fig. 8). Others like construction or consumer goods operate under strong seasonal and cyclical influence but they are not in temporal decline. By contrast, it is the sectors with declining employment like mining, manufacturing, financial services and public administration which have "stable" jobs and low labor turnover rates.

If, finally, the mechanisms of separation from employment relationships are considered, it is again not the contracting industries that are most prone to resort to dismissals but those that operate in volatile environments. Examination of the sectoral contributions to unemployment inflows reveals same pattern. The "mature" industries that operate in saturated markets and continually reduce employment have low job and labor turnover rates. Also, among the relatively fewer separations from these industries, the percentages of dismissals and the relative disincentives around the problem of displacement for economic reasons should be redesigned in order to assist re-orientation, retraining and re-employment rather than only compensate for unemployment. Recent reforms are only the first steps in this direction. In order to overcome growing long-term unemployment Germany does not need an ever faster succession of employment legislation but a new spirit of dynamism, innovation, and change, including a new work culture which encourages participation in working until the official retirement age of sixty-five.

#### **ENDNOTES**

<sup>1</sup> Handelsblatt 122/97: 11 of June 30, 1997.

<sup>2</sup> "Establishments" in German law and statistics are the organizational units in which goods or services are produced, human resources are managed and works councils are elected. For single-location companies they will be identical with the firm. In most cases, they will also make up a single spatial unit ("site" or "workplace"). If, however, several outlets or service points in the same area are managed as one organizational entity (e.g. a city bakery with twenty shops) the whole organization will be considered as one establishment.

<sup>3</sup> "Redundancy as a factor in social exclusion" is the title of the project for which the first draft of this paper has been written.

<sup>4</sup> The French title is *"Licenciement économique comme facteur d'exclusion sociale."* 

<sup>5</sup> The establishment (plant, site) is the organizational and local unit in which goods or services are produced. In German legislation and statistics, the establishment is clearly distinguished from the enterprise, firm or corporation that is the legal entity responsible for the economic activities of one or more establishments.

<sup>6</sup> The system registers the actual employment relationship of wage and salary earners, not the conditions of their contracts. A continuous succession of fixed-term contracts

or the transformation of a fixed-term into a permanent contract will be registered as one ongoing employment relationship if there is no interruption. The system is not well equipped to deal with persons who hold two part-time jobs with two different employers at the same time (Bender et al. 1996: 17).

<sup>7</sup> Besides *Beamte*, public authorities also employ wage and salary earners who must pay social security contributions and whose employment relationships are reported just like any other. Consequently, the sectoral category of "public administrations" does appear in ESS statistics, but these data do not cover *Beamte*.

<sup>8</sup> This category includes "dependent self-employed" persons who, in collusion with or under pressure from their contractors, evade social insurance contributions by redefining a dependent employment relationship as independent subcontracting. This group is estimated to amount to no more than two percent of dependent employment (Dietrich 1996; *Kommission für Zukunftsfragen* 1996).

<sup>9</sup> Under certain conditions, they may voluntarily join the social pension and health insurance systems, but this has no effect on ESS statistics that count obligatory contributors only.

<sup>10</sup> Since 1990, employers have been obliged to report these employment relationships, notwithstanding their exemption from social insurance, for statistical purposes. However, the results of this procedure have been inconclusive and contradictory to date (Weinkopf 1997). Estimates of marginal part-time workers have to rely on extrapolations from survey data that range from 2.6 to 4 million persons, with an even larger number of jobs (DIW 1997). For this reason, official employment statistics have recently been adjusted by approximately two million persons, which resulted in a somewhat lower unemployment rate. Legislation introduced by the current Social Democratic/Green Coalition has included the majority of marginal part-timers into the pension system. This change is too recent, however, to affect the statistics reported in this paper.

<sup>11</sup> The German tax and social security system is still very much orientated towards the male breadwinner model of the traditional family. For married part-timers with a partner working full-time, it provides strong incentives not to exceed the threshold of marginality (Dingeldey 1998). Recent legislation, however, taking effect as of April 1, 1999 has changed the social security status of marginal part-timers.

<sup>12</sup> Data for 1985 including marginal part-timers.

<sup>13</sup> The *Mikrozensus* is a population survey which is also used to contribute to the European Labour Force Survey.

<sup>14</sup> Cf. Projektgruppe Betriebspanel 1991.

<sup>15</sup> *Institut für Arbeitsmarkt- und Berufsforschung*, the research institute of the Federal Employment Agency.

<sup>16</sup> The methodological framework is explained in OECD 1987.

<sup>17</sup> If establishment A has fifty employees on January 1, 1990 and forty employees on January 1, 1991, it will be regarded as having lost ten jobs in 1990 or to have a job elimination rate of five percent, no matter whether its employment level in July, 1990, was forty-five, sixty or thirty. In other words, it makes no difference whether the development of employment between the two points of observation was unidirectional

or cyclical; seasonal variations are not taken into account. In a statistical test with firm data from the Netherlands it was shown that the measurement of job turnover described here comes sufficiently close to the results which are obtained by counting instances of job creation or elimination continuously over the course of the year (Hamermesh/Hassink/Ours 1996).

<sup>18</sup> Establishments that do not employ at least one person covered by social insurance do not appear in the database. From the point of view of dependent employment, establishments are considered as "newly set up" in the year when they report their first hire, and they are regarded as "shut down" after they have not reported any ESS for two consecutive years. This is important for the interpretation of "opening" and "closure" rates in job turnover analyses based on ESS data.

<sup>19</sup> Departing from the formula used by the OECD, and following the example of Cramer/ Koller 1988, we use  $[2 \times \text{employment}]$  in the denominator for computing job turnover rates. If we conceive of employment turbulence as a process in which jobs "die" in establishment A to be "reborn" in establishment B, thus considering structural change as a "migration" of jobs from one sector to another, it becomes clear that, in measuring job turnover, each job is counted twice, once when it disappears and once when it reappears. Thus the stock of jobs against which these movements are measured must be multiplied by two.

<sup>20</sup> In a more sophisticated version, the stock figures of jobs at the beginning and at the end of the year might be summed up in the denominator, thus calibrating the measurement by the average rather than the initial employment level of the period considered. For our purposes of contrasting countries, sectors and establishment sizes rather than giving an absolute measurement, this makes no difference.

<sup>21</sup> From the OECD tables, only those countries were selected for which longer series of data (mainly for the years 1983 through 1991) covering the entire economy were reported. The U.S. data do not quite fulfill this requirement but were included nevertheless because of the importance of this reference. The figures were adjusted to the formula used for the German data (see previous footnote).

<sup>22</sup> See Pries 1998 for a clarifying discussion of the mechanisms relevant to the allocation of labor. He does away with the misleading terminology of the internal labor "market" by establishing "organization," "market," "profession," "social security system" and "clan" as distinct institutions which govern employment careers. <sup>23</sup> The annual labor turnover rate is computed as follows:

<sup>24</sup> This value is much higher than the labor turnover rate of 11 percent reported by employers for the years 1993 to 1995 in the IAB Establishment Panel (Bellmann et

$$LTR = \frac{accessions + separations}{2 \times initial employment}$$

al. 1996: 12). The explanation for this difference is that managers questioned about labor turnover tend to neglect marginal and seasonal employment. A representative survey of private sector establishments in 1987 obtained an annual labor turnover rate

of 13 percent between May 1985 and April 1987 (Büchtemann 1991: 145).

<sup>25</sup> The source reports these data only as a graph (Bellman et al. 1996: 12) of which our text gives a verbal description.

<sup>26</sup> In a comparison of job and regional mobility in the periods 1977 to 1979 and 1982 to 1984 respectively, Weisshuhn and Buechel found that the percentage of employees who stayed with the same employer during a two-year period rose from 81.6 percent to 86 percent. The authors attribute this change to the labor market situation: the unemployment rate during the second period was roughly twice as high as during the first period.

<sup>27</sup> Average job tenure, the mirror image of job turnover, is consistently found to be counter-cyclical: as employment rises, new hires necessarily have short tenure; as employment falls, hires are cut, the last hires are more likely to be dismissed than those with long tenure, and, consequently, average tenure will rise (Burgess/Rees 1998).

<sup>28</sup> Computed as a percentage of the employment level at the end of the preceding year.
<sup>29</sup> Figures also given on changes of the occupation without changes of the employer are not reported here because employers' reports to the social security system about ongoing employment relationships are incomplete concerning facts that are not relevant for contributions or claims.

<sup>30</sup> In cases of job loss that are either voluntary or the fault of the employee, unemployment compensation may be suspended for a certain period as a penalty. Consequently, employees who have brought about their own dismissal may consent to a "voluntary" annulment under the pretense of redundancy that is generally overlooked by the employment offices.

<sup>31</sup> It appears that this question was not asked in the first wave by the panel.

<sup>32</sup> Without immediate rehiring of the former apprentice as a regular worker.

<sup>33</sup> This survey covered a sample of unemployed people who were reemployed, whereas the other surveys quoted covered unemployed people while they were unemployed.

<sup>34</sup> These figures reported in separate tables have been recomputed as a sub-percentage of the share of dismissals. Due to missing answers, they do not add up to the whole percentage of dismissals.

<sup>35</sup> During the first three years of unemployment, chances for reemployment were found to be significantly greater if the job loss had been due to economic rather than personal reasons (Gillberg et al. 1999: 20).

<sup>36</sup> Unless a dismissal is contested in court, an unambiguous classification in terms "economic" and "personal" reasons will never be established.

<sup>37</sup> The survey on which this source is based uses somewhat unusual categories of subsectors that differ from official statistics. Since only percentages are reported, we cannot aggregate these data into a three sector or otherwise simpler matrix. Since some of these data display great variations between the three years reported they should be regarded with caution.

<sup>38</sup> A structural analysis of unemployment inflows and outflows is conducted only during two weeks each year. Using these data, we have to content ourselves with the assumption that the situation in May/June when these data are recorded is roughly representative

of the whole year.

<sup>39</sup> This is the reason why long-term unemployment, according to survey data, is roughly 40 percent higher than in official statistics (Wagner/Muth/Stackelbeck 1998: 47).

<sup>40</sup> An analysis using the IAB Employee Sample corroborates this finding: the percentage of the total workforce (ESS) leaving employment for unemployment reached a peak in 1993 when the current restructuring crisis began, but it was lower in 1994 and 1995. The "peak" of 1993 was still lower than figures between 1985 and 1987 when employment was rising (Bender/Haas/Klose 1999: 7).

<sup>41</sup> Sectoral contributions to unemployment duration and, thence, unemployment volume might be even more interesting but cannot be computed with official flow data.

<sup>42</sup> In Figure 14, for reasons of data availability, the power and mining industries are bundled together with the rest of the "primary" sector, i.e. agriculture, forestry and fishing, although we know from earlier stages of our analysis that the employment patterns of the former and the latter group are very different.

<sup>43</sup> This differs from officially registered unemployment in three ways: (1) persons may be registered as unemployed without being entitled to income support; (2) recipients of training allowances are not considered unemployed; (3) since 1987, unemployed persons fifty-eight years or older may draw unemployment compensation without seeking a job and are, therefore, excluded from unemployment statistics.

<sup>44</sup> It must be admitted that age selectivity of the firms' employment policies tends to arithmetically boost the exit percentages of the older age groups in which relatively few employees are left and relatively many are dismissed.

<sup>45</sup> It should be noted that the graph for engineering is drawn to a different scale than for the other sectors, the 1994 peak representing 13 percent (!) unemployment entrants of the labor force aged around fifty-nine.

<sup>46</sup> All these provisions for a pension at an earlier than statutory retirement age still continue to exist for a transitional period but the earlier pensions now have to be "paid" for by accepting a lower pension.

<sup>47</sup> As a consequence, the uppermost sections of the columns in Fig. 16 "retirement at statutory retirement age" contain not only persons who actually worked until they were sixty-five but also those who received a disability pension until their sixty-fifth birthday. Others in this section are women who have not paid contributions long enough to be eligible for a women's pension at sixty or a pension for long-term contributors at sixty-three. The share of employees who actually work until they are sixty-five has dwindled to about 8 percent (Wübbeke 1999: 108). Only the smaller share of disabled persons who change over prematurely from a disability pension to an old-age pension at sixty are recorded separately in pension statistics and they are shown in the middle sections of the columns in Figure 16.

<sup>48</sup> Against the backdrop of disability pensions serving as pathways to retirement in many other countries, Riphahn (1997) tested the hypothesis that unemployment and disability pensions are equivalents, using data from the German Socio-Economic Panel (GSOEP). Significant differences in the health situations of persons drawing unemployment compensation or a disability pension confirm the strictness of the criteria governing entitlement to a disability pension in Germany. On the other hand, the two groups also differed significantly in terms of the establishment size of their last employer. If we reject the explanation that work in larger establishments is more hazardous and exhausting than work in smaller ones this difference appears to be related to the counseling practices of HRM departments in large firms where people with poor health are advised and assisted in filing their disability pension applications.

<sup>49</sup> More precisely, paying contributions for fewer years did have a modest negative effect on pension levels, whereas drawing the pension earlier and, therefore, eventually for a longer period of time was not taken into account before the recent reforms of the pension system.

<sup>50</sup> Data for 1995 entries are 159,000 in the west, 111,000 in the east. This development in the east was programmed by a special "out-of-the-labor-force" status designed to assist the mass exodus from *Treuhand* companies. This status was not statistically counted as unemployment but gave the same entitlement to early retirement at sixty (Knuth/Bosch 1994).

<sup>51</sup> Leaving aside minor categories which are idiosyncratic to the German pension system, the remainders are mainly made up by 26 percent of men and 50 percent of women who were "out of the labor force" before claiming their pension.

<sup>52</sup> Unemployment assistance (*Arbeitslosenhilfe*) succeeds unemployment compensation after the period of eligibility for the latter has expired—normally after a maximum of twelve months, but after a maximum of 32 months in the case of older employees. So, by definition, the majority of unemployment assistance recipients are long-term unemployed, whereas, on the other hand, not all the long-term unemployed will be on unemployment assistance. This type of benefit is lower (53 percent instead of 60 percent of former net income), means-tested and open-ended, and it is financed from the federal budget, not by contributions.

<sup>53</sup> (1) The time spent with the last employer should be long enough to have qualified for the observed duration of receiving unemployment compensation; (2) there should be no "out of the labor force" longer than ninety days, neither between employment and receiving compensation or between consecutive spells of receiving compensation.

<sup>54</sup> According to the definition in footnote 53, the slightly larger part of unemployment volume occurs after longer periods "out of the labor force" or after volatile employment without clear attachment to a particular firm.

<sup>55</sup> In addition to the definition in footnote 53, (3) receiving unemployment-related wage replacements should definitely end at ages between fifty-nine and sixty-five with no subsequent employment. For reasons of anonymity, the dating of events in the sample has been randomly manipulated, and birth is only reported by year. Therefore, we have to use age definitions that are somewhat wider than the legal definitions of the pension system in order to cope with the "blurring" of the time dimension.

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### WOULD THE CREATION OF A LOW-WAGE SECTOR HELP TO REDUCE GERMAN UNEMPLOYMENT?

Werner Sesselmeier

#### **1. INTRODUCTION**

The German labor market,<sup>1</sup> in contrast to that of the U.S. and most neighboring European countries, is characterized by a permanently high level of unemployment. Generally, there is a global job deficit, combined with structural problems, which manifest themselves in the elimination of unskilled jobs and in high long-term unemployment. In combination with the selection policies of companies concerning prospective employees, this global job deficit leads to a decreasing probability of finding work after a period of unemployment. This situation has lead to the fact that besides and instead of traditional active labor policies—different structures of subsidizing low wages have been discussed during the last seven years and that this discussion became a factor in the current political debate.<sup>2</sup>

The quest for the best possible integration of the unemployed, individually as well as socially, should be given the highest priority, as gainful employment is still the key factor of social integration (for the American debate see also Phelps 1997). In accordance with this strong identification with gainful employment in society, several studies show a positive correlation between gainful employment, unemployment and the physical and psychological well-being of the person in question (see Elkeles 1999; Frey/Stutzer 2000; Gerlach/Stephan 1996; Oswald 1997).

In the following we will take a closer look at the labor market situation in order to clarify whether a wage-subsidizing strategy contributes to a reduction of unemployment in Germany. We will address the reasons behind unemployment and strategies to combat it adequately. On the other hand, there is the argument that a low-wage sector combined with supporting income transfers is not primarily intended to integrate certain disadvantaged groups into the labor market, but to promote a general increase of regular jobs in this sector, without regarding the current situation of those to be employed (see Scharpf 1999). In the following section, we will analyze the main characteristics of the three models under discussion. Finally, the report will present some conclusions on the conception and political realization of such models.

## 2. THE PRESENT SITUATION ON THE GERMAN LABOR MARKET

#### 2.1 The empirical situation

The development of unemployment is mainly characterized by a stepby-step increase over the last twenty-five years, as with each recession, unemployment increased more than it decreased in the subsequent recovery. This kind of unemployment, with only a small percentage of cyclical unemployment-the council of experts (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung) estimates that about 20 percent of the total unemployment figure is due to variations in the business cycle—is characterized by a relatively insignificant share about one third-of short-term unemployment, i.e. up to three months, and a drastically larger number of long-term unemployment, which lasts for more than twelve months. The share of this group in the total of those unemployed was 36.7 percent in 1998, as compared to a share of shortterm unemployment of 30.6 percent. A long-term comparison shows that this relation is not a constant factor, but the result of a continuous development over the last thirty years: in 1970, the proportion of longterm unemployed was below 10 percent, whereas that of short-term unemployed exceeded 60 percent. Furthermore, it has to be taken into account that, as a result of the qualifying-date regulation, the percentage of long-term unemployed is underestimated by far and may in reality well exceed 50 percent (Karr 1997). Accordingly, the latest OECD estimates show a percentage of structural unemployment in Germany above the average of all OECD countries, which has furthermore been increasing throughout the 1990s (OECD 1999). It should also be considered that in addition to the "official" figures of long-term unemployment there is a large group of people with a significantly uneven employment biography characterized by frequent short-term unemployment.

#### 2.2 Approaches to an explanation

There are various explanations for the kind of unemployment that exists in Germany. They can be divided into three categories: labor market endogenous reasons, consequences of economic restructuring, and unemployment because of institutional arrangements, in particular of social policies. It has to be remembered that these diverse approaches may, however, not be seen as independent of each other.

#### 2.2.1 Persistent unemployment

From a theoretical point of view, the existing unemployment may be called persistent unemployment (for more details, see Sesselmeier 1997). This means that it is not the level of unemployment, but the changes of unemployment, regardless of level, that are considered as a relevant factor. The endogenous approaches to an explanation of persistent unemployment, which are primarily aimed at explaining the permanence of unemployment at a certain level rather than its increase, regard human capital aspects as central factors.<sup>3</sup> The notion of human capital comprises all productive characteristics of an individual that can be developed through any kind of education or training. In addition to education and professional training, the development of characteristics such as the ability to learn, dependability, teamwork or the ability to take over new tasks quickly, leads to an increase in human capital and thus in the productivity of the individual. This broad definition makes it clear that the problem of human capital not only comprises formal education and qualification, but also includes the personality of the worker and his socialization (extrafunctional qualification). As a result, human capital is of strategic importance to the employee as well as to the employer, manifesting itself also in wages and salaries.

It is assumed that (long-term) unemployment may cause dequalification processes, reducing human capital and making it obsolete. During a spell of unemployment, the (former) employee's internal and external human capital will decrease in value. When companies consider filling a vacancy, they create hierarchies among the candidates according to information they can obtain free of cost; one of these factors is the duration of unemployment. It is assumed that the duration of unemployment correlates negatively with the required personal characteristics. As a consequence, the lower levels of the hierarchy are mainly filled with long-term unemployed. Thus the general job deficit in Germany, which is expressed in a lower employment rate compared to other countries, produces long-term unemployment.<sup>4</sup>

#### 2.2.2 Structural change in the economy

The development of the economy is characterized by restructuring, which leads to the elimination of unskilled jobs and a strong orientation towards the service sector.

During the 1990s, the employment of persons with a university or higher technical college degree has increased in spite of the tensions in the labor market, whereas the number of employees with a low level of education or professional training has decreased sharply. Accordingly, the unemployment rates of these groups are high (for OECD figures, see Nickell/Bell 1995, for Germany see Bäcker et al. 2000, 332). This stable trend is predicted to continue.

The general restructuring raises the question of which sectors can expect an additional demand for jobs (see also Schettkat 1998). In general, a decrease in price elasticity of demand as a consequence of a lack of innovation typical of mature economies may be stated. Thus, in industrialized countries, industrial goods meet increasingly with a saturated market and price-inelastic demand, so that the labor-saving effect of productivity increases is prevalent and leads to a decrease in employment in industry (see also Klös 1997b). There is ample evidence of this situation in the OECD countries: everywhere, marketing activities are of highest priority, combined with a differentiation of products and a strong development of brands; furthermore, the overwhelming majority of households is sufficiently equipped with durable consumer goods. In addition, the development of the service sector must be considered. The demand for household-related services is subject to high price elasticity. As the increase in productivity affects only a small portion of the services demanded by private households, and the productivity of internal and external production in this sector is hardly distinguishable, the make-orbuy decision is mainly dependent on the difference between one's own net salary and the price of the service. The latter, in particular, is determined by the general wage level. The specifically German problem in this respect is that the wage structure differentiates less between manufacturing and services than in other countries (see Bogai 1996).

An international comparison of labor force participation shows that Germany has a high backlog demand in the sector of domestic marketoriented services. This backlog demand, in combination with the fact that positions in the low wage groups in manufacturing are hardly filled, leads to the assumption that only unskilled jobs in the household and consumption-related services sector, which require little human capital, can realistically be considered as a potential source of a sufficient number of jobs in the future, as there is—in comparison with other countries—a job deficit (see also Freeman/Schettkat 2000). When comparing the density of services in Germany to that in other countries, a service deficit of about 2.6 million full-time jobs becomes apparent in comparison to the UK; in comparison to the U.S., the figure is 3.5 million, and in comparison to Denmark it is 4.7 million (see Klös 1999, 10 and Setzer/Klopfleisch/Sesselmeier 1999, 83; see Chapter 4.1).

## 2.2.3 Institutional obstacles

The reasons given above for persistent unemployment, which are based on purely labor-market endogenous factors, are furthermore complemented by institutional factors. Specific details about labor legislation, of active and passive labor policy, but also of social policy in general, reinforce the endogenous inequality between insiders and outsiders.

It is of particular interest to consider the problem of the institutionallycaused incentive trap (see Sesselmeier/Klopfleisch/Setzer 1996). There are two aspects to be taken into account. First, there is the opinion that a wage spread at the lower end of the scale is prevented in particular by social assistance regulations which function implicitly like a minimum wage, and a high replacement rate on low incomes by the withdrawal of social benefits dependent on income.

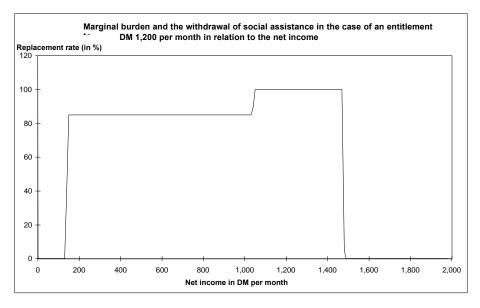
Furthermore, a high replacement rate may occur because of institutionally established limiting values like the so-called insignificance threshold. Finally, there is a general tax wedge between total labor costs and net wages.

The problem to be solved may thus be considered to be the smoothing out of the cumulative effects of the tax and transfer systems on the lower end of the income scale.

#### 2.2.3.1 The high marginal burden

In order to receive social assistance benefits, all kinds of income and property, with few exceptions, are taken into consideration. Thus, if a social assistance recipient without an income takes a job, his new income will be fully deducted from the social assistance benefits, except for the fact that 85 percent of the earned income of social assistance recipients exceeding the basic rate of DM 135 per month will be deducted from his social assistance entitlements, so that his remaining monthly earned income may increase by a maximum of DM 270. Any income exceeding this amount, up to the subsistence minimum, fully deducted from the social assistance benefits and are thus taken away from the social assistance recipient (see Sesselmeier 1997, 118ff, and Boss 1999, 69ff). Figure 2-1 shows the replacement rate of a household entitled to social assistance benefits of DM 1,200 per month, depending on the monthly net income tariff formulas Sesselmeier/Klopfleisch/ (for the see Setzer 1996, 1122).

## Figure 2-1: Replacement rate and withdrawal of social assistance in relation to the net income

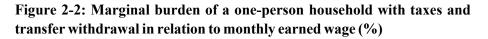


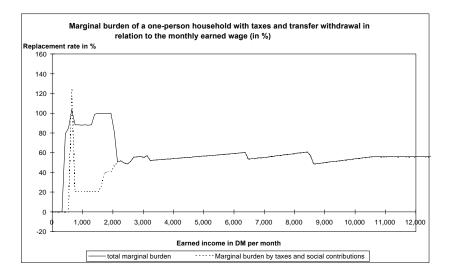
The consistent application of the principle of subsidiarity thus exercises

a negative influence on the effectiveness of social assistance as a labor market policy measure, as any income is nearly fully deducted from the social assistance entitlements. In the situation of a social assistance recipient who has to decide whether to take a job or to continue receiving social assistance benefits, it is clear, from a micro-economic point of view, that taking a job will not result in a significantly higher income, but certainly in a reduction of available leisure time. From this point of view, the social assistance recipient who refuses to take a job for rational reasons illustrates what we refer to as the "poverty trap" or "social assistance trap." Therefore, the conclusion is that the current modus of allocating social assistance benefits provides a strong disincentive for taking up work.

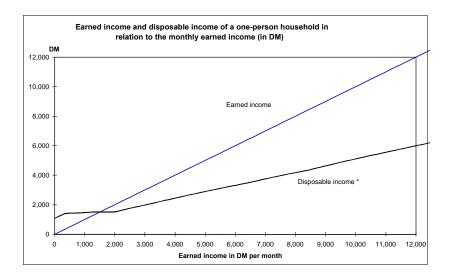
A similar transfer dilemma arises from the income tax calculation method. For lower incomes, a withdrawal of income-dependent transfer payments frequently results in a cumulative replacement rate which, in most cases, far exceeds the current maximum marginal income tax rate of 53 percent. At first glance, a bigger household is entitled to higher social assistance benefits, but, on the other hand, it is also subject to an extension of the income bracket with a high replacement rate. The following figures demonstrate this, using two different household constellations as examples.

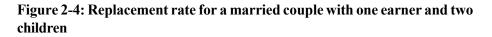
Given the current social assistance and tax regulations, it would appear rational in the short term for an individual not to take up work. For the economy as a whole, this leads, even in the short term, to a sub-optimal state, as funds are "wasted." But the consequences of the current regulations in the long term are far more serious, not only for the individual, but also for society. The decision not to work, rational as it may seem from a short-term point of view, leads to an increasing loss of human capital. Those concerned become increasingly less competitive in comparison with their employed counterparts. Thus, the typical persistence phenomena arise, making the unemployed dependent on long-term income support.

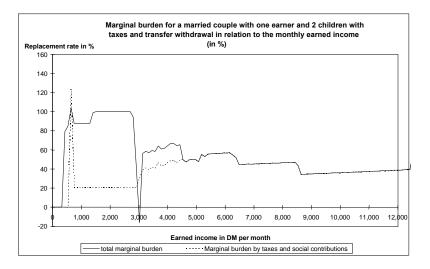




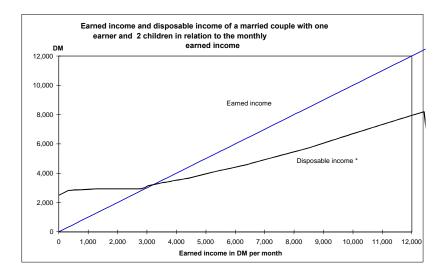
#### Figure 2-3: Earned income and disposable income of a one-person household







# Figure 2-5: Earned income and disposable income of a married couple with one earner and two children



#### 2.2.3.2. Social assistance benefits in the function of a minimum wage

A second factor is the violation of the regulation that establishes the difference between social assistance benefits and the lowest level of income on the basis of gainful employment. Negative incentives to take up work result from too small a difference between social assistance benefits and low-wage incomes. As children are taken into account in the calculation of social assistance benefits, but not in the calculation of wages, it is obvious that the violation or non-violation of this regulation depends on the size of the family. Another factor that influences its non-violation is the choice of the low-wage groups taken into account. Research based on exemplary branch-specific analyses shows that the regulation is violated in certain family constellations (see Boss 1999; Deutsche Bundesbank 1996), while reports which, according to the text of the law of s. 22 subs. 4 Federal Social Security Act, compare social assistance benefits to the average net earned wage of the lower wage and salary levels find no violation of the regulation (see ISG 1999). Nevertheless, the method based on this legal text appears hardly realistic, as the household in question will compare social assistance benefits only with its current earned income; because of information deficits, this is the only possible comparison.

The results of an analysis by Boss (1999) show that in households with children and only one working parent, the social assistance entitlements reach a high percentage of the available income from gainful employment, especially if the assumed job is in the textile and clothing industry. Here, the relation in the old federal territory is up to 90 percent, in the new *Länder* sometimes even more than that. The relation between social assistance benefits and available income from gainful employment in the hotel and catering industry is particularly extreme.

The *Bundesbank* (1996, 61-66) has calculated the difference between social assistance and wages for the *Land* Hessen on the basis of agreed minimum wages (initial salaries in the respective lowest wage group, including the relevant portion of Christmas bonus and holiday allowance) for three sectors of the economy (hotel and catering industry, retail trade and metal industry) for 1996. The reason for this choice of samples was that people with low qualifications will find entry into the labor market most probably via jobs that do not require formal training. It was shown

that the difference between wage and social assistance decreased with increasing household size. The available minimum income "e.g., of a married sole provider with two children, is on a level which hardly exceeds the corresponding social assistance benefits, even when assuming the higher wages paid in the metal industry. In the case of simple, unskilled work in the hotel and catering industry or the retail trade it even lies ... below this minimum social security level, so that in these cases the employees—in so far as they do not earn more than the agreed minimum wage—are, in spite of their workload corresponding to a full-time job, dependent on additional social assistance benefits" (*Deutsche Bundesbank* 1996, 64).

These results stem from a specific equalization of family burdens in the social assistance system that cannot be recreated in the remuneration of gainful employment. Nevertheless, there is sufficient evidence for the fact that the disincentive has more of an effect in those groups where the difference between wages and social assistance is officially observed than in larger households with a greater number of children.

#### 2.2.3.3 The insignificance threshold

The argument that high labor costs are an obstacle to the creation of more jobs in the service sector is indirectly confirmed by the German experience with regulating part-time employment. Some critics claim that the service gap existing in Germany is being over-estimated, referring to the fact that there are, particularly in the sector of household-related and personal services, numerous employment relations classified as part-time, which were, until very recently, not taken into account in official statistics. Thus the number of so-called 630-Mark jobs in the second half of the 1990s was estimated to be between 2.2 and 5.6 million (see Rudolph 1999). In view of the great extent to which employees and employees made use of the legal form of insignificant employment during the last few years, the assumption arises that these have turned into an important instrument to overcome the cost barrier on the way to an expansion of the service industry and a corresponding creation of jobs in this sector. In fact, the "630 Mark Law" allowed the organization of low-skilled, lowwage jobs in such a way that they were exempt from social security contributions and in some cases even from income tax.

Even after the introduction of the insurability of insignificant

employment relations, in force since April 1, 1999, there is still a remarkable employment threshold at a monthly income of 630 DM (west Germany) (see Rudolph 1999). Up to this limit, the social security contributions are, in the case of exclusively insignificant employment, borne by the employer alone.<sup>5</sup> Above this limit, the employee is fully liable to contribute to social security. Therefore, only with a gross monthly insurable wage of more than 798 DM will the net wage be higher than with part-time employment at 630 DM. The corresponding leap in taxation may be even greater because of the household situation and its specific replacement rate with regard to income tax.

#### 2.2.3.4 The tax wedge

The insignificance threshold illustrates the problem of labor costs in the German low-wage sector, which is nevertheless valid for all insurable employment relations, though with different effect. Taxes and social security contributions insert a steadily growing tax wedge<sup>6</sup> between the total labor costs, relevant for the company, and the net wage, relevant for the employee. Responsible for this are the payroll tax and the social security contributions of employers and employees, which have steadily increased in recent years. In the period 1990-1997 the social security rates have increased from 34.8 percent to 42.0 percent (see BMA 1998). In consequence of this development the share of the nominal net wage in the gross wage dropped from 72.6 percent in 1960 to 52.5 percent in 1996 (see Walwei 1999, 520).

This tax wedge is valid for all regular jobs, but compounds the additional problems in the low-wage sector: in this sector there is a higher elasticity of demand than with regard to jobs for better qualified employees (see Franz 1999, 169–172, and Walwei 1999, 525, and the literature quoted in these papers). In international comparison, only Italy and—to a lesser extent—France show the same tax wedge in the low-wage sector (see Klös 2000).

#### 2.2.4 Intermediary conclusion

The reasons for persistent unemployment discussed above are not to be considered separately from each other, starting from the assumption that in the manufacturing industry, for efficiency wage considerations, wages higher than the market clearing wage are paid. Because this is not the case in the sector of low-skilled services considered here, sector-specific wage differentials arise. Workers in the manufacturing industry who become unemployed and lose their competitiveness in this sector could be absorbed into the service industry, provided that there is full competition in this market. Thus, unemployment would be only temporary. However, if there are minimum wages fixed for the service industry, as they are now implicitly established as a consequence of social assistance benefits, and if the competitive wage lies below these minimum wages, unemployment will not decrease, but, on the contrary, will become persistent. Endogenous labor market factors, restructuring and institutional arrangements thus complement each other.

A relief in the low-wage sector would favor companies and branches with high labor intensity and low productivity and therefore result in a more advantageous situation for services as compared to manufacturing.

#### 3. ONE PROPOSAL: SUBSIDIZING LOW-WAGE EARNERS

A broadening of the wage structure, in particular at the lower end, requires a low-wage sector. However, in order to create jobs in this area and to avoid the "working poor" phenomenon at the same time, low wages must be publicly cofinanced. Since 1993, a debate has been going on about different proposals, the principles of which will be presented in the following sections. These models differ mainly in their institutional and social relevance. The discussion was initiated by Scharpf (1993) with the negative income tax model. From the criticism of this model, different proposals for wage subsidies emerged; among others, Scharpf and the Committee for the Future of the Friedrich-Ebert-Stiftung (1998) elaborated proposals for a subsidy of social security contributions. These instruments each address a different one of the institutional factors named above and can thus be considered as adequate solutions to the problem. Nevertheless, this development may be characterized-also considering the realization problems and political resistance related to the different models-as a trend away from the "big sweep" toward the "smallest common denominator."

#### 3.1 Negative Income Tax

The negative income tax is an integrated tax and transfer system<sup>7</sup> and thus proposes to extend the tax system as if it were "below zero," so that the tax payer who does not earn enough to pay taxes, receives instead "negative" taxes, i.e. transfer benefits.<sup>8</sup> The word "negative" is to be explained from the point of view of the government and its revenue and expenditure: for the government, tax revenues are considered to be positive, expenditures bear a negative sign. The person whose income does not exceed a certain amount receives an income and need-related transfer payments from the government. The background of this idea is the fact that the income tax system usually takes into account allowances in order to safeguard the subsistence minimum. A negative income tax, as a logical extension of income tax rates on a negative axis, would allow supporting those receiving small incomes consistent with the existing tax system. Three factors have decisive influence on the final design: first, the guaranteed minimum income; second, the transfer withdrawal rate and, third, the transfer limit, from which taxes have to be paid. Theoretically, the third factor emerges endogenously, if the other two are given (see Kress 1994, 246; Sesselmeier 1997):

The available income  $Y_v$  of a person consists of the minimum income  $Y_M$ , which is reduced by a certain percentage t of the earned wage  $Y_E$ , and the earned wage itself. Is results in:

(1) 
$$Y_{v} = Y_{M} + (l-t)Y_{F}$$

The transfer limit  $Y_{\kappa}$  is defined as:

$$(2) \qquad Y_K = Y_v = Y_{E'}$$

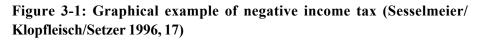
as in this case the available income equals the earned wage and thus marks the limit from which no transfers are paid. According to (1), this is the case if  $Y_{\rm M}$  - t $Y_{\rm E}$  = 0.

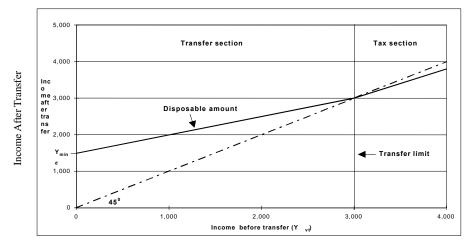
This results in:

$$(3) \qquad Y_K = Y_M / t.$$

With regard to the conditions and amount of the minimum income, there are different possibilities: it could be identical with the allowance safeguarding the subsistence minimum, with the current social assistance benefits, or an alternative poverty limit. Another possibility is to establish the minimum income below the subsistence minimum in order to fulfill the requirement of a stronger incentive to work. The same uncertainty applies to the transfer withdrawal rate, which will not necessarily follow the positive tax rate, but could develop in a linear, progressive or regressive way. The transfer withdrawal rate thus defines the proportion of the assessment basis to be taken into account when calculating the transfer amount. In most cases, a transfer withdrawal rate of 50 percent is applied. This results from the fact that a higher negative tax rate would, because of the excessive transfer withdrawal, provide too little incentive, and that, on the other hand, a lower tax rate would lead to a higher number of eligible recipients by raising the transfer limit.

The definition of the three basic variables is very much dependent on the aims to be achieved with the corresponding concept. If the main aim is to fight poverty or to safeguard the subsistence minimum respectively, the transfer withdrawal rate will be high, as will the minimum income, which should come close to the subsistence minimum. A high transfer withdrawal rate at the same time limits the number of eligible recipients. An aspect in favor of a low transfer withdrawal rate, combined with a low minimum income, would be that it provides an incentive to self-help by achieving an income on one's own. Graphically, the minimum income is represented by the ordinate section; the income before transfers has the value zero. The transfer withdrawal rate is represented by the gradient of the line that represents the available amount resulting from income and transfer. The transfer limit lies at the point of intersection of the line representing the available amount with the  $45^{\circ}$  line (see Figure 3-1).





The costs of a negative income tax depend on the choice of parameters, i.e., on the minimum income and the percentage to be taken into account as well as on the subsistence minimum (see table 3-1).<sup>9</sup> Accordingly, the costs vary with the modification of these parameters, and each model has its specific costs. The following table shows the exemplary cost variations in relation to the assumptions on which the calculation is based. The possible excess calculated by Gern (1999) results from the assumption of a physical subsistence minimum instead of the socio-economic social assistance level.

Table 3-1: Different cost estimations of negative income tax

DIW (1996): 8 variations	DM 69-269 bn		
Sesselmeier/Klopfleisch/Setzer (1996): 3 variations	DM 81-126		
Gern (1999): 14 variations	DM-22-302 bn		

Besides the fact that the system will not necessarily support a better integration in the labor market (see section 4.2), the high costs in particular have lead away from negative income tax and in the direction of wage subsidies.

# 3.2 Wage subsidies

Wage subsidies can be designed and structured in relation to a large number of characteristics (see Sesselmeier 1997, 58-62; Walwei 1999, 523-524) that are enumerated here:

- · Recipient: employer, employee, or both;
- Subsidy amount: in particular, reference quantity and linear as well as degressive support;
- · Time factors: limited or permanent subsidies;
- Eligible recipients: all employees within a certain income bracket, or pertaining to a particular group of recipients;
- · Basis of subsidy: direct wage or non-wage labor costs.

Just as in the case of the negative income tax, further considerations concern the financing of wage subsidies. Furthermore, the question to be raised is whether monetary transfers, in particular those aimed at a specific group of recipients, will be sufficient or whether they will have to be complemented by non-monetary measures to support an integration into the regular labor market (see Setzer/Klopfleisch/Sesselmeier 1999).

## 3.2.1 Subsidizing direct wages

From the numerous proposals made, only one will be presented here (see Setzer/Klopfleisch/Sesselmeier 1999, 47-60). This model is a targetgroup oriented wage subsidy aimed at combating long-term unemployment. From an institutional point of view, recipients of unemployment relief or social assistance benefits may thus be eligible for it. This wage subsidy is designed as follows:

- The subsidy is based on hourly wages, in order not to discriminate against part-time workers.
- Starting from a certain minimum wage, the wage subsidy develops regressively, i.e. this kind of wage rate subsidy leads to a lower demand for subsidies with rising wage rates. A maximum wage rate has to be established where the subsidy will end. A minimum wage is to be

defined in order to prevent unethical contracts as well as agreements between employer and employees to take advantage of the government.

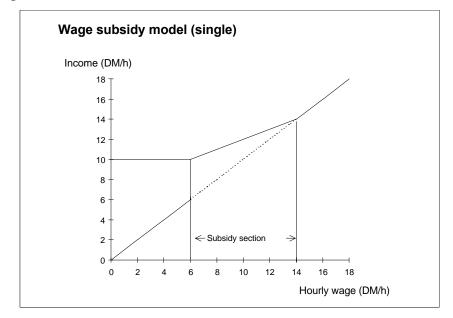
- The subsidy will be paid for an unlimited amount of time.
- The subsidy is based on the individual recipient; the household size, which is taken into account in social assistance benefits, will also be taken into account when calculating the subsidy amount, in order to provide an incentive. There is no means test, as this was already a prerequisite in order to obtain unemployment and social assistance benefits.
- The amount of the subsidy is oriented on the existing lower wage groups in those branches where there is an additional job potential.
- The total earned income, i.e. wage or salary plus subsidy, is subject to taxes and social security contributions.

These considerations result in a subsidized employee receiving an income of at least 10 DM per hour. This corresponds roughly to the lowest possible earnings in the lower wage groups (WSI 1998). The minimum wage for the employee is 6 DM, the reduction rate of the hourly-wage subsidi is 50 percent<sup>10</sup> and the maximum wage to be subsidized is DM 14 DM. The following table sums up the different parameters of the scale to be subsidized for a single employee.

Table 3-2: Subsidy, g	gross monthly	income and	labor cos	ts depending on
hourly wages				

Waga	6 1 1	T	S-h-sider	Gross monthly Income*)	Labor costs (monthly)		
Wage (DM/h)	Subsidy (DM/h)	Income (DM/h)	Subsidy rate (%)		excl. soc.contr.	incl.soc. contr.	
6	4.0	10.0	66.67	1,620	972	1,176.1	
7	3.5	10.5	50.00	1,701	1,134	1,372.1	
8	3.0	11.0	37.50	1,782	1,296	1,568.2	
9	2.2	11.5	27.78	1,863	1,458	1,764.2	
10	2.0	12.0	20.00	1,944	1,620	1,960.2	
11	1.5	12.5	13.64	2,025	1,782	2,156.2	
12	1.0	13.0	8.33	2,106	1,944	2,352.2	
13	0.5	13.5	3.85	2,187	2,106	2,548.3	
14	0.0	14.0	0.00	2,268	2,268	2,744.3	

The income of a single employee depending on hourly wages can be represented as follows:



# Fig. 3-2: Gross hourly wage of a single employee with wage subsidies depending on hourly wages (Setzer/Klopfleisch/Sesselmeier 1999, 54)

Assuming a working week of 38 hours, this would result in a gross income to be achieved with the subsidy of 1,620 DM to 2,268 DM, while the corresponding gross wages to be paid by the employer would lie between 972 DM and 2,268 DM.<sup>11</sup>

Because of tax and social policy considerations, the incomes would be completely subject to income tax and social security contributions, thus this form of subsidy would result in considerably lower cost advantages for the employer and a smaller incentive for the employee because of their respective shares in social contributions. In order to retain the incentive for both parties, the additional social security contributions caused by the wage subsidy are to be subsidized as well. The social security contributions for the portion of the wage not subsidized are to be borne by employer and employee.<sup>12</sup>

# 3.2.2 Subsidizing social security contributions

As an alternative to the proposals made so far, several countries have in recent years taken the opportunity to lower the labor costs of lowproductivity jobs by subsidizing the non-wage labor costs caused by the government instead of lowering gross wages (see Fels et al. 1999, 31-34; Schupp et al. 1999, 503). This means that the claims of the employees in question to receive social security benefits are fully maintained, as the government replaces the contribution rebates granted from tax revenues.

The different proposals in this respect are so numerous that it is difficult to give an overview of them all. The starting point for this variety of models was the proposal of the *Zukunftskommission* (Committee for the Future) of the *Friedrich-Ebert-Stiftung* (1998, 266-268) of a permanent subsidy of social security contributions for recipients of low earned incomes. In the discussion concerning the German Employment Pact, it was decided, in accordance with the joint declaration of 12 December 1999, to test two different models in specific labor market regions of two eastern and two western German *Bundesländer* for a period of three years, while any individual support should not exceed a duration of eighteen months. The two model variations to be tested are the "Pilot Study for the Creation of Additional Jobs for Low-Qualification Workers" (SGI-Modell; Saar-Gemeinschaftsinitiative 1999) and the "Mainz Model for Employment and Family Support" (Gerster/Deubel 1999).

## The SGI Model

The SGI Model is based on the idea that there is a lack of jobs primarily in the low-wage sector. Thus support is mainly aimed at the employers' labor costs. Subsidies are granted for additional, standard-wage, insurable jobs. Eligible for a subsidy are jobs for workers with low formal qualifications and long-term unemployed. A lowering of non-wage labor costs is achieved by a regressively graded subsidy of the employer's social security contributions paid on hourly wages between 10 DM and 18 DM. Since a direct subsidy of the employer's share in social security contributions would lead to a difference in net wages between "old" employees and additional employees to be subsidized according to this program, the subsidy is to be granted in the form of qualification measures, and expressly not directly in cash. The Mainz Model

In contrast to the SGI Model, the Mainz Model affects the employees' side more. The idea behind it is that existing vacancies in the low-wage sector cannot be filled because of the lack of incentives to take up work. The net incomes are thus augmented by subsidizing the taking-up of an insurable low-wage job. A regressive subsidy is granted on the social security contributions of low-wage earners from more than 630 DM up to an income limit of 1575 DM (double the amounts for married couples). Families eligible for rent subsidies will receive a supplement of DM 150 on child benefits as a maximum.

Originally, the benchmarking group working on the German Employment Pact had discussed a basic change of the employment conditions in the regular labor market. The low-wage sector was to be revived by general and permanent wage subsidies. The models finally decided upon are a far cry from this approach. They are instruments which, because of their limited duration and partial orientation toward specific groups of recipients, are in competition with the existing measures to promote employment.

# 4. EFFECTS ON EMPLOYMENT

The effects on employment of any kind of subsidy to low-wage earners are being seriously discussed. The existing estimates can be divided into two groups. The more pessimistic papers are based on econometric elasticity calculations, while the more optimistic papers obtain their results from international comparisons of employment figures in low-wage service branches and thus calculate a service gap for Germany, and from targetgroup oriented estimates of the potential labor offer.

# 4.1 Labor offer potential and service gap

For an estimate of the maximum number of jobs to be created by wage subsidies, the offer of as well as the demand for labor has to be taken into account.

# 4.1.1 The maximum labor offer potential

The target group of income transfers includes long-term unemployed social assistance or unemployment relief recipients, i.e. persons who have been registered as unemployed for at least a year and recipients of regular income support or of benefits under the Code of Social Law Vol. III. Legally, the receipt of subsidies is to be linked to the receipt of social assistance or unemployment relief and the registered duration of unemployment, i.e. those who are long-term unemployed and needy in the sense of the Federal Social Security Act are entitled to subsidies in case of low-wage work (see Sesselmeier/Klopfleisch/Setzer 1996 and Setzer/Klopfleisch/Sesselmeier 1999). This estimating method is also used by Gern (1999).

Table 4-1:Definition	of	target	group	(Statistisches	Bundesamt;	own
calculations)						

		1998(1000)
(1) (2)	Recipients of regular income support -those employed (full time)	1,767 69
(3) (4) (5) (6) (7)	<ul> <li>=Unemployed or part-time employed recipietns of regular income support between fifteen and sixty-five years</li> <li>because of education or training</li> <li>because of family obligations</li> <li>-because of illness, disability, inability to work</li> <li>-because of age</li> <li>= Recipients of regular income support between fifteen and sixty-five years, part-time employed or unemployed for other reasons</li> <li>-double counts (recipients uf unemployment benefits, estimated)</li> </ul>	1,700 107 276 136 29 1,152 74
(8)	= + Recipients of unemployment relief	1,078 1,500
	= Potential labor offer by recipients of regular income support and/or unemployment relief	2,578

The DIW (Schupp et al. 1999) concludes within the framework of an analysis of the original model of the Committee of the *Friedrich-Ebert-Stiftung* that there was a potential of 2.8 million persons available. Of those, 640,000 were formerly unemployed persons, about the same number was to come from Hidden Reserve I, and about 1.5 million from the Hidden Reserve II, which is excluded from the labor market (on this categorization

see Holst/Schupp 1997).

Klös (2000) calculates several potentials for an activating social policy, differentiated according to combinations of characteristics, the highest one being roughly seven million people, the lowest 3.2 million people, consisting of long-term unemployed and capable of working, but not gainfully employed social assistance recipients. While the maximum number is rather a theoretical figure, based on a radically different employment policy, the lower number is more in line with the other existing estimates.

The difference between the potentials calculated is due to the role accorded to the hidden reserve. While this is taken into account by Schupp et al. (1999), the other estimates disregard it.

## 4.1.2 The service gap

The level of employment in simple, person-related services in Germany is low in comparison to other countries. Comparing the density figures of employees in certain economic branches (employees per 1,000 inhabitants) in the U.S. and in Germany, the current calculations of the IAB (Hoffmann and Walwei 1999) show an employment deficit in Germany primarily in distributive services (2 million), in business-related services (2.1 million), in leisure-related services (1.9 million) and education and health services (1.3 and 1.2 million respectively). Employment opportunities for lowskilled employees are to be found mainly in the distributive and leisurerelated services, but also in auxiliary functions in the education and health sector. In particular with regard to low-skilled employees, the Institut der Deutschen Wirtschaft draws the conclusion from a comparison of the Danish and the German employment profile that there is an employment gap of 1.3 million jobs in the service industry (Klös 1999). The calculation is based on the employment density of different branches and starts with finding out the general employment deficit of the German service branches, using the same methods as the IAB in its Germany-U.S. comparison. Then an estimate is made, on the basis of international averages of the qualification structure of the individual sectors, of how many of the jobs not existing in Germany could probably be filled with low-qualification employees. The result of this estimate supports the assumption that lowqualification employees would profit in particular from an extension of employment in the service industry.

Another estimate on the basis of the annual, ISCO-88 classified EU Labor Force Survey is made using a comparison of the employment density figures of a sample of European countries and of Germany (see Setzer/ Klopfleisch/Sesselmeier 1999). The employment density figures are calculated in relation to job areas (jobs performed). Alternatively, the employment density figures could be calculated for individual branches and then compared (see *Zukunftskommission der Friedrich-Ebert-Stiftung* 1998), but in this case, problems arise from the different level of vertical integration in the countries considered. Countries where the outsourcing of production-related services is advanced show a high employment figure in the corresponding service branches, although the same jobs, and thus qualification and wage sectors, may be incorporated in economies with a higher degree of vertical integration in the branches of the secondary sector (see Cornetz/Schäfer 1998, 419).

To start with, the employment density achieved in 1997 is calculated for each job group of the three-digit ISCO-88 classification in the country of comparison by relating the current level of employment to the number of inhabitants. This density, multiplied by the population of Germany, shows the number of potentially available jobs in the corresponding sectors. The number of already existing jobs in Germany is subtracted from this figure, so that the difference shows the potential for additional jobs to be created. Denmark, the Netherlands and the UK were chosen for comparison, as these countries show a better labor market performance than Germany, and as they started to develop programs for low-wage jobs early on.<sup>13</sup>

After correction for the working time difference in the individual branches, there is, in comparison with Denmark, a potential of 4.7 million, in comparison with the UK one of 2.6 million, and in comparison with the Netherlands a potential of merely 270,000 jobs. The latter may be due to the fact that the employment policy of this country is very similar to that in Germany.

The different potentials can only give an initial suggestion of what appears to be possible under the social assistance conditions within Europe. New job ideas arising from a competition in services can only be hinted at in these potentials.

# 4.2 Supply and demand elasticities

Insofar as a support of an employment relation by income subsidies benefits the employer, it reduces the price of low-wage jobs and thus increases the spread, not of wages, but of the labor costs arising for the employer. Insofar as it works to benefit the employee, it leads to an increase in the wage rate. The effects of a rising wage rate are, however, theoretically uncertain. As the higher wage rate makes leisure time more expensive in comparison to working time, there will be a substitution of work for leisure time. This substitution effect extends the supply side of the labor market and is counteracted by an adverse income effect. The income effect leads to a reduction of the labor supply, as the higher wage rate may increase the demand for goods and thus make leisure time relatively more attractive. Empirical research shows that the income effect may be—at least on an aggregated level—weaker than the substitution effect, i.e. an increase in the wage rate will result in an overall increase of the labor supply.

This context leads to the necessity to have a closer look at the labor supply as well as at the demand development. Only a study made by the IZA (Riphahn/Thalmaier/Zimmermann 1999) considers the demand elasticities, as the labor supply is regarded as principally fixed and, because of the high levels of unemployment faced by low-skilled individuals, a dominant role of the demand side is assumed. Accordingly, the Mainz Model does not show any effects on employment in the analyses of the IZA.

Gern (1999) analyses the supply behavior for a negative income tax of those already employed and of those unemployed. He comes to the conclusion that a negative income tax to the amount of social assistance benefits may lead to a reduction of labor supply from the side of households where there are already people employed. For those unemployed he assumes a positive supply effect, without considering the estimate of potential shown above in more detail.

	Labor supply			Labor demand		
	<b>Characterization</b>	Man	Women	<b>Characterization</b>	Less qualified	
Bulsei et al. (1999)	* Germany *Singles *Couples + change in the woman's wage *Couples + change in the woman's wage	0,079 0,123 -0,002	0,106 0,079 -0,055 0,252	*Volume of work in hours	-0,67 m -0,47 w -0,61 m -0,19 w	
Trabert et al. (1998)	*Sachsen-Anhalt	0,190	0,601	*Manufacturing industry East Germany	-1,16 (no distinction)	

Table 4-2: Estimations of wage elasticities

All other papers estimating the supply behavior on the basis of elasticity calculations find results—depending on the model variation assumed of 0 to nearly 300,000 additional persons (see also Kaltenborn 2000, 162). These results are rather sobering in comparison with the potential estimates above, but are in accordance with experience in the UK and the U.S. (see Trabert 1999).

### **5. CONCLUSIONS**

#### 5.1 Comparison of the instruments

All proposals currently under discussion have their specific advantages and disadvantages. They all address the institutional problems of unemployment, which is correct insofar as the structural change of the economy as such cannot and should not be stopped. Rather, its consequences have to be channelled effectively, so that new institutional regulations emerge. In this respect, the instruments presented here are only an extremely small portion of the existing possibilities and necessities. This will be discussed in the following section in more detail.

With regard to the aim of increasing employment, wage subsidies are to be preferred to a negative income tax, as they can only be claimed in case of gainful employment. But EITC also shows that taking a job and income subsidies can be combined. In addition, the choice of the subsidy system is also dependent on the chosen target figure: is it a target-group oriented or a universal income transfer? Wage subsidies are more suitable for targeted measures than a negative income tax. The latter could well be imagined, but its real attractiveness would be lost in this case. However, a negative income tax without a target-group appears not to be financially feasible.

Besides the labor policy goal, the relevance of the institutional reasons for unemployment—social assistance trap, insignificance, tax wedge have to be considered. Subsidizing social security contributions is certainly the most specific instrument for this purpose; furthermore it affects the discussion of the role of self-reliance in social security. The problems of insignificance and the social assistance trap can be solved most effectively by modifications in the tax system or by better adjusting tax and social policy. In particular when taking into account the context of family policy and the neediness of the individual, wage subsidies may be particularly problematic. Both could be more easily taken care of within the tax system.

In order to carry out pilot studies certain limits must be established, particularly in order to be able to analyze and judge their (lack of) success in comparison with traditional labor policy. Although the orientation on a target group may result in horizontal injustice between those already employed and those to be employed in the low-wage sector, or between those officially recognized as long-term unemployed and people considered as the hidden reserve, this seems to be unavoidable in order to locate the people in question institutionally. Furthermore, the time limit will certainly not have a positive effect on the demand and supply behavior, as it is not clear whether, after termination of the subsidy, the arising higher wage costs will be covered by an increased productivity of the employees in question.

## 5.2 Low-wage sector and social strategy

The discussion about a low-wage sector in Germany, flanked by a subsidy, remains incomplete as long as further re-regulating measures are not taken into account, which may result in the fact that income transfers can be successful, but that they are just one instrument among others.

Especially against the background of the American, but also the British discussion with regard to the "third way," it appears more promising to speak of the broader strategy of an activating social policy. This includes

not only influencing the price of the factor labor, but also, and primarily, influencing human capital. In accordance with the existing experience, a purely financial strategy of re-integration into the regular labor market may not be sufficient. It must rather be supported by non-monetary care, counseling and placement measures, in order to compensate the multiple obstacles against re-employment existing in the target group (see Setzer/Klopfleisch/Sesselmeier 1999 and the literature quoted there, and Sell 1999).

Furthermore, the subsidies must be complemented by modifications in order to increase their effectiveness, including the combination of unemployment relief and social assistance as well as a general decentralization of labor policy (see Hoffmann 2000 and Sesselmeier 2000). In this respect, the question of competence for labor market policy within the federal system, with the aim of establishing an adequate and efficient distribution of tasks, costs and revenues, is of prime importance. There are coordination problems in this area between federal, regional and local authorities, which have a negative effect particularly on the long-term unemployed. Within such a re-structuring of labor market and social policy, the responsibility for the long-term unemployed should be concentrated on a decentralized, i.e. local level, as the local communities already have at their disposal a range of activating instruments on the basis of the Federal Social Security Act. Pilot studies should take into account this general context, and not be carried out in a patchwork approach like the planned projects.

A low-wage sector combined with income transfers is certainly no cure-all for unemployment in Germany. But incorporated into a comprehensive re-regulation of labor and social policy it may lead to a higher level of employment and thus to a higher level of well-being. However, this requires a long-term strategy and an understanding of the specific advantages and disadvantages of the economy in question (see also Freeman 2000 and Blanchard/Wolfers 2000). This is particularly relevant for the German labor market, which has been characterized for decades by a high-productivity/high-wage strategy. Nevertheless, the experiment of establishing a low-wage sector should be risked with more confidence than it has been. At the moment, almost anything appears better than the current policy of passivism.

#### **ENDNOTES**

<sup>1</sup> The German labor market is defined, for the purposes of this paper, as that of west Germany, excluding the former GDR. Even ten years after reunification, the situation in the east German labor market is different, so that the policy measures discussed in the following are applicable in general only for the West German labor market; for a discussion about the economic situation in east Germany see Sinn (2000).

<sup>2</sup> A discussion of different instruments to increase demand for less-skilled workers in a comparative perspective can be found in Freeman/Gottschalk (1998).

<sup>3</sup> Wage rigidities because of efficiency wage considerations or insider-outsider behaviour as well as mismatch problems which lead to persistence are finally just a consequence of the human capital problem.

<sup>4</sup> In 1996, the percentage of those gainfully employed among those able to work between fifteen and sixty-four years of age in Germany was 61.7 percent, which is below the OECD average of 66.5 percent. In the U.S., whose "job miracle" is frequently quoted as an example, the figure was 72.8 percent, but this was still surpassed by economies as different as Switzerland with 79.1 percent or Denmark with 73.4 percent.

<sup>5</sup> The employers may voluntarily take on the additional contributions to the social security pension scheme.

<sup>6</sup> The so-called tax wedge is the difference between the consumption wage, which matters to workers, and the product wage, which matters to firms. The product wage reflects the real labor costs and corresponds to the gross wage plus the employer's social security expenses and other non-wage labor costs. The take-home wage after the deduction of income taxes and employee's social security contributions is the consumption wage. The tax wedge is the ratio between these variables. A formula is given by Lindbeck (1996):

Let us define the real product wage:

$$\mathbf{w}_{\mathbf{p}} = \mathbf{W} \left( 1 + \mathbf{t}_{\mathbf{W}} \right) / \mathbf{P} \tag{1}$$

where

The real consumption wage can then be defined as:

$$w_{c} = W (1 - t_{i}) / [P_{c} (1 + t_{c})]$$
(2)  
where  
$$w_{c} = consumption wage$$
$$t_{i} = labor tax rate, including income tax and employees' socialsecurity contributions
$$t_{c} = consumption tax rate.$$$$

This leads us to the relationship

(3) where

$$q = tax wedge, q = [(1 + t_w) (1 + t_c)]/(1 - t_i)$$
 (4)

$$l = price wedge, l = P_c/P$$
 (5)

Financing social security through employers' contributions  $(t_w)$  and/or taxation  $(t_i \text{ or } t_c)$  then leads to different tax wedges. A further effect of this tax wedge is that it intensifies bargaining between the two parties. For example, an increase in social security contributions raises firms' labor costs on the one hand but reduces the disposable household income on the other.

<sup>7</sup> Overviews of the different models and their influence on the current debate on welfare state reform are given by Kaltenborn (1995 and 1998) and Sesselmeier/Klopfleisch/ Setzer 1996).

<sup>8</sup> To create employment for less-skilled workers is only one possible task of a negative income tax. Basically it is discussed as a instrument to create a basic income independent of gainful work (see Rothschild 1997 and Fitzpatrick 1999).

<sup>9</sup> For a more detailed comparison see Hüther (1997).

<sup>10</sup> I.e. DM 0.50 loss in subsidy for DM 1 increase in hourly wages.

 $w_p = w_c q l$ 

<sup>11</sup>Following different calculations in the literature, the figures for the monthly income are based on a monthly working time of 162 hours for full-time employees (see Scharpf 1994).

<sup>12</sup> Furthermore, a household or family-size related component can be integrated into this model (see Setzer/Klopfleisch/Sesselmeier 1999, 56-59)

<sup>13</sup> A comparison of this kind is, of course, based on the rigid assumption of similar wage and demand structures in the countries of comparison. Even though this method is useful as a first approach, some additions have to be made to put the results into perspective. The limitations result mainly from different institutional and socio-cultural factors. Under certain conditions, for some of the low-wage jobs considered here, e.g. in the child-care sector, considerably higher qualifications are required in Germany than in the countries of comparison. In addition, the service gap stated here is based on a lack of demand for these services because of specific traditional behavior. Nevertheless, these factors are not to be seen as unchangeable and unchanging, so that the method presented here can be considered as acceptable (see Klopfleisch/ Sesselmeier/Setzer 1997).

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# THE GERMAN SYSTEM OF COLLECTIVE BARGAINING UNDER STRESS: REFORMING OR ABOLISHING THE FLÄCHENTARIFVERTRAG?

Claus Schnabel

### **1. INTRODUCTION**

In recent years the German model of the social market economy (*soziale* Marktwirtschaft) has lost its glamour. Its basic features of welfarism, egalitarianism and corporatism do not seem to fit in the age of globalization (for an extensive discussion see Fels/Matthes/Schnabel 1999). One of its main pillars, which has come under attack, is the relatively centralized system of collective bargaining and wage determination. In the light of increasing international competition, substantial transformation problems in post-communist eastern Germany and growing unemployment, more and more employers (as well as economists, politicians and journalists) are questioning the efficacy of the existing collective bargaining system, which relies on the "pattern setting" collective bargaining agreement (Flächentarifvertrag).<sup>1</sup> Demand has arisen for more decentralized, company-level collective bargaining. In eastern Germany, which is suffering from relatively low productivity and massive unemployment, many firms have abandoned industry-level collective bargaining in order to achieve more flexible agreements at the plant level or they have made (illegal) deals with their workforces allowing for wages below the contractual minimums. There are also problems in applying and enforcing industry-wide collective agreements across firms characterized by increasingly different levels of productivity and profitability in western Germany as well. More and more firms have threatened to leave the employers' associations unless collective agreements become more flexible.

Both the trade unions and employers' associations (whose principal task is to negotiate collective bargaining agreements for their members) have an obvious institutional interest in retaining the corporatist collective bargaining system. Still, they are slowly coming to accept that they must give firms more freedom and flexibility to regulate working conditions at the company level. Trade union and employers' association membership

losses as well as a decline in the coverage of industry-wide collective bargaining have contributed to this greater acceptance. The social partners (i.e., labor and management) have reacted primarily by introducing socalled "opening clauses"<sup>2</sup> and other provisions for differentiation into collective bargaining agreements. Greater flexibility in collective agreements has been most common for regulating working time and, more recently, wages and salaries. By taking an active part in reforming the German bargaining system through controlled decentralization, trade unions and employers' associations are trying to stabilize their membership and to preserve their central role in the German economy for the future.

American observers may find it difficult to understand the developments in Germany, given the decentralized system of U.S. wage determination. This paper, therefore, first sketches the main institutional characteristics and the most important trends in collective bargaining in Germany. It then discusses the recent problems and range of proposals for reforming and decentralizing the current system of wage determination. The prevailing approach of introducing opening clauses in industry-wide agreements is described in detail. The concluding section deals with some implications of these reforms for the social partners and for the German system of labor relations.

## 2. THE INSTITUTIONAL FRAMEWORK

In Germany, structural conflicts between capital and labor are dealt with by using a dual system of interest representation (see, e.g., Jacobi/ Keller/Müller-Jentsch 1998 and Schnabel 1998). Whereas trade unions and employers' associations are responsible for sectoral collective bargaining, works councils and management shape labor relations at the company level. This system emphasizes relatively centralized collective bargaining, which takes place predominantly in a series of coordinated regional talks for each sector. The main exceptions are the construction industry and the public sector, which conduct collective bargaining for eastern and western Germany in single units. In most sectors, however, eastern and western Germany are treated as separate sets of bargaining districts because of the substantial difference in economic conditions. The regional negotiations within one sector are closely coordinated by the officials of the appropriate sectoral trade union and employers' associations, so that variations across regions are small. The result is a series of *Flächentarifverträge*. The social partners have also increasingly coordinated agreements loosely across sectors, which has produced increasing uniformity in collective bargaining policy throughout the economy.

Multi-employer sectoral bargaining agreements determine blue- and white-collar pay (usually annually). It also sets job classifications, working time and working conditions in multiyear contracts. The most important topics for negotiations in the 1980s and 1990s have been wages, employment security, technological change and working time. As is typically the case in wage negotiations, the trade union with the largest membership, the engineering union, Industriegewerkschaft Metall (Industrial Union of Metal Workers, IG Metall) took the lead in pushing for working time reduction. IG Metall's drive to reduce working time peaked in 1984 with the biggest industrial dispute in post-war history. This strike and subsequent collective bargaining rounds led to the step-by-step reduction of the average weekly working time set in collective bargaining from forty hours in 1984 to 37.4 hours in 1999 in western Germany, and from 44 to 39.2 hours in eastern Germany.

In exchange for reductions in average working hours, the employers gained more differentiation and flexibility of working time regarding individual and temporal aspects. For instance, regular working hours can differ for different groups of employees, individual working time can vary in a certain corridor without overtime bonuses etc. being paid, or "working time accounts" allow companies to deviate temporarily from the agreed average weekly working time by compensating the worker with free time within a specified period. This disconnection of individual working time from operating times has facilitated cost-cutting by lengthening machine running times, thereby coping with the costs of working time reductions.

Besides the more flexible working time, since the mid 1980s other managerial measures have led increasingly to a decentralization of labor relations and to greater importance being attached to the plant level. These measures, such as the introduction of new technologies and organizational settings (lately in particular through "lean production" and "reengineering"), were due to world wide technological and structural changes as well as increased international competition. As in several other countries, new forms of employee involvement such as quality circles and teamwork have been introduced as part of a "human resource management" policy by many firms, and new actors such as work groups and production teams have gained in importance, but they have not yet made traditional structures obsolete (see Jacobi/Keller/Müller-Jentsch 1998).

The concrete implementation of industry-level collective agreements on working time and other issues increasingly takes place through workplace-level agreements between company management and the works council. By adjusting general, sectoral collective agreements to the specific situation in the plants, the plant-level parties and their relationship have gained in importance. This has certain implications for the role of the collective bargaining parties — the employers' associations and trade unions—generally reducing their influence. In particular, on the side of the employees there is a certain friction between the industrial trade unions and the works councils, which often behave in a much more pragmatic and flexible way than the more political and ideological trade unions. Works councils, directly elected by the workforce and formally independent of trade unions, can seldom be found in smaller firms (for details see Addison/Schnabel/Wagner 1997). This gives smaller employers even greater discretion to reorganize the work place.

In contrast to working time, the industry level is still of crucial importance for wage negotiations. Industry-level agreements are immediately binding only on the members of employers' associations and trade unions. No more than two out of three private firms are members of an employers' association and less than one third of employees are members of a trade union. Nonetheless, collectively negotiated wage agreements set the wages for about three quarters of the workforce in Germany. The added reach of collective bargaining is due to two special institutional features: first, the German constitution rules out any discrimination between unionized and non-unionized employees, such as a closed shop (i.e., making union membership a prerequisite to employment), supplemental wages or benefits for union members, etc. Consequently, firms usually pay collectively negotiated wage rates to nonunionized employees as well. Second, under certain conditions, industrylevel contractual wages (which are regarded as minimum wages) can be extended by government decree to cover all employers and workers in a sectoral collective bargaining district, including those not represented in the original negotiations. Such extensions are the exception, however, rather than the rule.

There is no minimum-wage legislation in Germany. The collectively agreed norms are therefore minimum terms and working conditions. Companies bound by sectoral agreements cannot undercut them. Firms are, however, permitted to improve upon these terms and conditions through voluntary premiums (such as higher wages or more benefits). German collective agreements are essentially uniform from region to region within individual sectors. Wage differentiation across regions, sectors and plants is only achievable in virtually every case if plant managers pay premiums over and above the contract wage (for details, see Schnabel 1997).

## 3. THE CURRENT SYSTEM OF WAGE DETERMINATION UNDER STRESS

In the 1990s, the economic shock of German unification, increasing international competition and globalization as well as structural and technological change have posed new challenges not only for politics and business but also for trade unions and employers (see Schnabel 1998 and Hassel/Schulten 1998). The largely corporatist system of industrial relations and collective bargaining in Germany has come under stress and is now showing signs of decentralization and even erosion. Serious membership problems and corresponding reductions of influence in both trade unions and employers' associations have contributed to this development.

Trade union membership, which had received a boost from German unification, has subsequently fallen from 13.75 million in 1991 to 10.28 million in 1998. Currently, less than three out of ten employees in Germany belong to a trade union. The public service and manufacturing sectors remain traditional union strongholds. The unions have not been nearly as successful in the growing private service sector, among white-collar and young employees. Unions thus have been unable to adjust their membership composition to keep pace with structural and occupational change. For some unions, membership losses have caused severe financial difficulties, and this has given rise to mergers and discussions of a far-reaching reorganization of the German trade union movement. Despite these problems, the unions' maintenance of high density in strategic positions, such as manufacturing, means that they are still in a position to negotiate pace-setting collective agreements.

In recent years, employers' associations have come to face membership problems similar to those of the trade unions. In most sectors there has been an increasing (yet not officially quantified) trend of flight from employers' associations. Also, increasingly more companies (in eastern Germany in particular) have decided not to join an employers' association, since membership would obligate them to fulfill collective agreements, which many perceive as expensive straitjackets. Some members of employers' associations (again, especially in eastern Germany) are opting not to comply with the terms of sectoral agreements, despite their contractual obligation to do so. In response, new employers' associations have been founded in some sectors that do not conclude collective agreements. These developments have led a growing number of employers, economists, politicians and journalists to demand reform of the German system of wage determination. They have argued that a collective bargaining policy that is more differentiated, flexible and decentralized would secure jobs.

These demands for collective bargaining reform must be seen against the backdrop of Germany's unemployment rate, which rose relentlessly between the end of the unification boom and 1997, when it reached almost ten percent in western Germany and 18 percent in eastern Germany. Unemployment has only receded slightly since 1997. These massive employment problems are largely the consequence of relatively generous wages and high non-wage labor costs in both parts of Germany. An international comparison shows that in 1998 western Germany had the highest level of manufacturing labor costs among all industrial countries, that is, DM 47.96 per hour for manual workers (see Schröder 1999). Even in eastern Germany, hourly labor costs in manufacturing (DM 30.30) almost reached the level of the United States (DM 33.34), the United Kingdom (DM 31.09) and Italy (DM 30.62), and exceeded those of Canada (DM 28.28) and Australia (DM 24.83). Whereas Germany has been a relatively high-wage economy for several decades, in the 1990s stronger international competition and D-Mark appreciation have made it increasingly difficult for German firms to pass on rising labor costs to domestic and international customers.

A dilemma closely related to the problem of high wage levels, which even the relatively high level of labor productivity in Germany cannot fully absorb, is the uniform application of sectoral compensation minimums to companies with different levels of productivity and profitability. In order not to endanger the solidarity of their members, trade unions (and sometimes even employers' associations) are often not very interested in differentiated wage increases. This has led to a "one-size-fits-all mentality," which does not allow for differentiated negotiations according to sectors and regions, despite formally independent collective bargaining districts and trade unions. Furthermore, since collective wage rates have increased so much, the scope for differentiation through wage drift (i.e., plants paying premiums over and above the contract wage) has narrowed considerably. Even if there are different wage agreements in different industries, there is still a problem within each industry that sectoral collective agreements hardly take into account the particular situation of individual companies. In addition, critics often assert that collective agreements have tried to regulate too many details, which has limited flexibility at the plant level.

The reliance on relatively generous German collective agreements on minimum wages and the limited opportunities for wage differentiation have both become increasingly problematic. This has been most obvious in eastern Germany, where trade unions have been pushing hard for wage convergence with western Germany, despite the detrimental consequences for employment (analyzed empirically by FitzRoy/Funke 1998). In 1998 and 1999, sectorally negotiated basic monthly wages in the east reached about 91 percent of the western German level. Since fringe benefits are generally lower and regular working hours are longer in the east than in the west, and many firms in eastern Germany are not members of employers' associations, and are thus not bound by sectoral collective agreements, effective hourly wages were just about 69 percent of the western level in 1998. Average labor productivity in eastern Germany, however, was even lower (56 percent of the western level). As a result, average unit labor costs in eastern Germany are still considerably higher than in western Germany (i.e., 124 percent of the western rate in 1998).

Consequently, many firms in eastern Germany have problems paying the collectively established minimum wages. Even among companies in the same sector, productivity and performance differences vary considerably. Newly founded companies with modern machinery and equipment are able to pay the collectively negotiated wages. The older companies, burdened by old liabilities and outdated equipment stemming from the socialist planned economy, are often unable to meet their contractual obligations to their employees. An analysis of companies' annual accounts by the Deutsche Bundesbank (1998) shows that in 1996 about one-third of the firms in eastern Germany recorded losses and half of the firms analyzed did not have an adequate capital base. In surveys, companies usually point to the high level and fast growth-rate of wages as their most important problems. Many companies attain some relief by paying less than the contractual wage, mostly by reaching an informal agreement with their workforce (for details see Brenke/Eickelpasch/Blume 1997). For companies that are bound by collective agreements, this is a violation of the law, but the collective bargaining parties tacitly put up with it.

Sufficient reasons exist for reforming the system of wage bargaining in western Germany alone. In the past, nominal contractual wages in western Germany usually increased in line with productivity plus consumer prices, with unemployment exerting just a minor dampening effect on wage rises (for empirical analyses see Carruth/Schnabel 1993, Schnabel 1997). By ignoring the interests of unemployed "outsiders" and redistributing productivity increases resulting from lay offs among the remaining actively employed members, the trade unions (which mainly represent the employed "insiders") pushed through excessive wage increases which resulted in temporary employment losses becoming permanent. After a period of wage moderation and employment growth in the 1980s, high wage increases (exacerbated by reductions in working time), growing non-wage labor costs (arising from the social security system and from massive transfers to eastern Germany), and appreciation of the *Deutschmark* contributed to the massive employment problems in the 1990s.

In the light of all these problems, most trade unions have adopted a more moderate, employment-oriented wage policy since 1996, which has helped to improve the international competitiveness of German companies and to secure jobs. What is also needed, however, are structural reforms of the collective bargaining system including a more flexible design of collective contracts and greater scope for plant-level agreements.

# 4. CENTRALIZED VS. DECENTRALIZED COLLECTIVE BARGAINING

The institutional design of the existing system of collective bargaining in Germany is based on a logic of reducing transaction costs and internalizing external effects of wage-setting through relatively centralized collective bargaining between encompassing trade unions and employers' associations (as discussed by Calmfors, 1993). Through negotiations at the sectoral level, the workplace relationship between management and works councils usually is only marginally affected by conflicts about wages and working conditions. The law dictates that strikes may only be called as a last resort in a collective bargaining round by the industrial trade unions, and works councils do not have the right to strike. The centralization of collective bargaining thus is a peacekeeping element that improves social partnership at the plant level. International empirical research has shown that countries with centralized collective bargaining and attitudes of social partnership have significantly fewer days lost due to strikes than countries in which bargaining takes place at the plant level (Schnabel 1997).

The advantages of relatively centralized sectoral collective bargaining must be weighed against the employment disadvantages it produces. Theoretically, the goals of wage differentiation and employment security can better be reached through stronger orientation towards the situation of individual companies (as proposed, for instance, by Berthold/Fehn 1996). A radical response to this insight and the criticisms of inflexible sectoral agreements mentioned above would be to abolish the existing system of sectoral collective bargaining and to replace it with a system of company agreements between single employers and trade unions.

Currently, there are already about 5,800 companies in eastern and western Germany that bargain independently over wages and employment conditions and that usually do not belong to an employers' association. Prominent examples are Volkswagen and Lufthansa. According to the Federal Ministry of Labor and Social Affairs, the number of companies concluding company agreements has more than doubled since 1990, indicating a growing decentralization of collective bargaining in Germany, and particularly in eastern Germany. Despite their growing importance, however, in the private sector, only nine percent of establishments in western Germany and 14 percent in eastern Germany were covered by company agreements in 1997. Sectoral collective agreements still dominated; they covered 49 percent of western and 26 percent of eastern German establishments employing 65 and 44 percent of the workforce respectively (see Bellmann/Kohaut/Schnabel 1999). Newly founded firms and smaller establishments (which often feel insufficiently represented in the bargaining policy of employers' associations) are less likely to be bound by industry-wide agreements, whereas big firms predominantly believe in the virtues of sectoral collective bargaining.

One of the reasons for the persistence of sectoral bargaining may be that while bargaining on their own may be helpful for some companies, an overall strategy of dumping the industry-level agreements also has its disadvantages: if bargaining were to take place at the plant level, industrial conflict would also be transferred to this level, and strike frequency is likely to go up. This could weigh heavily on the working atmosphere in the plants. When companies and workforces negotiate individually, they have to be aware of the fact that they cannot count on the solidarity of other employees and employees and that this can lead in some cases to very undesirable results. There is already some evidence that companies do not necessarily fare better when they conclude company agreements: wage costs at Volkswagen, for instance, are substantially higher than in the industry-level agreement for the metalworking industry. The "insider" orientation of wage determination might even be strengthened by generally negotiating at the plant level, where employees are more concerned with job preservation than with employment growth. In general, decentralized negotiations make it more difficult for both parties to control and moderate the development of wages in the whole economy.

Empirical evidence also does not clearly favor plant-level bargaining. An econometric comparison of 30 company and 30 industry bargaining units in western Germany by Meyer (1992) indicates that company agreements do not show higher flexibility than industry-level agreements. Various international analyses have not found statistically significant, robust relationships between measures of economic performance and collective bargaining (see, e. g., OECD 1997 and Schnabel 1997). The thorough theoretical analysis by Moene/Wallerstein/Hoel (1993, 120) even concludes that "(in) the presence of strong, cohesive unions, a mixed system of centralized bargaining over the base wage and subsequent firmlevel bargaining under a peace clause may be the best compromise between divergent concerns."

Because of the mix of advantages and disadvantages, and the virtual impossibility of identifying the best working system, it appears sensible not to dump the whole existing system of collective bargaining. It would instead be preferable to implement reforms within a system that can minimize its problems as far as possible. The main aim should be to maintain the transaction-cost saving and peacekeeping function of industrylevel wage negotiations, while increasing flexibility, plant-level orientation and the possibility of differentiating within collective bargaining agreements. Industry-wide agreements should primarily determine the most important framework conditions, but instead of regulating wages and working conditions for every plant down to the smallest detail they should give the plants more scope for their own actions. This is the course of reform many German industries have followed recently.

## 5. REFORMING COLLECTIVE BARGAINING: THE ROLE OF OPENING CLAUSES

In recent years, trade unions and employers' associations have reacted to mounting criticism by introducing certain elements of flexibility and decentralization into industry-level collective agreements that have shifted some competence in wage determination to the plant level. According to the German Works Constitution Act, workplace management and the works council are normally not permitted to conclude works agreements on collective bargaining issues because these are to be dealt with by trade union representatives and employers. An exception to this restriction is only allowed when the relevant trade union and employers' association agree to delegate decision-making on an issue to the plant level by stating this explicitly in their industry-level collective agreement. This language is known as an "opening clause." It defines the scope and limits of plantlevel regulations.

Since the mid 1980s, there has been a growing tendency to use opening clauses to set working times. As mentioned above, most of the industrylevel collective agreements providing for a step-by-step reduction of weekly working hours also contain opening clauses. These provisions allow for plant-level negotiations to uncouple individual working time from the operating hours of the establishment in order to increase productivity. Such opening clauses usually require decisions concerning the beginning and end of daily working time, working time fluctuations, overtime work etc. to be taken by the social partners at plant level. Over the years, this has resulted in an increasingly flexible use of working time at the plant level.

A new stage in this development towards modernization and decentralization of collective bargaining has been reached by recent agreements in several industries. For the first time, some opening clauses have also permitted adjustments to wage and salary rates. Generally, these opening clauses grant management and the works council a limited opportunity to conclude works agreements that reduce wages below the rates set in industry-level collective agreement, but the severity of these limits varies considerably from contract to contract. In general, opening clauses take four forms:

1) Hardship Clauses: As early as 1993, the trade union and the employers' association in the eastern German metalworking industry agreed on the introduction of so-called "hardship clauses." These provisions enable companies to apply for an exemption to the wage rates set in an industrylevel collective agreement if they are close to bankruptcy but have a promising strategy for restoring economic viability. If the collective bargaining parties (i.e., the trade union and the employers' association, not local management and the works council) both accept that a case of hardship indeed exists and that temporary wage cuts could save the firm, they themselves must negotiate the firm-specific agreement reducing wages and benefits. This retention of authority by the collective bargaining partners can produce a rather awkward situation. At times, local management and the works councils have reached mutually acceptable wage and benefit cuts that the collective bargaining parties have rejected out of a desire to maintain a uniform standard for the acceptable instances and volumes of wage and benefit reductions. According to Hickel/Kurtzke (1997), the collective bargaining partners only accepted 98 out of 181 applications for hardship clauses in the eastern German metalworking industry in the period 1993 to 1996. A more restricted version of the hardship clause was introduced in the paper and plastics industry in 1997. Here, the collective bargaining parties may only approve firms' plans to reduce or postpone annual bonuses if this is combined with a ban on layoffs.

2) Opening Clause with Veto Rights: In contrast to a hardship clause, an opening clause with veto rights is slightly more permissive. It allows local management and the works council to negotiate a firm-specific works agreement without prior permission from the collective bargaining parties (i.e., trade union and employers' association), but the latter pair retain the right to veto such a works agreement. This allows the trade unions and employers' associations to keep control over bargaining, which can inhibit plant level negotiations to increase flexibility.

In 1997, after several companies threatened to leave the western German chemical and rubber industry employers' association, the social partners in this sector inserted an opening clause with veto rights into their national framework agreement for compensation (for details see Schulten 1997). This opening clause has allowed companies to reduce the collectively agreed wage by up to ten percent for a limited period of time in order to save jobs and/or improve competitiveness. The same agreement asks highly successful chemical firms to introduce profit sharing above and beyond the collective bargaining rate. Although only 29 chemical companies made use of this opening clause in 1998, it has provided a valuable "safety valve" for emergency cases and thus has helped to preserve widespread acceptance of industry-wide collective agreements among managers in the sector. A similar opening clause allowing for pay reductions of up to ten percent can be found in the eastern German construction industry, but in this instance, the company works council may overturn a veto by the collective bargaining parties. Other opening clauses of this type have called for a reduction or postponement of annual bonus payments, for example, in the paper industry in western and eastern Germany.

3) Opening Clauses without Veto Rights: These clauses provide local management and a works council with a limited opportunity to conclude a works agreement that undercuts the industry-level collective agreement and that need not be approved by the collective bargaining parties. Such

clauses offer relatively flexible and far-reaching opportunities for firmspecific solutions of wage problems. In the western German textiles and clothing industry, for instance, companies in economic difficulties are allowed to postpone contractual wage increases if they institute a layoff freeze (this agreement also asks companies with high profits to introduce profit sharing). An opening clause without veto rights in the printing industry allows companies to postpone the payment of annual bonuses. It should be noted, however, that this version of the opening clauses may only be used if local management and works council jointly agree. Neither party is allowed to use strikes or lock-outs when negotiating a works agreement.

4) Small Enterprise Clauses: Some industry-level collective agreements pay special attention to the often more difficult economic situation of small enterprises by allowing these companies to reduce wages below the collectively agreed level without any veto rights for trade unions or employers' associations. In the eastern German retail trade, for instance, companies with up to fifteen employees may pay as much as six percent less than the contractual wage rate. For companies with up to five employees, the maximum reduction is eight percent. Other small-enterprise opening clauses without veto rights can be found in the eastern German wholesale trade and in the printing industry.

In recent years, a variety of opening clauses covering wage rates have been introduced in many sectors in both eastern and western Germany (see also Bispinck 1997). This has not been the case, however, in the traditionally most important industry in the private sector, namely, the western German metalworking sector. In this sector, the visions of the trade union, *IG Metall*, and the *Gesamtverband der Metallindustriellen Arbeitgeber Verbände* (*Gesamtmetall*, Metal Industry Employers' Associations) differ substantially and in many instances seem to be incompatible (for details see Hassel/Schulten 1998). Unilateral efforts to institute change have often led to conflict. For example, the metalworkers' union fiercely opposed individual contracts between the radiator manufacturer Viessmann and its employees in which the company pledged not to transfer the production of gas heaters to the Czech Republic and to freeze layoffs in exchange for an unpaid increase in weekly working time. This dispute was ultimately settled out of court by firm-specific modifications to the existing industry-level collective agreement. The prominent example of Viessmann illustrates, however, that in the face of mounting international competition, more and more companies are looking for ways to opt out of the existing collective bargaining regime if they are not offered alternatives within the system, such as opening clauses, for adjusting pay and working conditions to their firm-specific needs.

#### **6. CONCLUSIONS**

In the 1990s, the shock of German unification, increasing international competition and the massive employment problems in western and eastern Germany have posed new challenges for the collective bargaining parties. On the one hand, trade unions and employers' associations have declared their intention to continue using industry-level collective bargaining, which is in their own organizational interest, to determine compensation rates. On the other hand, the growing tendency of companies to opt out of the collective bargaining system by resigning from employers' associations and/or by concluding (often illegal) agreements with their workforce has forced trade unions and employers' associations to start reforming the current system and bringing companies back into the legal framework of industry-level collective agreements.

The social partners have reacted by introducing opening clauses and other provisions for differentiation in industry-level collective agreements, in particular in the field of working time, but recently in the field of wages and salaries, too. The connection between pay and employment is also acknowledged in the collective agreements of several industries that allow companies to pay new hires who have been among the long-term unemployed only 90 percent of the standard collective bargaining rate. Moderate wage increases since 1996 are another sign of the social partners' willingness to tackle Germany's massive labor cost and employment problems and to preserve the traditional system of industry-level collective bargaining, albeit in a modernized form.

Within this system, the introduction of opening clauses means a substantial shift of regulatory competence from the sectoral-level collective bargaining parties to the plant-level actors. In particular, the trade unions have hesitated to make this shift because they fear a loss of power and influence to the formally independent works councils. Although works councils are usually comprised of union members, they often behave in a much more pragmatic and flexible way than the typically more politically and ideologically oriented trade union officials. A new, more flexible collective bargaining policy demands a certain degree of new thinking among trade unions and employers' associations. Both have to reduce their reach when designing industry-level collective agreements and both have to expand drastically the services they provide for members. If they do not, they will continue to lose members and jeopardize their very existence.

The growing tendency of firms not to join employers' associations and to conclude company agreements with trade unions, as well as the increased reliance on opening clauses in collective agreements, illustrate the process of decentralization underway in the German system of labor relations. After neglecting underlying problems for too long, the social partners in most industries have now begun to undertaken a modernization of the collective bargaining system that has taken the form of a controlled decentralization. Whereas only anecdotal evidence exists regarding the effectiveness of these reforms, they show promise as means to save jobs, to prevent firms from leaving employers' associations and to stabilize the German system of collective bargaining. Although the German *Flächentarifvertrag* has often looked like a dinosaur to U.S. observers, it remains a bit premature to relegate it to a museum of extinct species.

#### **ENDNOTES**

1. There is nothing exactly like the *Flächentarifvertrag* ("pattern setting" collective bargaining agreement) in North America or the United Kingdom. The Flächentarifvertrag is a multi-employer contract. An employers' association and a trade union (or a group of employers' associations and/or trade unions) negotiate each Flächentarifvertrag. Flächentarifverträge are valid only for an individual sector, or a small group of related sectors (e.g. metalworking). A Flächentarifvertrag usually covers only a limited geographic subsection of Germany. Most sectors divide Germany into ten to fifteen collective bargaining regions, but the Flächentarifverträge for a single sector usually closely resemble one another. German labor law under the Flächentarifvertrag system by permitting employers, employers' associations or trade unions to apply to Germany's Federal Ministry of Labor to have individual Flächentarifverträge declared "universally applicable" (allgemein verbindlich). If a contract covers a majority of a sector's employees, the Collective Bargaining Act (Tarifvertragsgesetz) empowers the Ministry of Labor to extend the provisions of that contract as a legally binding minimum for all employers in that sector and region, including those that are not members of the relevant employers' association. In the Federal Republic, the Flächentarifverträge and the declaration of universal applicability (allgemeine Verbindlichkeitserklärung) combine to serve the same function as minimum wage legislation in North America and much of Iberian Europe, namely, dampening cutthroat competition on the basis of compensation costs and providing all full-time employees at least an adequate standard of living. The German system differs from reliance on a minimum wage in two respects, however. First, the German system permits minimum compensation to differ from sector to sector. Second, the compensation "floor" for each sector under the German system is set at a substantially higher rate and includes much more than wages.-Editor.

2. An "opening clause" is a provision in a collective bargaining agreement that permits a party, typically an employer, to petition to "open" an existing collective agreement in order to reduce the compensation package below the contractually specified minimum. For a more detailed discussion of opening clauses, see Section Five of this chapter.—Editor.

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#### Unemployment Ebbs in Germany: Explanations and Expectations Workshop Agenda

#### 8:45 - 9:00 COFFEE AND PASTRIES

9:00 - 9:15 WELCOME AND INTRODUCTIONS Stephen Silvia, AICGS Director of Regulatory Studies

9:15 - 11:00 Overview

"German Unemployment: What Needs to be Done? What is Being Done?" Viktor Steiner, Center for European Economic Research, Mannheim

"Toll of Change: Economic Restructuring, Worker Displacement, and Unemployment in Western Germany" Matthias Knuth, Institute for Work and Technology, Gelsenkirchen

Discussant: Catherine Mann, Institute for International Economics

#### 11:00 - 11:15 COFFEE BREAK

11:15 - 1:00 Structural/Institutional Issues "The Flächentarifvertrag (sectorwide collective bargaining agreement) and the German Labor Market: A Critical Assessment" Claus Schnabel, Economics Institute, Friedrich-Alexander-Universität Erlangen-Nürnberg

"Would the Creation of a Low-Wage Sector Help to Reduce German Unemployment?"

Werner Sesselmeier, Institute of Economics, Technische Universität Darmstadt

Discussant: Claudia Dziobek, International Monetary Fund

#### 1:00 - 2:00 LUNCH

#### 2:00 - 3:15 External Factors

"The Euro and European Labor Markets" C. Randall Henning, American University and the Institute for International Economics, and Stephen J. Silvia, American University and AICGS

Discussant: Holger Wolf, George Washington University

#### 3:15 - 4:00 GENERAL DISCUSSION AND CONCLUDING REMARKS

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Black, Stanley W. *Europe's Economy Looks East: Implications for Germany and the EU*. Volume 1. AICGS: Washington, D.C., 1995.

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