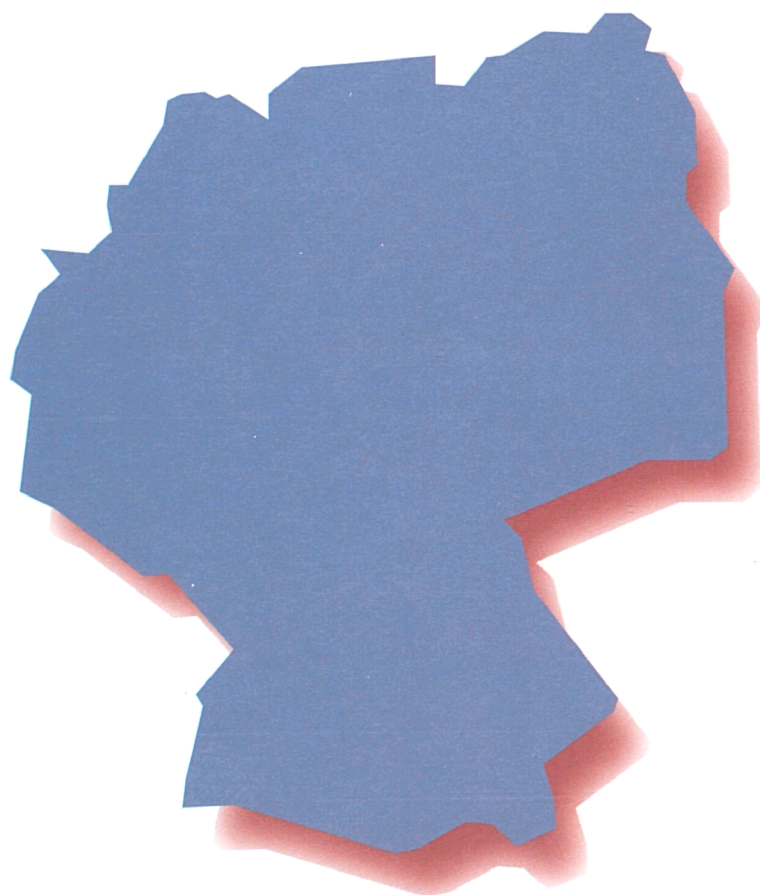


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# Labour Market Studies

## GERMANY



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# **Labour Market Studies**

# **Germany**

By

the ifo Institute for Economic Research

Harald Blau

Herbert Hofmann

Wolfgang Meyerle

Sonja Munz

Kurt Vogler-Ludwig

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## Executive summary

### The labour market context

At present 81.8 million people are living in Germany, 66.3 million in western Germany and 15.5 million in eastern Germany. In western Germany, the population grew by 13.2 million between 1950 and 1989. This growth was determined by immigration rather than by changes of the domestic population by births and deaths. The sum of net immigration to western Germany was 8.7 million during that period. By contrast population in eastern Germany declined by 2.9 million.

According to selected projections the population will decrease over the first half of the next century. The projection of the Federal Statistical Office forecasts a fall by 11 million persons between 1989 and 2040.

In all projections, the number of young people aged under 20 is expected to shrink more than the population aged between 20 and 60. The aged dependency rate will grow. It will be around 30% in the year 2020 - 10% percentage points higher than at the beginning of the nineties.

All forecasts of the labour supply based on projections with shrinking population result in a more or less declining labour force. Increasing activity rates will not offset the effect of a shrinking population. The share of elderly workers in the labour force will grow over time. According to our projections during 1990 to 2020 the share of the workforce aged 45-65 will increase from 40% to 47%.

The number of economically active persons in western Germany remained nearly constant between 1960 and the mid-1980s and has increased markedly since then (1985: 26.6 million, 1995: 28.5). The share of females among all economically active persons increased from 37% in 1962 to 41% in 1995. Since the 1970s the female activity rates began to rise markedly. The female total rate was 32% in 1970 and 48% in 1995. Female labour force participation is significantly higher in eastern than in western Germany.

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In total the level of employment has risen by 3.2 million employed persons between 1983 and 1992 (western Germany). The tertiary sector was the sector of greatest employment growth in this period. In terms of employment the trend to a service economy has accelerated. Within the tertiary sector employment of market services increased most markedly. The increase of service occupations compensated decreases of other occupational groups and was the reason for the positive employment balance between 1980 and 1992.

The qualification level of the western German employment has shifted from lower to higher formal qualifications. Especially the demand for employees without any vocational qualification has declined. The eastern German qualification structure in general is very close to the west German structure.

Non-standard forms of employment have gained in importance for women and men over the last decades. From 1960 to 1994 part-time employment for women increased by 30 percentage points and for men by 2 percentage points. The share of fixed-term contracts in total employment was 6.4% in western Germany and 11.6% in eastern Germany. Around 40% of all fixed-term jobs were in the sector of other private services (lodging and catering, cleaning, consulting) and 25% were jobs for the non-market sector.

Marginal part-time employed persons are not subject to the compulsory social insurance. It is difficult to quantify the extent of marginal part-time employment. According to surveys the highest number of this kind of workers was 2.9 respectively 3.8 million workers. Around 75% are female employees and for around 70% marginal work wages are additional income.

### **Unemployment: the central challenge**

While during the sixties and early seventies – except for a short cyclical slump in 1967 – full employment was prevailing with numbers of about 200,000 unemployed persons and unemployment rates of about one percent, in the last 20 years the phenomenon of mass unemployment had become persistent.

After 1987, in the course of German unification and the preparation and completion of the Single European Market unemployment decreased in western

Germany significantly. However, after the German unification in 1990 the third rise in the level of unemployment began. The number of unemployed increased from less than 2 million to a level of 4 million in 1996 (unemployment rate: 11.5%). Of course a substantial part of this development was to be attributed to the transition of the former GDR economy, which brought a burden of more than 1.1 million registered unemployed, about 17% of the new federal states' civilian labour force.

The German Council of Economic Advisers calculates the number of jobless persons by including short-time workers, people in job-creation schemes, persons in public training or retraining courses, recipients of early retirement pension etc. This leads to an amount of more than 5.1 million jobless people in Germany in 1995, 3.1 million of them in the west and 2 million in the east. Adding the discouraged workers (not or no more registered job-seekers and people who would offer their labour if there were better conditions in the labour market), which the Federal Employment Service estimates to nearly 1.9 million (1.6 million west, 0.27 million east), the total number of jobless people amounts to about 7 million in Germany in 1995, among them 4.7 million in the western and 2.3 million in the eastern Länder. This yields a jobless rate of 20% for Germany, 17% for western and 33% for eastern Germany.

The average duration of unemployment in 1995 amounted to 30 weeks. Around 32% of the unemployed persons were without a job for more than one year. Long-term unemployment is mainly a problem of older persons and/or of persons affected by health problems.

Until 1990 youth unemployment decreased to comparatively low rates of about 5%. In the course of the following recession, youth unemployment rates nearly doubled to a level of about 9%. Nevertheless, during this period nearly all applicants were able to find a vocational training place in the dual system. However, the transition to work became more difficult.

Often an insufficient matching process is blamed for the high unemployment rates. The job and labour turnover rates are regarded as to be not sufficient to enable a frictionless structural change in Germany.

Neither the magnitude nor the fluctuation of the job-turnover rates or the labour-turnover rates changed significantly from 1982 to 1994. Within the same time period the number of unemployed people rose in batches, whereas the number of unfilled vacancies in western Germany roughly kept the same level. These results together indicate that the ability of the German labour market to adjust labour to market requests by internal transfers or working time reductions in order to avoid lay-offs no longer works as successful as it used to do. Reasons for this can be seen in the increasing competition driven by globalisation and the demand for new qualifications which require faster labour adjustments than internal transfers into positions vacated by workers who are retiring or quitting can provide.

The debate on the causes of unemployment in Germany is far from reaching agreement, both theoretically and politically. New arguments have emerged from the micro-foundation of unemployment theory which puts the focus on the adjustment process on product and labour markets rather than macro-economic flow. Four thesis can be formulated as regards the existence and rise of unemployment in Germany: (1) missing real wage flexibility, (2) supply side shocks on product markets, (3) a labour supply shock, (4) the persistence of unemployment and the devaluation of human capital.

The rising welfare during the fifties and sixties created the public opinion that high incomes, job security, and social consensus can be achieved for long periods of time. For many years the changes of the international environment, the negative impacts of rising wages, stable wage relations, rising taxes and increasing social security contributions were not taken into consideration. While the growth prospects and the labour market situation clearly deteriorated during the seventies, only minor changes were undertaken to improve the functioning of the labour market. Political measures mainly concentrated on the reduction of labour supply and the provision of incomes to those who became unemployed. This was the type of social consensus which could be achieved much more easily than substantial changes in wage policy and social policy. From this point of view, unemployment, even if it was connected to rising social charges, was the second best solution, and was generally accepted by the political and social institutions. Low growth and the further increase in unemployment put an end to this conviction during the first half of the nineties. The politi-

cal debate in Germany has taken a new perspective with regard to unemployment and the creation of jobs but there are still serious controversies on the right type of policy to reduce unemployment.

### **Labour market institutions**

The German industrial relation system delegates a great deal of authority to social partners (unions and employers' associations) to reach binding agreements and provides for the safeguarding of the autonomy of the social partners from state influence.

Employees and employers are guaranteed the right of representation through unions and employers associations, which negotiate collective bargaining agreements on their behalf.

A dense network of employers associations represent companies in specific industries. The Federal Union of German Employers' Association has two levels of association (grouped within 48 umbrella industry associations) and 15 state level associations. There is also a separate federation of manufacturing industries (Federation Union of the German Industry) with 34 trade associations. Furthermore the Deutsche Industrie- und Handelstag (DIHT) is the central organisation for some 70 regional chambers of industry and commerce. In 1994 some 43% of companies applied to the number of companies in Germany belonged to a employers' association.

In 1995 the 16 unions under the umbrella organisation DGB (Deutscher Gewerkschaftsbund) had a membership of 9.3 million in Germany, which corresponds to a level of organisation of 34%. Another 1.8 million employees are organised in unions not organised under the DGB umbrella. Frequently several employer associations negotiate with one union. An individual bargaining of an employer with an union is possible under certain conditions.

Wages and other conditions of employment are set out in tariff agreements, 'Tarifvertrag', which also can have a statutory normative function for non-unionised employers and employees (through a law known in German as Allgemeinverbindlicherklärung). Collective agreements on wages and framework

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agreements on employment conditions are legally binding only for the establishments which are organised in an employers' association or which have ratified the agreements on enterprise levels. The exceptions are tariff agreements which achieved statutory normative function by the declaration of general binding (Allgemeinverbindlicherklärung). In this case the agreements are legally binding for all establishments of the relevant sector and tariff region. Therefore, tariff agreements come into minimum wage rulings.

The strength of interest associations has allowed for a high degree of coordination in the German economy and stability in the industrial relations system. However, the number of disputes is increasing where Germany's unions are fighting to preserve a social welfare system which employers say is too costly.

### **Labour market legislation and labour market policies**

Broad legal and collectively agreed dismissal provisions exist for the German labour market. In addition to the age-related minimum periods of notice fixed by the Civil Code and extended by collective agreements, the legal dismissal protection is controlled by the Dismissal Protection Law. This law is valid for all employees in employment over a minimum of 6 months in establishments employing at least 11 persons. Apprentices cannot be dismissed after a three month probationary period except if there are very special reasons.

The legal basis for the labour market policy is provided by the Labour Promotion Law. The newest reform of this law passed through the legislation process in March 1997. This Labour Promotion Reform Law reduces the target dimension, dampens expectations for the creation of jobs by the state and underscores the responsibility of employers and employees. It strives to discourage benefit fraud. The reintegration of the unemployed should be accelerated by higher sanctions and disincentives. Partly it is a shift from active and passive labour market to a policy of activating passive labour market policy by reducing benefits and stronger sanctions but also by some supportive measures.

The labour market policy of the Federal Employment Service can be subdivided into a passive and an active part. Passive labour market policy intends to en-



sure the subsistence of unemployed persons. The basic instrument is unemployment insurance, which is a branch of the statutory social security system. Those employees who are (temporarily) not employed or self-employed (an employment of less than 18 hours per week - 15 according to the reform - is permitted) are entitled to benefits. If the labour office cannot place the registered unemployed person on the labour market, unemployment benefits or unemployment assistance are paid according to the Labour Promotion Law.

Parallel to the growth of unemployment rates and the growth of long-term unemployment in Germany, active labour market policies moved to the centre of the labour market activities. German unification brought about a growing need for active intervention. The transformation of the former communist economy could not - and still cannot - be managed alone by „market forces“. Without the efforts of public intervention, unemployment would have worn down the resilience of the east German population - both materially and psychologically. Labour market policies had to and still have to serve as a bridge over the „troubled water“ of the transformation process until a sufficient number of new jobs can be created. Work-creation and retraining measures - the core of active labour market policy - are considered to be a better investment than passive wage replacement subsidies.

The Federal Employment Service spent DM 97.1 billion and the Federal government DM 31.6 billion on labour market policies in Germany in 1995. Expenditures for active labour market policy measures amounted to DM 40 billion. Around 50% of these expenditures for active measures were spent in eastern Germany. The share of active policy measures in the total labour market policy expenditures was 39% in 1995. The total expenditures for active labour market policy measures were highest in 1992/93 when they exceeded DM 45 billion.

Beyond the general agreement about the need for an active labour market policy between 'both sides of industry' a consensus of opinion on the extent, the organisation and the instruments of this policy is diminishing. The employers emphasise the costs of a 'secondary'<sup>1</sup> labour market (non-wage-labour costs!)

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<sup>1</sup> The secondary labour market is the labour market for jobs created by programmes. It is a subsidised labour market in contrast to the primary labour market which is created by market forces.

and the distortion of competitiveness by subsidised jobs, whilst labour favours standard employment relationships and equal opportunities for all groups of long-term unemployed.

Active labour market policy is one strategy which can deal with unemployment problems, the reduction in the labour supply is another. Compared with other OECD member-states Germany belongs to the group of countries showing the highest reduction in labour force participation by using one of the different pathways to early retirement. In the past the early exit from the labour force was not a major topic of debate. It was one of different measures to reduce mass unemployment but by the end of the eighties the picture changed. Now the financing of old-age security moved to the centre of discussions and reforms (without having found a solution for the unemployment problem).

Working time reduction for the reallocation was the union's strategy of the mid 1980s. The achievement of the 35-hour working week for the metal and printing industry which was negotiated in 1990 and came into force in 1995 was the (preliminary) end of the process of collective working time reduction. Against the background of a permanent unemployment crisis and a continuing debate about the German production location, the pressure on unions and works councils has increased to change the course.

In a situation of increasing international competition, the strategy of working-time reduction can only be pursued if it is compensated by high working-time flexibility. This link has been taken into consideration by the collective agreements of the recent past. Nevertheless, both sides of industry do not agree on the progress which has taken place. For the unions, flexibility has reached a considerable extent. They point out that the possibilities of arranging flexible working-hours are not really applied by the companies. As far as industry is concerned, Germany lacks institutional arrangements and collective agreements. They point out that machine operating hours are considerably lower than in other EU countries.

## Education and vocational training

Despite some regional differences and even with the reform elements in the new German Länder the German school system is characterised by a common structure. All Länder operate basic primary schools (Grundschulen) and a triple system of secondary schools: Hauptschulen, Realschulen, Gymnasien. There are comprehensive schools in some Länder. Compulsory education begins at age 6 years and ends at age 18.

The German system of elementary vocational training can be characterised as a dual system, balancing theoretical and practical training between public vocational schools and private companies. It is a corporate tripartite system. Both employers and the workers organisations are included in the process of regulation, financing, administration and controlling of training in the dual system. The government delegates decision-making to the semi-private or private commercial organisations. Only if private regulation fails does the government intervene.

The effectiveness of the German training system derives from the involvement of all players: government, employers, chambers and trade unions. But the strength of the corporate organisation might turn out to be a disadvantage in times of increased change. Considering the long period it took to work out the training rules for the new metal and electrical occupations - more than ten years - an element of inflexibility might be ascribed to the training system. But the Ministry for Education, Science and Technology has set the course for more flexibility by delimiting the duration to draw up new regulations to two years.

On the basis of a historical and international comparison the German labour force is highly qualified. The formal qualifications have increased in the course of the last decades. The proportion of unskilled workers dropped by more than half from 40% in 1960 to 15% in 1995. Those in the labour force who have finished an apprenticeship training increased from 50% to 60% and the proportion of academics increased from 4% to around 14%. The qualification profile of eastern and western German labour forces does not differ significantly. However, the eastern German proportion of intermediate skills was higher and the proportion of academics (around 10%) lower than in West Germany.

### **Job creation by tax cuts**

Tax cuts and the reduction of non-wage labour costs are regarded as means to stimulate economic growth and employment. The impacts of such measures and the options are investigated by different econometric model simulations. The result is that a comprehensive set of measures could increase employment and lower unemployment significantly. The average proportion of the wage tax and social insurance contributions in gross income from employment has to be lowered from 48% to 42.5% to reach an unemployment rate of 5%.

The redistribution of welfare costs is regarded as a focal issue. Non-wage labour costs can be reduced by eliminating the elements which do not reflect the insurance character of the social insurance system. This aims at the re-establishment of the equivalence of contributions and benefits. Employers and employees should not be burdened by responsibilities of the society as a whole.

Model calculations carried out by the Ifo Institute demonstrate that the reduction of social insurance contributions by 2 percentage points would result in increasing employment and declining unemployment. The effects are nearly independent of the kind of alternative financing that has to be carried out. (According to the model positive employment effects result also from a reduction of social benefits.) The lowering of social insurance contributions by one percentage point would increase employment by 0.3%.

### **The national debate**

Germany has failed to reach the goal of full employment for more than twenty years. Conventional wisdom held that the problem of unemployment could be solved by reviving growth, improving competitiveness on international markets, and by the innovative strength of German enterprises. The German receipt for success - relying in technological innovation with a well-trained workforce - does not continue to produce the positive consequences as it did in the past. Reacting to the new conditions change is taken place in German employment policies. The conviction that a reduction of unemployment will require great efforts from all political forces is widely accepted.

The unions' proposal was an alliance for jobs. The metal workers union, IG Metall, proposed forming an alliance for jobs with employers and the government. The union promised to agree to wage increases in 1997 that would not exceed the rate of inflation and to enable time-limited pay reductions for long-term unemployed in the first phase of their re-employment if enterprise - amongst others - promise not to layoff workers for business reasons in the next three years and to create additional jobs. Government is expected not to reduce unemployment compensation and to care for sufficient trainee positions. Although the proposal found majority acceptance in union circles it can be concluded that the attempt to form the alliance practically has failed.

The Council of Economic Advisors has urged fundamental changes in economic policy to include all areas: wage policy, fiscal policy, social policy and labour market policy. Wage agreements must be conducted that go beyond the goal of safeguarding existing jobs to include additional job opportunities for the unemployed. Fundamental reforms of the social system should be oriented around self-responsibility, the principle of equivalence of contributions and benefits and social reallocation via taxes outside the insurance system.

The federal government regards job creation as central challenge for the coming years. To achieve this the conditions for production and investment in Germany must be radically improved. The federal government proposed a programme of action for investment and jobs which contained an improvement of the regulatory environment for investment, the reform of the labour environment, the promotion of research and innovation as well as education and further training. In the Economic and Monetary Union and in political union, the German government sees the foundation for growth and employment and the global competitiveness of the European continent.



## INTRODUCTION

In recent years considerable attention has been paid to the conditions of labour markets in Europe. The persistent and growing unemployment in European economies is far from being an economic problem alone. It is a social question of cohesion, a cultural question of social commitment and a political question of the future of democracy. In the process of European integration, employment policy increasingly touches on the role of the EU. European social and employment policy initiatives have to consider the differences in the national labour market situation, the historically grown differences of institutions and preferred policy paradigms. The study on the German labour market is aimed at providing comprehensive information about one Member State. It supplements other national studies which together form a series of harmonised European labour market studies.

The current labour market situation in Germany reveals the weak job dynamics more clearly than in many other European countries. Germany is going through the current business cycle without significant job growth. After the positive impacts of the single European market and German unification, the German economy is recovering hesitantly from the recession. The economy is now about to experience an unprecedented loss of jobs in industry. The rise of new competitors on world markets, the macroeconomic consequences of unification and the deflationary effects of the Maastricht convergence criteria, long-standing supply-side deficiencies like the high density of regulations and an eroding institutional structure are among the reasons given for the economic problems. Obviously the high price/high quality strategy followed for decades is not able to create enough jobs. Internal adjustments are regarded as all the more necessary. This brings the question of how to reform social policies and the system of wage determination into the debate. For a number of studies the prescription is radical deregulation. The aim of the presented study is to show that the analysis of the situation as well as the resolution of the problems is not straightforward. The fundamental decision is whether one regards it as more likely to find solutions within institutional structures or outside them. In any case, basic principles of the social market economy will be touched.

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The presented report follows the general harmonised study programme. The first chapter deals with German population trends and summarises population projections. It presents the composition of the labour supply and demand, describes and analyses unemployment and gives a picture of the dynamics of entries and exits from the labour market. The resulting labour market mismatch regarding qualification, sectoral and regional distribution of supply and demand is discussed separately.

A highly regulated labour market like the German one requires an understanding of the institutional settings. Therefore, the next chapters are concentrated on the institutional structures. The second chapter outlines labour market institutions and the third chapter treats the legal framework concerning employment protection and working time. The fourth chapter covers the system of labour market policy. The report is continued by a description of the education and training system. The strengths and weaknesses of the system are evaluated and issues concerning participation and the transition from school to work are discussed.

Employment policy is the core issue of the political debate in Germany. The main topics are the role of the government, the reform of wage negotiations, the reform of the social security system and the specific situation in eastern Germany. The last chapter of this report presents the arguments of this national debate.

The study is mainly based on the available labour market statistics and on the large amount of available studies on labour market developments and employment policy.

The analysis of the German labour market position devotes attention to the specific situation in eastern Germany. The eastern economy is still characterised by a huge (regional) trade deficit and is depending on transfers from the western part. The imposition of the West German institutional framework has not yet produced the expected self-sustained growth.



## 1 Analyses of the labour market situation

### 1.1 Demographic trends

#### 1.1.1 Population trends

At present 81.8 million people are living in Germany, 66.3 million in western Germany and 15.5 million in eastern Germany (Table 1.1.1.1).

**Table 1.1.1.1**

#### Total population

	Western Germany	Eastern Germany	Germany
	in million		
1950	49.99	18.39	68.38
1960	55.12	17.28	72.40
1970	61.19	17.07	78.26
1980	61.44	16.74	78.18
1989	62.68	16.43	79.11
1990	63.25	16.11	79.36
1995	66.34	15.48	81.82

Source: Federal Statistical Office.

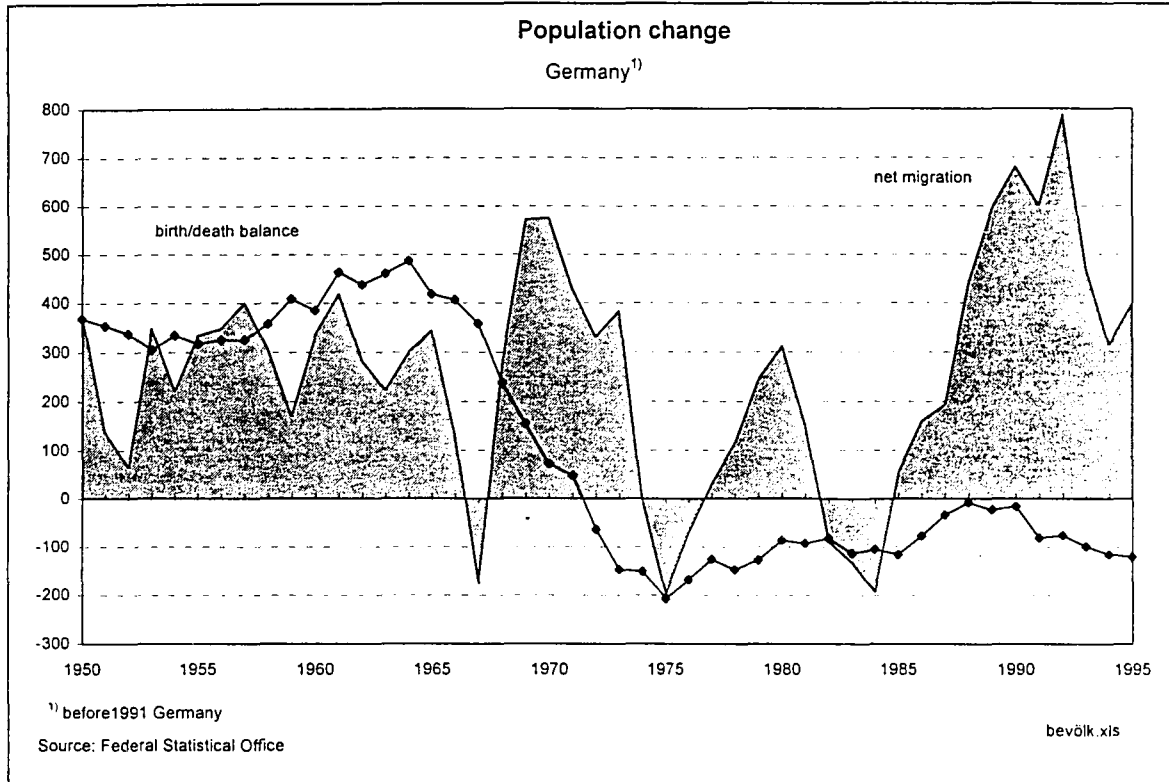
Population trends in western Germany were characterised by a continuous increase since the fifties. On average, population expanded by 0.63% p.a. since 1950. In total this amounted to an increase by 16 million in the 45 years period until 1995. By contrast, population in eastern Germany decreased by 2.9 million during that period, which is a decline by 0.38% annually.

#### *Immigration*

Population growth in western Germany was determined by immigration rather than changes of the domestic population by births and deaths. The sum of net immigration to western Germany between 1950 and 1989 was 8.7 million (Chart 1.1.1.1), total population growth over that period was 13.2 million. Taking into account that the fertility rate of non-citizens is higher than of German citi-

zens, the importance of migration for the development of population in western Germany is even more evident.

Chart 1.1.1.1



Three different phases of net migration to western Germany can be distinguished. The post-war period until the beginning of the 1970s is marked by important net immigration flows: before the closing of the frontier between eastern and western Germany in 1961, mainly Germans came to western Germany. Between 1950 and 1959 the net immigration amounted in total 2.8 million persons. The second migration phase took place between 1960 and 1970. Net immigration increased up to 3.3 million persons. Due to the labour shortages in this period specific measures have been undertaken in order to support immigration. In the 1970s and early 1980s net migration flows were less important, as the western German Government stopped attracting foreign workers. Between 1971 and 1985 net migration reached a total of 2.3 million persons interrupted by net-outflows during recession periods. Since 1985 a third immigration phase has been under way, beginning with the opening of eastern European borders and pushed by the fall of the Berlin Wall. Immigration flows increased

by persons seeking political asylum. Especially persons from former Yugoslavia fled to Germany. Between 1989 and 1995, net immigration sums up to 3.8 million persons.

### *Fertility and life expectancy*

The fertility rate in western Germany declined markedly since having reached the peak in 1964. Since then it declined from 2.5 to 1.4 births per woman (Table 1.1.1.2). In eastern Germany, fertility rates slowed down more smoothly. However, since German unification birth rates of eastern German women have fallen sharply.

**Table 1.1.1.2**

**Trends in fertility rate (births per women) - life expectancy (at birth) - net migration in Germany**

	fertility rate		life expectancy				migration		
	western Germany	eastern Germany	western Germany (a)		eastern Germany (b)		net migration western Germany (non-citizens)	eastern Germany to western Germany	net migration eastern Germany
			male	female	male	female			
1950	2.10	2.37	64.56	68.48	63.9	67.96			
1960	2.37	2.33	66.86	72.39	67.07	72.02	+243 800 (1962)		
1964	2.54	2.51					+254 100	24,000 (1965)	- 16,100 (1965)
1970	2.02	2.19	67.41	73.83	68.52	73.61	+541,600	18,600	- 13,100
1975	1.45	1.54					-233,300	18,900	- 11,000
1980	1.44	1.94	70.18	76.85	68.96	74.83	+245,600	14,000 (1979)	- 7,700
1984	1.29	1.73					-213,900	40,600	- 48,500
1989	1.39	1.56	72.21	78.68	70.13	76.38	+332,500	383,000	-244,100
1993	1.39	0.77	73.3	79.6	70.3	77.8	+233.000	53,286	77.000

(a) Years/time periods: 1949/51; 1960/62; 1970/72; 1980/82; 1986/88  
(b) Years: 1952; 1961; 1971; 1981; 1989

Source: BMFuS (Federal Ministry for Families and Elderly)/Höhn, 1994, pp. 197, 199, 204, 205, Federal Statistical Office, Statistical Yearbook 1995.

Life expectancy increased considerably between 1950 and 1993. It increased by about 9 years for the male population and about 11 years for the female population in western Germany. The corresponding eastern German figures are more than 6 years for males and nearly 10 years for females. Beginning in the

seventies, more deaths than births have been registered in western Germany (Chart 1.1.1.1).

The age structure of the population shifted towards older persons (age 60 and above) during the fifties and sixties but remained more or less constant since then (Table 1.1.1.3). Due to the increasing number of middle aged persons (age 20 to 60) the aged dependency rate declined in both, western and eastern Germany. Declining birth rates reduced the youth dependency rate since the seventies.

**Table 1.1.1.3**

**Share of male and female age groups in total population**

	Western Germany				GDR/Eastern Germany			
	in %							
	<i>share of males 60+</i>	<i>share of females 60+</i>	<i>aged depend. Rate</i>	<i>youth depend. rate</i>	<i>share of males 60+</i>	<i>share of females 60+</i>	<i>aged depend. Rate</i>	<i>youth de- pend. rate</i>
1950	13.3	14.6	26	55	15.5	16.7	30	56
1960	14.4	18.3	30	52	18.1	22.2	40	55
1970	16.1	22.3	39	58	18.5	25.1	47	66
1980	14.8	23.6	37	49	14.3	23.4	36	53
1991	16.2	24.9	35	36	14.3	23.6	34	44
1994	18.8	24.7	36	36	15.4	24.4	35	41

aged dependency rate = (60+/20-60 years old); youth dependency rate = (0-20/20-60 years old)

Source: BMFuS (Federal Ministry for Families and Elderly, 1994), pp. 36, 38, 209, 213 and Dorbritz, J. Gärtner, K. 1995, p. 395.

## 1.1.2 Population projections

### *Main assumptions*

In Germany, population projections are carried out by different institutions. A short overview of the main results is necessary. All of the presented projections play an important role for the policy discussions in Germany. The most important projections for our purpose have been elaborated by the Federal Statistical Office (the 7th and 8th co-ordinated population projection) and by two research centres (DIW and Prognos). Prognos carried out its projection for the pension institutions 'Verband Deutscher Rentenversicherungsträger'. Additionally, the

main results of the Eurostat population projection of are of interest. The main assumptions of these projections are the following:

- Concerning life expectancy the basic assumptions are quite similar. In general, it is assumed that life expectancy will increase. Both projections of the Federal Statistical Office assume life expectancy will rise in western Germany by about 1.5 years by the turn of the century and will then remain at a constant level; the eastern German figures will converge with the Western German level by 2010 (according to the 7th projection) or 2030 (according to the 8th projection). According to the DIW projection life expectancy in Western Germany will increase by approximately one and a half years by 2015. The increase of life expectancy in eastern Germany is assumed to be slightly higher and thus converges to the western German level by 2040. According to Prognos, life expectancy will increase slightly for all age groups.
- The 7th and the 8th co-ordinated projections of the Federal Statistical Office assume a constant birth rate of western Germans over the next two decades. The DIW expects a slightly decreasing fertility rate of the new cohorts. Prognos is assuming slightly increasing birth rates for national female in western Germany over the next two decades. Generally, it is expected that two kinds of assimilation processes will occur: the eastern German fertility rate, which has seriously decreased since unification, will rise to the Western German level (differences will exist then only in regard to the length of the assimilation period), while the fertility rate of non-citizens will decrease, depending on the level and the structure of future net immigration flows (depending on the countries of origin and the length of stay of non-citizen families in Germany). Future migration flows thus will affect future birth rates.
- Major differences between the available forecasts exist in regard to the level assumed for future immigration (see Table 1.1.2.1). While the 7th projection of the Federal Statistical Office assumes rather low annual net immigration figures (300,000 p.a. between 1990 and 2000, and 50,000 or 60,000 p.a. until 2030), three different scenarios have been calculated for the 8th projection, allowing for markedly higher figures. In all three variants it is expected that the flows of ethnic Germans living in eastern Europe moving to Germany ("Aussiedler") will decrease sharply after the year 2000 and will be insignifi-

cant after 2010. With regard to the net immigration flows of non-Germans, it is assumed that the net immigration will decrease until 2000, and stay at the level of 100,000 p.a. thereafter in the first variant, of 200,000 p.a. in the second variant, and of 300,000 p.a. in the third variant (basic assumption: widening of EU will induce more migration, however migration policy as regards non EU-residents will be more restrictive in the future).

**Table 1.1.2.1**

**Assumptions on annual net migration**

**Germany**

Federal Statistical Office	1990-2000	2001-2030/40	2001-2009	2010/2020-2040
7th projection	308,000	50,000 - 60,000 (2001-2030)		
8th projection Version 1	decreasing down to 100,000 (1992-2000)	100,000 (2001-2040)		
8th projection Version 2	decreasing down to 200,000	200,000		
8th projection Version 3	decreasing down to 300,000	300,000		
DIW	340,000 (1995-2000)	160,000 - 170,000	190,000	150,000 - 160,000 (2010-2040)
Prognos Low Variant	250,000 (1993-2000)	70,000 (2000-2040)	65,000 (2000-2020)	74,000 (2020-2040)
Prognos High Variant	290,000	280,000	260,000	300,000

Source: Ifo Institute.

- The DIW expects that, on the whole, a total of 1.4 million eastern European ethnic Germans will move to Germany. Among them the share of children will be relatively high, while the share of elderly will be low. All in all an annual net immigration of 150 000 to 180 000 is assumed.
- According to Prognos 1 million eastern European ethnic Germans will migrate to Germany. The trend of the migration balance with the EU will prevail positive, but on a low level (+17,000 in 1993). In contrast to the other projections where economic interdependencies are not taken into account, controlled immigration policy ('gesteuerte Einwanderungspolitik') depending on economic circumstances is assumed. In the high variant the migration bal-

ance will drop to a level of around 150,000 persons by 2000 and then increase to an annual level of approximately 300,000 by 2040. In the low variant net immigration in the year 2000 is at a level of 35,000 and will then increase to a level of 74,000 net immigrants a year.

### *Total population forecasts*

According to the variations of assumptions about net immigration the projections of total population and age structure differ significantly (see Table 1.1.2.2, Table 1.1.2.3, Table 1.1.2.4). In general – with the exception of Eurostat's high variant – total population is expected to decrease over the first half of the next century. Population will fall by 11 million between 1989 and 2040 according the 8th projection of the Federal Statistical Office (2<sup>nd</sup> variant). The DIW and the Prognos forecast even sharper reductions amounting to 14 and 15 million. The figures of high variant projections are less dramatic.

**Table 1.1.2.2**

#### **Projection of total population Germany**

Federal Statistical Office	base years 1989-1993	2000	2010	2020	2030	2040
		million				
7th Projection	79.1 (1989)	81.1	78.9	75	69.9	
8th Projection Version 1	81 (1992)	83.3	82	78.6	73.7	67.6
8th Projection Version 2	81	83.7	83.4	81.2	77.4	72.4
8th Projection Version 3	81	84.1	84.9	83.7	81.1	77.1
DIW	81.3 (1993)	83	82.5	80.2	75.7	69.4
Prognos Low Variant	81 (1992)	82	80	76.8	72.3	66.8
Prognos High Variant	81	82.3	82.3	81.8	80.1	77.6
Eurostat Low Variant	79.1 (1990)	80.3	77.6	73.5		
Eurostat High Variant		84.2	87.3	90.3		

Source: Ifo Institute.

Under the condition of high immigration, increasing fertility and growing life expectancy the Prognos and the Federal Statistical Office forecast a decline of 3.4 and 3.9 million inhabitants over the whole period. Eurostat and UN forecasts are even envisaging a growing population (93.6 million in the high variant of UN's population projection of 1992, and 90.3 million for Eurostat's high vari-

ant). The assumptions are more of the scenario type, following the quantitative paths of specific artificial conditions.

In general the forecasts can be criticised for not considering the political and social feedbacks on both birth rates and immigration policy<sup>1</sup>. The question how ageing and the shrinking of the population impedes economic growth is not addressed. The problem of labour shortage or skills shortages is not taken into consideration either. Considering unemployment rates, the immigration policy might react on imbalances on the domestic labour market.

### *Age structure*

While at the present, the youth dependency rate (YDR) is at a slightly higher level than the aged dependency rate (ADR) on population aged between 20 and 60 (YDR: 37%, ADR: 35% in 1992), this will change in the next decades (see Table 1.1.2.4). In all projections, the number of young people aged under 20 is expected to shrink more than the population aged between 20 and 60. On the other hand, the increasing share of elderly is reflected in a growing aged dependency rate, which in the worst cases of the projections could even double by 2030 or 2040. Even in scenarios with higher net immigration the aged dependency rate will grow (see Table 1.1.2.4).

In order to keep the number of persons aged between 15 and 65 at the current level, annual net immigration would have to vary between 640,000 (in 2020), 910,000 (in 2029) and 570,000 (in 2040) and the total population would then amount to 83 million in 2030, according to calculations of the DIW. But even in that case the problem of ageing cannot be totally overcome. In the high variants of Prognos and the Federal Statistical Office (8<sup>th</sup> projection), the share of population aged 60 and above increases from 20.4% in 1992 to 31.7 or 33% respectively in 2040 (see Table 1.1.2.3). Similarly in the high variant of the UN's population projection with growing population, the share of the elderly would be at a higher level in 2025 (25.6%) than in 1992. Moreover, in all presented projections the share of the very old (population aged 80 and above) will increase

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<sup>1</sup> At present Eurostat prepares new European population (and labour force) scenarios. The scenarios will be published in 1997).



sharply from 3.2% in 1992 to over 5% or even 6% during the projection periods (see Table 1.1.2.3).

**Table 1.1.2.3**

**Share of population aged 60+ or 80+ of total population in %**

Federal Statistical Office	share of population aged 60+						share of population aged 80+					
	<i>basic year</i>	2000	2010	2020	2030	2040	<i>basic year</i>	2000	2010	2020	2030	2040
	<i>in %</i>											
7th proj		23.6	25.8	29.4	34.9		3.6	4.7	6.2	6.2		
8th proj.1	20.4	23.2	25.2	28.9	34.6	35.0						
8th proj.2	20.4	23.1	24.9	28.2	33.6	33.9						
8th proj.3	20.4	23.0	24.6	27.7	32.7	33.0						
Prognos LV	20.4	23.3	25.8	29.3	34.3	33.7	3.2	2.8	3.7	4.8	4.6	5.3
Prognos HV	20.4	23.2	25.2	28.1	32.5	31.7	3.2	2.8	3.7	4.8	4.8	5.5

Source: Ifo Institute.

**Table 1.1.2.4**

**Youth dependency rate (pop. 0-19 / pop. 20-59) and dependency rate of the old (pop. 60+ / pop. 20-59)**

Federal Statistical Office	youth dependency rate						dependency rate of the old					
	<i>basic year</i>	2000	2010	2020	2030	2040	<i>basic year</i>	2000	2010	2020	2030	2040
7th Proj.	37.0	38.8	34.1	32.4	35.8			42.8	46.6	55.1	73.5	
8th Proj.1	37.0	38.1	32.9	31.4	34.3	32.4	35.0	41.6	44.9	53.3	71.1	71.2
8th Proj.2	37.0	38.1	32.9	31.4	33.9	32.2	35.0	41.4	44.1	51.7	67.8	67.8
8th Proj.3	37.0	38.0	32.9	31.3	33.5	31.8	35.0	41.2	43.3	50.2	65.0	65.0
DIW	37.0		32.9	31.5	34.5	33.1	35.0	42.2	46.5	57.4	79.3	83.2

Source: Ifo Institute.

## **1.2 Structure of the workforce**

### **1.2.1 Labour force participation**

The behavioural component of the labour supply is measured by the activity rate which is the ratio of the economically active population (employed and unemployed) to the total population of the working age. Table 1.2.1.1 shows the development of German labour force participation from 1960 to 1996. Three major trends can be gathered from the figures.

The first trend is the decline of activity rates for persons of both sexes younger than 25 years. This trend is due to the extension of education and training. On the one hand, this is the result of a prolongation of individual education and training periods and on the other hand of higher school and university attendance rates. School attendance rates of males and females became more equal during the last decades.

The second trend is the growth of economic activity of females. Married women in particular have entered the labour market. Since the 1970s female activity rates began to rise markedly. The changing role of women in the family, the participation of women in education, the declining family size, the functional shift from production to service activities and the changing working time patterns are the most prominent determinants from a list of various other determinants.

The third trend is the decrease in the age of exit from gainful work expressed by the drop of activity rates for elderly workers. The activity rates of 60 to 64 year old men and women demonstrate the decline of a 'normal' age limit for retirement of 65 years. For men this decline extends to the group aged 55 to 59 years. For females aged 55 to 59 the decline of activity rates is not observable. This indicates that a propensity to lower real retirement ages has been compensated by a growth of female labour force participation. Thus, activity rates for this age group are the result of overlapping trends. In the 1970s and 1980s the trend to early retirement was not a major topic of political discussion. It was regarded as one attempt among others to reduce mass unemployment. But in

the 1990s early retirement has moved to the centre of social-political discussions and reforms. With regard to the financing of old-age social security, it became a pronounced topic separate from the still-unsolved unemployment problems.

Table 1.2.1.1

**Activity rates by gender**  
Germany <sup>a)</sup>

Age groups	Males					Females				
	1960	1970	1980	1990	1995	1960	1970	1980	1990	1995
15-19	76.7	54.7	48.5	43.2	36.1	75.0	53.6	41.4	37.3	28.7
20-24	90.8	82.9	82.0	79.8	77.7	75.7	69.8	71.1	75.7	70.8
25-29	95.9	92.6	90.2	87.4	87.2	52.7	51.1	62.5	71.6	75.5
30-34	98.1	98.4	97.3	95.8	95.9	45.1	45.4	56.2	66.9	73.6
35-39	97.6	98.8	98.3	97.5	97.1	45.4	46.2	55.4	68.0	75.5
40-44	97.0	98.5	98.1	97.4	97.2	44.9	48.4	54.9	69.4	78.8
45-49	96.1	96.8	96.8	96.5	96.1	41.6	48.9	52.2	66.7	75.5
50-54	94.1	95.1	93.3	93.2	92.6	37.9	44.8	47.1	57.8	69.0
55-59	89.0	89.1	82.3	81.1	75.8	32.7	37.2	38.7	43.8	49.7
60-64	72.6	74.7	44.2	35.0	29.5	20.9	22.5	13.0	12.5	10.9
65+	22.0	19.7	7.4	5.3	4.1	7.8	6.5	3.0	2.0	1.5
15-64	-	88.2	83.4	82.7	81.0	-	47.1	50.2	58.5	62.6
Total <sup>b)</sup>	63.6	57.8	58.4	60.8	69.7	33.7	32.1	32.6	39.2	48.2

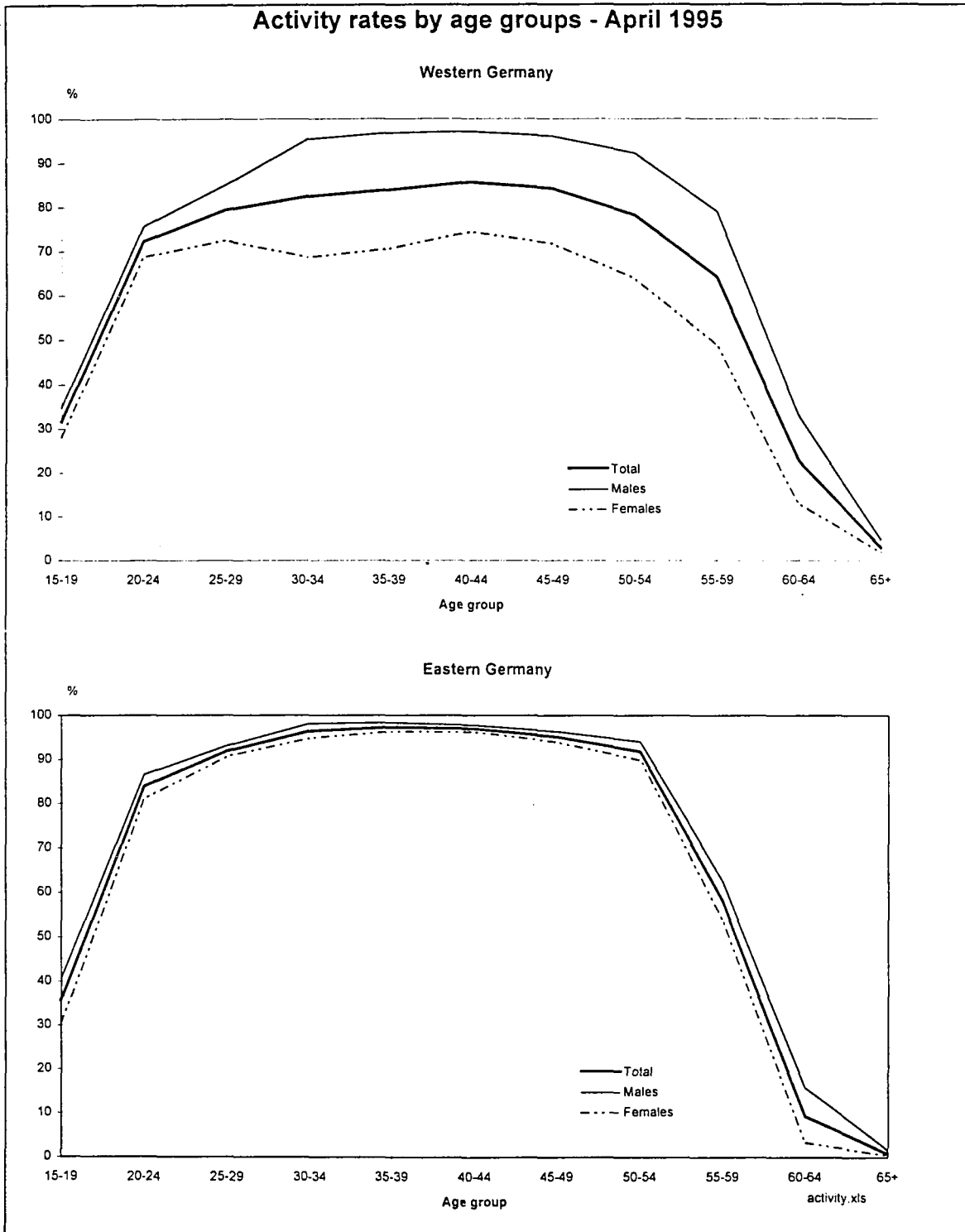
a) Before 1995 western Germany, 1995 western and eastern Germany

b) Share of labour force in total population older than 14 years

Source: Federal Statistical Office, Mikrozensus.

Labour force participation patterns show marked differences between western and eastern Germany. The activity rates of the working age group 15 to less than 65 years was 70.7% in the old and 76.8% in the new Länder. This difference is due to the higher labour force participation of females in eastern Germany. Whilst the difference of male activity rates is only 1.6 percentage points (western Germany: 81.3, eastern Germany:79.7), the difference of female activity rates is pronounced (16 percentage points). This discrepancy is less determined by income differences but by a different life concept which can be traced back to the social and economic characteristics of the German Democratic Republic.

Chart 1.2.1.1



Source: Federal Statistical Office, Mikrozensus 1995.

The differences of western and eastern German (female) activity rates are shown in Chart 1.2.1.1. Whilst in western Germany activity rates of men and women drift apart for the age groups 25 years and over, the eastern German rates run parallel. Female activity rates of the ages over 25 and below 50 are around 70% in the old and 94% in the new Länder (compared with 92% and 95%). The 'birth dip' which can be observed for 30 to 40 year old women in western Germany does not exist in the new Länder.

Table 1.2.1.2

## Labour force and employment in Germany 1950 - 1995

Year <sup>a</sup>	Labour force	Activity rate <sup>b</sup>	Gainfully employed <sup>c</sup>		
			Employees	Self-employed <sup>d</sup>	Total
	1,000	% rate	1,000		
Western Germany					
1950	21577	46.0	13674	6323	19997
1955	23758	48.3	16840	5990	22830
1960	26518	47.8	20257	5990	26247
1965	27034	46.1	21757	5130	26887
1970	26817	44.2	22246	4422	26668
1975	27184	44.0	22467	3643	26110
1980	27948	45.4	23897	3162	27059
1985	28897	47.4	23559	3034	26593
1990	30327	48.0	25460	3026	28486
1991	30662	47.9	25920	3053	28973
1992	30941	47.7	26066	3067	29133
1993	30952	47.2	25611	3071	28682
1994	30884	46.9	25242	3086	28328
1995 <sup>(e)</sup>	n.a.	n.a.	25383	3099	28482
Eastern Germany					
1991	8503	53.4	7219	371	7590
1992	7895	50.2	6307	418	6725
1993	7682	49.1	6071	462	6533
1994	7782	50.0	6140	500	6640
1995 <sup>(e)</sup>	n.a.	n.a.	5863	523	6386

a) Before 1960 without Saarland and Berlin (West)

b) Proportion of labour force in total population.

c) Resident concept.

d) Self employed and family workers

e) Preliminary

Source: National accounts.

The past development of the labour force depended on three factors: on demography, on the decline of the labour force participation of young and old persons and on the growth of female labour force participation (see Table 1.2.1.2). The demographic swells are reflected by the labour force. In the 1950s the proportion of the labour force in the total population increased, decreased in the 1960s, increased in the 1970s again and reached its peak in 1988 (48.2%). Since then it has dropped moderately and was around 47% in 1994. The average annual growth of the labour force was around 2% in the 1950s, 0.1% in the 1960s, 0.4% in the 1970s, 0.8% in the 1980s and was around 0.5% in the first half of the 1990s. The years of low labour-force growth between 1960 and the early 1970s are regarded as times of full-employment. In addition to demography, the labour force was determined by changing participation patterns.

## **1.2.2 Labour force projections**

### *Current projections*

The labour force projections are derived from the population forecasts. The main results of recent work carried out by the Ifo Institute for Eurostat, on the basis of the Eurostat's population projection, by Prognos and by the Centre for Labour Market Research of the Federal Employment Service (IAB), based approximately on the 7th population projection of the Federal Statistical Office, as well as some findings of the German Institute for Economic Research (DIW) are briefly discussed.

### *Activity rates*

The projections for the labour supply do not only depend on the assumed development of total population and its age structure but also on estimates of future labour force activity rates.

The Ifo Institute's projection for Eurostat has made different assumptions about activity rates.

a) *Status-quo projection of activity rates*

According to Eurostat's population low variant, the workforce will decline until 2000 (compared to 1990) by 2.1% and by 12.8% between 2000 and 2020 (from 37.5 million to 32.7% million). In the high variant, the workforce will increase by 7.4% until 2000 (compared to 1990), and 16.5% until 2020. According to this variant in 2020 47.4 million persons are offering their work.

b) *Varying activity rates*

For the low scenario the basic assumption for the development of total population is Eurostat's low variant with regard to activity rates, continuity is assumed. Thus, the trend of the last ten years is extrapolated to 2020, although with diminishing intensity. The activity rate differential between males and females will decline only by a small degree.

For the high scenario, which is based on the high variant of Eurostat's population projection, it is assumed that the activity rates of all age groups will increase, and the difference in the labour market participation rate between men and women will be narrowed. The trend to early retirement will be stopped. The assumptions are shaped as an 'integration scenario', which assumes a convergence to the highest EU labour market participation rates for each age group (see Table 1.2.2.1). However, some of the results have to be used with caution. For example, it is rather unlikely for Germany, that a large proportion of young people aged 15-20 will combine education and part-time work. On the other hand, the potentials for a lengthening of working life might be underestimated.

The difference between the two Ifo scenarios shows (Table 1.2.2.1), besides the enormous migration effect, the potential for activating endogenous potential. The share of females in the total labour force will grow from 40.4% in 1990 to 48% in the high scenario (and to 43.1% in the low scenario).

Table 1.2.2.1

## Ifo Labour Force Projection: activity rates by age groups and gender

Age groups	male			female		
	1990	2020		1990	2020	
		Scenario1	Scenario2		Scenario1	Scenario 2
	in %					
15-20	42.2	30.6	60.2	36.3	25.6	59.0
20-25	76.6	68.1	84.0	73.2	68.0	83.4
25-30	86.6	82.8	94.9	69.1	73.9	90.6
30-35	95.0	92.5	97.0	63.8	73.1	92.8
35-40	97.0	95.4	97.0	65.6	74.7	93.0
40-45	96.9	95.2	97.0	67.9	76.2	93.1
45-50	95.9	93.8	96.1	64.3	70.9	90.9
50-55	92.9	89.2	92.6	56.1	62.8	86.1
55-60	79.9	72.0	80.7	42.1	48.5	73.6
60-65	34.6	23.5	41.9	11.6	12.1	37.3
65+	4.7	2.7	6.9	1.8	1.3	5.3

Activity rate being defined as share of labour force (employees, self-employed and unemployed) of total population in the age group

Source: Hofmann, in: ifo-Schnelldienst 1994, 1975: Hofmann, Ifo Institute Long Term Labour Force Scenario for the European Union, Final Report 1995.

c) *Prognos 1995*

It is assumed that the activity rate of young men will decrease since the general qualification level is expected to grow. For men aged 35-54 the trend of a slight lowering in the activity rate will continue, since the activity rate for women will increase markedly. This increase will be on a rather low level for young women, due to higher education and training. For women aged between 25 and 35 there will also be a slight increase of labour market participation (since for this age group childbearing will still be important). In particular, the activity rate of females aged above 35 is expected to grow on a higher path. The labour market participation rate of older men and women will increase (owing to the long-term financial problems of the public pension schemes, the government will take appropriate measures to raise retirement age).



d) *IAB projection (Institute for Labour Market Research of the Federal Employment Service, 1991 and 1995)*

The labour-force projection is derived from IAB's own population projection, based mainly on the assumptions of the 7<sup>th</sup> projection, the basic year being 1990. The main variations are fertility rate remains constant at the level of 1987, net migration by 2010 is summed up to 4.2 million persons, net migration after 2010 is not considered. Total population will be at a level of 71 million in 2030. It has been taken into account, that the potential labour force activity rate depends on labour market indicators and varies not only between age groups and gender, but also between nationals and non-nationals. Three scenarios have been elaborated with differing potential labour market activity rates (Table 1.2.2.2).

**Table 1.2.2.2**

**Projections of total labour force (potentials)**

	basic year	2000	2010	2020	2030	2040
	Million					
Ifo Scen. Low	38.3 (1990)	37.49	36.1	33.16		
Ifo Scen. High		41.1	45.7	48.16		
Prognos Low V.	41.1 (1992)		39.2			29.2
Prognos High V.			40.6			34.8
IAB Var.1	41.1 (1990)	41.0	40.2	36.9	31.8	
IAB Var.2		40.5-40.8(*)	41.4	38.2	32.9	
IAB Var.3		41.0-41.4(**)	42.4	39.1	33.6	
(*) convergence of eastern German activity rates to the western German average up to 2000						
(**) convergence of eastern German activity rates to the western German average up to 2010						
IAB variant 1: constant activity rates						
IAB variant 2: varying activity rates low						
IAB variant 3: varying activity rates high						

Source: Ifo Institute.

### *Total labour force and age structure*

The total labour force projections vary considerably, because of important differences between the population projections and also the varying assumptions of activity rates (Table 1.2.2.2). All forecasts of the labour supply based on projections with a shrinking population result in a more or less declining labour force. This indicates that none of the projections assume, that the effect of a shrinking population on labour force potentials will be offset by increasing activity rates.

The share of elderly workers will increase over time. According to the Ifo projection, the share of the workforce aged 45-65 will increase from 40% in 1990 to 47.2% in the low variant and to 47.5% in the high variant in 2020. According to the IAB projection, the share of persons aged 50 and above of total potential labour force will be higher than of those less than 30.

### *Some critical remarks concerning the data*

Current labour force projections are basically derived from population forecasts. But labour supply also depends as well on the long-term growth rate of the economy. In particular, there are interdependencies between the migration policy and the labour market development. The retirement age is also correlated with the unemployment rate, or, conversely, with labour shortage. Only the Prognos projection attempts to take these interdependencies into account. The starting point for Prognos lies in assumptions about the growth rate of the economy and labour productivity. However, the question of future distribution of labour is not directly addressed.

According to estimates put forward by the DIW, the present high unemployment rate will be rather difficult to lower, at least by 2010, even assuming a favourable economic climate (jobless growth). By assuming continuity regarding the development of output and productivity, a nominal labour-market equilibrium will be achieved in 2020. Prognos also gives estimates about future unemployment rates derived from aggregate demand and development of productivity. However, the impact of labour market mismatch on future unemployment rates will still be important in the future.

### 1.2.3 Employment

Table 1.2.1.2 and Chart 1.2.3.1 show that gainful employment was quite constant at around 26 and 27 million in western Germany between 1960 and mid-1980. Then, after 1988 the number of employees increased and employment reached its peak in the year 1992 at 29 million employed persons. This was an increase of 9% compared with the employment level of 1970. Since 1992 gainful employment has dropped by around 1 million persons. The potential labour force which includes the labour force and the discouraged workers<sup>1</sup> grew by 24% over the 25 years since 1970. The growing labour force participation of women, the increase of national and immigrant workers as a result of demographic trends as well as the immigration of ethnic Germans have increased the potential labour force by about 6 million. The discrepancy between employment growth rates and potential labour force growth rates is expressed by growing numbers of registered unemployed and discouraged job-seekers.

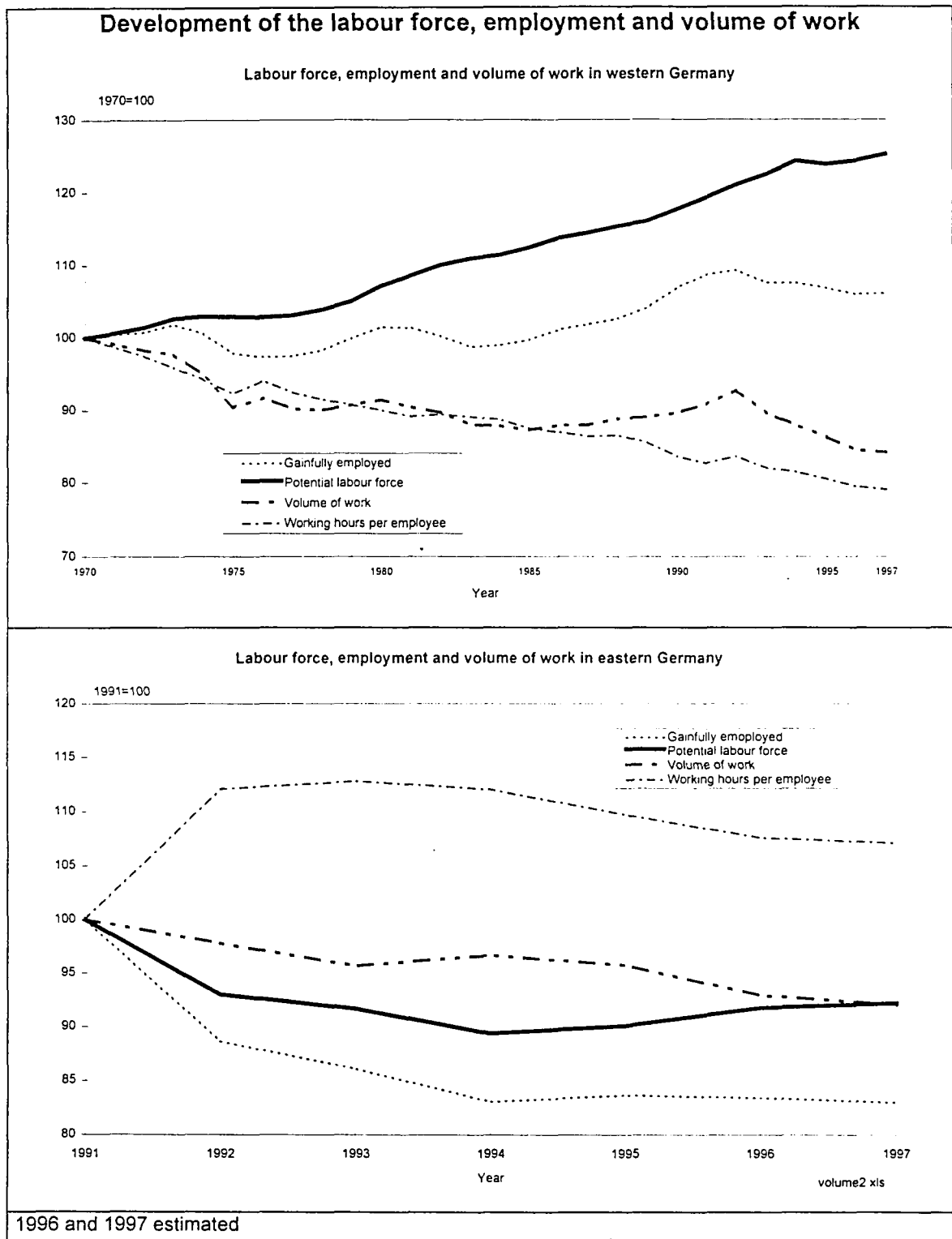
Although employment has increased since 1970 the volume of work in terms of total hours worked decreased by around 14% up to 1995. This was due to reductions in working hours and to the extension of part-time employment. The working time per employee decreased parallel to the volume of work up to 1985. Then it fell more strongly than the volume. The reduction of working time per employee is partly due to agreements about weekly working time reductions by employers and workers organisation. In April 1985 the tariff contract for metal workers fixed the individual weekly working time at 38.5 hours, and in 1990 the 35 hour week was negotiated by the metal union and employers organisations. The working time reduction policy was followed by other unions. This is one reason for the decline of the average yearly working time per employee from 1,694 hours in 1985 to 1,558 hours in 1995.

In eastern Germany the potential labour force declined by 0.8 million (10%) and gainful employment by 1.2 million (16%) between 1991 and 1995. The yearly working time per employee in eastern Germany increased from 1,510 hours per employee in 1991 to 1,657 hours in 1995.

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<sup>1</sup> The potential labour force or maximum labour force is calculated by the Federal Employment Service. It can be assessed by observing employment behaviour during periods of high labour demand.

Chart 1.2.3.1



*Employment projections*

Different research institutes have carried out long-term projections of the labour force components employment and unemployment. The results of three projections are given in Table 1.2.3.1: They are briefly reported in the following paragraph.

**Table 1.2.3.1****Long-term employment projections**

Prognos projections						
in 1000	Western Germany			Eastern Germany		
	1994	2000	2010	1994	2000	2010
Employees	28315	28737	29310	6593	6312	6357
Unemployed	2556	2560	2280	1142	840	540
IAB projections (summer 1994)						
Employees	28315	290215	30915	6593	6593	7293
Unemployed incl. hidden unemployed	4664	4164	3064	1302	602	-
DIW projections						
	Germany					
	1994	2010				
		Integration		Restriction		
	Employees	34953	37770		35900	
Unemployed	3698	2758		3867		
hidden unemployed	3173	2266		3269		

Source: Weidig et al 1996, Klauder 1995, DIW Wochenbericht 36/96.

According to the Prognos projection resident employment will grow by 0.2% p.a. in western Germany until 2010. This will reduce registered unemployment between 2000 and 2010 by -1.2% p.a. In 2010 unemployment in absolute terms will be still higher than in 1993. In eastern Germany the unemployment figures will drop by -5.0% p.a. until the year 2000 and then by -4.3% p.a. This runs parallel with a reduction of total employment. According to the IAB projections this reduction will not happen: 0.7 million persons more than in 1994 will be in employment in the year 2010. Unemployment, including hidden unemployment, will be reduced by 1.4 million persons. The DIW prepared two scenarios. One for favourable economic and political circumstances (Integration) and another for a contrasting situation of conflict and disharmony. The 'best' option would be

that unemployment could be lowered by around 0.9 million persons by 2010. In the worse case it could increase by around 0.17 million.

### *The sector composition of employment*

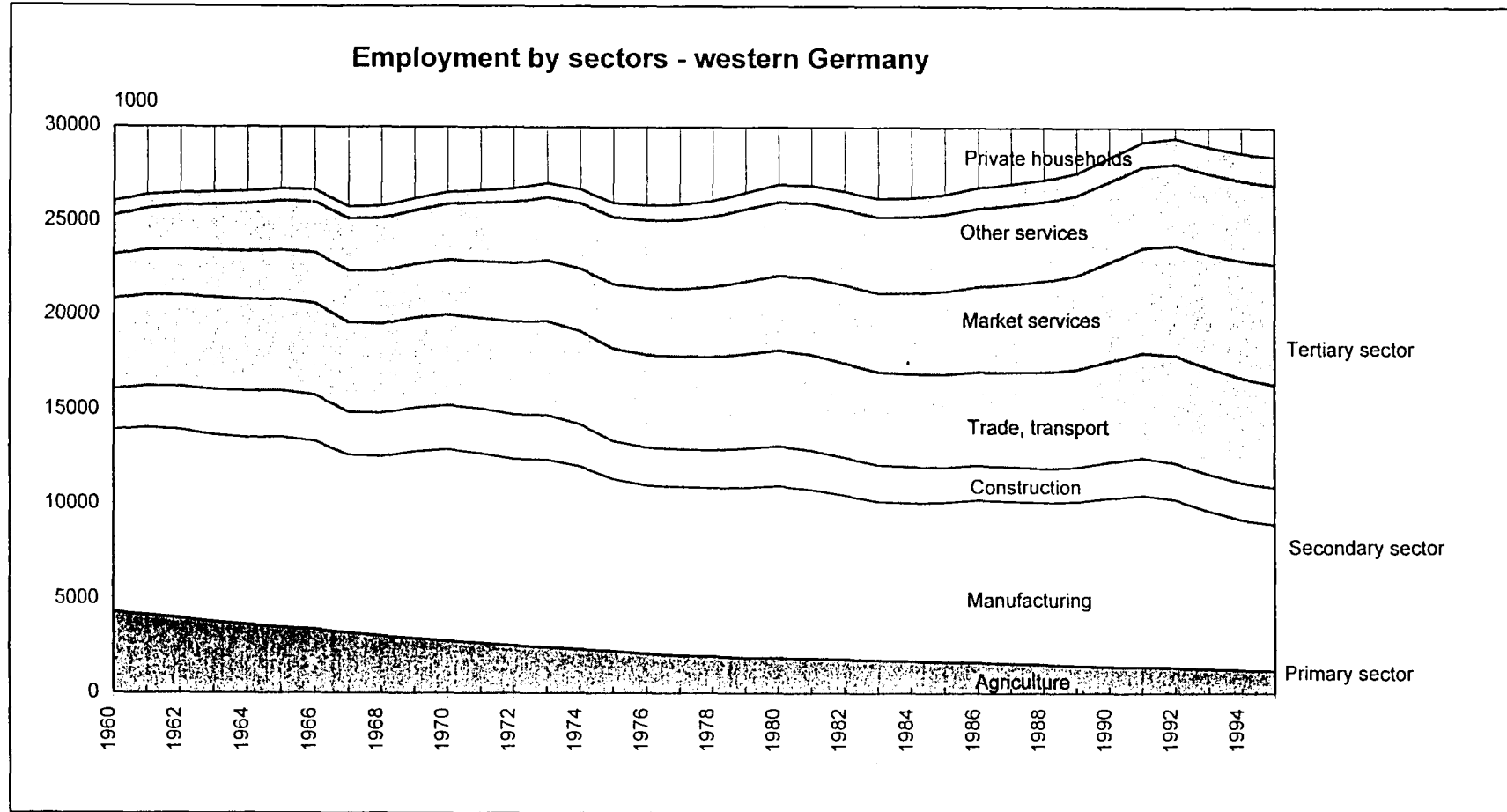
The sector composition of gainful employment is shown in Chart 1.2.3.2.<sup>1</sup> In total the level of employment has risen by 2.4 million employed persons between 1960 and 1995 (western Germany). The strongest increase was in the 1980s and early 1990s. In 1992, 3.2 million jobs more than in 1983 were counted. The tertiary sector was the sector of greatest employment growth in this period. The net employment effect of the service sector was 3.1 million, the industry and construction sector grew by 0.5 million jobs whilst the primary sector declined by 0.4 million jobs. Thus, in terms of employment, the trend to a service economy has accelerated in the past decade. In 1960 around 45% gainfully working people were employed in the secondary sector and 38% in the tertiary sector. In 1980 the proportions were 42% and 51% and in 1995 34% and 62%. The primary sector shrunk from 17% in 1990 to 4% in 1995.

Within the tertiary sector employment of market services increased most markedly. In 1985 around 30% of service employment was absorbed by market services, 34% by trade and transport services, 29% by other services (non-market services) and 7% by private household services. In 1995 the proportions had changed. The share of market services grew continuously and was now 36%, trade, transport and non-market services declined to 31% and 24% respectively whilst private household service increased slightly to 9%.

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<sup>1</sup> Employment by domestic concept.

Chart 1.2.3.2



In the eastern German economy employment has also shifted to the service sector. Total employment declined between 1991 and 1995 from 7.3 million to 6.4 million, but service employment grew by 60,000 jobs. Services' share of jobs has thus climbed from 51% to 62%. The proportion of manufacturing and construction jobs has dropped to 33% from 38% in 1991. The growth of services has not meant growth in all sub-sectors. Trade and transport as well as non-market service employment decreased, but the decrease was overcompensated by market services (finance and insurance, culture, entertainment, business consultancy, renting, etc.) and household services.

The extent of service activities within the total economy and the sectoral shift to the service economy is also expressed by the change of employment by occupations. Table 1.2.3.2 lists service occupations in the narrow sense and adds technical occupations - engineers, chemists, mathematicians and technicians, physicists. These groups carry out service work in a broader sense: research, development, construction, control, planning, etc. In 1994 the difference between the extended service and the narrow concept was 1.7 million employees (covered by social security). Including technical occupations around 65% of total employees were working in service occupations. (According to the pure sectoral concept this proportion was around 56%.) Comprising 4.6 million employees the organisational, administrative and clerical occupations formed the strongest group followed by service clerks (sales clerks, bank and insurance clerks and other service clerks), transport occupations and health service occupations.

The occupational classification of employees underscores the growing importance of the services. On average the service occupations in the narrow sense increased by 1.7% from 1980 and 1992. Including technical occupations the growth rate was 1.8%. The increase of service occupations compensated decreases of other occupational groups and was the reason for the positive employment balance between 1980 and 1992. After 1992 the general business development is reflected by negative rates in employment



Table 1.2.3.2

## Employment by occupations

Occupations a)	Employees covered by social security - Western Germany -							
	1980	1992	1994	1980	1992	1994	1980/92	1992/94
	1,000			Share in % b)			Change in % c)	
Technical occupations	1309.4	1988.3	1644.9	6.2	7.2	7.2	2.1	-1.3
Service clerks	2315.3	2835.0	2828.1	11.0	12.0	12.4	1.7	-0.1
Transport occupations	1619.3	1754.0	1620.6	7.7	7.5	7.1	0.7	-3.9
Organisational, administrative and clerical occupations	3776.3	4595.1	4632.8	18.0	19.5	20.4	1.6	0.4
Arts	158.0	195.1	193.5	0.8	0.8	0.9	1.8	-0.4
Health service occupations	808.3	1316.2	1411.7	3.9	5.6	6.2	4.1	3.6
Social and cultural service occupations	532.0	847.7	924.0	2.5	3.6	4.1	4.0	4.4
General services	1269.7	1351.7	1312.8	6.1	5.7	5.8	0.5	-1.4
Service occupations excluding techn. occupations	10740.7	13204.5	13226.4	51.3	56.1	58.1	1.7	0.1
Service occupations including techn. occupations	12050.1	14892.7	14871.2	57.5	63.3	65.4	1.8	-0.1
Total occupations	20953.9	23530.3	22755.3	100	100	100	1.0	-1.7

a) Classification of occupations, Central Statistical Office, version 1995.  
b) In % of all employees covered by social security.  
c) Change on average of years.

Source: Federal Employment Service, employment statistic. Calculations by the Ifo Institute: Hummel, Strukturberichterstattung 1995, p. 46.

*Employment by different structural characteristics*

An overview of some structural characteristics is given by Table 1.2.3.3. In summary western Germany employed persons have become more female, more foreign and older on average over the last decade.

Eastern German employment structure shows a higher female proportion and a clearly lower share of foreigners. The western and eastern age structures are different for the younger and for the older age groups. In eastern Germany the proportion of young people in total employment is higher and the proportion of old people is lower than in western Germany.

**Table 1.2.3.3****Employment by different structural characteristics**

	Germany	Western Germany			Eastern Germany	
	1995	1995	1991	1985	1995	1991
Total (1000)	36048	29244	29684	26626	6804	7761
Total (%)	100	100	100	100	100	100
<b>Gender</b>						
Male	58.1	58.6	59.7	61.6	55.8	53.5
Female	41.9	41.4	40.3	38.4	44.2	46.5
<b>Nationality</b>						
German	91.7	90.2	91.4	92.4	98.0	99.1
Foreign	8.3	9.8	8.6	7.6	2.0	0.9
<b>Age (years)</b>						
15-19	3.5	3.3	4.1	7.3	4.7	5.4
20-24	8.8	8.8	12.0	13.2	8.7	10.2
25-34	27.7	27.7	26.2	22.9	27.5	27.1
35-44	26.0	25.4	23.4	22.4	28.8	24.9
45-54	21.9	22.0	23.1	23.4	21.5	24.8
55-59	8.9	9.3	7.5	7.6	7.5	6.0
60-64	2.3	2.5	2.7	2.5	1.0	1.4
65+	0.9	1.0	1.0	1.1	0.2	0.2

Source: Federal Statistical Office, Mikrozensus

*Qualification levels*

The qualification level of the western German employment has shifted from lower to higher formal qualifications (see Table 1.2.3.4). Especially the demand for employees without any vocational qualification has declined (in relative terms).

The future demand for qualifications is difficult to forecast. It depends on technology trends, on organisational changes and on the education and training system. But there is a general agreement on the decline of the demand for unskilled persons. According to projections carried out by the Institute for Employment Research (Tessaring, 1994), the labour demand for university and polytechnic leavers will grow at an above-average rate (see Table 1.2.3.3). Al-

though less intense in relative terms demand for workers trained in apprenticeship schemes or vocational schools (Berufsfachschulen) will also increase. Jobs for leavers of Meister or technical schools are foreseen to grow by 14% to 19%. The group of unskilled in the labour force must face a very unfavourable situation. The share of unskilled employment will be halved by 2010. This is an expected loss of 2.8 million jobs for the unskilled.

**Table 1.2.3.4**

**Employment by qualification levels  
- Western Germany -**

Qualification <sup>a)</sup>	1976	1991	2010 <sup>b)</sup>
University degree	5.1	8.2	11.1
Polytechnic degree	2.2	4.1	5.6
Meister/technician	6.5	8.4	9.8
Apprenticeship/Berufsfachschule	51.3	59.1	63.3
No qualification	34.9	20.3	10.1
Total employment	100.0	100.0	100.0
a) Highest level.			
b) Projection variant 'middle'.			

Source: Tessaring (1994) S. 11.

The east German qualification structure of 1991 in general was close to the west German structure, but some important differences must be stressed. In terms of proportions the employed workforce comprised less university and polytechnic leavers (around 10%), more Meister/technicians (around 19%), a similar amount of skilled workers (Facharbeiter, around 58%) and fewer unskilled people (around 10%)<sup>1</sup>. Mikrozensus<sup>2</sup> results indicate that the eastern German employment distribution converges towards western German qualification structures. Forecasts for eastern Germany are regarded as risky but there is no reason to assume that the future qualification composition in the new Länder should deviate significantly from the western pattern.

<sup>1</sup> Around 3% cannot be classified.

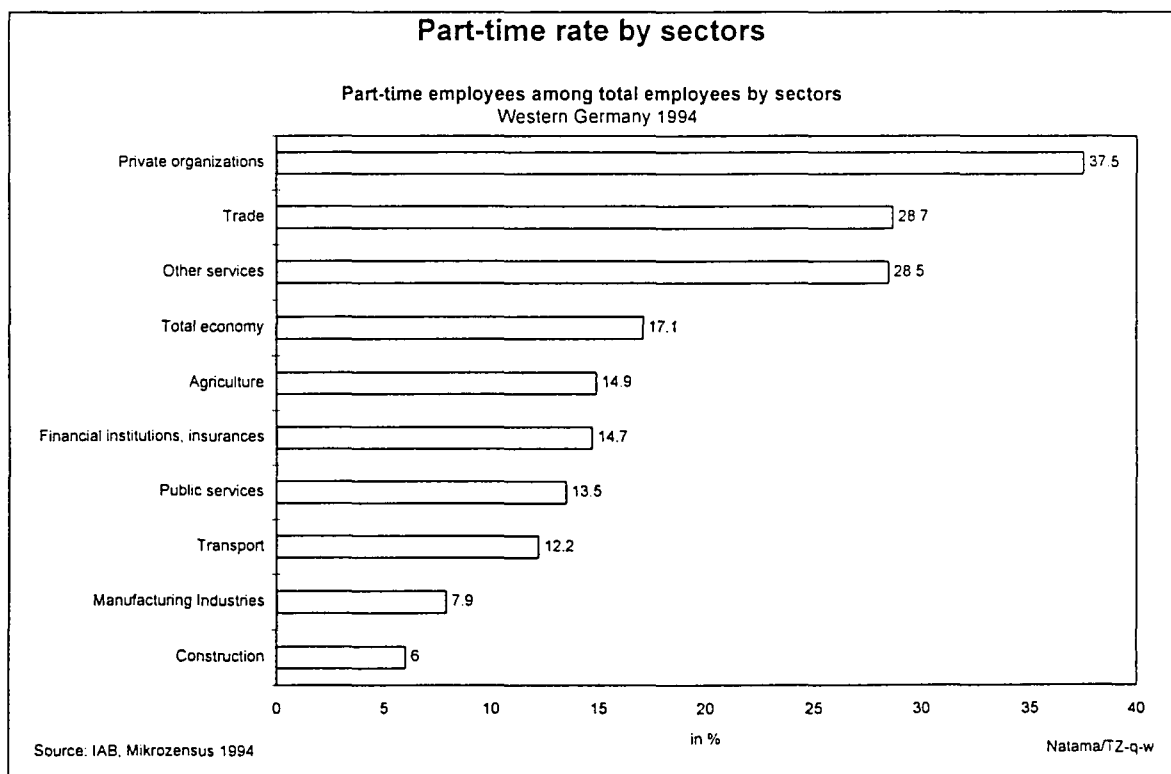
<sup>2</sup> Labour Force Survey

### Part-time/full-time employment

Part-time employment has gained in importance for women and for men over the last decades. From 1960 to 1994 overall part-time employment increased by 15 percentage points, part-time employment for women by 30 percentage points and for men by 2 percentage points (see Table 1.2.3.5). Part-time employment is a domain of women. Around 3% of male employees and 37% of female employees were working part-time in 1994.

Part-time jobs are concentrated on a few industries, activity areas and occupations. Thus part-time employees have fewer options for employment. Part-time employment by occupations shows that growth was concentrated on 'simpler' occupations. For domestic services and nursing, sales and cashier jobs and unskilled clerical jobs part-time rates increased most rapidly over the years from 1985 to 1993. Parallel to this, part-time employment growth rates were higher than the average for the sectors private organisations/households, trade and other services (Chart 1.2.3.3).

Chart 1.2.3.3



Part-time employment is less common in eastern Germany than in western Germany because it still is not the work of choice in the new Länder. After unification part-time rates began to rise. In 1994, 2.5% of men and 20.4% of women were working part-time.

Table 1.2.3.5

## Full- and part-time employment in western Germany

Annual average	Employees in total			
	Total	Full-time	Part-time*	Part-time rate
	1000 persons			%
1960	20073	19561	512	2,6
1970	22138	20689	1449	6,5
1980	23818	21157	2661	11,2
1990	25453	21607	3846	15,1
1991	26136	22059	4077	15,6
1992	26385	22111	4274	16,2
1993	25930	21548	4382	16,9
1994	25579	21084	4495	17,6
Development a) 1960 - 1994	5506	1523	3983	15,0 %-p
	Employees - men			
1960	13317	13237	80	0,6
1970	14618	14530	88	0,6
1980	15055	14556	147	1
1990	15278	14724	331	2,2
1991	15265	14953	351	2,3
1992	14830	14911	381	2,5
1993	14452	14466	386	2,6
1994	1135	14032	420	2,9
Development a) 1960 - 1994	1135	795	340	2,3 %-P
	Employees - women			
1960	6756	6324	432	6,4
1970	7520	6159	1361	18,1
1980	9115	6599	2516	27,6
1990	10398	6883	3515	33,8
1991	10858	7132	3726	34,3
1992	11120	7227	3893	35,1
1993	1110	7104	3996	36,1
1994	11127	7052	4075	36,6
Development a) 1960 - 1994	4371	728	3643	30,2 %-p

\* Part-time employees by self indication

a) Preliminary, data base: Federal Statistical Office (national account concept), Institute for Employment Research.

Source: Spitznagel/Kohler, 1995

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### *Permanent/fixed-term contracts*

The Employment Promotion Law (Beschäftigungsförderungsgesetz) of 1985 made it easier to arrange fixed-term contracts. Until the adoption of this law reasons did have to be given for the completion of fixed-term contracts. An acceptable reason for example was the need for replacement of mothers on maternity leave. Since 1985 a first completion of temporary contracts up to 18 month is possible without special reasons to be given. This regulation was first limited to 1990 and then to 1995. After 1995 it was extended until the year 2000. In 1996 the limit for fixed-term contracts was extended to 24 months. Fixed-term contracts now can be concluded for shorter periods and can be prolonged three times. These changes, which step-by-step made fixed-term contracts easier to conclude, were meant to increase labour demand by making the labour market more flexible. The unions fear that this kind of labour market flexibility goes at the expense of permanent jobs, i.e. that permanent jobs will be substituted by fixed-term jobs. In this case the effect of the German dismissal law and last but not least the job security in Germany would be undermined.

According to the Mikrozensus there were around 1.6 million fixed-term contracts in April 1995 in western and 0.6 million in eastern Germany (see Table 1.2.3.6). Fixed-term contracts have grown by around 50%. Their share in total employment<sup>1</sup> was 6.4% in western Germany (and 11.6% in eastern Germany). Contrary to fears the 1%-point growth from 1985 to 1994 must not be interpreted that way that fixed-term jobs take place of permanent jobs. It turned out that fixed-term contracts are sensitive to cyclical fluctuations. The relatively favourable economic circumstances of 1990/91 involved a decline of fixed-term contracts in favour of permanent jobs. Then, as a consequence of the economic slowdown of the 1990s the proportion of fixed-term contracts began to rise again. Fluctuations and higher shares of fixed-term contracts were discernible for sectors of lower cyclical sensitivity like agriculture and the service sector. Around 40% of all fixed-term jobs were in the sector of other private services (lodging and catering, cleaning, consulting) and 25% were jobs for the non-market sector of territorial authorities and social insurance (state). A ero-

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<sup>1</sup> Excluding apprentices, persons in retraining or in practical training.

sion of the 'standard' labour contract has only taken place for these services sectors. Thus, the service sector did show up the most job gains so that the regarding fixed-term jobs in this sector did not take the place of permanent jobs.

Table 1.2.3.6

## Fixed-term contracts in Germany

	Western Germany						Eastern Germany		
	Apr. 85			Apr. 94			Apr. 94		
	Total 1000	Fixed-term 1000	Proportion of total %	Total 1000	Fixed-term 1000	Proportion of total %	Total 1000	Fixed-term 1000	Proportion of total %
Total	19547	1050	5,4	25086	1605	6,4	5872	717	12,2
Age									
less than 25 years	3273	336	10,3	2776	574	20,7	601	147	24,5
25- 40 years	9573	491	5,1	10692	706	6,6	2619	281	10,7
45-59 years	6253	201	3,2	11011	298	2,7	2596	283	10,9
60 years and older	447	23	5,2	607	26	4,3	58	6	10,3
Men	11642	555	4,8	14522	972	6,7	3207	373	11,6
less than 20 hours	76	24	31,7	228	75	32,9	19	5	26,3
20 hours	49	14	28,4	83	22	26,5	9		
21-35 hours	112	20	17,9	429	37	8,6	76	52	68,4
36 hours and more	11404	497	4,4	13782	838	6,1	3104	313	10,1
Women	7904	495	6,3	10564	633	6,0	2665	344	12,9
less than 20 hours	592	77	13,0	1613	155	9,6	55	11	20,0
20 hours	866	50	5,7	1045	53	5,1	77	11	14,3
21-35 hours	1169	62	5,3	1640	80	4,9	471	105	22,3
36 hours and more	5277	306	5,8	6266	345	5,5	2062	217	10,5
Sector									
Agriculture	234	22	9,2	270	23	8,5	236	57	24,2
Energy	483	12	2,5	416	9	2,2	161	21	13,0
Manufacturing	7669	294	3,8	7778	264	3,4	1124	103	9,2
Construction	1559	66	4,2	1785	73	4,1	907	80	8,8
Trade	2505	110	4,4	2975	115	3,9	607	44	7,2
Transport	920	37	4,0	1527	48	3,1	440	19	4,3
Finance, Insurance	808	26	3,2	988	33	3,3	111	6	5,4
Other priv. services	3628	356	9,8	5934	572	9,6	1419	185	13,0
Non-profit services	395	38	9,6	712	72	10,1	134	41	30,6
State	1348	91	6,7	2700	396	14,7	732	160	21,9
Employees without apprentices, persons in retraining or in practical training									
Non-profit organisations include private households									

Source: Helmut Rudolph IAB, based on Mikrozensus 1985 and Central Statistical Office, Mikrozensus 1994

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In April 1994 around 0.63 million women and 0.98 million men were fixed-term workers in western Germany. Fixed-term contracts show a correlation with the

weekly working hours. Over 30% of male part-time workers working less than 20 hours per week have temporary contracts but only 9% of those working 21 to 35 hours. The fixed-term rate for employees younger than 25 years is above average.

In eastern Germany the fixed-term contract rate is nearly twice as high as in the western Länder. This can be explained by the transformation process. In contrast to the first years of unification when the rates were also high, this indicates less the restructuring of public institutions and ownership than diverse and extensive job creation measures. Employment provided by job creation programmes is always temporary employment. Similar to western Germany fixed-term employment was most frequently for jobs in other private services, in non-profit services and in the state sector but also in agriculture and energy, water and mining. In contrast to western Germany the frequency was higher for those who worked 21-35 hours than for part-time workers working fewer hours. Similar to western Germany the number of younger people in temporary jobs was above average, but for the other age groups the proportions of temporary contracts were more even.

### *Temporary work*

The supply of temporary work by employment agencies has been in existence in Germany since 1967. It is closely regulated by law (Law on the Supply of Workers by Temporary Employment Agencies). The rental activity has to be licensed and the renting period is limited to a maximum of nine months. There must be an employment contract between the temporary help service worker and the agency. This contract is not allowed to be fixed-term for one renting period. Private temporary employment agencies are not allowed to rent temporary workers to companies of the construction sector.

Since the beginning of the 1990s there has been an annual number of around 130 thousand temporary workers in Germany. This average measured every year at the end of June, is clearly higher than in the 1980s. In 1995 nearly twice as many temporary workers were employed as in 1987 (see Chart 1.2.3.4).



Chart 1.2.3.4



### *Marginal part-time employment*

In principle persons who are gainfully employed have to be insured against the risks of unemployment, illness, need of nursing care, occupational invalidity and inability to work by the social insurance system. In addition they must contribute to the pension insurance scheme. There are exceptions from these rules. Exempted from the compulsory insurance are persons who are in marginal part-time or marginal fixed-term employment. Marginal short-time employees are not subject to the statutory unemployment insurance, health insurance, nursing care insurance and the pension scheme if the working hours are less than 15 hours a week and the monthly wage (in 1996) is less than DM 610 in western Germany and DM 520 in eastern Germany.<sup>1</sup> These wage limits are adapted annually.

<sup>1</sup> The insurance exemption is also valid if the wage gained by a job is lower than one sixth of the total individual income. Employment is also exempted from insurance contributions, independent of the amount of wages, if it is restricted to a maximum of two months.

The complicated legal regulations and the presumable 'grey areas' make it difficult to quantify the extent of marginal part-time employment. Available sources give incomplete information about the structure and extent of persons working under these kind of contracts. There are four different surveys which try to cover the subject (see Table 1.2.3.7 and Kohler, Rudolph, Spitznagel, 1996 p. 1.)

**Table 1.2.3.7**

**Marginal part-time employment in Germany according to different surveys**

	1992	1994	1992	1994	1992	1994 <sup>1)</sup>
	Germany		Western Germany		Eastern Germany	
	1000 persons					
<b>Mikrozensus</b>						
Marginal p.-t. employment	1502	1426	1434	1349	68	77
- exclusively	1152	1082	1104	1026	47	56
- second job	351	344	330	323	21	21
<b>SOEP<sup>2)</sup></b>						
Marginal p.-t. employment	3139.6	6357	2858.9	5555	280.7	802
- exclusively	1653.9	3811	1564.9	3392	89.0	419
- second job	1485.7	2546	1294.0	2163	191.7	383
<b>ISG</b>						
Marginal p.-t. employment	4453		3833		620	
- exclusively	2979		2616		363	
- second job	1474		1217		257	
<b>IAB/GfK/Ifo</b>						
Marginal p.-t. employment	3069	3878	3008	3684	61	194
<b>Notes:</b> Mikrozensus = German Labour Force Survey, SOEP = Sozioökonomisches Panel (Socio-economic panel), ISG = Institute for Social Research and Policy, IAB = Institut für Arbeitsmarkt- und Berufsforschung (Institute for Employment Research), GfK = Gesellschaft für Konsumforschung, Ifo = Ifo Institute for Economic Research.						
1) SOEP Data are for 1995.						
2) SOEP Data for the year 1992 are transformed by the IAB.						

Source: Kohler Rudolph, Spitznagel, IAB Kurzbericht Nr. 2/31.1.1996, p. 8.

- According to the Mikrozensus (a household survey) around 1.4 million persons were marginal part-time workers in 1992 and in 1994 (western Germany). This number has to be regarded as a minimum limit.
- The SOEP and the ISG surveys also comprise persons who are at the very margin of (short-term) employment. (e.g. paid neighbourly help). In 1992

around 2.9 million (SOEP) respectively 3.8 million (ISG) were marginal part-time workers.

- The range of marginal part-time workers in eastern Germany, according to the different survey results, is between 80,000 and 400,000 persons (1994).
- The SOEP and ISG results indicate growing numbers of marginal part-time employment.

The composition of persons in marginal jobs is as follows (Mikrozensus data, see Kohler, Rudolph, Spitznagel 1996 p. 4.):

- Around 75% are female employees. Nearly 86% of those are married, widowed or divorced.
- For around 70% of persons marginal work wages are an additional income. Their main income comes from other sources (e.g. pension, income of husband or wife).
- Around 14% of persons are self employed or family workers.
- Focal sectors of marginal part-time employment are agriculture, trade and (consumer) services. The importance of marginal employment in the trade sector has grown after the liberalisation of the German shop opening hours in 1996.

Marginal part-time employment which is exempted from compulsory insurance (but on the other hand does not create entitlements for benefits), was introduced to contribute to the flexibility of the labour market. It was assumed that the extent of marginal work compared with the extent of compulsory insured work could be ignored. The labour law provides equal rights for all employees independent of working-times, but in practice rights like sick pay or holiday pay are denied for marginal part-time workers. Marginal work is attractive for employees and employers from a short-term view. Most employees are insured by family relations or they are students or pensioners. Employers appreciate the saving of non-wage labour costs and the flexibility of the instrument (Friedrich-Ebert-Stiftung 1996, p. III).

There are arguments against marginal part-time work:

- Persons in jobs without liability of social insurance contributions are co-financed by contributors and tax payers.
- Employers can split up jobs into mini jobs to save wages and non-wage labour costs. Marginal employment is, in tendency, eroding the social insurance principle, a basis for the social welfare state.
- Marginal part-time employment discriminates against women. Most marginal employees are women, and employment does not create social security for their future.

The unions position is to abolish the social security exemption of marginal part-time work or at least to reduce it drastically. Employers' representatives, on the other hand, underscore the necessity of DM 610 jobs. This controversy is not at an end, but the decision of the European Court of Justice in December 1995 that marginal part-time employment does not violate against European law has weakened the unions' position.

## 1.2.4 Unemployment

### 1.2.4.1 Macro-economic situation

#### *Current situation*

Since the middle of the seventies unemployment has become one of the main problems in economic policy. In 1996 4 million people were registered as unemployed in the Federal Republic of Germany, about 2.8 million in western Germany and 1.2 million in eastern Germany (Table 1.2.4.1). This corresponds to rates of 11.5% for the total federal territory, 10.1% for the old and 16.7% for the new Länder. These rates are calculated by the Federal Employment Service method and reflect the relation between registered unemployed and the dependent civilian labour force. Using the Eurostat concept which relates unemployed persons as measured by the Labour Force Survey to the *total* labour force the value of the unemployment rate is 9.0% for Germany in 1995. Separate Eurostat values for eastern and western Germany are not available.

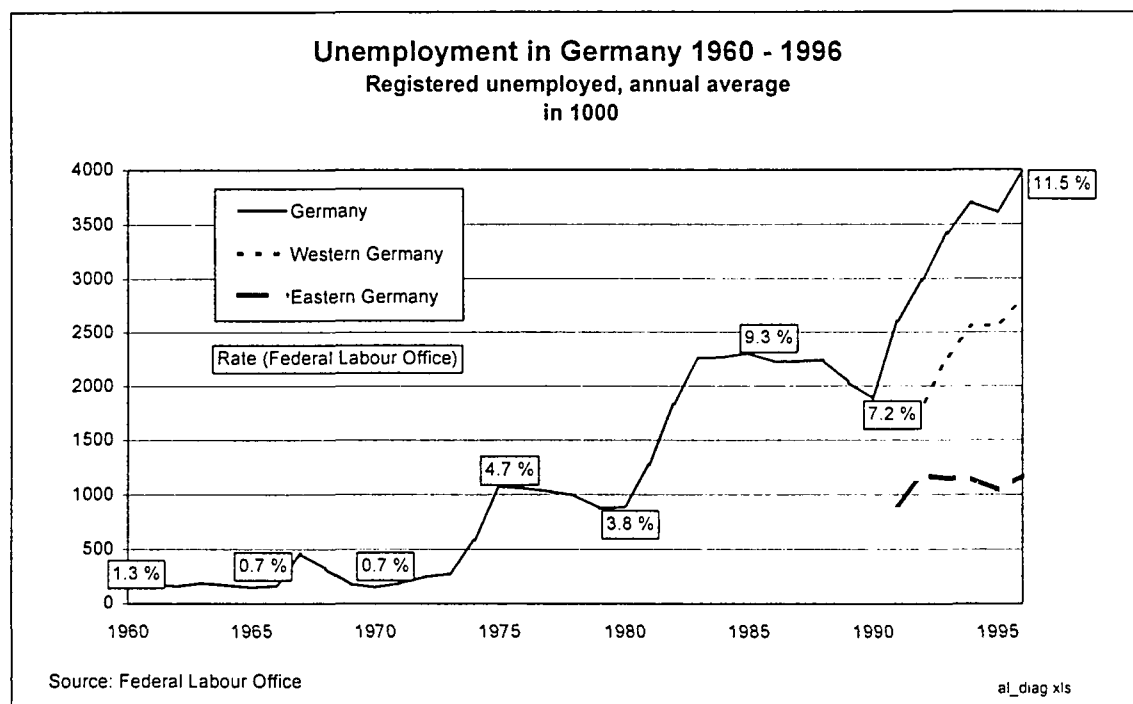
**Table 1.2.4.1**

#### Unemployment in Germany 1960 - 1996

	Germany			Western Germany		Eastern Germany	
	Federal Employment Service		Eurostat	Federal Employment Service			
	1000 <sup>1)</sup>	% rate <sup>2)</sup>	% rate <sup>3)</sup>	1000	% rate	1000	% rate
1960				271	1.3		
1965				147	0.7		
1970				149	0.7		
1975				1074	4.7		
1980				889	3.8		
1985				2304	9.3		
1986				2228	9.0		
1987				2229	8.9		
1988				2242	8.7		
1989				2038	7.9		
1990				1883	7.2		
1991	2602	n.a.	5.6	1689	6.3	913	10.3
1992	2979	8.5	6.6	1808	6.6	1170	16.1
1993	3419	9.8	7.9	2270	8.2	1148	15.8
1994	3698	10.6	8.4	2556	9.2	1142	16.0
1995	3612	10.4	8.2	2565	9.3	1047	14.9
1996	3965	11,5	9.0	2796	10.1	1169	16,7

<sup>1)</sup> Registered unemployed, annual average  
<sup>2)</sup> Registered unemployed as percent of the dependent civilian labour force, national concept, annual average  
<sup>3)</sup> Unemployed as percent of the total labour force, national concept, 1995 estimate

Chart 1.2.4.1



### *Development 1960-1996*

While during the sixties and early seventies – except for a short cyclical slump in 1967 – full employment was prevailing with numbers of about 200,000 unemployed persons and unemployment rates of about one percent, in the last 20 years three structural breaks can be observed, each with a serious rise in unemployment (Chart 1.2.4.1). The first two breaks occurred in the aftermath of the two oil price shocks in 1973 and 1981, each time strengthened by heavy revaluations of the D-Mark and high wage settlements, with a rise in unemployment to about 1 million in the second half of the seventies and more than 2.2 million in the mid-eighties. The peaks were reached in 1975 with nearly 1.1 million people unemployed (4.7%) and in 1985 with 2.3 million (9.3%). Despite short declines in the late seventies and late eighties the phenomenon of mass unemployment had become persistent. After 1987, in the course of German unification and the preparation and completion of the Single European Market unemployment decreased in western Germany significantly. However, after the German unification in 1990 the third rise in the level of unemployment began. The number of unemployed people increased from less than 2 million to a level of 4.0 million in 1996 (11.5%). Of course a substantial part of this development was to be attributed to the transition of the former GDR economy, which

brought a burden of more than 1 million registered unemployed, about 15% of the new federal states' civilian labour force. But in the course of the following recession unemployment grew in western Germany from 1.7 million in 1991 (6.3%) to nearly 2.8 million or 10.1% in 1996.

The proportion of eastern Germany in total German unemployment dropped from 39% in 1992 to 29% in 1996. This is still higher than the share in the total labour force (19.4%) but indicates a gradual approximation of the eastern and western economic development and labour market structures.

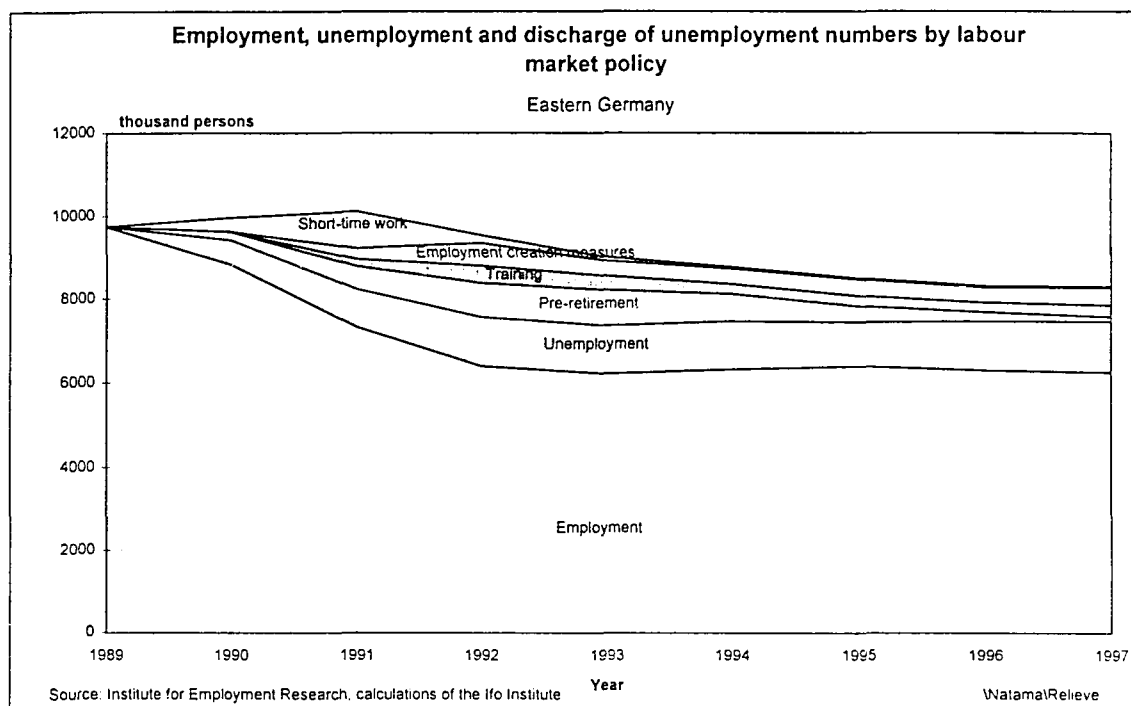
#### *Registered and hidden unemployment*

Looking at hidden unemployment in addition, the values are markedly higher (Table 1.2.4.2). The German Council of Economic Advisers calculates the number of jobless persons by including short-time workers, people in job-creation schemes, persons in public training or retraining courses, recipients of early retirement pension etc. This leads to an amount of more than 5.1 million jobless people in Germany in 1995, 3.1 million of them in the west and 2 million in the east. Adding the discouraged workers (not or no more registered job-seekers and people who would offer their labour if there were better conditions in the labour market), which the Federal Employment Service estimates to nearly 1.9 million (1.6 million west, 0.27 million east), the total number of jobless people amounts to about 7 million in Germany in 1995, among them 4.7 million in the western and 2.3 million in the eastern Länder (Federal Employment Service 1995, pp.27, 123). This yields a jobless rate of 20% for Germany, 17% for western and 33% for eastern Germany.

A closer look at the extent of job creation schemes, further education measures and early retirement practice in eastern Germany indicates that the rate of registered unemployment especially for this region is markedly underestimated. Up to around two million employees annually have been supported by employment and labour supply reducing measures. After the monetary and economic union short-time working was the main instrument of labour market policy, then labour supply was reduced by pre-retirement schemes. In 1993 around 850,000 persons were supported by pre-retirement regulations. Parallel job creation programmes and further training and retraining programmes were extended. These

measures moved to the centre of labour market policy when short-time work and pre-retirement schemes were reduced (Chart 1.2.4.2).

**Chart 1.2.4.2**



**Table 1.2.4.2**

**Registered and hidden unemployment 1995**

Average values<sup>1)</sup>

	Germany	Western Ger.	Eastern Ger.
	in 1000		
<b>Registered unemployment</b>	<b>3588</b>	<b>2556</b>	<b>1032</b>
Short-time work <sup>2)</sup>	81	44	37
Job-creation schemes	384	72	312
Further education, retraining (full time)	436	192	244
Benefit recipients (§ 105 AFG <sup>3)</sup> )	244	207	37
Early retirement, old-age transitional pension	370	3	367
<b>Total Unemployment</b>	<b>5103</b>	<b>3074</b>	<b>2029</b>
Discouraged workers <sup>4)</sup>	1870	1600	270
<b>Registered and hidden unemployment</b>	<b>6973</b>	<b>4674</b>	<b>2299</b>

<sup>1)</sup> Calculated from rounded quarterly values, IV 1995 estimate  
<sup>2)</sup> Number of short-time workers multiplied by their average loss of working time  
<sup>3)</sup> Based on § 105 AFG (Labour Promotion Law) benefits are given to unemployed workers aged 58 and over without realistic chances of reemployment  
<sup>4)</sup> Unregistered job-seekers and people who would offer their labour in the case of better labour market conditions

Sources: Council of Economic Advisers, Federal Employment Service.

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### 1.2.4.2 Unemployment by different structural characteristics

#### *Unemployment by gender*

In Germany in 1995 almost exactly half the unemployed persons were women (Table 1.2.4.3). The share of female unemployment in eastern Germany is markedly higher (63.7%) than in western Germany (44.1%). Since 1992 the female proportion has slightly declined for both eastern and western Germany.

This observation is confirmed by the unemployment rates by gender (Chart 1.2.4.3). In 1996 the male unemployment rate in western Germany was almost equal to the female unemployment rate (10.4% and 9.9%). By contrast, the rate for eastern women was significantly higher than the rate for men (19.9% and 13.7%). Female unemployment rates were twice the corresponding value for western Germany. This difference is mainly caused by the poorer job outlook and the higher activity rates of women in the new Länder (Section 1.2).

Unemployment rates for men and women have converged continuously since 1989. While the (dependent) male working population was obviously less affected by labour market problems until the late eighties and both genders profited from the upswing, the recession of 1991 mainly pushed up male unemployment rates. The unemployment rate for men grew by 1.8 percentage points during the 1985 to 1996 period, while the female unemployment rate decreased by 0.5 percentage points. For the first time since 1969 unemployment rates of males aligned with the female average in 1994. Eastern German unemployment rates are converging as well, but - in contrast to the western figures - only as a result of the decrease of female rates.

While the rise of male unemployment rates in western Germany during the nineties has to be attributed to the decline of jobs in manufacturing and construction, the more favourable situation for females is due to both the better job performance in services and the increasing number of part-time jobs (Munz 1996). In eastern Germany the decline of female unemployment rates, however, is due to rising numbers of early retirement and discouragement of female workers.

Table 1.2.4.3

Unemployment by different structural characteristics<sup>1)</sup>

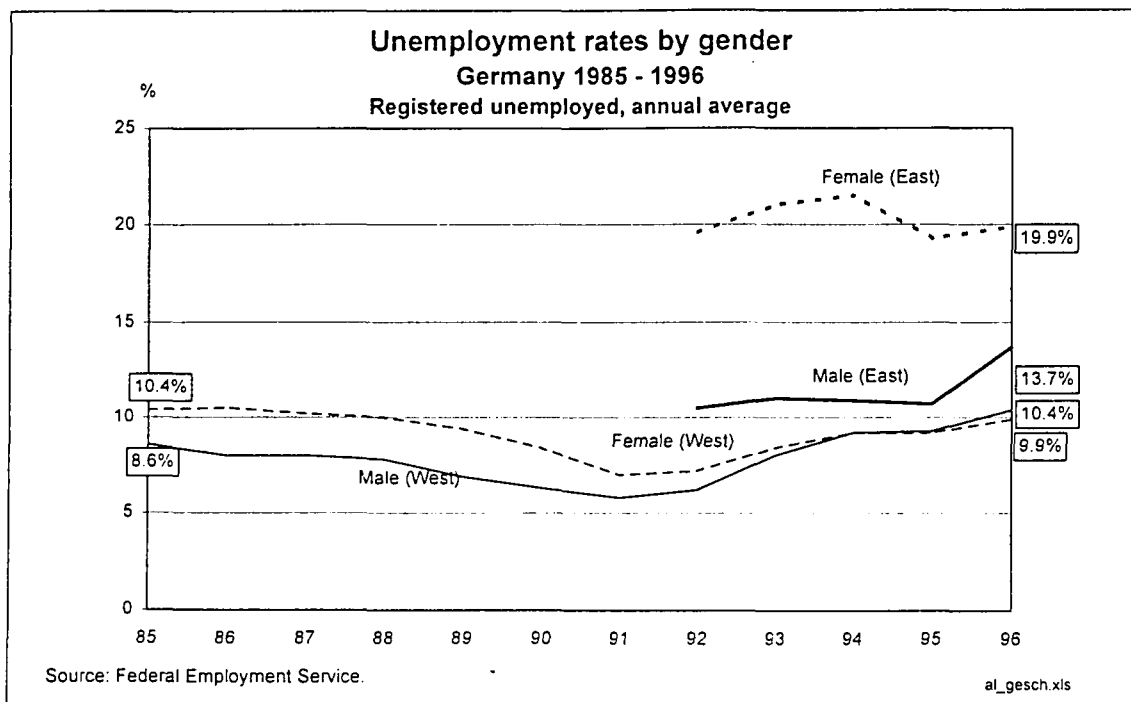
Germany 1992 - 1995, end of September

Percent of total

	Germany	Western Germany				Eastern Germany			
	1995	1995	1994	1993	1992	1995	1994	1993	1992
<b>Total</b>	100	100	100	100	100	100	100	100	100
<b>Gender</b>									
Male	50.1	55.9	56.1	55.5	53.4	36.3	33.1	34.6	35.3
Female	49.9	44.1	43.9	44.5	46.6	63.7	66.9	65.4	64.7
<b>Age</b>									
15-24	12.4	13.0	13.3	14.1	14.8	11.5	11.3	11.7	12.4
25-34	24.9	24.8	26.1	27.9	27.2	24.9	26.6	27.7	28.6
35-44	21.7	20.4	20.3	20.0	19.0	24.8	25.1	25.6	24.9
45-54	20.0	18.8	19.0	18.2	18.5	22.7	24.7	27.4	28.4
55-65	21.0	22.9	21.2	19.8	20.5	16.4	12.4	7.6	4.5
- among them 55 - 59	18.2	19.3	17.7	16.1	16.2	15.5	11.5	7.0	4.0
<b>Vocational Training</b>									
Without vocational training	39.0	46.5	46.3	46.5	47.7	21.0	20.5	23.2	23.8
In-firm training	49.4	42.2	42.4	42.1	40.8	66.6	66.9	64.0	64.1
Specialised vocational school	5.7	4.4	4.9	5.0	4.9	7.7	8.1	8.3	n.a.
Higher education (non-univ.)	1.7	2.0	2.0	2.0	1.9	0.9	0.8	0.8	n.a.
University/higher education	4.2	4.3	4.3	4.4	4.6	3.7	3.7	3.7	3.6
<b>Occup. status/skill level</b>									
Unskilled blue-collar worker	39.6	42.3	42.8	43.9	44.7	33.0	31.4	32.4	34.3
- with vocational training	9.1	6.4	6.8	7.3	7.1	15.8	14.9	14.6	15.6
Skilled blue-collar worker	24.0	19.9	20.2	20.4	19.6	33.8	34.3	35.0	35.7
- without vocational training	1.6	1.7	1.8	1.7	1.6	1.4	1.6	2.8	2.4
Low level salaried employees	14.4	15.7	15.1	14.0	13.8	11.5	12.1	14.2	15.6
- with vocational training	8.1	7.7	7.5	6.8	6.4	9.2	10.0	11.9	13.3
High level salaried employees	22.0	22.2	21.9	21.7	22.0	21.8	22.2	18.3	14.4
- without vocational training	0.7	0.9	0.9	0.9	1.0	0.1	0.2	0.2	0.3
<b>Nationality</b>									
German citizens	n.a.	83.4	84.0	84.7	85.6	n.a.	n.a.	n.a.	n.a.
Non citizens	n.a.	16.6	16.0	15.3	14.4	n.a.	n.a.	n.a.	n.a.
<b>Unemployed since</b>									
less than 3 month	31.9	32.3	31.1	34.5	37.8	30.9	27.0	29.2	30.8
3 to 6 month	15.9	15.1	15.7	17.7	17.3	17.9	14.7	17.3	15.7
6 to 12 month	20.2	19.4	20.7	21.8	18.3	22.4	23.6	22.8	29.1
12 to 24 month	16.6	17.0	19.3	14.5	13.4	15.4	20.0	20.7	19.5
more than 24 month	15.4	16.3	13.2	11.4	13.2	13.4	14.7	10.1	4.9

<sup>1)</sup> Registered unemployed, national concept

Chart 1.2.4.3



### *Unemployment by age*

As regards the share in total unemployment, the middle age groups between 25 and 55 seem to bear the heaviest burden. 67% are in the middle age groups between 25 and 55, 21% were 55 years and over and 12.4% were less than 25 years of age (Table 1.2.4.3). However, the pattern changes when unemployment rates are used (Chart 1.2.4.4): In western Germany, older employees are more affected by unemployment than the middle-aged and young workers. Older workers experienced a continuous increase of unemployment rates during the eighties and were significantly touched by the employment decrease in the nineties. Taking into account the early retirement practice during the last years, the quoted figures are even underestimated. Table 1.2.4.2 indicates, 244,000 workers in 1995 were recipients of unemployment benefits based on article 105 of the Labour Law (AFG). These are benefits given to unemployed workers aged 58 and over without realistic chances of reemployment. Moreover, early retirement pensions are paid to 370,000 workers, almost exclusively in eastern Germany. Taking these figures into account, the unemployment rate of workers aged 55-65 would rise to 26% in western Germany and 58% in the eastern part. This fact clearly shows the labour market problems of employees

older than 55, especially in periods of declining labour demand: They are more likely to become redundant and their prospects of finding a new job are very low.

Until 1990 youth unemployment (younger than 25) decreased to comparatively very low rates of about 5%. In the course of the following recession, youth unemployment rates nearly doubled to a level of about 9%. Nevertheless, during this period nearly all applicants were able to find a vocational training place in the dual system (Section 5.1). However, the transition to work became more difficult. One of six leavers of the dual system registered as unemployed in 1993, while it was just one of nine in 1990 (Berufsbildungsbericht 1995, pp.101,102). The cyclical development affected unemployment in the age groups between 25 and 54 years less dramatically: In 1995 unemployment rates were slightly lower than the average.

Unemployment rates for eastern Germany reveal a similar pattern (Chart 1.2.4.5). Youth unemployment remained below average with a rate of 14.3% in 1994. In the 55-65 age group about a quarter of the labour force covered by social security was registered as unemployed (25.1%).

Chart 1.2.4.4

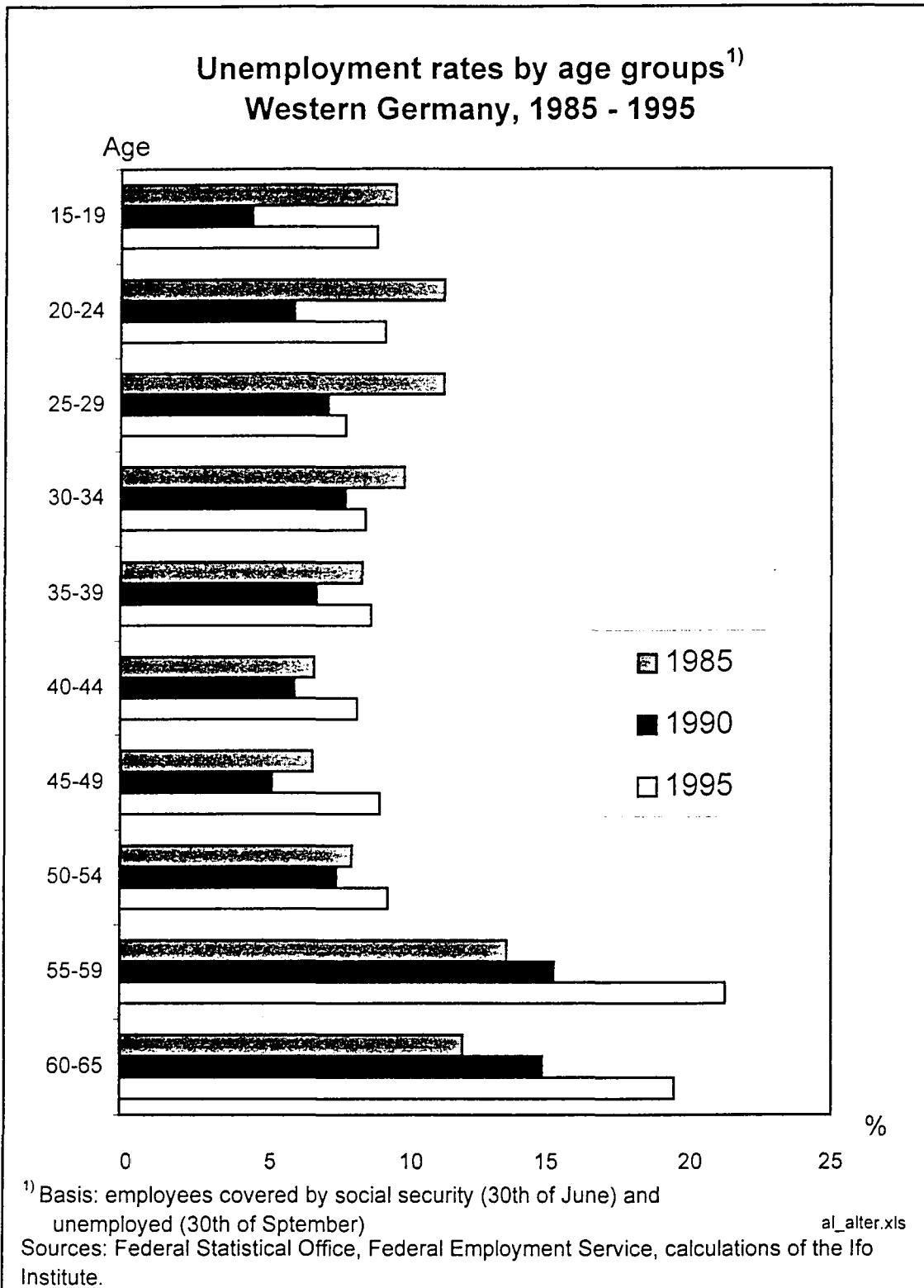
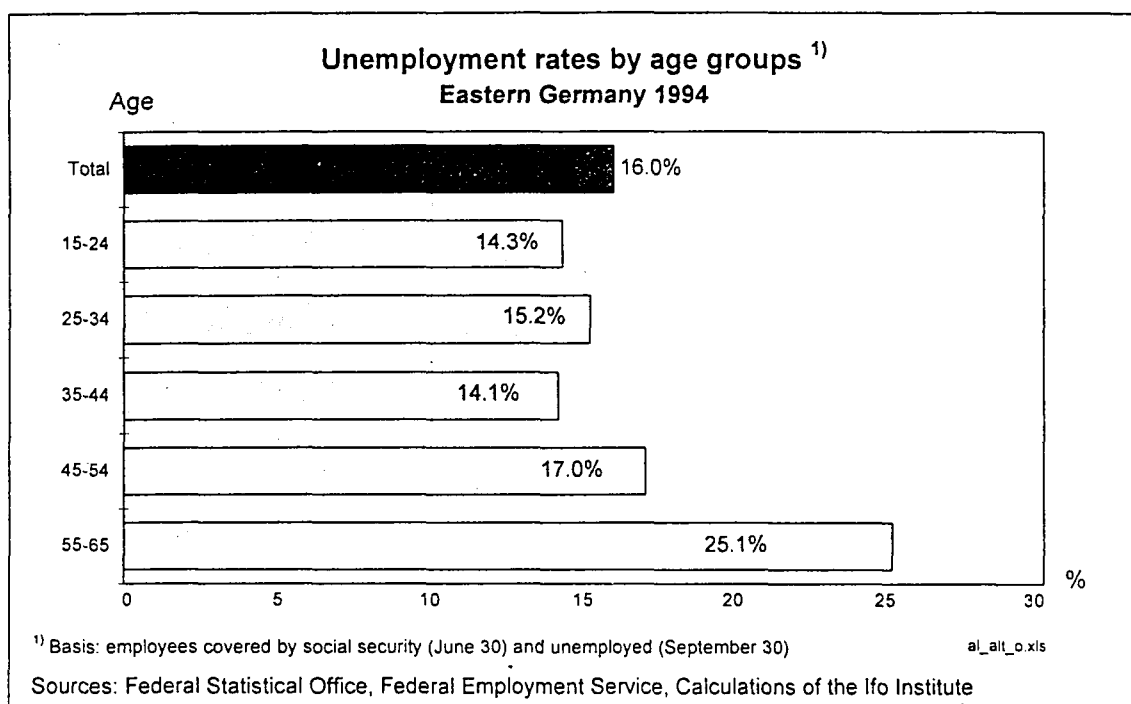


Chart 1.2.4.5

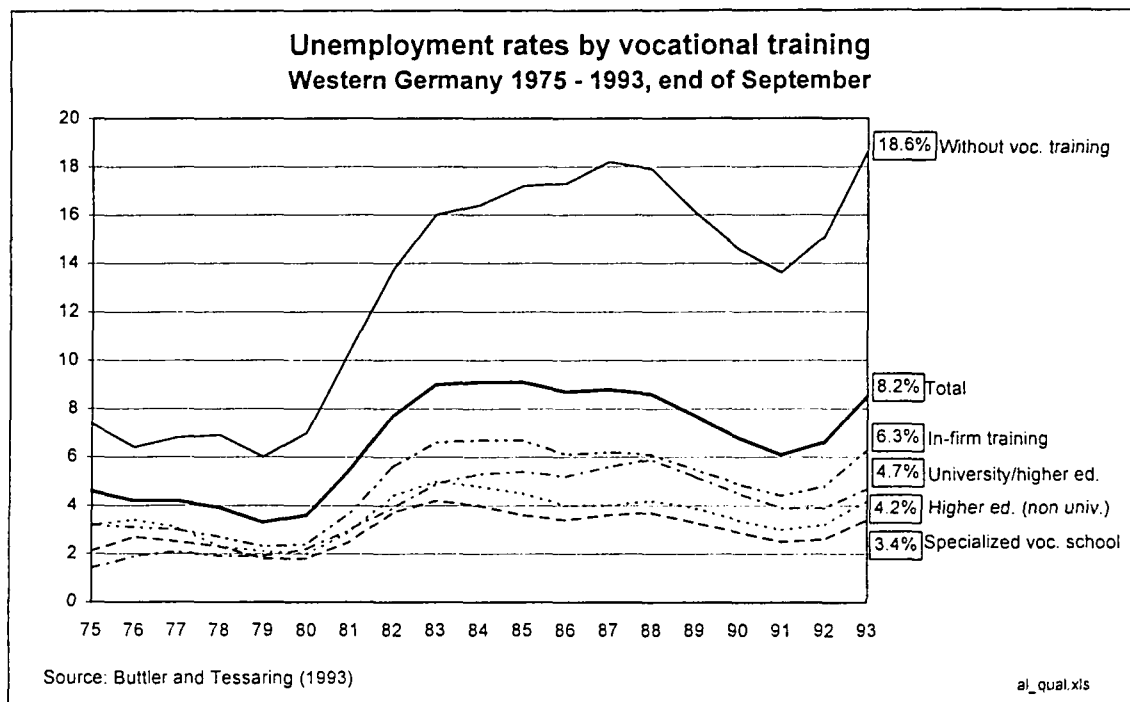


### *Unemployment by level of vocational training*

In 1995 in Germany 39% of the unemployed were people without any vocational training (Table 1.2.4.3). 50% completed in-firm training, mainly apprenticeship training by the dual system, while the specialized vocational school-leavers and those with higher education (*Fachhochschule* and university) show a comparatively low representation (5.9%). In general the unemployed have a lower qualification profile than the total labour force.

Most importantly, there is a large difference between eastern and western shares of unemployed without vocational training. The figure of untrained among the unemployed in western Germany (46.5%) is more than twice the value in the east (21.0%). This is explained by the obligation to attend formal training courses in the former German Democratic Republic. The rate of persons without any vocational training in the new Länder was only 10% in 1995, in contrast to 24% in the west (Source: Federal Employment Service).

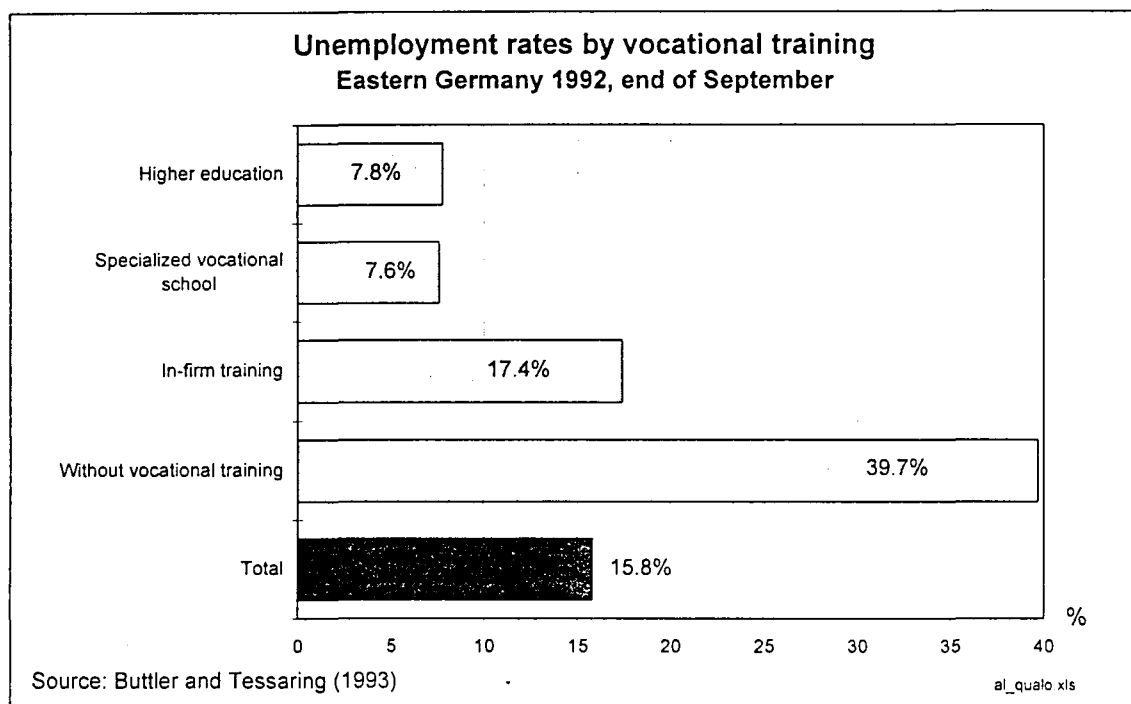
Chart 1.2.4.6



The high unemployment risk of persons without formal qualification compared to qualified workers becomes evident through unemployment rates (Chart 1.2.4.6 and Chart 1.2.4.7). In 1993 the unemployment rate for west Germans without vocational training amounted to 18.6%, while the rates for educated and especially highly educated (dependent) workers were markedly lower than the total unemployment rate (6.3% for in-firm trained and about 4.5% for highly educated persons). In eastern Germany a share of almost 40% of the untrained active labour force was registered as unemployed in 1992. Moreover, a high rate for persons with in-firm training (17.4%) could be observed in the new Länder.

In the course of the recession in western Germany during the eighties, unemployment rates for workers without vocational training were rising from a level of 6% to more than 18% in 1987, while total unemployment increased from about 4% to 9% during that period. The labour market situation for untrained persons eased in the following upswing, however, and today this group faces a higher unemployment level than ever before.

Chart 1.2.4.7



Thus the gap of job risks between unskilled and skilled workers has significantly widened during the past decade. Due to the increasing international competition and the structural change from production to service and information, workers with low formal qualification are comparatively more threatened by dismissals and do not have the skills profile required by new jobs. The higher total unemployment the more serious these problems are. The relative layoff probability for disadvantaged groups rises in general and many of the highly qualified workers offer their labour in lower segments of the labour market which strengthens the competition for the less educated. Moreover, the average job duration of less skilled workers is significantly lower than for skilled workers. Thus labour turnover and unemployment rates are higher.

#### *Unemployment by occupational status and skill levels*

In Germany blue-collar workers are more affected by unemployment than white-collar workers. In 1995 63.6% of the unemployed were skilled and unskilled blue-collar workers and 36.4% high and low level salaried employees (Table 1.2.4.3). The corresponding unemployment rates in 1996 were 15.6% and 9.0% respectively (Table 1.2.4.4).



**Table 1.2.4.4****Unemployment rates by occupational status 1996<sup>1)</sup>**

in %

	Germany	Western Germany	Eastern Germany
Blue-collar workers	15.6	14.4	19.9
Salaried employees	9.0	7.9	13.7
<sup>1)</sup> Basis: employees covered by social security (30 <sup>th</sup> of June) and registered unemployed (30 <sup>th</sup> of September)			

Sources: Federal Statistical Office, Federal Employment Service, calculations of the Ifo Institute.

These markedly lower figures for salaried employees can be explained by two factors: Salaried employees hold fewer jobs in the primary and secondary sector (west: 26% compared to 62% within the blue-collar-group, east: 14% compared to 34%) and on average dispose of higher formal qualifications. For example in western Germany the share of salaried employees without any vocational training among the school-leavers of *Haupt- and Realschule* amounts to 12% compared to 39% within the corresponding blue-collar group.

Unskilled blue-collar workers make up a larger part of total unemployment (39.6%) than skilled blue-collar workers (24.0%). By contrast, among the white-collar workers the share of the low level salaried employees 14.4% (8.1% with vocational training), while the senior white-collar workers make up 22%. If we define unskilled blue collar-workers and low level salaried employees as unskilled and the other groups as skilled, the skill level profile of unemployment becomes 54% unskilled and 46% skilled.

*Unemployment by nationality*

In 1995 83.4% of the registered unemployed in western Germany were German citizens, 16.6% non-citizens (Table 1.2.4.3). The corresponding unemployment rates are 9.3% for Germans and 16.6% for non-citizens. These figures show the problems non-citizens are confronted with in the German labour market at present. Besides possible language obstacles they have, on average, lower schooling and vocational training levels. Partly for this reason, they are employed in agriculture and manufacturing rather than in services. In general, like

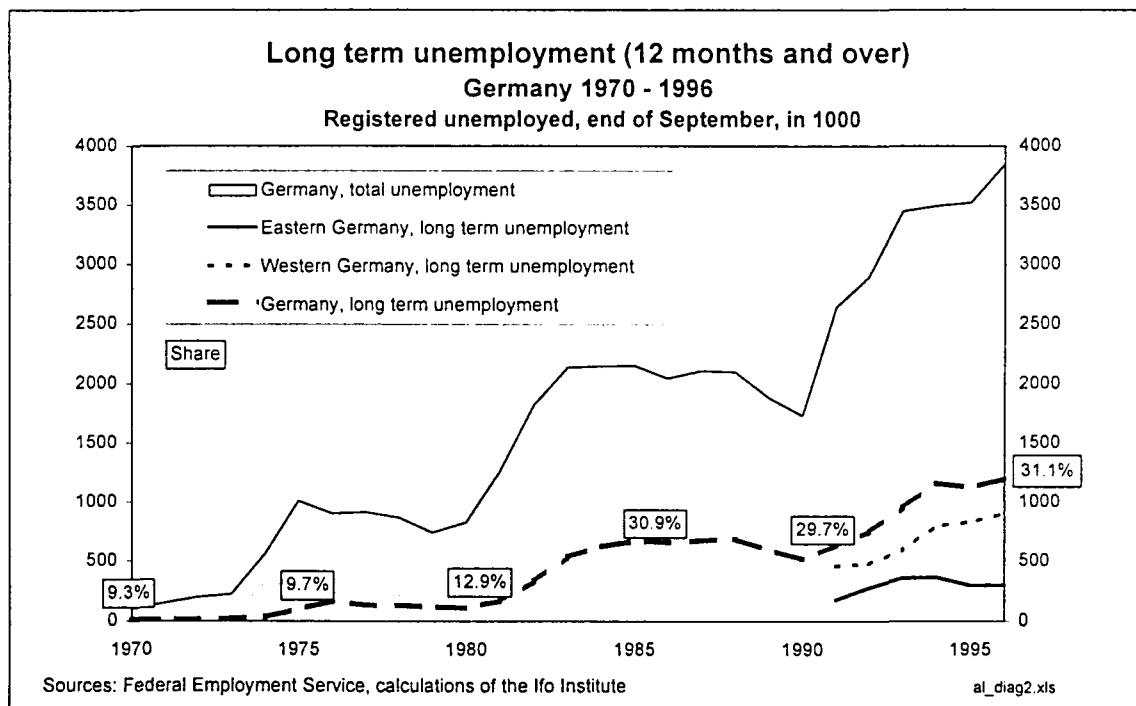
all less skilled groups, they are confronted with a higher possibility of dismissal as well as lower recruitment opportunities.

### *Duration of unemployment and long-term unemployment*

In 1995 31.9% of the unemployed persons in Germany were jobless less than three months, 47.8% less than 6 months and 68% less than one year (Table 1.2.4.3). The remaining 32% were without a job for more than one year (15.4% for more than 2 years). The average duration of unemployment in 1995 amounted to 30 weeks (Federal Employment Service 1995, pp.38, 133).

Regarding the recent development for western Germany from 1991 to 1996, there was a decline in the proportion of short-term unemployment while the share of long-term unemployed workers increased (and Chart 1.2.4.8).

**Chart 1.2.4.8**



Long-term unemployment tends to be a cumulation of personal disadvantages:

- Long-term unemployment is mainly a problem of older persons. About one half of the long-term unemployed are 50 or more years old. Early retirement has helped to keep the share at that level.
- More than one third of the long-term unemployed are affected by health restrictions.

The average duration of unemployment for persons older than 45 years with health restrictions, and without vocational training is 60 weeks. This value is twice as high as for the 'normal' unemployed. The problems for women with these characteristics are even greater.

It is to be noted that using the calculation method of the Federal Employment Service short interruptions of unemployment by temporary employment or training courses lead to a new beginning of the unemployment period. Not considering these facts as termination of unemployment, the shares of long term unemployment are estimated substantially higher. Eurostat calculate values which are about 10 percentage points higher than the numbers presented in this section (Rudolph 1994, p.189).

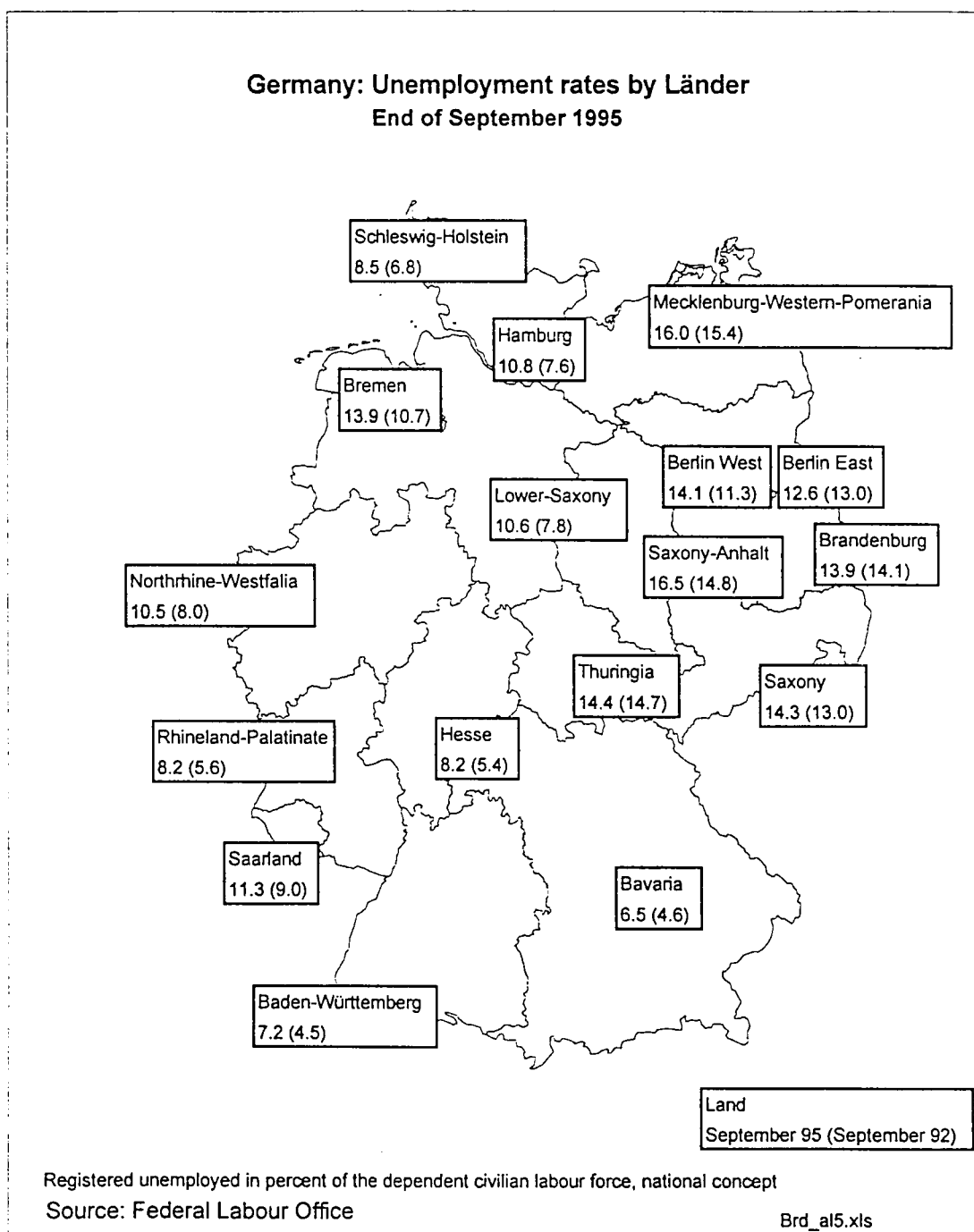
#### *Regional variations of unemployment*

There are two obvious differences in the regional distribution of unemployment in 1995. From the north to the south and from the east to the west (Chart 1.2.4.9). Unemployment rates were lowest in Bavaria (6.5%), Baden-Württemberg (7.2%), Hesse and Rhineland-Palatinate (each 8.2%); the highest rates were found in the new Länder, especially in Saxony-Anhalt with 16.5% and Mecklenburg-Western-Pomerania with 16%, in Berlin-West with 14.1% and in Bremen with 13.9%. North Rhine-Westfalia and Saarland with 10.5 and 11.3% show unemployment rates higher than the middle value in the west (9.3%) but similar to the national average (10.4%).

These figures indicate the structural problems of the northern regions, especially in the metal industry, shipbuilding and mining. The high unemployment rates in eastern Germany reflect the process of transition from a planned economy to competitive market structures.

The east-west difference has abated since 1992. However, this is the result of strongly increasing unemployment rates in the old Länder rather than of the average, slightly diminishing unemployment in the east. By contrast the north-south difference has not changed. The rates in both parts increased by about the same extent.

Chart 1.2.4.9



### 1.2.4.3 Structural unemployment

The term structural unemployment is an analytical tool for approaching the phenomenon of persisting unemployment. In a narrow sense structural unemployment means excess supply in distinct segments of the labour market with simultaneous excess demand in other segments, while in the total economy the labour market might be in equilibrium. The market is not able to balance qualification-related, occupation-related or regional differences between labour demand and labour supply. This form of structural unemployment is called *mismatch unemployment*. In a broad sense structural unemployment is caused by the disability of the labour market to return to equilibrium after a shock because of institutional or behavioural barriers. It is thus related to structural change in the economy as a whole.

Common to both definitions, unemployment is not only temporary, and certain structures and inflexibilities in the labour market, or in the total economy, are not able to reduce it. It is understood as the opposite of cyclical and frictional unemployment. External shocks which might cause structural unemployment start out from an increasing labour supply, from a permanent demand gap, from the investment and innovation behaviour of the firms (rationalisation or job-creation) and - with growing importance - from new organisational strategies ('lean management', reengineering, ...), technical progress and economic globalisation.

#### *The seventies*

Germany has suffered from structural unemployment in a broad sense since the middle of the seventies. In the aftermath of the first oil crisis 1.2 million jobs were lost. This originally cyclical unemployment became structural because of the changes in cost and demand structures as a consequence of the supply shocks (for details see Section 1.2.4.1). Intensified by an increasing labour force, the persistent level of unemployment stayed at a level of about 4%. Wage policy did not adequately react to the labour market imbalance. Consequently, there was a lack of jobs for low-skilled persons but no indication for unemployment due to qualification-related mismatch (Rudolph 1994, pp.186).

### *The eighties*

After the second oil crisis in 1979 the permanent level of unemployment in the mid-eighties moved up to about 7.5%. As a result of the recession and the following upswing period, a substantial change in the structure between the economic sectors and industries took place. For example the production in mining, steel, shipbuilding and textiles decreased by about 18% to 39% from 1980 to 1989 (Rudolph 1994, p.187). At the same time the service sector share in employment grew from 50.4% in 1980 to 56.8% in 1990, while the manufacturing sector declined from 44.1 to 39.7%. This development affected the low skilled workers comparatively strongly and the traditional industrial regions in the west (Ruhrgebiet, Saarland) and at the coast. The average duration of unemployment increased from about 17 weeks in the seventies to 30 weeks in the eighties.

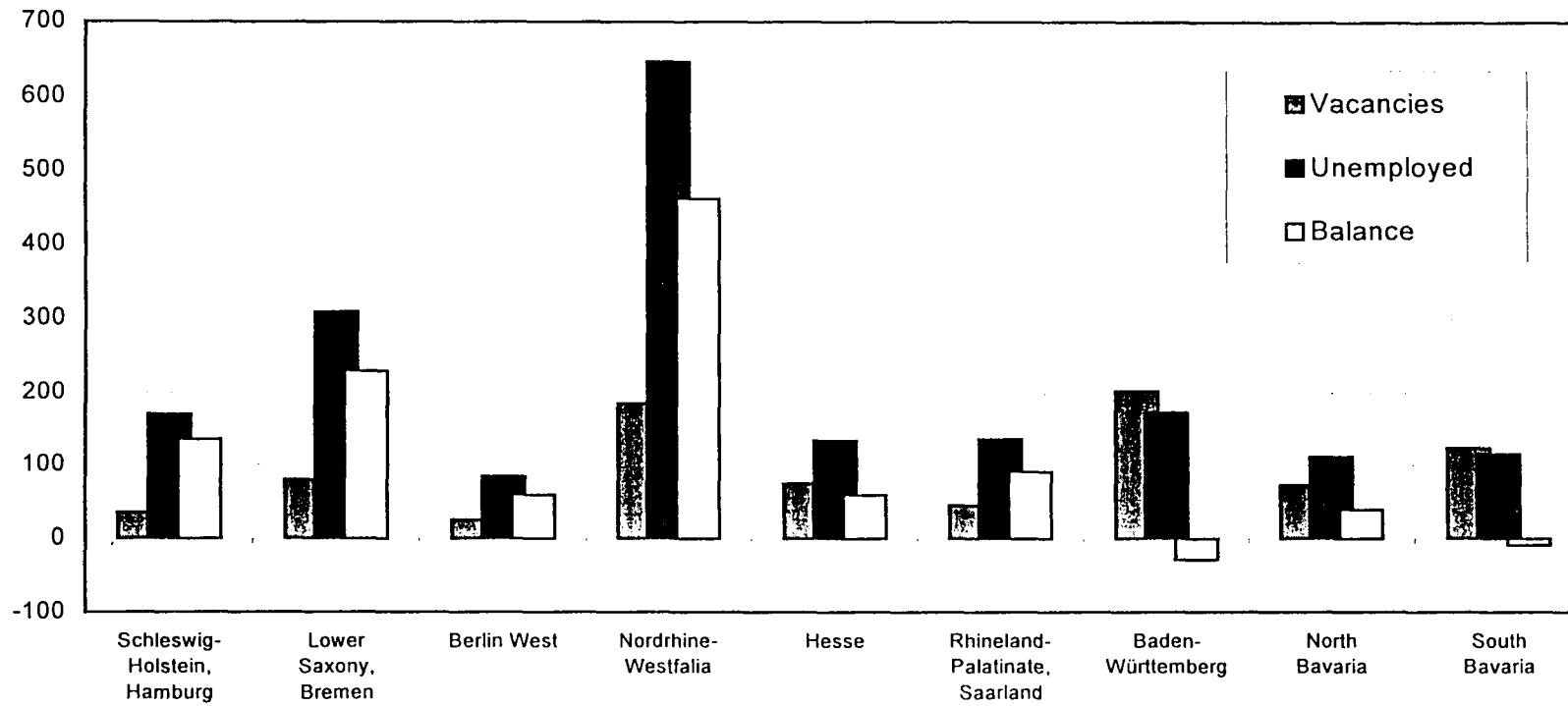
In spite of a continuing growth at the end of the decade, the economy was not able to sufficiently substitute the jobs lost in the agricultural and manufacturing sectors. Empirical evidence for the late eighties shows the following main features of structural unemployment (Vogler-Ludwig, Gürtler 1991):

- the regional mismatch which shows excess labour supply in the northern regions of Germany and slight labour shortages in the south (Chart 1.2.4.10),
- the qualification mismatch which results in high surplus labour for less skilled workers and little excess demand for senior white-collar and skilled workers (Chart 1.2.4.11, Chart 1.2.4.12), with simultaneous indications for occupational mismatch (Chart 1.2.4.11),
- the company size mismatch which provides more or less sufficient labour supply for big companies but labour shortages for small companies.

Analysing mismatch unemployment in Germany, Buttler (1991) found a range of indicators which show that it became harder during the upswing in the late eighties to match vacancies and dismissed employees. In spite of high unemployment rates the filling of vacant jobs took a comparatively long time or was even unsuccessful. According to the results this is caused by a regional, qualification-related and occupational mismatch, but also by personal disadvantages of workers like higher age, health-related restrictions or participation in job-creation measures.

Chart 1.2.4.10

### Labour market balances by regions 1989 Western Germany, end of September in 1000



Sources: Federal Employment Service, Ifo Institute.

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Chart 1.2.4.11

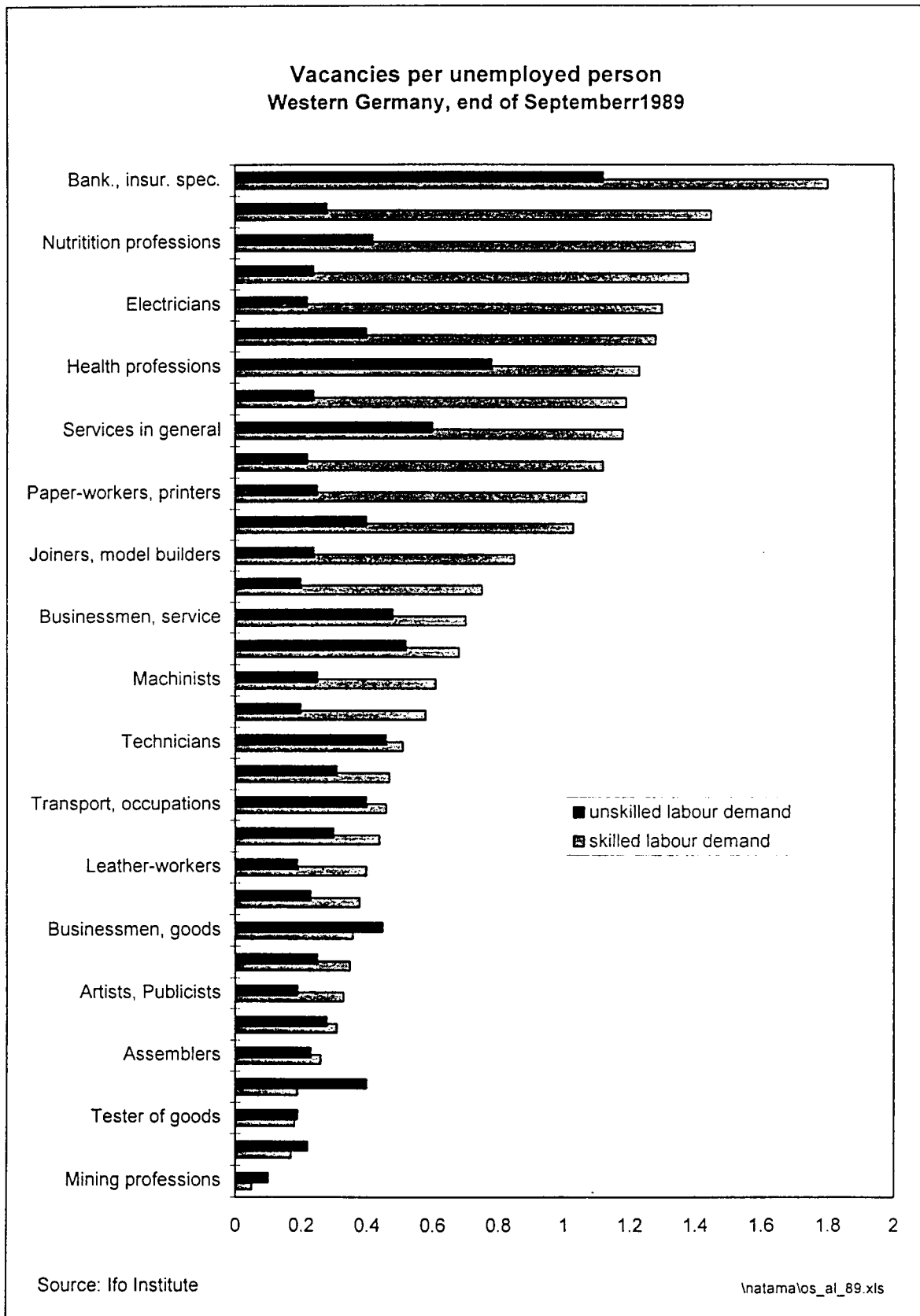
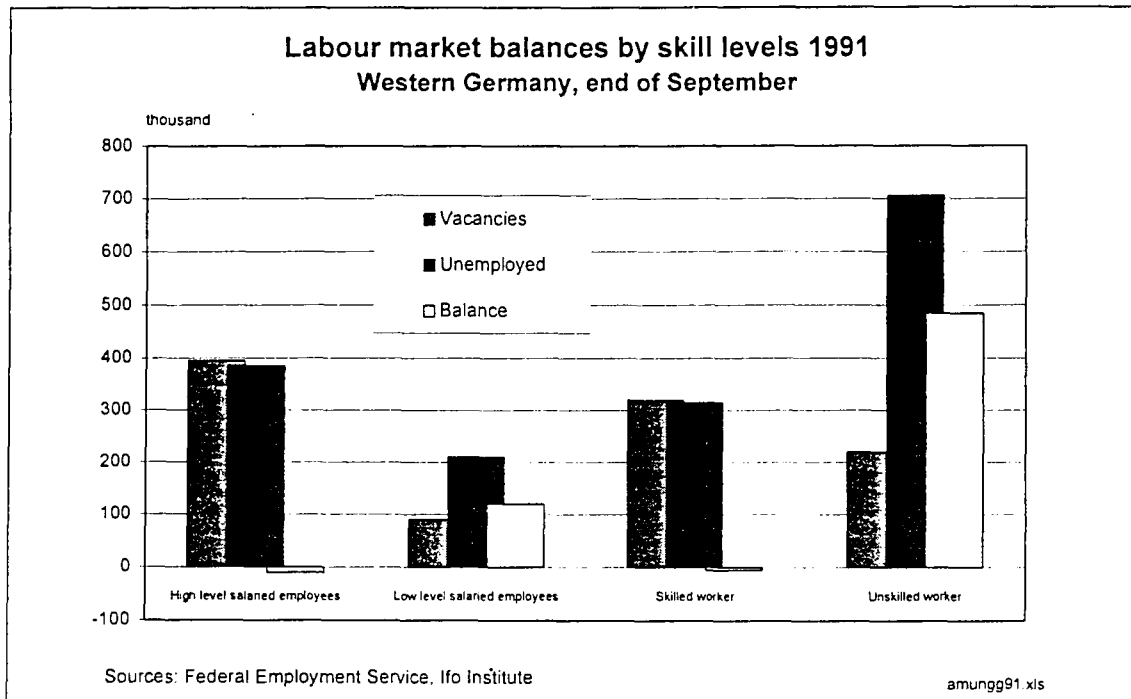




Chart 1.2.4.12



### *The nineties*

In the nineties the world-wide recession accelerated structural change. It did not only touch a few industries as in the eighties and especially unskilled workers, but the whole industrial sector and all skill-level groups. Table 1.2.4.5 shows that due to the demand slump and the increasing global competition, formerly stable industries like the car industry, machine tools industry and electrical engineering in western Germany laid off parts of their staff. Both unskilled and skilled workers like engineers and high level salaried employees were dismissed. The sectoral change continued (employment shares in 1995: 62.2% services, 35% production), while the total employment stagnated. At the same time the labour supply grew, mainly by immigrants, by 1 million to 31 million (Federal Employment Service 1995, p.27).

In eastern Germany the transformation to a market economy forced a strict reform of the production structures and an efficiency increase of the production processes. Moreover the markets with the east European trade partners collapsed due to the economic and political upheavals in those countries and the monetary change in eastern Germany. This led to an increase in the unem-

ployment rate to the level of 10%. The average duration of unemployment amounted to about 35 weeks in the east and increased up to 23 weeks in the west. Again, the growth rates of GDP were not sufficient to create enough jobs to close the renewed labour demand gap caused by structural reasons.

**Table 1.2.4.5**

**Development of employment in the 20 most strongly decreasing industries <sup>1)</sup>**  
**Western Germany 1985 - 1995**

	1991-1995	1985-1991
	absolute change in 1000	
Motor vehicles	-80.6	53.7
Precision instruments	-55.1	34.9
Stationed forces	-54.3	-20.5
Hot-rolling mills	-50.5	-37.2
Other machine producers	-49.8	34.3
Communication engineering	-45.5	37.1
Chemical basic materials	-43.6	8.9
Motor vehicle parts	-42.9	31.8
Television receivers, transmitters	-36.7	1.8
Pit-coal mining	-35.2	-38.3
Heavy-current equipment	-33.7	51.3
Department stores	-30.5	-15.9
Defence	-30.1	-0.2
Ladies' outerware	-30.0	-14.6
Printers	-26.3	30.3
Plastics manufacturing	-26.0	86.3
Building machinery producers	-25.7	18.2
Data-processing equipment	-23.2	5.4
Steel forming	-22.7	20.1
German Federal Postal Administration	-20.0	-3.2

1) Employees covered by social security

Source: Federal Employment Service.

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Looking at the skill-related and regional labour market balances for the mid-nineties and especially for 1995, there is - in contrast to the turn of the decade - no more indication for structural unemployment in a narrow sense (Chart 1.2.4.13, Chart 1.2.4.14). Even with growing structural differences in the relations between vacancies and unemployed persons for regions and skill-levels there is excess demand neither in any federal state nor in any skill level class (for occupations there are no according data available).

This result can be confirmed by the Ifo Business Survey ('Ifo Konjunkturtest'). Only about one percent of firms indicated to be restricted in production by a

lack of employees in the nineties. By further segmenting the labour market there certainly could be found some highly-qualified occupations with an excess demand, for example new professions like multimedia specialists or 'multi-qualified' executives. But - with the methods applied in this analysis - no empirical evidence for mismatch unemployment in a narrow definition for the present period can be found.

**Chart 1.2.4.13**

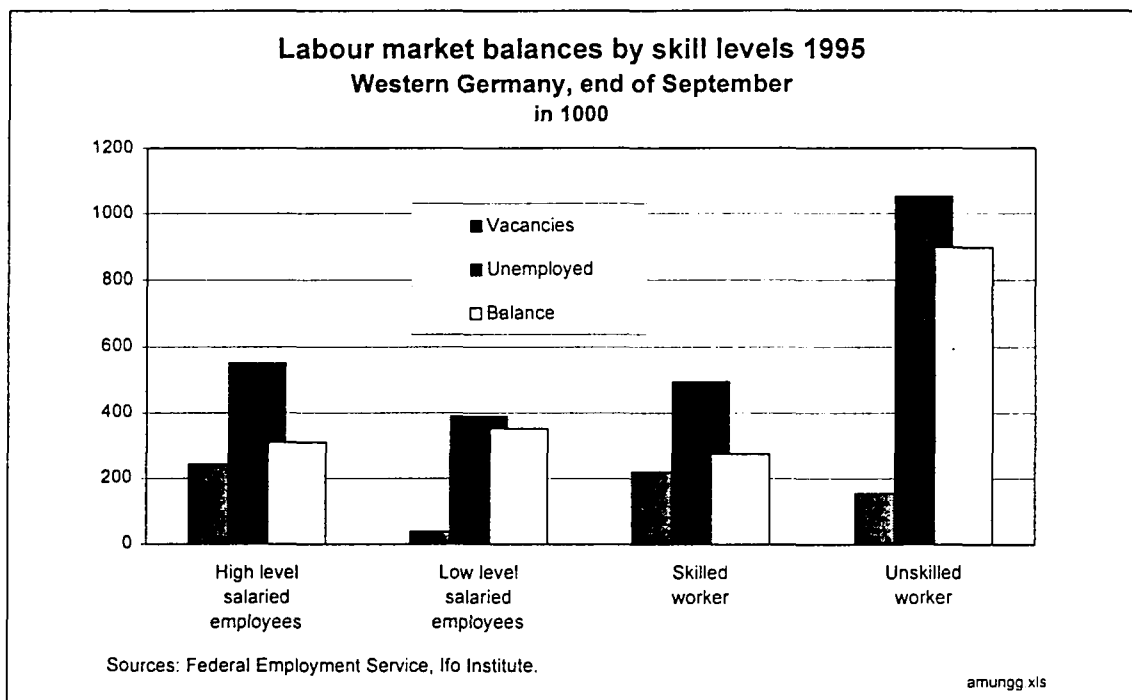
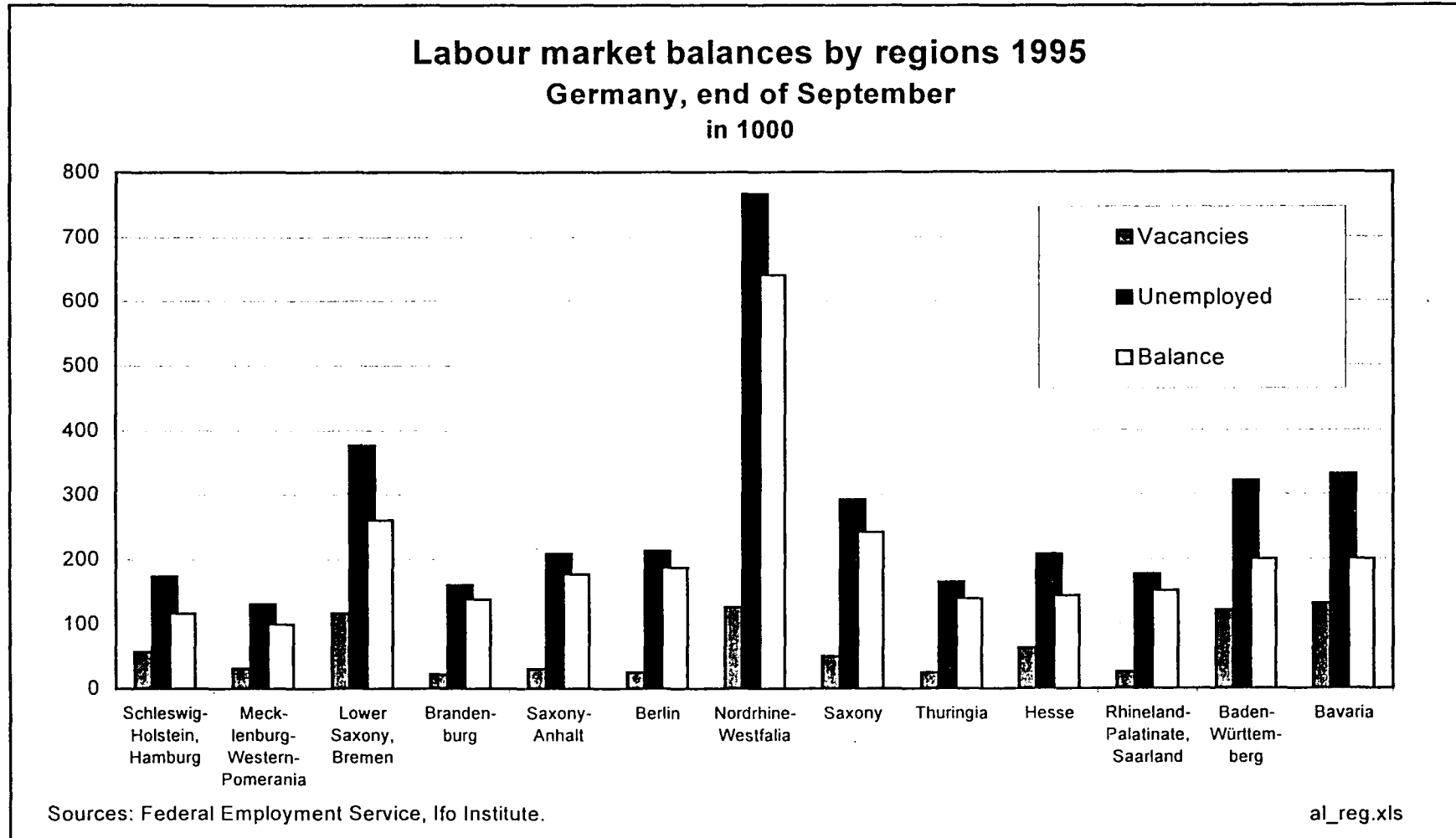


Chart 1.2.4.14



### *Numbers for structural unemployment in Germany*

Franz (1992) estimates the long-term rate of structural unemployment (in a broad sense) at 4.11% for the period 1976–1988. For the late eighties he guesstimates a rate of about 5%. Lawrence and Schulze calculated the rate of natural unemployment, which is partly used to quantify structural unemployment, for Germany in 1985 to be at a level of 5.3% (Franz 1992, p.48).

A further approximation to the rate of structural unemployment is the 'non-accelerating inflation rate of unemployment' (NAIRU), because it reflects the share of unemployment that cannot be explained by a demand gap in the markets for goods and services and so virtually cannot be reduced by expansive political measures (see Langmantel 1996, p.10). Estimates for the shifts of NAIRU from 1970 to 1996 can be found in Section 1.4.

### *Structural unemployment and the structure of unemployment*

Structural unemployment is not only a *consequence* of the structure of unemployment. It is also a *reason* for the unemployment structure and it is a phenomenon that strengthens itself. Once someone is jobless this becomes a negative screening factor for possible employers. And the higher the unemployment, the less the chances for disadvantaged groups to get new jobs. This interaction can be clearly confirmed by the empirical figures.

#### **1.2.4.4 Outlook**

In the course of a so-called 'action program for investment and jobs' the German Federal Government together with the unions and the employers' associations aims to halve unemployment in Germany by the year 2000 relative to the 1995 level. According to Langmantel (1996) this is a hard task even assuming favourable growth conditions with average rates of 2.6%. Using an econometric simulation model he calculated that the unemployment rate can decrease to 5% by 2000 if the share of taxes and contributions in gross income (dependent employment) lessens from 48% at present to 42.5%. The related shortfall in revenue should be compensated by cuts in public expenditure. This is the main

problem with this scenario: Thus public expenditure would only increase by 0.6% per year, i.e. 3.1 percentage points less than the allowed yearly growth to reach the Maastricht criterion of net new indepthness.

Regarding the phenomenon from a less formal perspective and extrapolating the current development one is even less optimistic. Growing globalisation, business reorganisation and technological change (especially information technology) cause an increasing uncoupling of growth and employment. With present cost-structures, favoured by communication facilities and a diminishing qualification gap between high and low wage countries, more and more skilled jobs are being exported as well. The global players are internationalising their sites in order to be near the markets and to decrease business risk by risk distribution. Moreover, in view of increasing competition, faster changing demand structures and shorter knowledge cycles, firms are forced to reengineer their organisations to lean and flexible units. At the same time the trend in structural change from manufacturing to service, and especially to information occupations with high qualification requirements, is continuing (Friedrich, Wiedemeyer 1994, pp.103). Considering all these trends, unemployment - especially long-term unemployment for disadvantaged groups - can be expected to remain a serious social problem and one of the main political challenges in Germany.

As a supplement to this chapter a further discussion of causes for rising unemployment since 1980 is pointed out in Section 1.4.

### 1.3 Main trends in job creation and job loss

#### *Preliminary remarks*

The essential function of labour markets is to match labour supply and demand. A good functioning labour market is characterised by a frictionless matching. The matching process itself is characterised by the search of employees or unemployed persons for a new job with establishments trying to fill vacant jobs. To keep the matching process running sufficiently, smoothly mobility is necessary to 'enable workers to get the job opportunities that will maximise their satisfaction and income, and allow employers to adjust their workforce to changing needs' (OECD 1994, p 66). Whether the job and labour turnover rates are sufficient to enable a frictionless structural change in Germany is focus of this section. Following Reynolds (1990) who proved a positive and statistically significant correlation between job turnover and employment growth, in recent years several models have been developed in an attempt to explain countercyclical movements of job turnover, the sum of gross job creation and destruction rates in Germany. Often the either acyclical or mildly procyclical fluctuation in job turnover is associated with the lower flexibility of the German labour market and the high density of employment security regulations in Germany. The costs incurred by employers in laying off workers may over time smooth the accelerations in gross job destruction occurring during downturns, thereby reducing the correlation between job turnover rates and the net employment growth rates. On the other hand, the same costs hamper job growth during an upswing. Thus, security regulations improve both job stability and profitability of human capital investment at the expense of external labour market flexibility. The resulting effects will be analysed in the following sections.

#### *Data*

Suitable datasets to shed light on the relevant questions must reveal properties of gross job flows rather than only of net changes in employment. Properties of gross job flows are able to demonstrate that within sectors simultaneous and often substantial job creation and job destruction occur (cp. Blanchflower/Burgess 1996). Furthermore, gross job flows are able to give information of the job reallocation (the sum of job creation and job destruction) by age and size of establishments.

Primarily the data used are drawn from the employment statistics register of the Federal Office of Labour (Bundesanstalt für Arbeit) and collected via the social insurance procedure introduced in 1973 that compels employers to report every year all changes that occurred in the number of workers who are subject to health or unemployment insurance or who are participating in a pension plan. This makes it possible to measure job turnover as a sum of establishment-level employment changes. The register covers more than 80% of all employees in Germany; the remaining 20% consists of civil servants and self-employed persons. The gross flows at the sector and aggregate level are constructed by using the net employment change at the establishment level. It should also be stressed that jobs are, in this context, filled positions. *Ceteris paribus*, if an individual leaves an establishment and, at the time of the statistical recording, has not yet been replaced, this unfilled job will be counted as a job loss. In other words, empirical measures of job turnover tend to overstate the actual turnover of posts, whether filled or unfilled (see Equation 1.3.1 at the end of this section). Conversely, job turnover is likely to seriously understate labour turnover; that is, the sum of gross hirings and separations over business units because a given net change at the establishment level can result from simultaneous hirings and lay-offs. The results of job turnover rates depend highly on the level of disaggregation, such as sectoral or establishment level.

#### *Job creation and job losses*

From 1982 to 1994 the net change of employment accounted for 2.3 million jobs covered by social security (excluding agriculture and public sectors). This corresponds to a growth rate of 11% (Table 1.3.1). Table 1.3.1, which records the changes for this time period, reveals that the job gains due to expanding and new establishments add up to 21.5 million and the job losses due to declining establishments or plant closures add up to 19.2 million within this period.



**Table 1.3.1**

**Employment flows at the establishment level from 1982 to 1994**  
**- western Germany -**

Flow	Primary sector	Secondary sector	Tertiary sector	Total economy
	in 1000			
Increase of employment by new establishments	140	1766	3451	5357
Decrease of employment by plant closures	-161	-1411	-2375	-3948
Increase of employment by expanding establishments	273	6342	9485	16100
Employment losses by declining establishments	-255	-7358	-7628	-15241
Net changes of employment	-3	-662	2933	2269

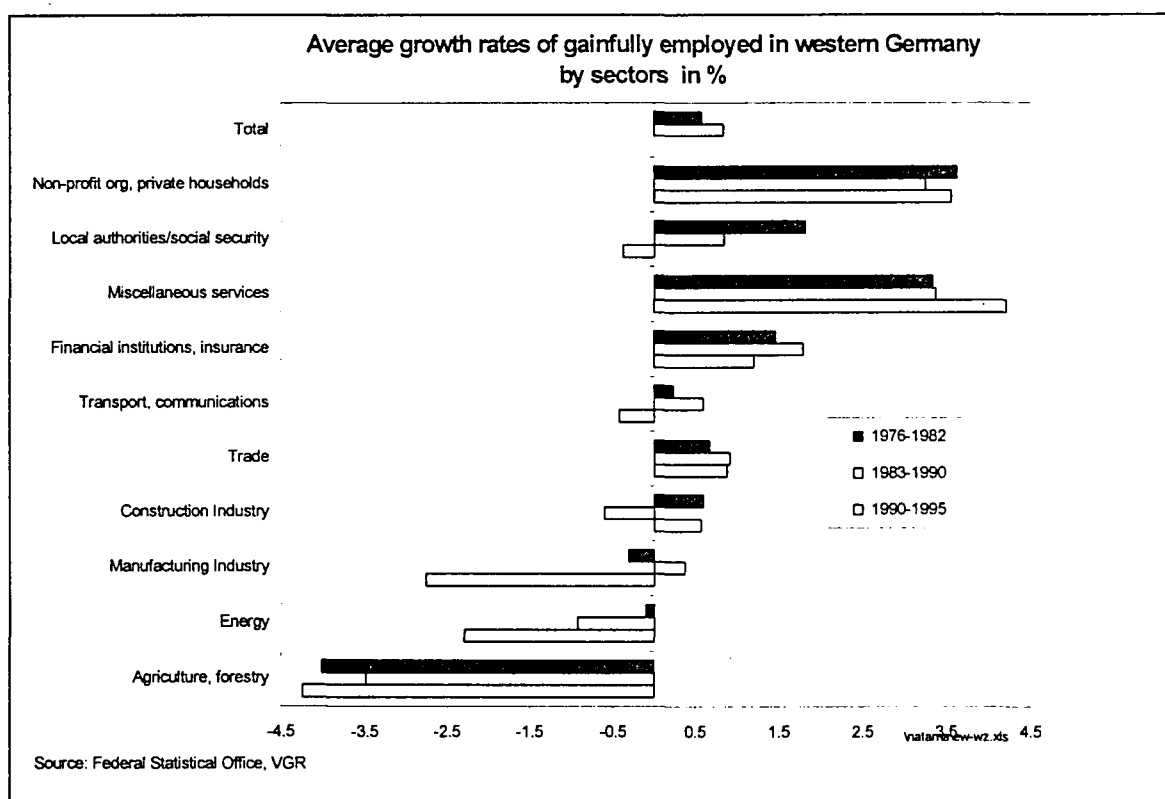
Source: IAB 1996.

The results of the analysis underline that the amount of simultaneously occurring job creation and destruction is very large. Table 1.3.1 also shows the extent to which job destruction from 1982 to 1994 was centred on manufacturing. Therefore, the figures illuminate the trend of de-industrialisation in the first place as a lack of employment compensation for employment losses by declining establishments within the goods producing sector (- 7,358,000). Unlike the secondary sector, within the tertiary sector both an increase in the gross job destruction and job creation occurred. In fact the employment flows within the tertiary sector are characterised by a surplus of new jobs both by comparing the number of jobs created by new establishments and the ones lost by plant closures as well as the number of jobs created by expanding establishments and the ones lost by declining establishments.

Reallocation of labour or jobs can also be demonstrated at the 3-digit sectoral level. Gross employment gains for employees covered by the social security system are reported in Table 1.3.2. Therefore, the 25 most largely increasing sectors out of 293 sectors in western Germany accounted for 52% gross employment increase from 1985 to 1990, and more than 70% from 1990 to 1995. Predominantly the sectors belong to the tertiary sector. From 1990 to 1995 this was particularly obvious (see Chart 1.3.1).

Altogether, from 1985 to 1990 almost 80% and from 1990 to 1995 about 60% of the gross job losses were concentrated on the 25 most strongly decreasing sectors among employees covered by social security in western Germany (Table 1.3.3). Outstanding job losses occurred in the time period from 1990 and 1995, which was a recession period. Parts of the secondary sector as well as of the public sector which have been pared down due to the public finance situation were most affected (see Chart 1.3.1).

**Chart 1.3.1**



**Table 1.3.2**

**The 25 top growth sectors in western Germany - employees covered by social security 1985 - 1995**

Sectors		Changes absolute 1985/90	Share of total employment gains in % 1985/90	Sectors	Changes absolute 1990/95	Share of total employment gains in % 1990/95
1	Other retail distribution	122792	5.25	Other retail distribution	100030	6.41
2	Wholesale trade	89332	3.82	Accountants	97398	6.25
3	Architects' offices	76100	3.25	Architects' office	93653	6.01
4	Plastics manufacturing	66196	2.83	Private hospitals	66009	4.23
5	Accountants	65042	2.78	Property administration	59108	3.79
6	Freelancing health services	56799	2.43	Non-profit hospitals	49307	3.16
7	Hospitals of regional administrative bodies	55305	2.37	Wholesale trade	49295	3.16
8	Forwarding agencies	54723	2.34	Credit institutions	49290	3.16
9	Credit institutions	54106	2.31	Commercial cleaning	48451	3.11
10	Temporary worker agencies	52993	2.27	Forwarding agencies	47548	3.05
11	Agencies	52762	2.26	Non-profit homes	46446	2.98
12	Head administration	50996	2.18	Voluntary welfare work	46267	2.97
13	Power instruments	45743	2.96	Head administration	44710	2.87
14	Motor vehicles	43642	1.87	Catering trade	39082	2.51
15	Commercial cleaning	43284	1.85	Non-profit approved schools	38428	2.46
16	Catering trade	42021	1.80	Homes	38306	2.46
17	Hostels	41825	1.79	Hospitals of reg. adm. bodies	36021	2.31
18	Food supermarkets	39587	1.69	Causal worker agencies	35209	2.26
19	Freight transport	38605	1.65	Social security	30312	1.94
20	Non-profit hospitals	36605	1.57	Forwarding agencies	26291	1.69
21	Social work	35939	1.54	Private cleaning services	24115	1.55
22	Motor vehicle parts	32630	1.40	Church, holy order	22900	1.47
23	Communication engineering	32402	1.39	Freight transport	21682	1.39
24	Private hospitals	32353	1.38	Legal advice	20514	1.32
25	Precision instruments	32232	1.38	Air-conditioning systems	20428	1.31
	Sum	1294014	55.34	Sum	1150800	72.48
	Total employment gains	2338464	100.00	Total employment gains	1559525	100.00

Source: Federal Employment Service

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Table 1.3.3

## The 25 most strongly decreasing sectors in western Germany - employees covered by social security (1985 - 1995)

Sectors	Changes absolute	Share of total employment losses in %	Sectors	Changes absolute	Share of total employment losses in %
	1985/90	1985/90		1990/95	1990/95
1 Hot-rolling mills	-32972	8.66	Motor vehicles	-70489	4.92
2 Hard coal mining	-30245	7.94	Stationed forces	-64303	4.49
3 Structural and civil engineering (w. main emphasis)	-23292	6.12	Hot-rolling mills	-54814	3.82
4 Department stores	-21315	5.60	Precision instruments	-52443	3.66
5 Agriculture	-18301	4.81	Chemical basic materials	-46940	3.27
6 German Federal Railway	-16437	4.32	Other machine producers	-45802	3.20
7 Knitting	-16328	4.29	Motor vehicle parts	-43704	3.05
8 Shoe manufacturing	-15101	3.97	Hard coal mining	-43229	3.02
9 Ladies' ware	-13330	3.50	Communication engineering	-40827	2.85
10 German federal Post	-11937	3.13	Telev. receivers, transmitters	-36546	2.55
11 Structural and civil engineering	-11054	2.90	Defence	-33444	2.33
12 Butchers	-10993	2.89	Ladies' ware	-31233	2.18
13 Shipbuilding	-10649	2.80	Electrical engineering	-29901	2.09
14 Stationed forces	-10542	2.77	Power ma	-28104	1.96
15 Maritime shipping	-8373	2.20	Data processing equipment	-27378	1.91
16 Schools of administrative regional bodies	-7029	1.85	Department stores	-25075	1.75
17 Large-scale generators	-6575	1.73	Steel deformation	-21605	1.51
18 Without details	-5776	1.52	Knitting	-21242	1.48
19 Private households	-5153	1.35	Hairdressers	-20754	1.45
20 Breweries	-4976	1.31	Textile machinery	-18735	1.31
21 Fell, pelt	-4533	1.19	Gear wheels	-18593	1.30
22 Potash and Salt mining	-4524	1.19	Large-scale generators	-18263	1.27
23 Office machinery	-4151	1.09	Building machinery	-18135	1.27
24 Mens' ware	-4100	1.08	Oth. public admin.	-17717	1.24
25 Mineral oil refining	-4068	1.07	Printing	-16892	1.18
Sum	-301754	79.24	Sum	-846168	59.04
Total employment losses	-380812	100.00	Total employment losses	-1433289	100.00

Source: Federal Employment Service

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*Net job creation by employment status*

From 1977 to 1994 part-time jobs had the highest share of the total employment growth in western Germany. In contrast the share of unpaid family workers and self-employed persons declined significantly among job creations in this period. This illustrates that job creation in the first place was given for part-time jobs among gainfully employed persons (Chart 1.3.2). The graphs in Chart 1.3.2 show the extent to which job growth was concentrated on part-time, full-time or self-employment.

Chart 1.3.2

Share of part-time, full-time or self employment growth

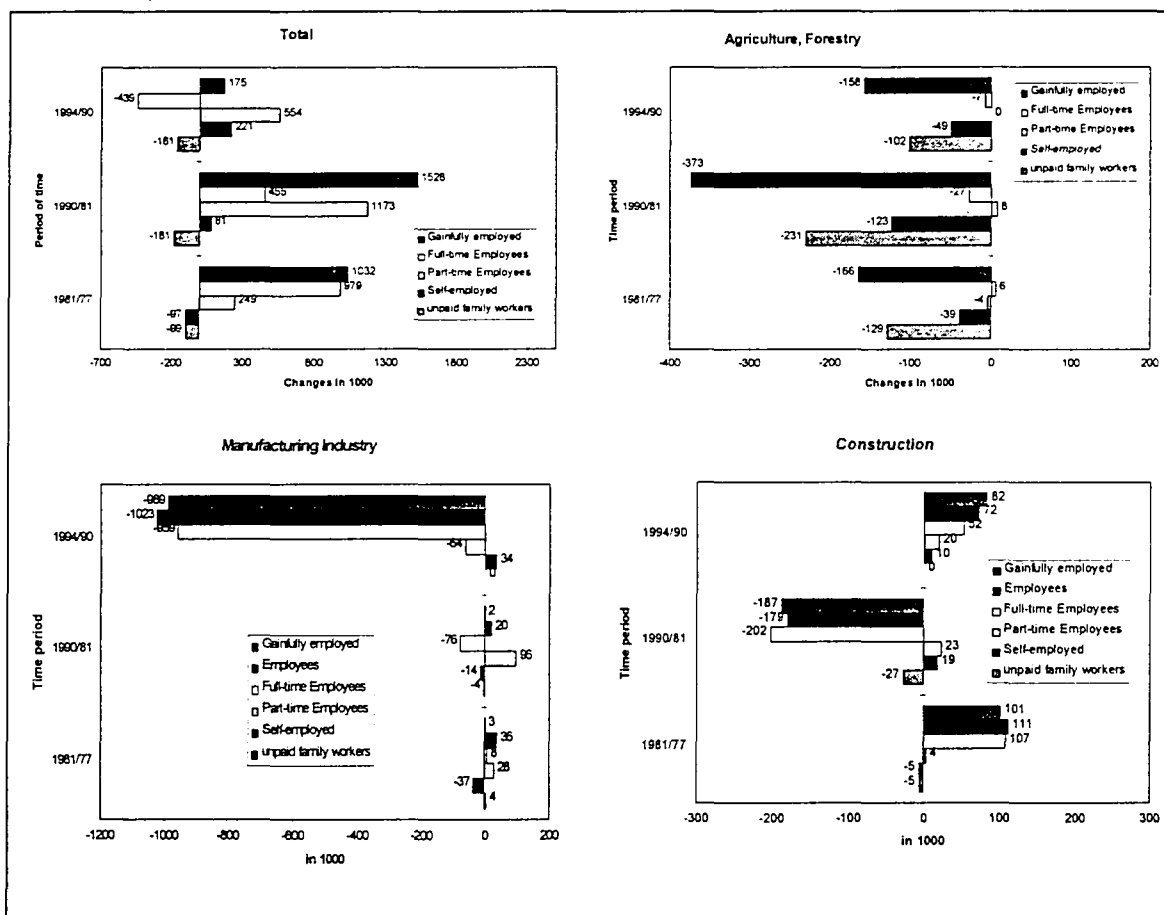
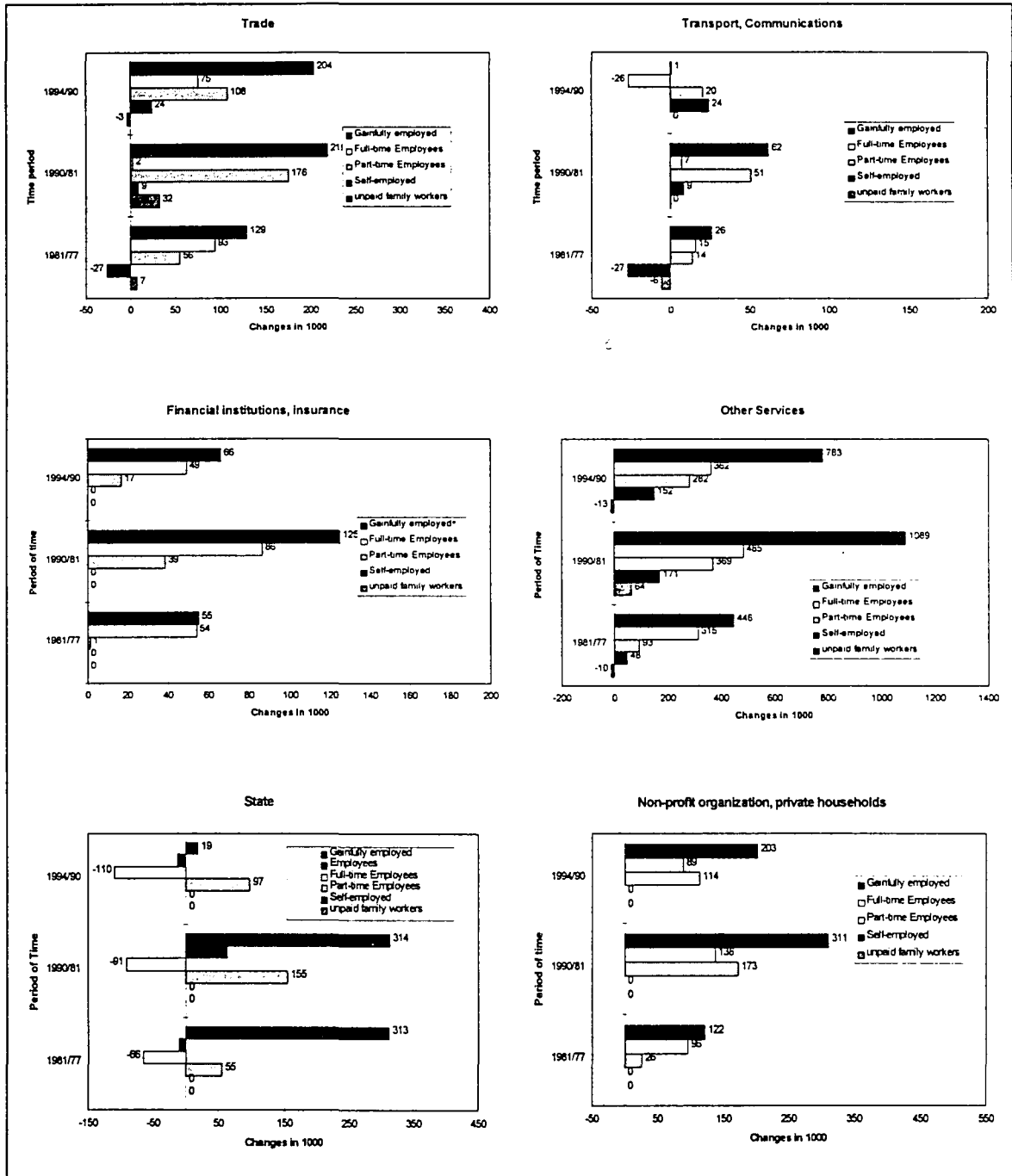


Chart 1.3.2

Share of part-time, full-time or self employment growth



Source: VGR, Federal Statistical Office

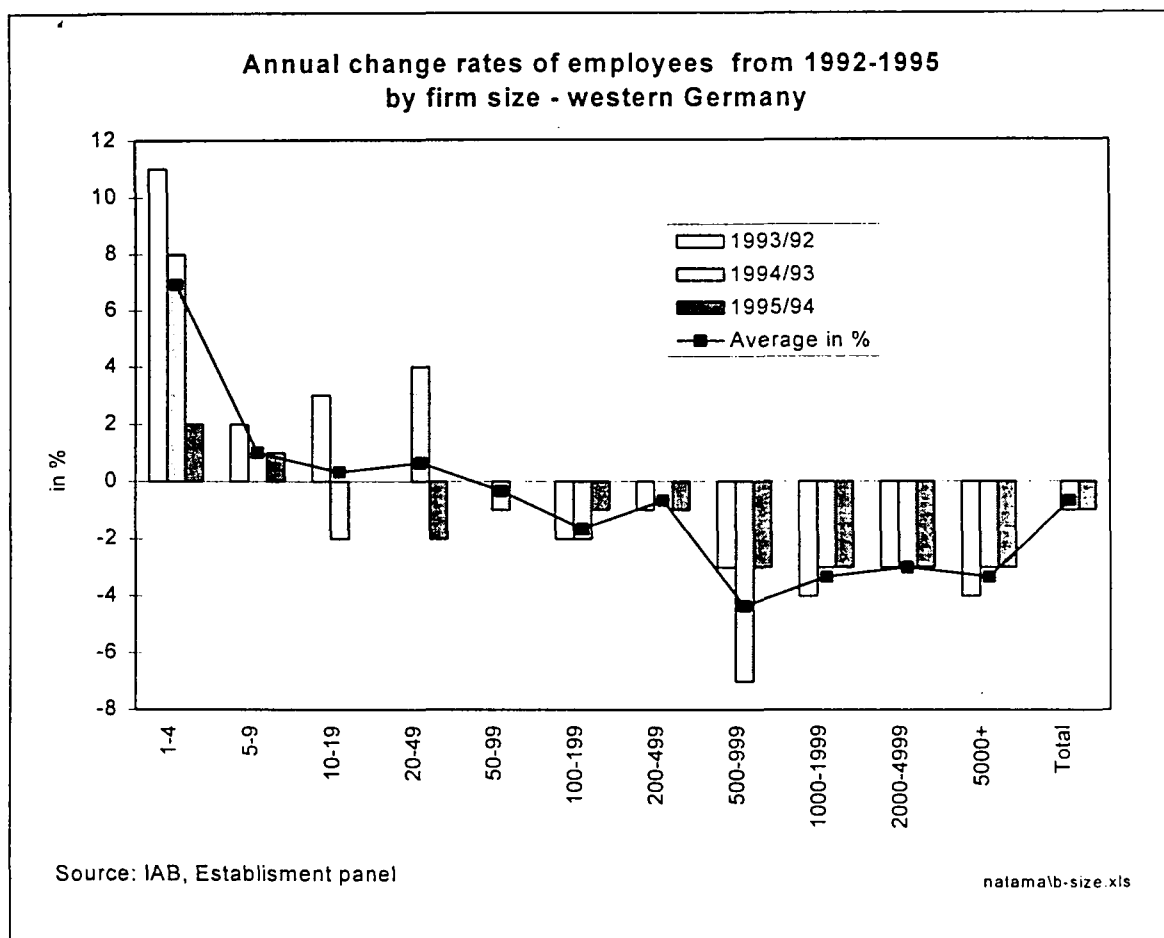
Obviously, the situation differs considerably among the individual sectors. It is remarkable is that within the manufacturing sector in the period from 1990 to 1994 only the number of self-employed persons grew whereas the number of

gainfully employed people declined. Traditionally the construction industry is characterised by a high number of job creations among gainfully employed and self-employed people, whereas the trade sector is characterised by the high number of created part-time jobs. In fact, during the period from 1981 to 1990 within the trade sector, almost only part-time jobs have been created. In the agricultural sector a decrease of self-employment and family-oriented establishment is characteristic. The transport and communication sector shows extremely high rates of self-employed and part-time jobs among the new jobs. In contrast, the financial institutions still have high growth rates for full-time jobs. As expected, the sector of other services is characterised by a high rate of self-employed persons and part-time employees among the new jobs. Furthermore, the graph for the state sector confirms the public labour market policy to support part-time employment. Among the non-profit organisations and private households during the last 15 years, part-time jobs played a significant role in the job creation process.

*Structure of firms where jobs have been created and lost*

Chart 1.3.3 indicates that especially small-sized establishments with fewer than 100 employees had positive annual employment growth rates during the last 3 years. In contrast, medium and large-sized establishments downsized the number of employees due to the industrial restructuring process and economic downturn.

Chart 1.3.3

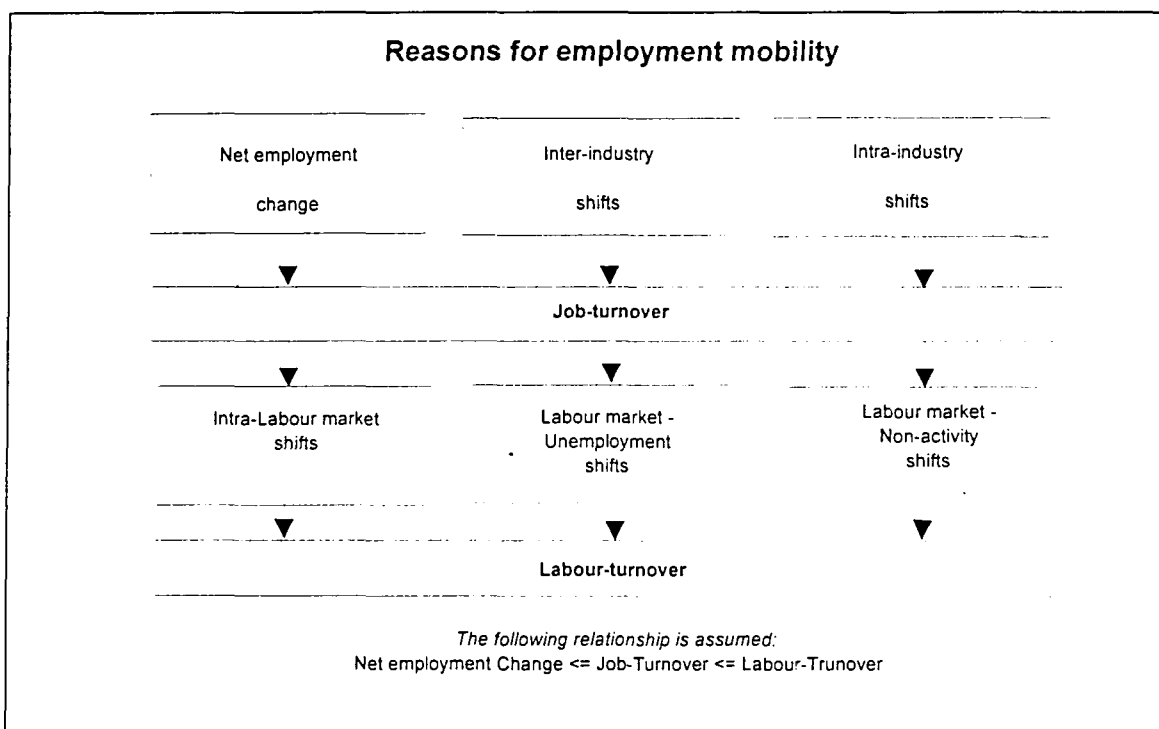


The negative growth rates among firms with 500 up to 1000 employees stand out. Nevertheless, the role and importance of small and/or new enterprises in the job creation process is a subject of controversy. Though net new jobs are created mainly - indeed often exclusively - in small and very small establishments, an accurate assessment of the relationship between business size and job creation is subject to several statistical pitfalls, since there is no evidence for the thesis that small-sized are an independent motor for employment growth (cp. Discussion in: OECD 1994, p122). From the establishment panel for Lower Saxony (Hannover Panel) Wagner (1995) already derived evidence that the contribution of small firms to net job change tends to be overstated. In this case, it is not establishment size per se that is critical for job creation but the ability of establishments to respond to a revival of demand.



In order to analyse the dynamics of labour adjustment predominately in western Germany, the job-turnover and Labour-turnover concept will be applied (Chart 1.3.4).

Chart 1.3.4



Source: Schettkat 1993, p.368.

This analytical framework will shed light on the process of labour market dynamics and the apparent problems.

#### *Job turnover rates*

The job turnover rate (JT) is defined as the sum of the job creation and job destruction rates in Equation 1.3.1. If  $S$  jobs are lost in the establishment  $i$  and  $A$  jobs in  $i$  are simultaneously created, the sum in relation to the total number of employees provides a measure of the job turnovers in this establishment (cf. OECD 1987, pp. 97ff, Cramer/Koller 1988, p. 362f). The resulting ratio is standardised by the factor  $\frac{1}{2}$ , so that the reciprocal value of the measure can be roughly interpreted as the average length of employment (strictly speaking this is only valid under the assumption that the number of employees is constant).

**Equation 1.3.1**

$$JT = \frac{1/2 \sum |A_i - S_i|}{\sum E_i}$$

with

$A_i$ : Number of Accessions in the establishment  $i$

$S_i$ : Number of Separations in the establishment  $i$

$E_i$ : Employees in the establishment  $i$

A job-turnover rate of 8%, for example, means, that 8% of all jobs get filled during one year, or, in other words, over 12.5 years all jobs would be refilled under the restriction that the number of employees is constant (see Table 1.3.4).

However, the interpretation of job-turnover rates is quite difficult because as Chart 1.3.4 illustrates, this measure summarises several components such as the net employment change, inter- and intra-industry shifts. According to calculations conducted by Cramer and Koller (1988), the share of the net employment change and the inter-industry shift each accounted for 9.8% of job turnover in 1987 whereas the intra-industry shift accounted for more than 80%. These charts imply that most job turnover is the result of labour displacement within industries rather than across industries, so that the job-turnover rate is initially a measure of total job mobility in a sector. Additionally, a large magnitude of job reallocation indicates a high degree of heterogeneity in employment growth, not least because the measure only indicates job reallocations between but not within establishments. The hypothesis can be formulated that sectors with a high degree of internal flexibility do not show up high job reallocation rates, whereas conversely, sectors with high job reallocation rates only have a low degree of internal flexibility.

**Table 1.3.4****Job-turnover rates at establishment level (agriculture and public services excluded)**

Time period*)	Job-turnover rate	Average in years**)	Change of employment
1982/83	7.4	13.5	-1.6
1983/84	7.9	12.7	-0.6
1984/85	8.1	12.3	1.6
1985/86	8.0	12.5	1.7
1986/87	7.8	12.8	1.5
1987/88	7.4	13.5	1.0
1988/89	7.4	13.5	1.7
1989/90	8.0	12.5	3.5
1990/91	8.2	12.2	3.6
1991/92	7.7	13.0	1.5
1992/93	8.3	12.0	-1.7
1993/94	8.4	11.9	-1.6
1982/94	7.9	12.7	10.7

\*) each 1.7.-30.6  
 \*\*) approximately equals the reciprocal value of the job-turnover rate

Source: Bellmann et al. 1996

Altogether the charts displayed in Table 1.3.4 indicate, except for the beginning of the nineties, a mildly procyclical fluctuation in job turnover on the German labour market. This goes along with the insignificant and low Spearman rank-correlation coefficient (with marginal significance levels in parentheses) between the job turnover rate and the net change of employment, which in western Germany amounts only to -0.03 (0.94) from 1982 to 1994 with an average period job turnover rate of 7.9 and a standard deviation of 0.1 opposed to -0.43 (0.10) in the United States within the time period 1973-1988.

The job-turnover rate (JT) also summarises the following four components:

- the 'expansion rate', which reveals the growth rate of employment by expanding establishments (EX)
- the 'starting up rate', which is defined as the growth rate of employment by new establishments (Sr)
- the 'declining rate', which indicates the growth rate of employment losses by declining establishments (De)

- the 'closing rate', which reveals the growth rate of employment losses by establishment closures (CI).

Therefore, the job-turnover rate is also expressed by:

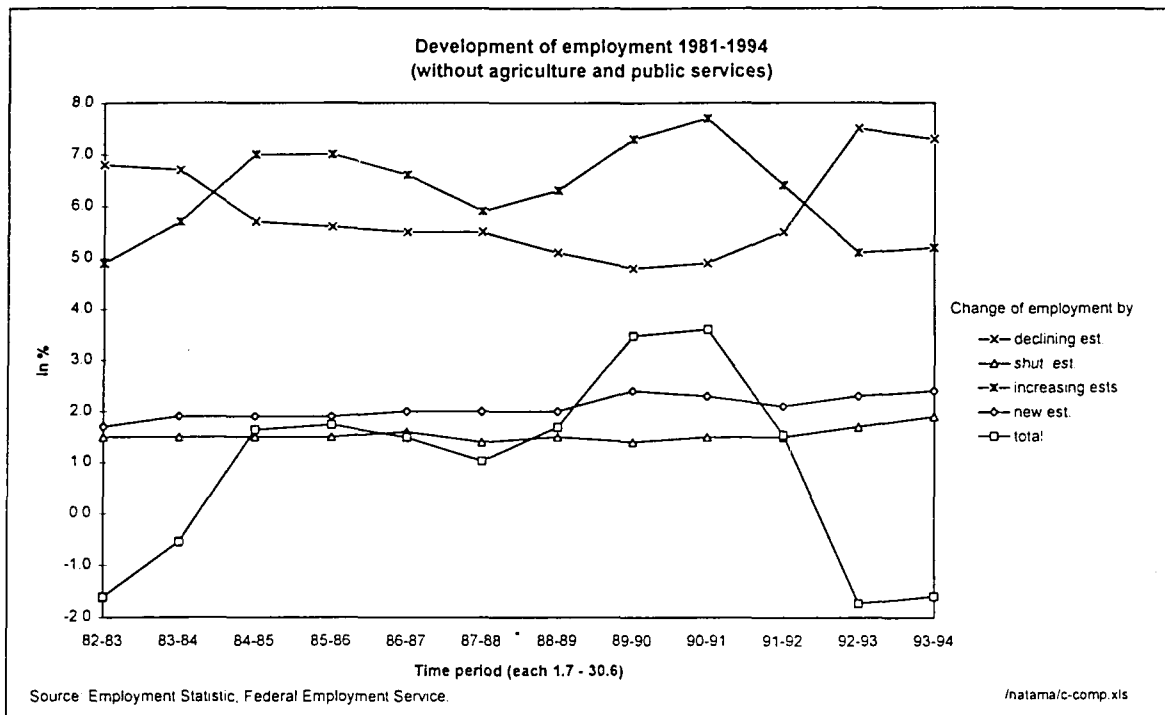
### Equation 1.3.2

$$JT = 1 / 2 (Ex + Sr + De + CI)$$

Attempting to explain the magnitude of and fluctuations in job turnovers, we must focus on the extent to which turnover may be characterised as driven by structural or cyclical influences and if some of the components of job turnover better represent structural as opposed to cyclical influences. Two competing ideas on this question have been developed in the literature. One sees structural change in employment as a continuous process and emphasises the importance and stability of establishment openings as the primary means through which structural changes are diffused in an economy. In this view, the trend in net employment change is driven mainly by job creation among new establishments. Another view is that structural changes is concentrated in cyclical downturns, i.e. this position mainly analyses whether annual job turnover increases in recessions due to larger increases in job losses rather than declines in job gains (cf. OECD 1994, p 106).

Chart 1.3.5 illustrates the proportions of the individual years, indicating the long-term (1981-1994) development of the individual components such as jobs creation by new or expanding establishments and jobs destruction by closed or declining establishments. Between 1982 and 1994 the contribution of new firms to job gains rose only slightly, whereas the contribution of expanding firms accounted for most of the increase in net employment growth, reflecting cyclical volatility.

Chart 1.3.5



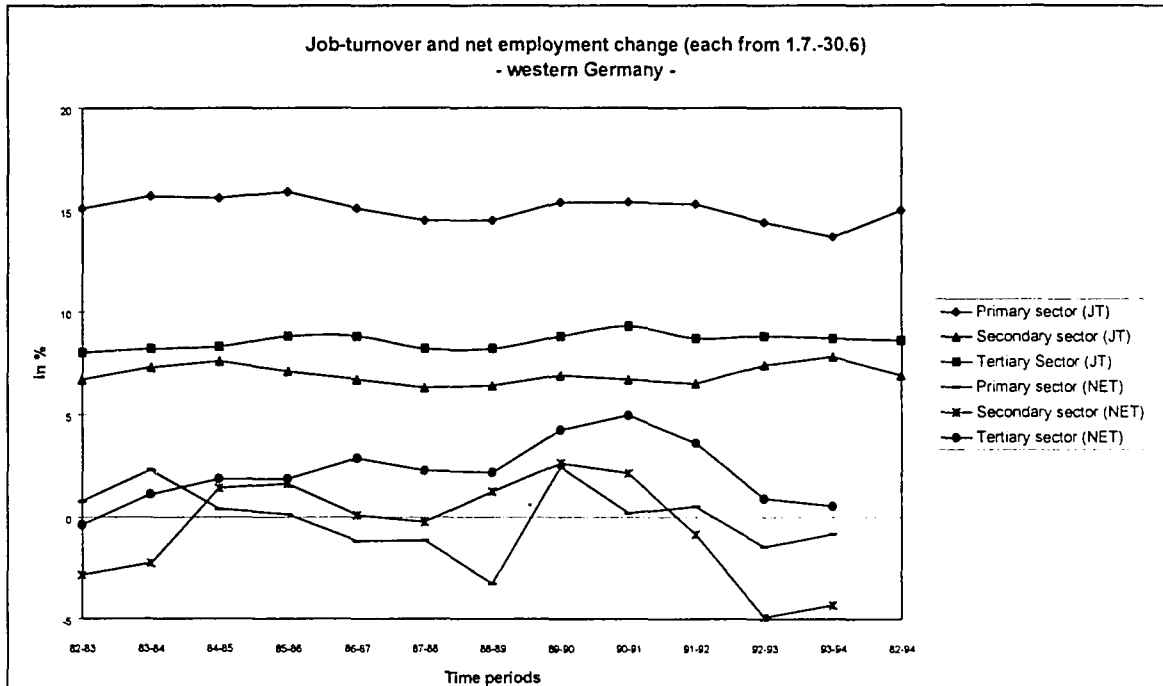
The change in employment from openings accounted for annual average gains of 2.1% during the early 1980s to mid-1990s. In this context it is remarkable that the contribution of new firms to the job gains seems to be independent from cyclical employment changes. Closure of establishments resulted in annual average employment losses of 1.5%. The main source of the increase in employment was the expansion of existing establishments, whereas the main source of job losses was the declining of existing establishments.

Assuming that the rate of job losses at cyclical peaks and the rate of job gains at cyclical troughs are determined by non-cyclical factors, that which remains can be considered cyclical. This approach indicates that approximately 81% of total turnover from 1982 to 1994 was non-cyclical, i.e. driven by structural change and competition.

Chart 1.3.6 reveals the wide spread of the job turnover rates among the sectors. In general the job-turnover rates of the tertiary sector exceed the ones of the secondary sector. The primary sector shows the highest job turnover rates. Within the secondary sector the producing industry and the investment goods industry have the lowest and the consumer goods industry the highest job-turnover rates. Household-related services and distributive services reveal the

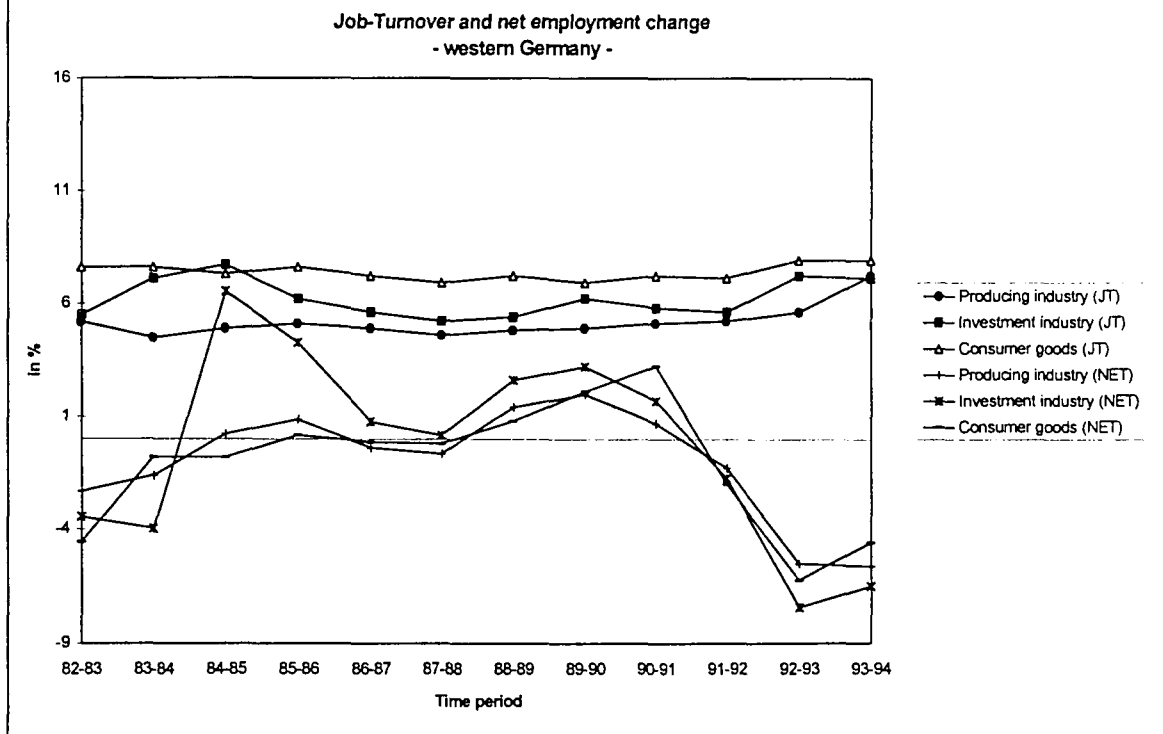
highest rates within the tertiary sector, the non-profit services the lowest. In general the job-turnover rates did not fluctuate significant during the observed 12 years in spite of a high volatility in net employment change.

Chart 1.3.6



Source: Establishment Statistic, Federal Employment Service.

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Source: Employment register, Federal Employment Service

The size structure of establishments among the sectors differs quite a lot (cp. Table 1.3.5). The differentiating job-turnover rates among the sectors are strongly related to the structure of the size of establishments. The share of small-sized establishments in the sectors is positively related to the job-turnover rate, i.e. the higher the share of small-sized establishments within a sector, the higher the observed job-turnover rate (the rank correlation coefficient accounts for more than 90%).

**Table 1.3.5****Size of establishments by sectors (31.12.95)**

	1 - 19	20 - 99	100 - 499	500 +	Total
Primary sector	92.9	6.6	0.5	0.0	100.0
Secondary sector	69.6	23.9	4.9	1.6	100.0
Tertiary sector	83.0	13.5	2.8	0.7	100.0
Agriculture	92.9	6.6	0.5	0.0	100.0
Producing industry	69.6	23.9	4.9	1.6	100.0
Manufacturing industry	67.9	24.0	5.9	2.2	100.0
Mechanical engineering	54.1	29.6	11.4	4.9	100.0
Food, drink and tobacco	73.0	21.7	4.1	1.2	100.0
Building and civil engineering	73.4	23.5	2.8	0.4	100.0
Trade	82.4	14.7	2.6	0.4	100.0
Consumption-orientated services	92.2	6.7	0.9	0.1	100.0
Non-profit services	82.1	13.6	3.3	1.1	100.0
Business related services	84.3	13.4	2.0	0.3	100.0
Total	79.9	16.0	3.3	0.9	100.0

Source: Establishment Statistics, Federal Employment Service

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In fact the highest share of small-sized establishments with less than 20 employees (93%) coincides with the highest job-turnover rate in the primary sector.

It might be surprising that the job-turnover rates have not been fluctuating a lot since 1982, despite significant cyclical changes in the economy. This is due to the standardisation of job flows to the employment level. Thus, variations are excluded. The same applies to the labour-turnover rates. However, the analytical focus of this concept inherits further components which might be the more

appropriate ones to explain labour adjustment processes (see Chart 1.3.4) on the German labour market.

The low rates of job-turnover in Germany as compared to the United States and Great Britain indicate that German firms might be hampered in adjusting their labour force to the market requests. On the other hand, German employers are said to be able to avoid laying off excess workers by transferring them into positions vacated by workers who are retiring or quitting. This process of internal transfers is facilitated by the existence of a broadly-skilled workforce, for which the German apprenticeship system is widely credited. Internal flexibility of the workforce however is limited as regards the adjustment capability to external market changes.

Labour turnover rates are higher than the job turnover rates as described above because the labour-turnover rate (LT) also includes recruitments and dismissals for one and the same job. On the basis of the employment statistics we define the labour turnover rate as follows:

### Equation 1.3.3

$$LT = \frac{Lr - Lw}{Lw} * 100$$

with

Lr = number of employees being employed for some time in year t

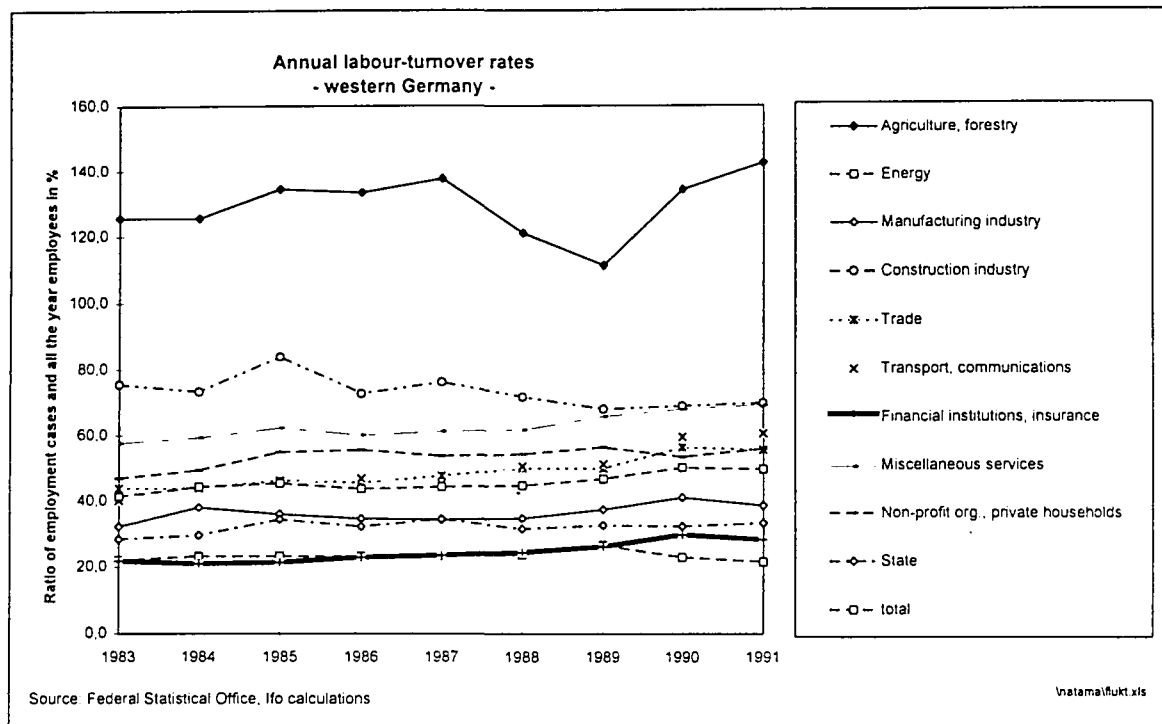
Lw = number of employees being employed during the whole year t without changing employer

In 1991 in western Germany 25.8 millions persons were employed and covered by the social security system. The number of the employees covered by the social security system who were employed by the same employer during the whole year only amounts to 17.2 millions. Therefore, in 1991 about two-thirds of the employees were employed all the year round and one third (33.2%) of the employees either has swapped their employers during the year (cf. job-turnover-rate) or has taken up a new job or left one (cf. natural turnover rate). Applying this number to the number of employees who were employed all the year round means that per 100 persons employed the whole year round by the same employer 50 employee-employer relationships lasting less than a year are counted (cf. labour-turnover rate, Chart 1.3.7). According to these figure



labour turnovers of employees covered by the social security system are quite significant in Germany.

Chart 1.3.7



Differentiating by sectors the labour-turnover rates show a wide spread (see Chart 1.3.7). Chart 1.3.7 underlines that the labour-turnover rates of the service sector exceed the ones of the goods producing sector in general. This is partly attributable to the fact that especially within this sector jobs have been created (cf. job-turnover-rates). Furthermore, labour turnover rates within the construction sector exceed the ones of the manufacturing industry. In the sector of miscellaneous services, they are higher than in the sector of credit institutions and insurances. The following sectors show the highest labour-turnover rates:

- Agriculture, forestry
- Construction Industry
- Miscellaneous services
- Transports, communications
- Non-profit organisations, private households

The lowest labour-turnover-rates are observed in:

- Energy, gas, water, mining
- Financial institutions, insurance
- State
- Manufacturing Industry.

The differences of the presented labour-turnover rates have several reasons such as seasonal employment fluctuations, temporary employment and frequent alternations of employers by the employees. Furthermore, the labour-turnover rate also reflects the relative employment growth or job loss of a specific sector. Summarising these results, it can be said that the size of the labour turnover rate itself does not confirm the statement about an impediment of labour adjustment in the long run by the German job security system (Abraham/Houseman 1993).

#### *Vacancies and unemployment (Beveridge relation)*

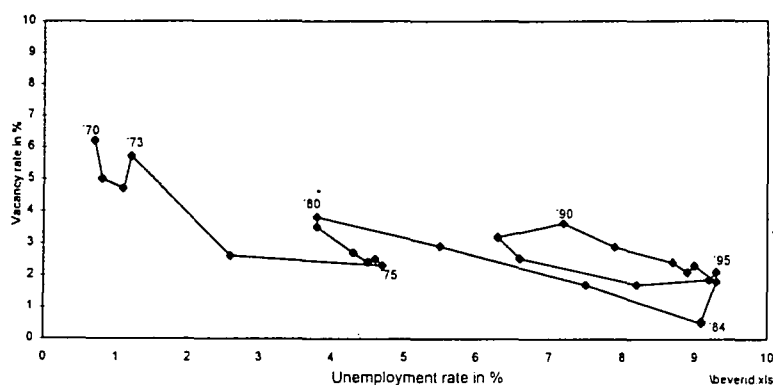
On the German labour market significant flows can be registered, and both labour-turnover rates as well as job-turnover rates did not change significantly during the last 12 years. Nevertheless, Germany increasingly faces the problem that the number of unemployed people rises in batches because the unemployment rates tend not to decline back to their starting point even if increasing economic activity is registered. This persistent problem distinguishes unemployment in western Europe from USA.

Introducing the notion of a 'matching' technology that describes how efficiently the labour market brings vacancies and unemployed work-seekers together, the Beveridge curve is one indicator designed to represent this technology: given a particular labour market with its matching technology at a certain point in time, it can be shown that there is a unique steady-state relationship between the rate of unemployment and the number of vacancies in the economy (Mühleisen 1994). The graph of this relation, the so-called Beveridge curve, is a downward sloped and indicates the level of unemployment for a given number of vacancies and vice versa. Empirical studies have indeed verified this relationship (Blanchard/Diamond 1989, Franz 1987). Möller has shown that the longer the average unemployment duration in an economy is, the greater the mismatch

between labour supply and vacancies. In other words, long-term unemployment increases the time employers have to search for suitable applicants. Therefore, vacancies will not be filled despite a higher level of unemployment, which implies that the Beveridge curve has shifted outwards: the labour market works less effectively.

**Chart 1.3.8**

**Beveridge Graph**  
western Germany 1970 - 1995



Source: Federal Employment Service, Franz 1994. Calculations of the Ifo Institute

Chart 1.3.8 illustrates the outward shifting of the Beveridge graph in western Germany within the time period of 1970 to 1995. This means that in spite of the high dynamic of the labour market regarding the described job-turnover and labour-turnover rates, unemployment in Germany rose in batches. Obviously, the matching process on the labour market, especially regarding qualifications, is not functioning effectively (cf. Franz 1994). This is also reflected by the overall unfilled vacancies by qualifications in western Germany (Table 1.3.6).

**Table 1.3.6****Overall unfilled vacancies - western Germany**

Time period <sup>1)</sup>	1991	1992	1993	1994	1995
<i>in 1000</i>	984	784	536	581	654
	<i>in %</i>				
<i>Size of establishment</i>					
1 - 9	35.8	41.5	33.2	31.7	33.6
10 - 19	14.2	12.8	24.2	23.7	17.9
20 - 49	17.4	14.7	15	15.9	14.4
50 - 199	14.8	14.2	12.2	12.2	19.5
200+	17.7	16.8	15.4	16.6	14.6
<i>Sectors</i>					
Agriculture, forestry	3.5	3.1	7.3	4.1	4.7
Mining	0.3	0.1	0.1	0.2	0.2
Manufacturing industry	20.7	21.3	16	19.3	16.7
Construction	9.6	13.6	10.9	11.2	7.3
Trade	12.9	13.7	10.7	17.5	19.3
Transport, Communication	4.6	2.7	2.5	2.8	2.9
Insurance, financial institutions	2.8	1.5	2.3	2.8	1.5
State	7.1	6.1	4.9	4.2	3.9
Miscellaneous services	38.6	37.9	45.2	37.8	43.3
<i>among them</i>					
Consumer services	9	12.6	17.2	10.1	10.2
Social services	15.1	13.6	15.8	16	18.8
Business services	14.4	11.7	12.2	11.7	14.4
<i>Qualifications</i>					
Un- and semi-skilled worker	22.1	23.4	28.1	21.9	23.7
Skilled worker	30.1	34.9	37.6	38.8	33.6
Ordinary white collar worker	9.3	10.4	7.3	6.2	5.8
Senior white collar worker	37.8	30.3	26.9	33.1	37

Source: Ifo/IAB

/natama/pbo-  
w.xls**Conclusions**

Neither the magnitude nor the fluctuation of the job-turnover rates or the labour-turnover rates changed significantly from 1982 to 1994. Within the same time period the number of unemployed people rose in batches, whereas the number of unfilled vacancies in western Germany roughly kept the same level. These results together indicate that the ability of the German labour market to adjust labour to market requests by internal transfers or working time reductions in order to avoid lay-offs no longer works as successful as it used to do. Reasons for this can be seen in the increasing competition driven by globalisation and the demand for new qualifications which require faster labour adjustments than

internal transfers into positions vacated by workers who are retiring or quitting can provide.

## 1.4 Principle causes of unemployment

### 1.4.1 Analysis of the principle determinants of unemployment

The debate on the causes of unemployment in Germany is far from reaching agreement, both theoretically and politically. Parts of the debate are still dominated by the macro-economic arguments of neo-liberals and neo-Keynesians. New arguments, however, have emerged from the micro-foundation of unemployment theory which puts the focus on the adjustment process on product and labour markets rather than macro-economic flows. This section will concentrate on the recent theoretical debate.

Basically there are two approaches to unemployment theory:

- The *micro-economic approach*, which is based on general equilibrium theory and identifies market failures as the major causality of unemployment and
- The *macro-economic approach*, which starts from Keynesian theory and sees failures in the co-ordination of macro-flows rather than individual behaviour to be responsible for unemployment.

During the eighties the neo-classical labour market theory was reinterpreted. Following the suggestions of Layard, Nickel and Jackman (1991) and others (Lindbeck, 1993, Manning, 1992, Blanchard, 1990) the labour demand function represents the price setting behaviour of companies rather than the declining marginal productivity of labour under the conditions of perfect competition on product and labour markets. Companies are behaving under imperfect competition on product markets and calculate mark-up prices based on marginal costs. The mark up generally is positively correlated to output and employment. In addition the labour supply curve represents the results of collective wage bargaining rather than individual labour supply decisions as the results of collective wage bargaining can be expected to be higher than wages resulting from individual wage bargaining. The labour supply curve moves left from the individual labour supply curve and has a positive slope due to the fact that the bargaining power of trade unions rises with higher employment. Moreover,

companies are willing to pay higher wages when employment rises in order to reduce fluctuation. From these arguments it follows that

- labour demand not only depends on technology and productive capacities of companies but also on the price setting behaviour and institutional arrangements of market behaviour.
- labour supply not only depends on individual preferences but on the institutional arrangements of wage bargaining and labour market regulations.

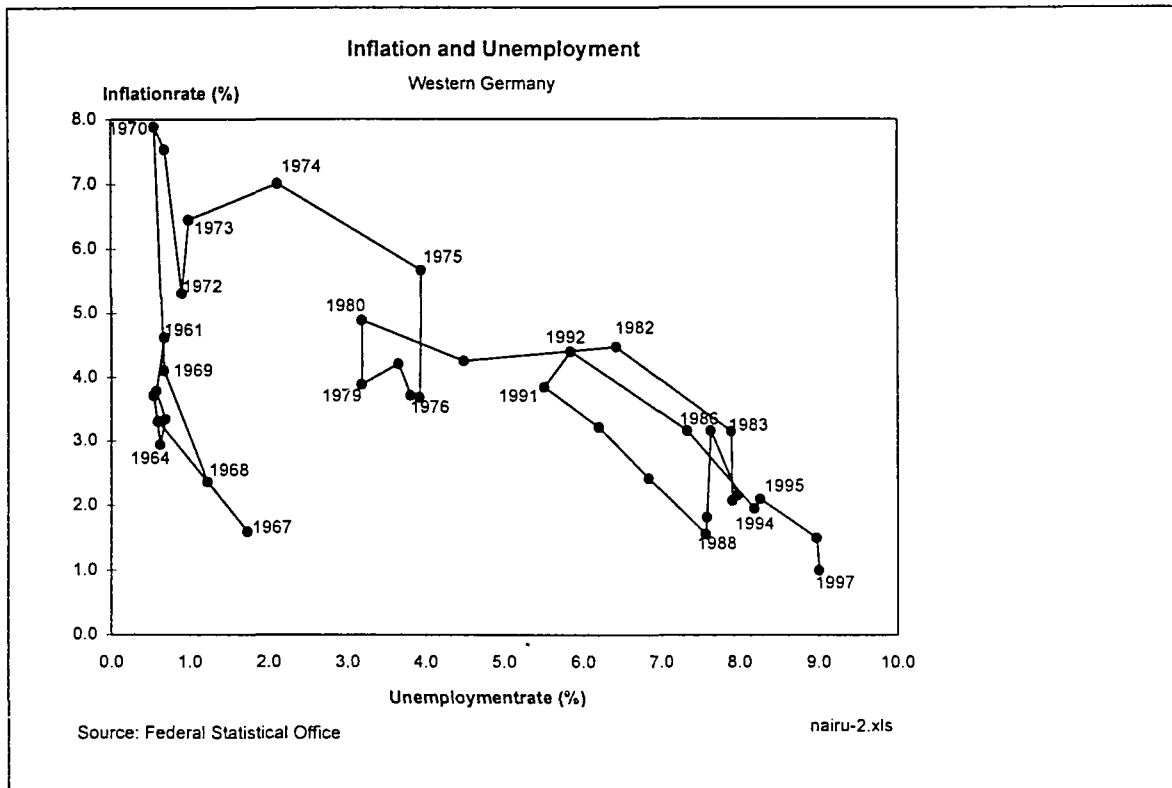
Unemployment can be expected to be higher under the conditions of these institutional arrangements than under the condition of a fully flexible labour market as regards wages and the reallocation of labour. The quasi equilibrium rate of unemployment (QERU<sup>1</sup>) is the result of rational behaviour of both individual and institutional subjects. As Franz (1995) points out not only the inflexibility of real wages can be blamed for unemployment. In contrast, the unemployment rates observed are the result of rational decisions of companies, workers trade unions and employers associations and are thus the result of deliberate social decisions. Moreover the QERU shows the structural or institutional character of labour market behaviour and thus unemployment.

There are significant empirical indications for the increase of the quasi equilibrium rate of unemployment. Not only the stepwise increase of unemployment rates in Germany with every cyclical recession shows that labour market flexibility is not sufficient to cope with demand shocks. The rightward spirals of the Phillips Curve show the success of monetary policy on price setting behaviour and the failure of wage policy and labour market policy as regards unemployment (see Chart 1.4.1.1).

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<sup>1</sup> The QERU concept is similar to the NAIRU which means Non Accelerating Inflation Rate of Unemployment. The difference between the two ratios is the identity of wage and price increase in the QERU concept while the NAIRU in addition assumes the constance of both rates.

Chart 1.4.1.1



While the Phillips curve, which shows the interrelation between inflation rates and unemployment rates, was characterised by a steep slope during the sixties combining low variations of unemployment rates with high variations of inflation rate, the macroeconomic shocks of the seventies moved the Phillips curve rightward with high unemployment rates connected to high inflation rates. During the eighties further progress was achieved in reducing inflation rates while unemployment rates continued to increase. This process proceeded during the nineties.

Following the theoretical and empirical arguments, four theses can be formulated as regards the existence and rise of unemployment in Germany (Franz 1995, p. 12):

1. There is a quasi equilibrium rate of unemployment because the equilibrium on the labour market is not simply determined by labour supply and labour demand but by institutional regulations of the wage setting process and by



labour law in particular. Unemployment thus is the result of rational decisions on both sides of the labour market.

2. The labour demand curve shifted leftward (which means a reduction of labour demand at given constant real wages). This is due to changes in the international competitiveness (labour unit costs, innovation) increasing uncertainties about future demand etc. Similarly the labour supply curve shifted leftward due to generous unemployment benefits or the increasing heterogeneity of labour demand and labour supply.
3. Unemployment is due to shocks on the product markets and changes in labour supply. The increase of labour supply during the eighties is one of the dominant shocks in this respect.
4. The hysteresis argument sees the devaluation of human capital, the discouragement and stigmatization of unemployment as being the main factors which transform temporary into persistent unemployment.

Of course these four theses which try to explain the rise of unemployment are closely interlinked. The analytical isolation of partial causes of unemployment must fail. Similarly the separation of cyclical and structural determinants of unemployment seems to be misleading. The adjustment process on the labour market has to be evaluated comprehensively in order to explain unemployment.

#### **1.4.2 Missing real wage flexibility**

Following the concept of a quasi equilibrium rate of unemployment the main question is why collective wage bargaining is able to set wages above its competitive equilibrium value. In other words to what degree is unemployment taken into consideration by the labour market institutions or individual companies and workers when they negotiate the level of wages. Basically there are three theories which provide an explanation for this phenomena:

- the efficiency wage theory
- the insider-outsider theory
- the wage negotiation models

The efficiency wage theory assumes that companies are willing to pay higher than equilibrium wages, because wages set positive incentives for the workers to increase their productivity and thus profits. Higher than market wages may also attract more efficient workers from the labour market and reduce fluctuation. While these non-equilibrium wages guarantee the efficiency of the companies, they create unemployment on the labour market or even use unemployment as a threat to less productive workers. The question however remains why unemployed workers do not compete with employees in the form of lower wages. The insider-outsider theory argues that fluctuation costs, retraining costs in particular, are high enough to reduce outsider competition. The productivity difference between insiders and outsiders is too high to allow outsiders to compete with lower wages. Moreover, tariff agreements prohibit such offers to be accepted by the companies. Trade unions are assumed to follow the interests of employed rather than unemployed workers. The non equilibrium wage rises with high bargaining power of trade unions, favourable unemployment benefits, low-risk aversion of workers and trade unions and a low elasticity of labour demand with respect to the real wage (Nickell 1990).

Many of these arguments can be applied to the west German evidence. Traditionally it was the strategy of German companies to compete internationally with high productivity and high innovation rates for their manufactured products. This required high investment into human capital, long job duration and the continuous participation of workers in total income growth. Both a high insider power of workers and the incentive to pay efficiency wages can be assumed. Moreover the responsibility to combat unemployment was largely shifted from the social partners to the government. Wage policy was thus dominated by fair play considerations rather than full employment targets. In addition, the cartelisation of the labour market was justified by arguing that it would limit wage competition among companies. A downward spiral of wages due to the liberal negotiation of labour contracts would have endangered social consensus and the fair distribution of incomes. The trade-off between efficiency and equity continuously shifted towards equity considerations since the end of the sixties in particular. There was a clear social preference for income growth instead of full employment. The most recent and most striking example for this fact is wage policy in eastern Germany since German unification. The clear preference of wage policy to adjust eastern wages to western levels within a very short period of five to

ten years extended far beyond the growth and productivity potentials of the east German economy. Labour unit costs thus shifted significantly above the western level and created not only persistent cost disadvantages for eastern German companies but limited employment growth considerably.

A further indication of the dominance of equity considerations is the stability of wage relations in western Germany over decades. The increasing surplus of labour in less qualified occupations was not able to modify wage relations in order to create employment opportunities. Not wages but human capital, educational level and motivation were thus the crucial factors of competition among workers. This deteriorated the competitive position of less qualified workers further. With increasing human capital investment by the group of better qualified workers in particular, they were able to reduce their efficiency wage in comparison to the low qualification groups. For the latter groups the effect of training investments remained limited almost by definition. Thus labour demand showed a clear preference for better qualified workers. Wage rigidity is not only responsible for unemployment at the macro level but for the structural shift of unemployment risks to the less qualified workers (Vogler-Ludwig 1994).

### **1.4.3 Supply-side shocks on product markets**

The rise of unemployment during the seventies is also attributed to external shocks:

- the increase of raw material prices
- the rise of the DM exchange rate against the Dollar and other currencies
- technology shocks

An increasing real interest rate, the rise in oil prices and the DM exchange rate all significantly affected the competitive position of German companies on international markets. They can explain why the German economy fell into a severe recession during the first half of the seventies. However the reduction in oil prices and exchange rates during the eighties has not fully made up for the increase of unemployment rates during the seventies. Supply-side shocks therefore had significant effects on unemployment during specific historical periods

like the seventies but further arguments are needed to explain the continuous rise of unemployment rates in the following years.

One of these arguments refers to the increasing regulation of product markets in Germany which reduced the flexibility and adaptability of German companies to adjust to the changing competitive environment (Hummel 1996). The specialisation of the German economy could not be adjusted rapidly enough to create the new jobs in new markets and to substitute job losses in the old markets. Supported by increasing growth during the eighties which was due to the single European market, the opening of central and eastern European countries, and German unification, the German economy did not restructure efficiently during the eighties. In the first half of the nineties, when the process of de-industrialisation of the German economy became very obvious, the structural deficits clearly emerged.

Technology shock arguments therefore can hardly explain German unemployment rates. It may be true that companies concentrate the reorganisation of their capital stock on labour saving techniques during the recessions and thus start into a new boom with a significantly higher productivity than before. However, higher productivity improves cost competitiveness on the product markets and opens new growth potentials. The empirical evidence for Germany shows that the negative effects of labour saving technology was largely compensated by the positive effects of market growth. In the long run technological change contributed considerably to income growth and left employment more or less unchanged.

#### **1.4.4 The labour supply shock**

The labour supply shock thesis refers to the significant increase of the labour force during the eighties and attributes rising unemployment to the growing number of job searchers (Wagner 1994). Unemployment is split into an employment determined component and a population determined component. The shift share analysis explains the rise in unemployment rates from 1960 to 1994 using these two components: The long-term increase in employment reduced the unemployment rate by 6 percentage points while the increase in population

numbers added 14 percentage points. Population growth thus surpassed economic growth - an observation which seems quite evident for developing countries but apparently also has to be applied to the German experience. Following this thesis, the cyclical rise of the unemployment level and its persistence in boom periods must be attributed to the growth of the population.

The thesis, however, neglects the interrelations between population changes, economic growth and employment. Three critical arguments have to be considered:

- Immigration - as one source of labour force growth - leads to the expansion of demand potentials which become effective in the course of economic integration. In the long run, a positive correlation between labour force growth and employment can be observed (Koll, Ochel, Vogler-Ludwig 1993, p. 156)
- The fact that the absorption of the growing labour force did not sufficiently work has to be attributed to the adjustment capabilities of labour and product markets. The question is how the markets react to changes in population and the labour force. The amount of employment cannot be taken as a constant.
- The assumption of an employment constraint has to rely on the assumption of a capital constraint if markets are expected to work efficiently. This refers back to changes in profit rates and the economic determinants of unemployment.

If demography is considered to be the major force for rising unemployment, the political recommendation to restrict immigration, to limit the access to the labour market and to redistribute employment by working time reductions is straightforward.

#### **1.4.5 The persistence of unemployment**

Unemployment creates unemployment. This is the basic message of theories which refer to the persistence of unemployment and the hysteresis of the labour market. Following Franz (1996) the persistence of unemployment means that external shocks can only be absorbed by the labour market within longer periods of time. In contrast hysteresis means the continuous increase of unemployment due to external shocks. One of the main reasons for these phenom-

ena is the fact that human capital of unemployed persons is devalued during the unemployment period. Unemployed persons are discouraged from looking for new jobs. Companies take the fact of being unemployed as an indicator for the unknown productivity of job searchers. This type of screening reduces the job opportunities of unemployed persons in correlation with their unemployment period. Indirectly this might lead to higher wages if the bargaining power of insiders increases. Moreover companies might limit the number of new working places due to the unsatisfactory qualification profile of labour supply.

Two other arguments which are able to explain the persistence of unemployment refer to the transaction cost of labour and to the flexibility of working time. The transaction cost argument refers to dismissal protection laws and redundancy payments. These costs dampen the cyclical variation of employment both in booms and slumps. Similarly the flexibility of working hours allows companies to adjust labour input through variation of the weekly working hours. These possibilities were extended in the manufacturing sector in recent years and allow considerable variations in working time.

#### **1.4.6 Conclusions**

While most of the arguments presented above seem to be plausible explanation of rising unemployment, every single argument is still not strong enough to explain the phenomenon completely. This does not mean that the arguments are wrong, but that they have to be taken together in order to give a comprehensive explanation. The rising welfare during the fifties and sixties created the public opinion that high incomes, job security, and social consensus can be achieved for long periods of time. For many years the changes of the international environment, the negative impacts of rising wages, stable wage relations, rising taxes and increasing social security contributions were not taken into consideration. While the growth prospects and the labour market situation clearly deteriorated during the seventies, only minor changes were undertaken to improve the functioning of the labour market. Political measures mainly concentrated on the reduction of labour supply and the provision of incomes to those who became unemployed. This was the type of social consensus which could be achieved much more easily than substantial changes in wage policy

and social policy. From this point of view, unemployment, even if it was connected to rising social charges, was the second best solution, and was generally accepted by the political and social institutions. Low growth and the further increase in unemployment put an end to this conviction during the first half of the nineties. The political debate in Germany has taken a new perspective with regard to unemployment and the creation of jobs. There are still serious controversies on the right type of policy to reduce unemployment. Nevertheless the promotion of new jobs seems to be more important than the creation of social equity.

## **1.5 Wage and salary trends**

The overall economic situation is significantly affected by developments in wages and salaries. On the one hand, these represent employee income and thus have a very strong influence on consumer spending and on the other hand they are an important cost factor affecting the employers' demand for labour. Consequently, wages and salary trends also have a powerful effect on the investment behaviour of companies. In view of the great increase in unemployment in Germany, the current discussion about the country's attractiveness as a business location has therefore centred on labour costs as well as on the necessity for making the German system of wages and salaries more flexible.

After a brief presentation of the framework conditions and of the process of income formation in Germany, the following section examines the development of negotiated wages and salaries as well as actual earnings between 1960 and 1995 in a long-term review. In addition, a cross-section of actual earnings is used to represent the current earnings structure not only by sector but also by salaried and blue-collar employees, by sex and level of qualification.

### **1.5.1 Income formation and trends in West Germany since 1960**

#### *Income formation - negotiated wage - minimum wage - actual wage*

Economic theory (Franz 1996) states that in the ideal case a balance will be established between supply and demand on the labour markets as long as these markets are characterised by the complete availability of information as well as flexibility of wages and prices. In this situation, employers and those seeking employment act as agents of quantity adjustment, the result being the formation of balanced wages determined by real wages in the various labour markets, ultimately leading to market clearance. In such a case, unemployment would not exist.

In reality, however, there is no such thing as complete availability of information and full flexibility on the labour markets. In Germany, wage settlements take



place on the basis of autonomous wage negotiations, predominantly by means of collective bargaining between employers and unions, each of which represents the interests of their associated companies or members as well as taking public reactions into account. For the companies in question, negotiated wages represent the lower limit of remuneration, in de facto terms the minimum wage that has to be paid. However, surveys in East Germany show that because of the great problems of adjustment experienced there, a not inconsiderable number of companies pay their employees below negotiated rates in order to safeguard their jobs, a procedure with which the works councils and unions appear to be in full agreement. The large increases in negotiated wages since reunification have also led to companies being less keen to join employers' associations. Only 25% of companies were members of such associations at the beginning of 1995 (German Council of Economic Advisors 1995). The proprietors of newly-founded companies often decide not to join an employers' association.

However, Germany does not have a *legal minimum wage*. The existing law on the establishment of minimum conditions of employment, dating from 1952, gives priority to settling these conditions by collective agreements, and has therefore not been hitherto applied. But the Federal Ministry of Labour and Social Affairs may declare collective agreements to be "generally binding" on the basis of § 5 of the law on collective agreements. This ruling extends the field of application of the legal stipulations laid down in a collective agreement (e.g. compensation) to those employers and employees who have hitherto not been bound by such agreements.

At the beginning of 1996, 571 collective agreements on wages, salaries or trainee compensation were declared to be generally binding. In West Germany, 1.9 million employees are employed in the relevant collective-agreement sectors, of whom 700,000 have acquired collective-agreement status thanks to this *declaration of general validity*. This declaration ends with the notice of termination of employment or with the lapse of the collective agreement.

However, a new situation has arisen with the *employee sending law* of February 26, 1996. This law regulates obligatory conditions of employment in cases of cross-frontier services. In this connection, a collective agreement that lays down a minimum wage in the construction sector was declared to be generally

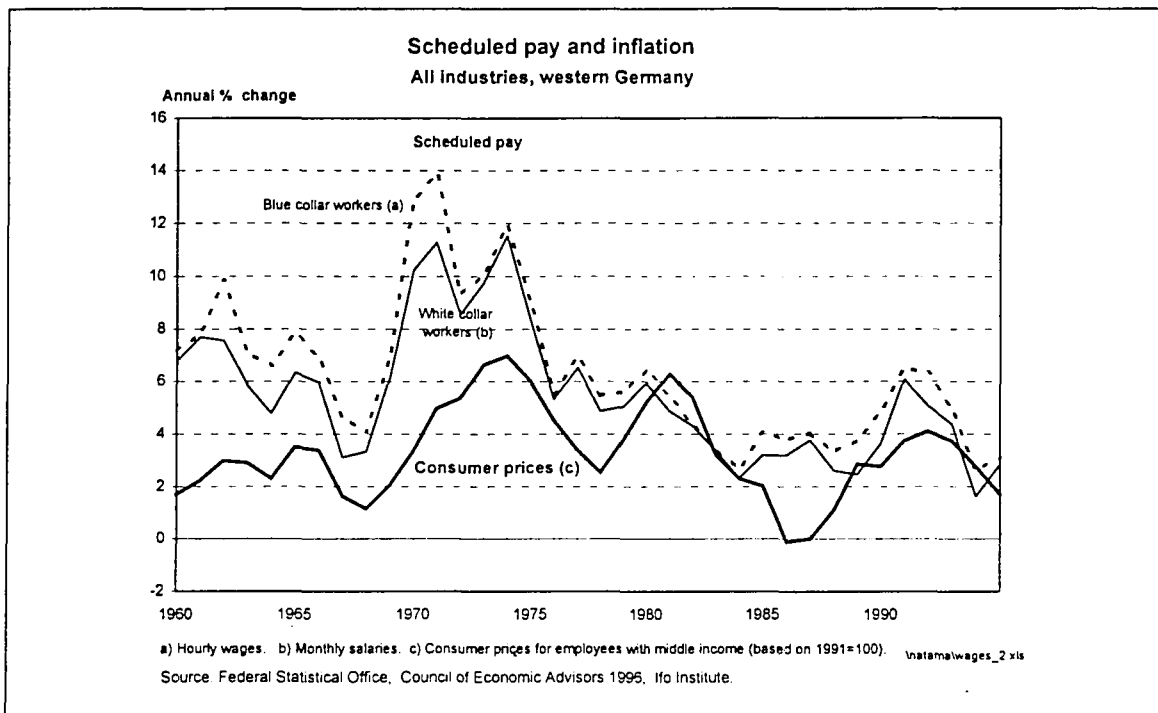
binding up to August 31, 1997 with effect from January 1, 1997. This agreement lays down an overall negotiated hourly wage of 17.00 DM in West Germany and 15.64 DM in the new Federal States (excluding East Berlin).

Because of the high level of unemployment and the new competitive demands incident upon the globalization of the economy, increasing criticism has also been levelled in recent years against Germany's *nationwide collective agreements*, that are censured for being insufficiently flexible, partly due to their defined area of application (economic sectors defined as "territory"). And yet this discussion is a controversial one - even among economists - as this system clearly does not have only negative aspects (reproach of over-regulation and insufficient flexibility), but also positive ones (such as a predictable cost framework, fewer strikes, lower susceptibility to strikes by individual factories). In general, the discussion also shows that the existing potential for utilizing the available inner flexibility of the collective bargaining system has not yet been fully exhausted. A certain consensus therefore appears to be forming, namely to retain the nationwide system of collective agreements, that has proved its worth for decades, in principle, but to apply it in a more flexible way and to reform it in future to comply with the new economic conditions.

#### *Wage and salary trends in West Germany since 1960*

Chart 1.5.1.1 shows that the nominal negotiated wages and salaries of male wage-earners and salaried employees in full-time employment in German industry since 1960 have risen every year since 1960, so that the growth rates (of the indices 1985 = 100) were always positive. The largest negotiated wage increases took place in the early seventies; the high pay settlements in 1970 and 1971 represented subsequent demands by the unions as compensation for the lower rates agreed at the end of the sixties, and these could be realised thanks to the strong demand for labour at that time (unemployment rate 0.7%). Against the background of greatly increased prices of raw materials (first oil-price shock), the high rise in negotiated wages in 1974 was an attempt to redistribute the economic pie in favour of the employees.

Chart 1.5.1.1



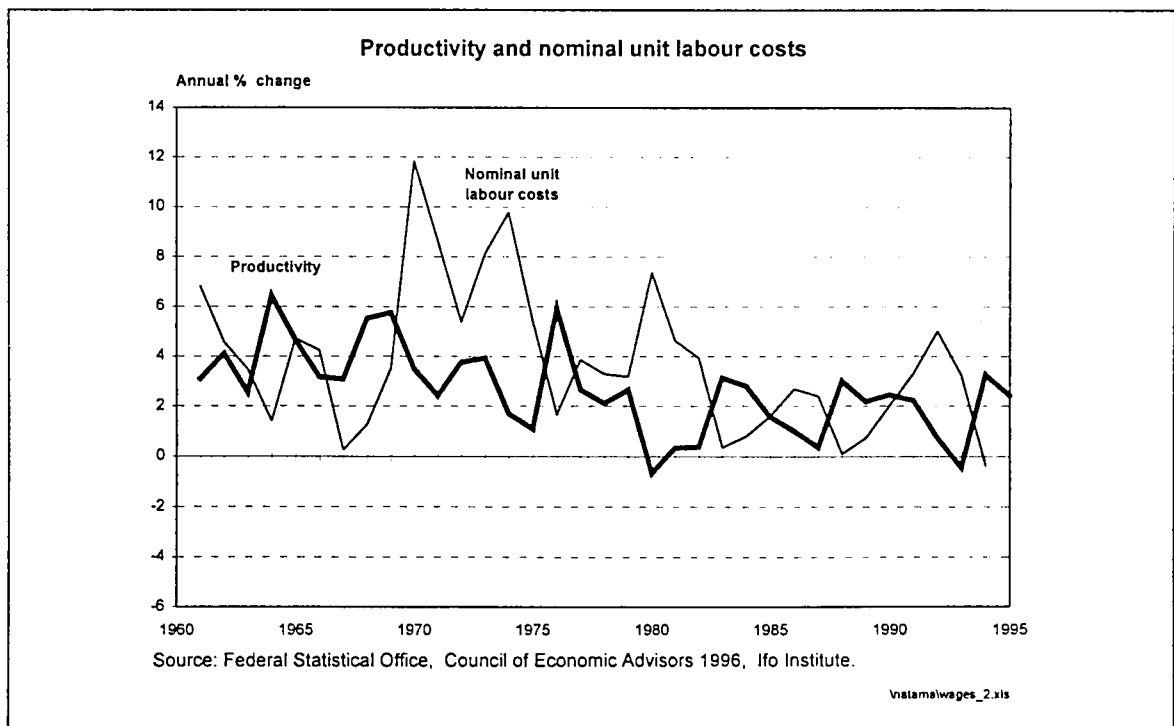
The pay rises of 6% negotiated between 1976 and 1980 were significantly lower. This meant that wage restraint was practised at the time of the second oil crisis of 1979 in contrast to the response during the first oil-price shock. Since 1983, growth rates of below 4% have been recorded, rising again only between 1991 and 1993. Over the entire period, but especially in 1970 and 1971, a higher rise in the index occurred for the negotiated hourly pay rates of workers than for the monthly salaries of white-collar employees.

During the last 25 years, not only was the growth rate of negotiated wages always positive, but until the years 1986 and 1987 the same applied to the living costs of employees' households with middle-range incomes (Chart 1.5.1.1). The strong correlation between consumer prices and negotiated wages is striking, but not surprising, as the change in living costs is used as a yardstick in the collective bargaining negotiations, above all by the unions. But as the change in consumer prices, in addition to being affected by other factors such as the terms of trade, is also a result of the development of labour costs, and these are in turn reflected in product prices, a continuous reciprocal relationship prevails between these factors.

From a long-term economic viewpoint, it would make sense if the development of nominal wages and salaries were oriented to changes in productivity. If full employment and stable prices are assumed, then unit labour costs would remain constant. Labour's share in national income would also remain unchanged, i.e. no redistribution would take place between the production factors of labour and capital. If full employment does not exist, then the theory predicts that wage increases should be lower than productivity rises; otherwise no new jobs could be created.

Chart 1.5.1.2 shows the rates of change in productivity and of unit labour costs for West Germany between 1960 and 1995. The productivity is calculated here as the gross value added in 1991 prices for each average wage and salary earner, the nominal unit labour costs or labour costs per product unit as the gross income from dependent work for each employee divided by the gross domestic product in 1991 prices for each wage and salary earner (concepts applicable exclusively to Germany). The indices 1991=100 have been reformulated on the basis of 1970=100 for clarity.

**Chart 1.5.1.2**

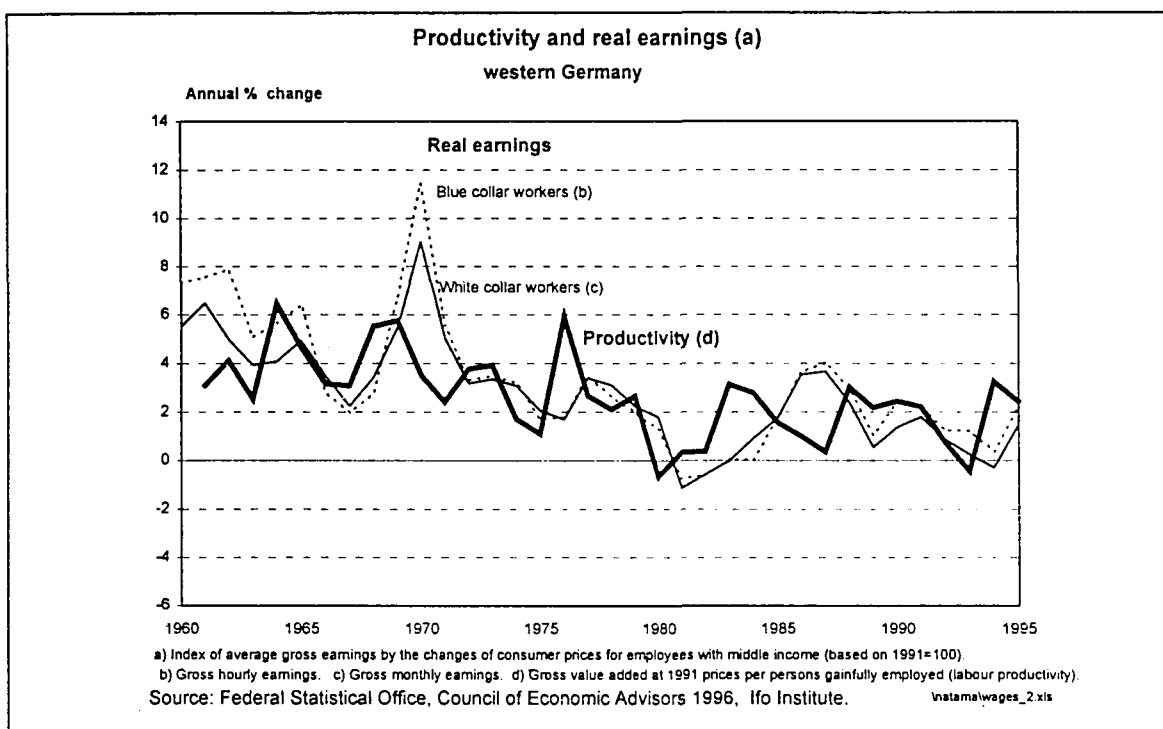


Both these factors are used in collective-bargaining negotiations, inter alia to provide a yardstick for wage settlements. The diagram clearly shows the great increase in nominal unit labour costs in the first half of the nineteen seventies. Corresponding situations occurred in the early eighties and nineties. If wage restraint had been practised in these phases, then unit labour costs could have dropped by the amount of the productivity increase. However, it must be noted that an orientation on the basis of labour productivity is not without its problems. If the cost burden of the companies increases too greatly, then - in purely numerical terms - productivity increases when the workforce is reduced, a situation that can incite the workforce to demand higher wages.

In view of the currently high level of unemployment in Germany therefore, "adjusted" productivity figures that are adapted to the situation must be used as the yardstick in the wage-settlement process. This approach is counselled by the *German Council of Economic Advisors*, that proposes such settlements to be based on a growth rate, that is corrected for changes in the labour market, of the marginal productivity of a productivity-oriented wages policy (German Council of Economic Advisors 1996, number 315). Because an orientation to real wages aims to provide full compensation for price increases, another proposal by this Council is to provide only partial compensation for the rise in living costs because the anticipated price increase used as the basis for the term of a collective agreement can be no more than an uncertain estimate.

In many cases, companies make additional voluntary payments going beyond the negotiated rates. Chart 1.5.1.3 shows the development of *actual gross earnings*, deflated by the increase in living costs. From 1960 to 1979, the rates of change were always positive. This trend was interrupted at the beginning of the nineteen eighties, when employees suffered a real decline in income. A comparison with the rate of change in labour productivity also shows that real wage increases exceeded productivity rises at the beginning of the seventies. Taking into account the methodical limitations of estimating labour productivity, a declining tendency can be observed over the last 25 years in both labour productivity and real *gross earnings*.

Chart 1.5.1.3



In considering real wage trends, however, it should be noted that reduced working hours have a considerable influence on the results. Different deviations result depending on the yardstick used: *net earnings per employee* increased by only 1.4 % between 1980 and 1995, whereas *net earnings per working hour* rose by 13.6 % (German Council of Economic Advisors 1996, number 150).

### 1.5.2 Negotiated earnings and wage drift

#### *Level and range of negotiated earnings*

An evaluation of 24 key collective-bargaining sectors in the overall economy (out of a total of about 300) produces the following picture of earnings levels and the spread of earnings at the end of 1995 (Bispinck 1997):

- In the *lowest paid group*, average earnings (waged and salaried employees) were 2,399 DM with a range from 1,499 to 3,657 DM monthly, depending on sector and collective-agreement group.
- In the *middle paid group*, that includes employees with a completed vocational training, usually lasting three years, the average starting wage was

2,866 DM, the final wage 3,336 DM. The ranges here were 1,787 to 4,423 DM and 2,731 to 4,831 DM respectively.

- In the *top paid group*, an average figure of 5,091 DM was reached at the final stage, with incomes ranging from 2,615 to 10,362 DM monthly.

This means that the *average remuneration* of the highest group is 2.2 times that of the lowest group. In the individual collective-agreement sectors and depending on the type of remuneration (wages/salaries), the ranges vary greatly (e.g. wages/salaries: joiners 3.6 times, public service 3.7 times). The deviations are less in the collective-agreement wages, the largest range, of 1.97, being observed in the retail trade (Bundesministerium für Arbeit und Sozialordnung 1997, p. 92-93). The lowest monthly negotiated basic wage (1,252 DM) was recorded for the salaried employees of the leather goods and travel goods industry in the Rhineland Palatinate.

### *Wage drift*

As a rule, companies in Germany pay their employees an amount that exceeds negotiated wage rates as a supplementary bonus. Chart 1.5.2.1 shows the growth rates of the indices of the negotiated wages and the paid nominal earnings for waged and salaried employees since 1960. The temporal gap between negotiated and paid earnings, the *wage drift*, can be seen from Chart 1.5.2.2. If paid earnings rise more quickly than negotiated earnings, then a positive wage drift can be observed as the difference in the growth rates, in the inverse case we get a negative wage drift. The latter is usually a sign of a reduction in payments in excess of negotiated rates, often due to changes in the performance of the economy or changes in the labour market.

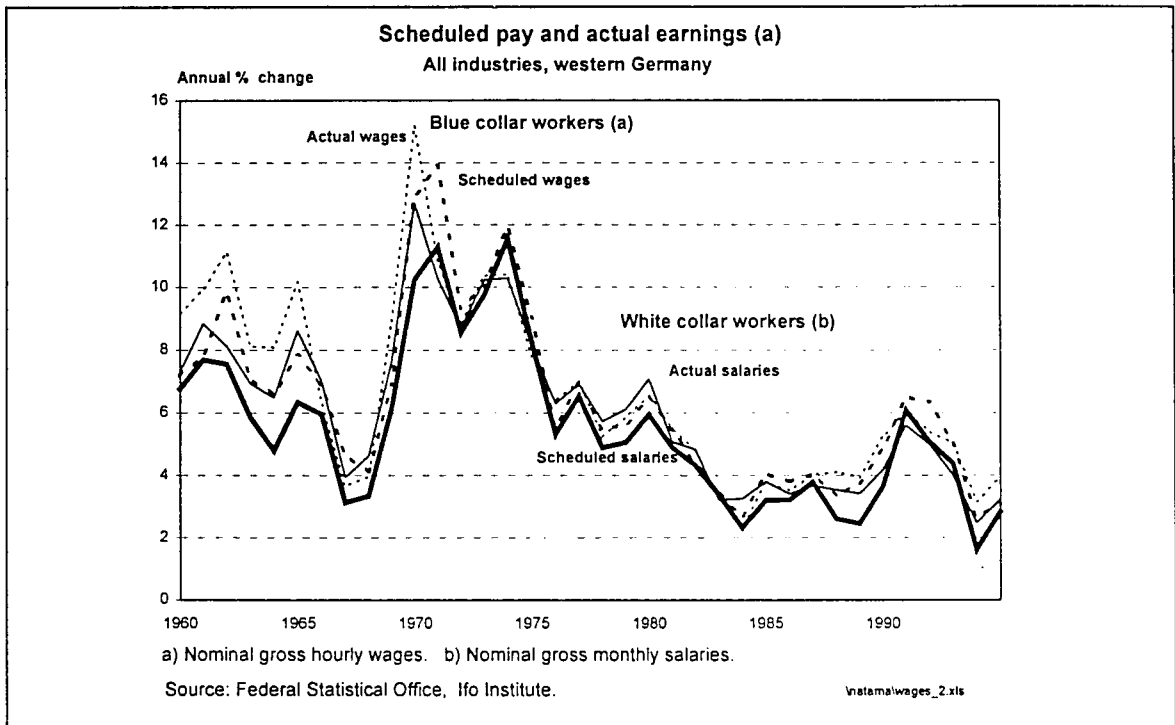
As different ways of delimiting the statistics (e.g. recording supplementary payments, working hours, short time etc.) can distort the results, these therefore refer to an unadjusted or gross wage drift.<sup>1</sup> With this restriction, the following picture emerges: in the nineteen sixties, the wage drift for salaried employees was always positive, for workers predominantly so. This difference, of up to

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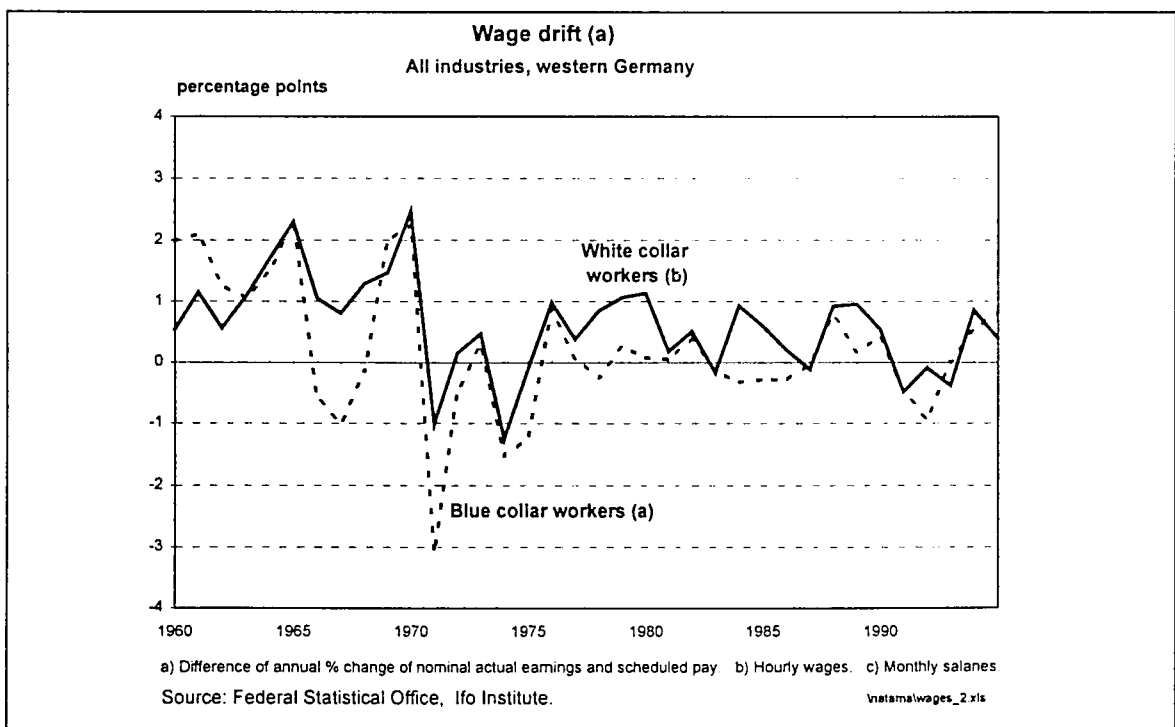
<sup>1</sup> An adjusted wage drift (net wage drift) could not be calculated here.

three percentage points higher, was observed until the mid seventies; since then, the fluctuations have remained within a single percentage point.

**Chart 1.5.2.1**



**Chart 1.5.2.2**





Overall, a negative wage drift is seen more frequently for workers than for salaried staff. Payments in excess of negotiated rates were consequently restricted, above all between 1966/67 and 1971 as well as 1974/75. In the years 1971 and 1975, a negative wage drift could be observed especially for male salaried employees, whereas this did not apply to wage earners (without figure).

### **1.5.3 Inter-sector structure of average earnings**

#### *Paid average earnings (nominal)*

For female workers in full-time industrial employment, the distribution among the three income groups recorded in the statistics has remained relatively constant over the past 30 years (West Germany). At the end of 1995, almost 49% were in the lowest skills group (unskilled), 42% in the middle group (semi-skilled) and only just 9% in the highest group (skilled). For male workers, these proportions were 10%, 30% and 60% respectively in 1995, with a shift occurring from the lowest group in favour of the highest one (10 percentage points) since the mid-sixties. These structural changes, that vary depending on the sector of the economy and are greatly affected by qualification levels, have a considerable effect on the average levels of paid nominal earnings.

Table 1.5.3.1 shows the average earnings of workers by economic sector for selected years (no index). In 1995, the average hourly earnings in industry were 25.57 DM. Women earned 18.96 DM in the lowest-paid group, and 22.56 DM in the highest. Men earned between 22.11 DM and 27.99 DM per hour. It should be noted that the income groups in the earnings statistics represent only a rough classification by qualification. The ranges within companies are almost certainly considerably greater than the official statistics indicate.

Table 1.5.3.1

Average gross hourly nominal earnings of blue collar workers,  
by industrial groups  
Men and women, western Germany

Sector	1995	1975 = 100 a)					
	D-Mark	1970	1975	1980	1985	1990	1995
<b>All industries</b>	25.57	62	100	136	166	205	260
<b>Manufact. industries (excl.build./civil engineering)</b>	25.46	(b)	100	136	167	207	262
<b>Energy, water</b>	29.44	57	100	134	162	198	251
<b>Mining (c)</b>	25.30	61	100	140	172	201	234
<b>Producer goods industry</b>	26.24	63	100	135	166	203	254
Manufacturing of non-metallic mineral products	24.24	62	100	136	160	192	240
Manufact. of metal, engineering (excl. non-ferrous met.)	26.77	65	100	134	167	202	256
Manufact. of non-ferrous metal, foundries	26.53	62	100	137	166	208	264
Mineral oil refining	34.39	56	100	138	171	212	269
Chemical industry	27.41	62	100	134	167	207	261
Man-made fibres industry	27.17	61	100	137	160	197	249
Saw milling and panels	22.34	60	100	138	165	202	252
Manufact. of pulp, paper and board	26.74	62	100	139	173	216	270
Manufacturing of rubber products	24.33	64	100	134	163	199	246
<b>Investment goods industry</b>	26.69	61	100	136	167	209	267
Manufact. of structural metal products	25.88	61	100	135	163	200	238
Mechanical engineering	26.77	61	100	134	166	205	258
Road vehicles, manufact. and repairing	30.96	61	100	135	164	205	274
Manufact. of motor vehicles, motors	33.32	60	100	135	165	206	282
Shipbuilding	28.59	62	100	137	169	208	269
Aerospace and aeronautic equipment	29.75	58	100	138	172	219	281
Electrical engineering, repairing	24.24	60	100	136	167	210	268
Instrument engineering, optics	23.47	61	100	136	168	209	263
Tools, finished metal goods	23.47	63	100	136	166	204	255
Office machinery, data processing	23.39	(b)	100	137	170	215	256
<b>Consumer goods industry</b>	22.60	61	100	136	164	204	260
Manufacturing of ceramic goods	19.85	60	100	133	156	185	232
Manufact. and processing of glass	23.80	62	100	135	165	201	246
Manufacturing of wood	23.24	61	100	138	162	197	245
Manufact. of musical instruments, toys etc.	20.83	59	100	136	161	200	249
Processing of paper and board	22.66	61	100	137	167	212	269
Printing and reproduction	29.24	64	100	133	164	207	266
Processing of plastics	22.07	62	100	137	168	205	254
Processing of leather	19.96	66	100	137	162	196	238
Manufact. of leather goods (excl. footwear)	17.01	65	100	138	159	192	238
Footwear, repairing of shoes, leather goods	17.70	64	100	136	165	195	237
Textile industry	20.61	62	100	133	162	199	251
Clothing industry	17.59	62	100	134	156	188	238
<b>Food, drink and tobacco industry</b>	22.46	60	100	136	165	200	253
Bread and flour confectionery	22.86	61	100	137	165	199	256
Tobacco industry	27.48	58	100	143	181	240	329
<b>Building and civil engineering (2)</b>	25.52	66	100	138	164	199	251

a) No index. b) Data not available. d) Earnings of men.

Source: Federal Statistical Office, Ifo Institute.

TAB-1531.xls

The highest average hourly earnings were reached in 1995 in the oil industry, in the chemical industry (34.39 DM) and in the automotive manufacturing sector (vehicles and engines), the lowest hourly rates being found in the leather and textile industry (between 17 DM and 20.60 DM). Since 1970 the greatest increases in hourly rates took place in the tobacco industry and in some sectors of the investment-goods industry (including automotive and aerospace vehicles). Earnings in the consumer-goods industry (above all ceramics, leather, apparel) increased by below-average levels.

The shifts within the four earnings groups were significantly greater among full-time commercial and technical salaried employees in industry, trade, credit institutes and the insurance sector. For male salaried employees, skill level groups II (highly skilled) and III (upper skill level) are significantly more strongly represented than thirty years ago, for female ones there has been above all a shift in favour of skill-level group III. In 1995, the groups showed the following composition for men / women:

Skill level group	II	Highly skilled	63.3% / 36.7%
	III	Upper skill level	41.9% / 11.0%
	IV	Mid-level (apprenticeship)	11.8% / 37.1%
	V	Below apprenticeship	1.3% / 5.2%

In 1995, the average monthly income for all sectors was 5,445 DM (Table 1.5.3.2). Incomes in the lowest and the highest qualification groups were between 3,481 DM and 7,572 DM for male salaried employees, and between 3,030 DM and 6,096 DM for female ones. As was the case for workers, the salaried employees also attained the highest earnings in the sectors of oil processing as well as automotive and aerospace vehicles. To this must be added the sector of information technology.

The relatively lowest monthly earnings were also paid in the consumer goods industry (leather goods, footwear manufacture). The absolutely lowest earnings were the 3,906 DM monthly found in the retail trade.

Table 1.5.3.2

**Average gross monthly nominal earnings of white collar workers, by industrial groups  
Men and women, western Germany**

Sector	1995 D-Mark	1975=100 a)					
		1970	1975	1980	1985	1990	1995
All industries (incl. trade, credit inst., insurance)	5445	60	100	140	170	207	258
All industries (incl. building)	6148	59	100	140	173	210	259
<b>Manufacturing industries (excl. build./civil engin.)</b>	6159	(b)	100	141	176	213	263
Energy, water	5922	59	100	134	163	191	238
Mining	6548	57	100	134	165	195	227
<b>Producing industry</b>	6172	60	100	139	172	208	253
Manufacturing of non-metallic mineral products	5700	60	100	137	164	197	240
Manufact. of metal, engineering (excl. non-ferr. met.)	5958	58	100	139	169	198	244
Manufacturing of non-ferrous metal, foundries	6153	59	100	144	177	213	266
Mineral oil refining	7532	57	100	143	182	217	261
Chemical industry	6278	62	100	138	172	210	254
Man-made fibres industry	5940	59	100	140	174	202	237
Saw milling and panels	5283	61	100	139	168	204	249
Manufacturing of pulp, paper and board	6431	59	100	145	182	217	267
Manufact. of rubber products	5908	61	100	138	177	217	262
<b>Investment goods industry</b>	6426	58	100	142	178	216	269
Manufacturing of structural metal products	6074	59	100	138	173	207	246
Mechanical engineering	6201	60	100	141	176	213	264
Road vehicles, manufact. and repairing	6938	57	100	139	172	208	258
Manufacturing of motor vehicles, motors	7451	56	100	139	172	207	259
Shipbuilding	6407	59	100	142	172	208	273
Aerospace and aeronautic equipment	6938	58	100	140	181	224	280
Electrical engineering, repairing	6582	56	100	143	179	219	277
Instrument engineering, optics	5751	60	100	141	176	214	262
Tools, finished metal goods	5565	60	100	140	173	207	253
Office machinery, data processing	7096	(b)	100	149	189	227	276
<b>Consumer goods industry</b>	5289	61	100	139	171	204	250
Manufacturing of ceramic goods	4981	60	100	140	160	192	238
Manufact. and processing of glass	5389	60	100	143	176	212	253
Manufacturing of wood	5100	61	100	141	168	198	242
Manufacturing of musical instruments, toys etc.	4821	59	100	138	166	198	239
Processing of paper and board	5473	60	100	139	169	203	251
Printing and reproduction	5816	62	100	137	167	200	244
Processing of plastics	5463	61	100	139	174	208	250
Processing of leather	5052	67	100	141	171	199	233
Manufact. of leather goods (excl. footwear)	4444	64	100	137	166	196	238
Footwear, repairing of shoes, leather goods	4841	63	100	138	169	205	254
Textile industry	5049	61	100	136	168	198	243
Clothing industry	4592	60	100	137	166	196	237
<b>Food, drink and tobacco industry</b>	5492	60	100	137	170	205	250
Bread and flour confectionery	4768	59	100	133	160	193	224
Tobacco industry	6503	59	100	145	189	236	282
<b>Trade, credit institutions, insurance</b>	4724	61	100	140	165	202	260
Wholesale dealing	4989	61	100	140	167	200	255
Retail distribution	3906	61	100	140	163	201	257
Credit institutions	5089	61	100	135	166	201	254
Insurance	5421	59	100	140	176	207	261
<b>Building and civil engineering</b>	6099	62	100	135	159	192	236

a) No index. b) Data not available.

Source: Federal Statistical Office, Ifo Institute.

TAB-1532.xls

*Ranges of average earnings*

Table 1.5.3.3 shows the ranges of earnings. A further differentiation is made within the group of workers and salaried employees by sex and qualification group. As the calculations are based on absolute average earnings and not on structurally-adjusted indices, the time sequence represents momentary snapshots of the relevant reference year. Accordingly, earnings for male workers at the highest level are only 1.27 times greater than those at the lowest level. The range was even smaller among women.

For both male and female salaried employees, the paid monthly earnings of the highest earning group exceeded those of the lowest by a factor of 2.18 and 2.01 respectively.

*Gross annual earnings East/West ratio - special payments*

In Germany, employees often receive - seen over the whole year - additional payments from their employer that are not recorded in the periodic earnings surveys of payments made on an hourly or monthly basis. However, these special payments, such as a 13<sup>th</sup> month's salary or wage, Christmas bonuses, vacation pay, performance bonuses, severance pay etc., are contained in the gross annual earnings. This means that the statistics of annual earnings give a more comprehensive picture than the periodic earnings statistics, but with the drawback that the former do not allow any differentiation by payment groups.

In 1995 in West Germany a worker in industry received an annual gross wage of 56,344 DM, in East Germany the figure was around 40,000 DM (Table 1.5.3.4). Compared with 1985, nominal annual earnings in the West rose by an average of 45.7% in industry, and by 60% in structural and civil engineering inclusive of allied trades. Enormous increases in earnings since 1991 (earliest data) could be observed in East Germany. Thus in mining, for example, annual earnings doubled in only five years.

Table 1.5.3.3

**Differentials in nominal earnings by gender and by skill levels, all industries  
Western Germany 1950 - 1995**

Hourly gross earnings of blue collar workers (a,c)						
	1950	1960	1970	1980	1990	1995
<b>Men</b>						
unskilled male = 100						
skilled	129	123	123	124	123	127
semi-skilled	118	115	111	112	111	114
unskilled	100	100	100	100	100	100
all skill levels	121	117	116	118	117	120
<b>Women</b>						
unskilled women = 100						
skilled	115	114	112	112	115	119
semi-skilled	n.a.	108	104	104	104	105
unskilled	100	100	100	100	100	100
all skill levels	109	104	103	102	103	104
<b>Women</b>						
unskilled male = 100						
skilled	79	83	88	93	96	102
semi-skilled	n.a.	79	82	86	87	90
unskilled	69	73	78	83	83	86
all skill levels	75	77	80	85	85	89
<b>Monthly gross earnings of white collar workers (b,c)</b>						
	1950	1960	1970	1980	1990	1995
<b>Men</b>						
male below apprenticeship = 100						
highly skilled	n.a.	228	205	205	230	218
upper skill level	n.a.	167	155	155	169	158
mid-level (apprenticeship)	n.a.	116	115	116	122	118
below apprenticeship	n.a.	100	100	100	100	100
all skill levels	n.a.	165	160	168	186	178
<b>Women</b>						
female below apprenticeship = 100						
highly skilled	n.a.	236	215	197	210	201
upper skill level	n.a.	166	161	151	155	148
mid-level (apprenticeship)	n.a.	115	116	113	115	113
below apprenticeship	n.a.	100	100	100	100	100
all skill levels	n.a.	126	131	133	138	138
<b>Women</b>						
male below apprenticeship = 100						
highly skilled	n.a.	179	161	160	183	175
upper skill level	n.a.	126	121	123	135	129
mid-level (apprenticeship)	n.a.	87	87	92	100	98
below apprenticeship	n.a.	76	75	81	87	87
all skill levels	n.a.	96	98	108	121	120
n.a. = data not available.						
a) All industries incl. building. b) All industries incl. trade, credit institutions, insurance.						
c) Calculations based on average nominal earnings of the year.						

Source: Federal Statistical Office, Ifo Institute.

Tab-1533.xls

This shows an overall ratio of East/West earnings of 71% in industry for 1995. In the sector of producer goods, an East German worker could earn about 64% of the annual income of his colleague in West Germany, but this figure was already almost 85% in the mining sector.

A similar trend could be observed among the salaried employees who achieved annual earnings averaging almost 74,000 DM in 1995 in the West (Table 1.5.3.5). There was an overall increase of 52% compared with 1985 in West German industry. In East Germany, the increase was almost 100% within five years, in the mining sector as much as 136%. At 77%, the earnings gap between East and West for salaried employees was highest in the sectors of commerce, banks, and insurance, and lowest in the foods and luxury consumables sector at 59%.

It can also be seen from the table that special payments comprised 11.6% of annual earnings in 1995 in West Germany and 9.9% of annual earnings in the East. This share of supplementary payments is particularly striking in the mining sector, at 6.9% in the West and 21.2% in the East.

Table 1.5.3.6 and Table 1.5.3.7 list annual earnings by sector and sex for West and East Germany. The figure for total annual earnings in industry is taken as the average 100% reference. It can be seen that female workers in the automotive, oil processing and tobacco processing sectors in West Germany could earn up to 37% above the sector average, in East Germany up to 40% (printing and reproduction). Earnings were considerably below the industry average, especially in the consumer goods sector. For salaried employees, this applies above all to East Germany. With the exception of printing and allied trades, incomes were below the industry average.

Table 1.5.3.4

## Structure of gross annual nominal earnings of blue collar workers in Germany, by industrial groups (a)

## Men and women

Sector	West			East (2)		Earnings: Eastern G. % of Western Germany	West	East (b)
	DM	1985=100 (c)		DM	1991=100 (c)		Earnings of blue collar workers as percentage of white collar workers (white coll. workers = 100 %)	
	1995	1990	1995	1995	1995	1995		
All industries (incl. building)	56344	120.6	145.7	40000	169.2	71.0	68.1	71.6
Manufacturing industries (excl. building and civil engineering)	56052	121.0	146.4	38235	179.3	68.2	67.6	70.6
Energy, water	67407	117.7	144.9	49484	180.5	73.4	83.6	85.2
Mining	57018	115.5	135.1	48240	200.1	84.6	67.6	74.3
Producer goods industry	59460	119.6	144.5	38210	182.7	64.3	70.9	74.0
Investment goods industry	57506	120.8	145.9	40454	186.9	70.3	66.6	68.7
Consumer goods industry	49989	122.1	151.0	33248	158.6	66.5	70.8	70.3
Food, drink and tobacco industry	52502	120.4	146.0	35762	167.8	68.1	71.0	81.9
Building and civil engineering	55781	123.7	160.0	40952	140.9	73.4	69.1	70.1

a) Gross annual earnings of full time employees including all bonuses, gratuities etc. paid over the year.

b) Before 1991 data not available. c) No index.

Source: Federal Statistical Office, Ifo Institute.

Tab-1534.xls



**Table 1.5.3.5**

**Structure of gross annual nominal earnings of white collar workers in Germany, by industrial groups (a)  
Men and women**

Sector	West			East (b)		Earnings: Eastern G. % of Western Germany	West	East
	DM	1985=100 (c)		DM	1991=100 (c)		Additional earnings % of annual earnings (white collar workers) Annual earn. = 100 %	
	1995	1990	1995	1995	1995	1995		
All industries (incl. trade, credit inst., insurance)	73892	123.6	152.0	53981	197.9	73.1	11.6	9.9
All industries (incl. building)	82699	122.1	148.5	55875	207.9	67.6	10.8	9.8
Manufacturing industries (excl. build./civil engin.)	82915	122.5	149.0	54156	207.7	65.3	10.9	7.9
Energy, water	80671	117.6	145.2	58066	178.8	72.0	11.9	8.8
Mining	84380	118.7	135.8	64904	235.7	76.9	6.9	21.2
Producer goods industry	83854	123.2	146.9	51669	192.4	61.6	11.7	7.0
Investment goods industry	86312	122.2	149.6	58874	227.2	68.2	10.7	8.1
Consumer goods industry	70613	121.3	147.0	47275	179.3	66.9	10.1	7.2
Food, drink and tobacco industry	73906	121.6	148.8	43675	179.5	59.1	10.8	8.5
Trade, credit institutions, insurance	64789	123.7	159.9	49920	193.0	77.1	12.5	14.2
Building and civil engineering	80711	120.2	150.5	58416	162.4	72.4	9.3	4.4

a) Gross annual earnings of full time employees including all bonuses, gratuities etc. paid over the year.

b) Before 1991 data not available. c) No index.

Source: Federal Statistical Office Ifo Institute.

Tab-1535.xls

**Table 1.5.3.6**  
**Sectoral structure of gross annual nominal earnings**  
**of blue collar workers 1995 (a)**

Sector	Western Germany			Eastern Germany		
	Men	Women	Total	Men	Women	Total
	D-Mark			D-Mark		
<b>All industries (incl. building)</b>	58928	41521	56344	41162	31791	40000
	all sectors = 100			all sectors = 100		
All industries (incl. building)	100	100	100	100	100	100
<b>Manufacturing industries (excl. build./civil engin.)</b>	100	100	99	97	97	96
<b>Energy, water</b>	115	120	120	122	135	124
<b>Mining</b>	97	(b)	101	117	(b)	121
<b>Producer goods industry</b>	103	107	106	95	105	96
Manufact. of non-metallic mineral products	100	101	103	98	109	100
Manufact. of metal, engineering (excl. non-ferr. met.)	100	105	104	97	111	99
Manufacturing of non-ferrous metal, foundries	103	105	105	100	114	102
Mineral oil refining	135	133	140	98	118	99
Chemical industry	110	109	110	90	102	89
Man-made fibres industry	97	105	99	88	108	91
Saw milling and panels	89	98	92	85	99	87
Manufacturing of pulp, paper and board	104	102	108	90	99	91
Manufact. of rubber products	95	102	95	88	98	87
<b>Investment goods industry</b>	102	106	102	101	105	101
Manufact. of structural metal products	100	106	104	126	119	104
Mechanical engineering	102	107	105	101	103	103
Road vehicles, manufact. and repairing	110	121	112	100	109	101
Manufacturing of motor vehicles, motors	114	137	118	127	131	129
Shipbuilding	106	119	111	111	122	114
Aerospace and aeronautic equipment	103	112	107	(b)	(b)	(b)
Electrical engineering, repairing	97	103	92	99	105	97
Instrument engineering, optics	93	102	89	96	101	92
Tools, finished metal goods	93	99	92	94	92	93
Office machinery, data processing	95	108	92	87	101	86
<b>Consumer goods industry</b>	93	92	89	89	88	83
Manufact. of ceramic goods	81	89	77	89	100	86
Manufact. and processing of glass	95	92	95	94	106	94
Manufacturing of wood	95	97	90	86	94	84
Manufacturing of musical instruments, toys etc.	84	90	79	77	72	69
Processing of paper and board	94	93	90	83	83	78
Printing and reproduction	114	116	113	131	140	127
Processing of plastics	91	92	88	84	88	81
Processing of leather	81	89	81	75	71	71
Manufact. of leather goods (excl. footwear)	72	78	64	63	69	57
Footwear, repairing of shoes, leather goods	76	86	70	78	73	66
Textile industry	84	90	80	70	77	66
Clothing industry	80	84	66	72	71	59
<b>Food, drink and tobacco industry</b>	97	93	93	93	96	89
Bread and flour confectionery	96	96	95	84	91	81
Tobacco industry	109	123	103	132	139	124
<b>Building and civil engineering</b>	95	(b)	99	99	(b)	102

a) Gross annual earnings of full time employees including all bonuses, gratuities etc. paid over the year.

b) Data not available or data not representative.

Source: Federal Statistical Office, Ifo Institute.

Tab-1536

Table 1.5.3.7

## Sectoral structure of gross annual nominal earnings of white collar workers 1995 (a)

Sector	Western Germany			Eastern Germany		
	Men	Women	Total	Men	Women	Total
	D-Mark			D-Mark		
<b>All industries (incl. trade, credit inst., insurance)</b>	<b>84059</b>	<b>55918</b>	<b>73892</b>	<b>61565</b>	<b>47318</b>	<b>53981</b>
	all sectors = 100			all sectors = 100		
<b>All industries (incl. trade, credit inst., insurance)</b>	100	100	100	100	100	100
All industries (incl. building)	107	108	112	102	99	104
<b>Manufacturing industries (excl. build./civil engin.)</b>	108	109	112	99	95	100
<b>Energy, water</b>	103	110	109	105	108	108
<b>Mining</b>	104	113	114	114	122	120
<b>Producer goods industry</b>	109	116	113	95	94	96
Manufact. of non-metallic mineral products	101	100	104	95	90	95
Manufact. of metal, engineering (excl. non-ferr. met.)	101	103	106	99	100	103
Manufacturing of non-ferrous metal, foundries	106	109	111	103	106	108
Mineral oil refining	131	139	140	93	92	95
Chemical industry	113	122	117	93	94	94
Man-made fibres industry	99	101	104	95	93	97
Saw milling and panels	93	92	96	89	82	88
Manufacturing of pulp, paper and board	110	109	115	90	84	90
Manufact. of rubber products	100	103	105	90	90	92
<b>Investment goods industry</b>	111	111	117	103	104	109
Manufact. of structural metal products	104	104	109	100	103	106
Mechanical engineering	108	107	114	103	103	108
Road vehicles, manufact. and repairing	117	119	124	88	92	94
Manufacturing of motor vehicles, motors	123	126	132	106	121	117
Shipbuilding	108	105	116	118	123	126
Aerospace and aeronautic equipment	113	120	123	(b)	(b)	(b)
Electrical engineering, repairing	113	113	119	110	110	117
Instrument engineering, optics	100	103	103	106	106	112
Tools, finished metal goods	99	100	102	88	90	92
Office machinery, data processing	127	138	136	93	103	100
<b>Consumer goods industry</b>	95	97	96	88	88	88
Manufact. of ceramic goods	86	93	88	90	87	87
Manufact. and processing of glass	97	96	99	91	88	92
Manufacturing of wood	90	90	91	78	82	80
Manufacturing of musical instruments, toys etc.	87	92	86	69	67	69
Processing of paper and board	98	100	100	84	83	84
Printing and reproduction	104	109	106	111	112	109
Processing of plastics	95	96	98	86	79	85
Processing of leather	89	89	92	(b)	(b)	83
Manufact. of leather goods (excl. footwear)	81	88	80	(b)	(b)	67
Footwear, repairing of shoes, leather goods	90	93	90	78	74	73
Textile industry	89	95	90	70	73	71
Clothing industry	86	93	82	70	72	66
<b>Food, drink and tobacco industry</b>	97	102	100	87	78	81
Bread and flour confectionery	88	78	86	72	62	64
Tobacco industry	116	133	123	130	141	139
<b>Trade, credit institutions, insurance</b>	89	95	88	90	102	92
Wholesale dealing	88	93	91	81	84	82
Retail distribution	75	78	70	76	83	77
Credit institutions	97	109	97	100	107	98
Insurance	101	119	103	97	116	104
<b>Building and civil engineering</b>	107	98	109	108	98	108

a) Gross annual earnings of full time employees including all bonuses, gratuities etc. paid over the year.

b) Data not available or data not representative.

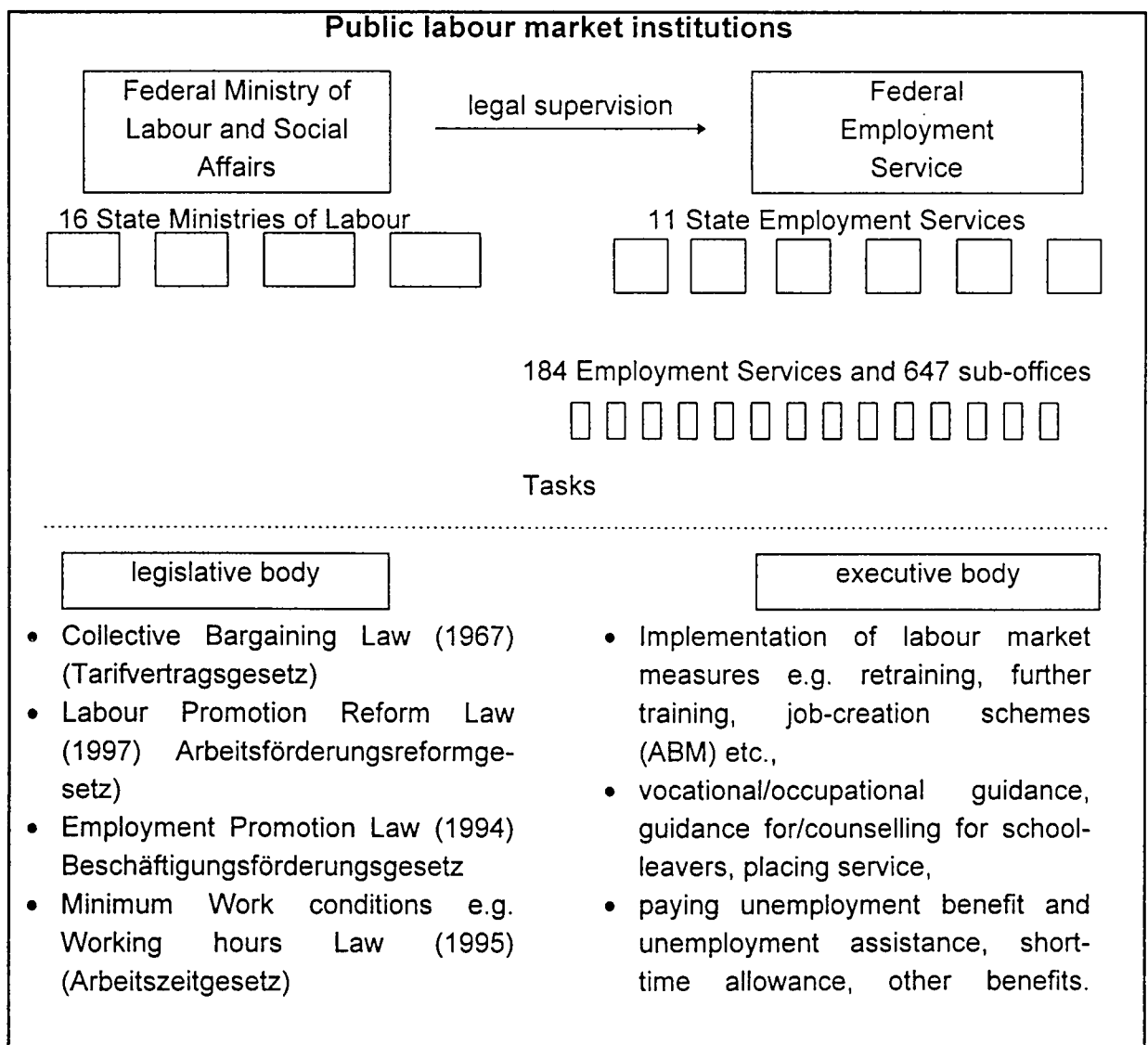
Source: Federal Statistical Office, Ifo Institute.

## 2 Labour market institutions

### 2.1 Public institutions

Basically the public administration for labour market affairs follows a twofold structure. The Federal Ministry of Labour and Social Affairs is responsible for the legislative framework for labour market affairs, and the legal supervision of its implementation in the task of the Federal Employment Service. Furthermore, the latter has to provide public employment services such as retraining, further training, job-creation schemes, vocational/occupational guidance, job placements and paying unemployment benefits, etc. (cf. Chart 2.1.1).

Chart 2.1.1



Up to 1995 the Federal Employment Service was the only institution in Germany which was allowed to provide an employment service. Since then also private agencies may refer suitable applicants to firms. But private agencies are not as successful as had been expected. In fact they only reported 33,800 filled vacancies during the year 1995 compared to 3,269,000 placements by the public labour offices. Moreover, in 1997 a reform of the so called Labour Promotion Law passed through the legislation which puts an emphasis on strengthening regional labour offices in their financial autonomy and general scope of action regarding active labour market measures to support the synchronisation of the labour market and structural policies.

## **2.2 The system of industrial relations, with an emphasis on collective wage negotiations**

Employee representation in the determination of wages, working conditions, and other important norms affecting work is provided on three levels (Vitolis 1993, pp. 2ff):

- Industry-level collective bargaining
- Representation of workers in supervisory boards of companies (Mitbestimmung)
- Works councils

### *Industry level collective bargaining*

Employees and employers are guaranteed the right of representation through unions and employers associations, which negotiate collective bargaining agreements on their behalf. The so-called freedom of coalition and the right to build interest associations for the purpose of furthering working conditions and economic interests is specifically guaranteed in the Constitution (Grundgesetz) Art. 9 Sec. 3. The Collective Bargaining Law (Tarifvertragsgesetz) of 1967 defines the possible content, form and parties to a collective bargaining agreement. It requires these agreements to be registered by the Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Sozialordnung), and defines the conditions under which the agreements can be legally binding

for all companies in an industry. On the employers' side, a dense network of employers' associations represent companies in specific industries. Depending on the industry, these associations are also organised on a regional basis, although the degree of co-ordination between these regional associations is typically very high and regional variations in negotiated minimum wages and working conditions are low ( see employers' organisations).

### *Representation in supervisory boards*

Employees have the right of representation on the supervisory boards of companies.<sup>1</sup> The type of representation depends on the characteristics of the company and takes three forms: parity, qualified parity, and one-third co-determination. The strongest form of representation is parity codetermination (paritätische Mitbestimmung) as established by the Montanmitbestimmungsgesetz of 1951 which applies to public corporations and limited liability companies (AG and GmbH) engaged primarily in the coal mining and steel industries and employing at least 1,000 people. The Parity Codetermination Extension Law (Montanmitbestimmungsergänzungsgesetz) of 1956 further provides that parity co-determination applies to the supervisory boards of holding companies in which steel producing or mining operations comprise 20% or more of turnover and employ at least 2,000 people. That way unions and works councils have an important influence over company policy in the mining and steel industries. Another form of representation is qualified parity co-determination (unterparitätische Mitbestimmung) as determined by the Co-Determination Law (Mitbestimmungsgesetz) of 1976. Although this form of co-determination from the point of view of employee representation is weaker in comparison to parity co-determination, the benefit for unions and works councils are rights to information. This form of co-determination applies to public corporations, limited liability corporations, limited commercial partnerships, and cooperatives (AG, GmbH, KGaA and Genossenschaften) with over 2,000 employees. One-third co-determination (Drittelparitätische Mitbestimmung), as defined by the Works Constitution Laws of 1952 and 1972, applies to companies between 500 and 2,000 employees.

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<sup>1</sup> German companies have a two-tier structure with a strict separation between the executive board, which runs the day-to-day affairs of the company, and the supervisory board, which sets general company policy and appoints the members of the executive board.

### *Works councils*

Employees have the right to elect works councils with information, consultation and participation rights at the plant and company level. The works council is the most important institution for employee representation at the plant level. In the Betriebsverfassungsgesetz (Works Constitutions Law ) of 1972, the form, rights and obligations of works councils are defined. Employees in plants with at least five regular employees (exclusive of management) are entitled to elect representatives to a works council. The number of members of the works council depends on the number of employees eligible to vote. Regular elections have to occur every four years in the time between 1 March and 31 May. In companies with multiple plants, a company works council composed of representatives of each of the plant works councils is to be formed. In groups of affiliated companies, a works council composed of representatives of the individual companies may be formed. Works councils have the right to negotiate with management about the scheduling of the working day and of vacation days, incentive pay, job design, the administration of surveys, the development of guidelines for hiring, layoffs, and reclassification, the training plan, and social plans for cushioning the impact of layoffs. Work councils also have a veto right on the hiring, layoff, classification and reclassification of employees. Finally, works councils have information and consultation rights about health and safety measures, personnel planning, general company planning and the effects of new investment, organisation, work processes and other major changes. The broad information rights of works councils are balanced by maintain obligation to keep sensitive company information confidential and to keep consensus-orientated contracts with the management.

### *Employers' organisations*

The Federal Union of German Employers' Associations (Bundesvereinigung der Deutschen Arbeitgeberverbände) has two levels of associations (grouped within 48 umbrella industry associations) and 15 state level associations. The largest industry employer association in the BDA is Gesamtmetall whose almost 10,000 companies in the engineering industry have 2.8 million employees.<sup>1</sup>

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<sup>1</sup> See Bratt C. (1990).

Most companies belong to one or more industry associations and possibly also a state association. There is also a separate federation of manufacturing industries, Federal Union of the German Industry (Bundesverband der Deutschen Industrie, BDI), which with its 34 trade associations watches over the interests of business and industry. Furthermore the Deutsche Industrie- und Handelstag (DIHT) is the central organisation for some 70 regional chambers of industry and commerce. In 1994 some 43% of the companies applied to the number of companies in Germany belonged to a employers' association (Schroeder/Ruppert 1996). Applied to the number of employees this ratio accounted in 1984 for about 75%. The reason is that large companies are more likely to be a member of such an association.

#### *Unions' structure and participation*

On the union side, in 1995 the 16 unions under the umbrella organisation DGB (Deutscher Gewerkschaftsbund) had a membership of 9.3 million in Germany (Federal Statistical Office 1996), which corresponds to a level of organisation of 34% (Bispinck/Lecher 1993). Another 0.5 million people are members of the white collar union (Deutsche Angestellten-Gewerkschaft, DAG), which in many industries also bargains with employers. About 1 million public officials are organised in the DBB (Deutscher Beamtenbund), which however is more of an association than a union since it does not formally bargain over wages and working conditions. Finally, a small number of workers (0.3 million) are organised in the unions under the Christian Trade Union Confederation, which is not a significant force in collective bargaining. As is evident, the employers associations do not correspond exactly to the number of unions, and frequently several employer associations negotiate with one union. Under certain conditions, employers may also bargain individually with unions. In the metalworking sector, for example, Volkswagen has traditionally negotiated separate contracts.



*Laws and agreements concerning collective wage negotiations*

Wages and other conditions of employment are set out in tariff agreements, Tarifvertrag, which also can have a statutory normative function for non-unionised employers and employees (through a law known in German as Allgemeinverbindlicherklärung). These agreements are normally of two types:

1. Lohntarifverträge, which regulate wages, are normally entered into by industry at a regional level, this being a characteristically German practice. At this stage also additional supplements are negotiated over and above the agreed tariff wage. The actual wage paid is decided by the employer at a local level; the unions have no bargaining rights at this stage.
2. Manteltarifverträge which regulate job conditions (working hours, holidays, training conditions etc.) are entered into at a regional level as well as on an industry-wide basis (see Box German sick pay regulations).

Lohn- and Manteltarifverträge are legally binding only for establishments which are organised in a employers' association or which have ratified Lohn- and Manteltarifverträge on enterprise level. The exception are tariff agreements which achieved statutory normative function by the so called Allgemeinverbindlichkeitserklärung. In this case the agreements covered by the Allgemeinverbindlichkeitserklärung are legally binding for all establishments of the relevant sector and tariff region. Therefore, tariff agreements come into minimum wage rulings. Altogether about 43,632 ratified tariff agreements existed in western Germany at the beginning of 1995. One half of them were entered by associations, the other half by firms. Out of this number, 627 agreements covering 16 sectors (117 the construction sector) achieved statutory normative function through the Allgemeinverbindlicherklärung. In the construction sector for the first time in 1996 wage tariff agreements have achieved statutory normative function (Allgemeinverbindlichkeit) in order to prevent foreign workers from supplying their labour more cheaply than German workers do.

## German sick pay regulations

### *History of the German Sick Pay Law*

Since 1931 white-collar workers have been entitled to sick payments, whereas blue-collar workers achieved similar benefits in the 1950s. The relevant law (Lohnfortzahlungsgesetz) was enacted in 1969. Only in 1994 was the so-called Entgeltfortzahlungsgesetz enacted which regulates sick pay equally for both white- and blue-collar workers. Essentially the statutory sick pay since 1 October 1996 guarantees in case of sickness continuing payments amounting to 80% (or 100% of previous earnings if the employee waives one holiday for five days of illness, without any waiting periods) for a period of six weeks. Afterwards sickness benefits amounting to 70% of previous earnings are paid by the health insurance funds for 78 weeks (§47, § 48 SGB V 31 V).

### *Agreements on sick pay in labour contracts*

With partial reference to the Sick Pay Law, which functions as a minimum condition, many collectively bargained pay agreements additionally regulate sick payments. The regulations differ regarding details such as the right to and the length of continuing payments in case of sickness, the calculation basis, the calculation method, and the following payments for the purpose of increasing the sickness benefits paid by the health insurance funds after six weeks of illness. Pay agreements also differ with regard to their legal effects, i.e. some of the agreed regulations establish legal entitlements whereas other regulations refer to the Sick Pay Law but are only of a declaratory nature. The difference is important for understanding the entire conflict between employees' statutory rights and entitlements under collective agreements.

### *Recent reforms*

In the autumn of 1996 the German Government amended a welfare cuts programme which also included cuts in the statutory sickness pay from 100% to 80% of previous earnings and a minimum job tenure of four weeks. The law took effect on 1 October 1996. Almost immediately several companies in the engineering industry set out to make unilateral reductions, although the government's legal advisers said that the change would apply only to new employees. The employers argued that employment contracts are based on law, and that a change in the law implies a change in contract. On the other hand, the unions argued that the pay agreements established autonomous sick pay entitlements, for which the Sick Pay Law only functions as a statutory minimum condition. The sick pay cut was firmly resisted by the trade unions with considerable - and costly - local industrial action, reinforced by the fact that 100% sick pay, was as described above, guaranteed by binding agreements in many regions. Even the ministries were surprised by the speed and the resolve of some German companies in seeking to use the new law to their own advantage and how quickly they were denounced. Chancellor Kohl appealed to employers to honour existing contracts and President Roman Herzog advised employers to tread cautiously and not to endanger social harmony. After the industrial actions and the intervention of these high standing politicians all of the companies who have had cut sick pay entitlements agreed not to apply the new rule until new collective wage negotiations were settled.

*Pay agreements on the background of the 'new' Sick Pay Law*

Since this conflict many new pay agreements have been concluded. Regarding the sick pay regulations, basically employees will continue to receive 100% of pay for the first six weeks of illness despite the 'new' Sick Pay Law. However, in calculating pay for the three months preceding the illness, any overtime payments are now to be ignored. Additionally, some of the management and employee representatives at the workplace level are to collaborate on absence monitoring and health promotion.

Altogether, the recent debate on pay for sickness is a good example of the role of the state in the German industrial relation system and its functional mechanisms.

Tariff agreements can only achieve statutory normative function if they fulfil certain preconditions such as,

- at a minimum 50% of all employers for which the relevant tariff agreement will be applied are organised in a employers' organisation and
- the declaration (Allgemeinverbindlicherklärung) is of public interest.

Altogether about 5.5 million employees have been covered by tariff agreements which have a statutory normative function in western Germany. Among them, for 1.2 million employees the tariff agreements have been only applied because of the so called Allgemeinverbindlicherklärung (Clasen 1996, p.22).

The total of tariff agreements ratified by the roof organisation DGB covered about 16.7 million employees (only valid for tariff regions and sectors with more than 1,000 employees) in western Germany (cp. Table 2.2.1).

**Table 2.2.1**

**Employees covered by wage agreements, 1995**

Sectors	Number of employees covered by wage agreements* in 1000
Agriculture, forestry	1448
Energy, water	148
Production goods	1028
Investment goods	4151
Consumer goods	975
Food, beverages	613
Construction	1216
Trade	2881
Transport, communication	860
Credit institutes, insurance	665
Private services, non-profit organisations	1495
State	2472
<b>Total</b>	<b>16648</b>

\* Only valid for tariff regions and sectors with more than 1000 employees and tariff agreements ratified by the roof organisation DGB

Source: WSI Tariff archives

Wage agreements are normally entered into for one, two or three years, and other agreements for three, four or five years. During the term of the agreement a peace obligation is enforced. Currently there is no legislative framework regulating the right to strike, however, extensive case law established by the courts have established a number of guidelines. Therefore strikes can only be called as a last resort and an attempt must be made at negotiation and arbitration. Since the 1950s, Germany has had a comprehensive system of industrial tribunals at local, regional and federal levels (the supreme authority, Bundesarbeitsgericht), which every year settle many disputes over collective agreements, employment contracts and work councils.

Unions do not negotiate for approximately 18% of the salaried employees within the private sector. These employees, known as ATs („Außer Tarifliche“) generally earn a wage higher than that of the highest tariff. Furthermore, negotiations take place for blue- and white-collar workers but not for civil servants. For the latter personnel - who have no right to strike - pay and working conditions are determined by statute. In general it can be said that conditions of employment for wage earners and salaried employees differ quite markedly in Germany.

### *Role of the state*

The German industrial relations system delegates a great deal of authority to the social partners (unions and employers' associations) to reach binding agreements and provides for the safeguarding of the autonomy of the social partners from state influence. Indeed, the state does not have an official function within the collective wage negotiations. But in fact, each Länder government has some influence on the social partners in their function as employer of about 4.3<sup>1</sup> millions employees in the public sector and the Federal Ministry of Labour and Social Affairs has to decide if an individual tariff agreement will have a statutory normative function for non-unionised employees and not organised employers. However, the Ministry can only take action at the request of the employers' associations or unions.

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<sup>1</sup> Including Beamte (life-time civil servants) whose pay conditions are determined by statutes which are orientated to the tariffs negotiated for the employees in the public sector.

*Capacity and scope of the system to create socio-economic consensus*

The strength of interest associations has allowed for a high degree of coordination in the German economy and stability in the industrial relations system. However, the number of disputes is increasing where Germany's unions are fighting to preserve a social welfare system which employers say is too costly.

### 3 Labour market legislation

#### 3.1 Employment protection schemes

Broad legal and collectively agreed dismissal provisions exist for the German labour market. In addition to the age-related minimum periods of notice fixed by the Civil Code and extended by collective agreements, the legal dismissal protection is controlled by the Dismissal Protection Law. This law is valid for all employees in employment over a minimum of 6 months in establishments employing at least 11 persons. Apprentices cannot be dismissed after a three month probationary period except if there are very special reasons.

The Dismissal Protection Law basically includes the following regulations:

- Social justification of a dismissal. Any dismissal must be socially justified. The dismissal is justified by reasons which depend on the work ability or on the behaviour of the employee or - on the establishment side - on serious business requirements (no order inflows or rationalisation).
- The employee can institute proceedings against a dismissal at the labour court.
- Members of the works council and youth delegations are especially protected.
- Employers are obliged to indicate mass layoffs.
- Dismissals are not a legal means for industrial conflicts.
- The law does not cover small establishments employing 10 or fewer persons (excluding apprentices and marginal part-time workers).

This minimum establishment size for the validity of the Dismissal Protection Law was changed from 6 to 11 persons by the Employment Promotion Law under labour legislation (*arbeitsrechtliches Beschäftigungsförderungsgesetz*) in 1996. In addition to the extension of the limit the reform includes part-time workers only proportionally depending on hours worked. The objective of this extension was to create new employment in (very) small establishments. According to the old size limit the Protection Law applied to around 30% of all

western German and 35% of all eastern German establishments and to around 76% of all employees covered by the social security system. After the extension from 6 to 11 employees, the Protection Law applies to around 17% (west) and 20% (east) of total establishments and to around 70% of all employees in both German regions (cf. Rudolph, 1996).

As the size structure of companies varies between sectors, the reform of employment protection has different impacts on industries. The sectors agriculture, construction, trade, miscellaneous services are most affected.

#### *Codetermination by the works council*

A dismissal is only legal if the works council has been informed and if it has not objected. In the case of mass dismissals, the management and the works council negotiate a 'social plan', which includes transfer provisions, wage guarantees and early retirement options as well as lump-sum payment schedules.

#### *Special dismissal protection schemes*

The general restrictions of dismissals are supplemented by special regulations of umbrella agreements<sup>1</sup> and of rationalisation protection agreements. Special protection rules are in force for severely handicapped, for pregnant women, parents on maternity leave, for elected members of works councils and for conscripts. Some umbrella agreement and rationalisation protection schemes exclude dismissals with notice for employees aged 40, 45 or 55 years or for employees whose length of employment is 15 or 20 years. Civil servants cannot be dismissed on notification.

One broad interpretation of Germany's current economic problems and prospects is that long-standing, supply-side deficiencies - high labour costs due to a over-blown welfare state and a rigid labour market-hamper a recovery (Carlin, 1997). The demand for more 'flexibility' is directed to wages, to lower social contributions, but also to the legal system of dismissal protection and to labour time. Dismissal protection is blamed for different things (cf. Büchtemann 1990):

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<sup>1</sup> Provisions on conditions of employment which extend beyond remuneration.

- It is accused of inhibiting the adaptation of employment to the demands of the labour market and of (technical) structural change, thereby hampering international competitiveness.
- It increases labour costs and lowers the propensity of employers to recruit new people. Instead of recruitment a strategy of overtime work and rationalisation is preferred.
- Dismissal protection intensifies the insider/outsider problem. The protection of job owners discriminates against job seekers and contributes to increasing long-term unemployment.
- Dismissal protection discriminates more against the unskilled than the skilled and qualified workforce. The higher productivity of the latter group is balanced against the possible costs of a dismissal.
- Dismissal protection is one reason for an increasing interest of employers in less protected employment like temporary work, fixed-term contracts and subcontracting. Thereby, the labour market is segmented into the group of the very qualified and highly paid core-staff and the growing group of less qualified marginal employment.

Arguments for constraints to the freedom of contract and for regulations imposed by law are (cf. Walwei 1996):

- Employment protection takes care for an internalisation of external social costs. Regulations create a balance of otherwise unequal bargaining conditions between employers and employees.
- Employment protection is a factor of stabilisation of the labour market. Notice periods reduce frictional and cyclical unemployment. Employees have a chance to start searching for a new job before they lose their current one. Additionally, the combination of protected employment and short-term work (partially unemployment) are a counter-cyclical element of stabilisation.
- The amortisation of investment in the recruitment of employees, in the job introduction and in the training of employees depends on employment stability. Therefore, the employment protection is an incentive to improve the quality of skills for both sides.
- Employment protection saves transaction costs. Individual bargaining is substituted by standardised rules.



- Employment protection creates motivation, identification and continuity. It increases productivity, improves internal mobility, assures the maintenance and the transfer of acquired knowledge and promotes the acceptance of technological changes.

In the past the more or less theoretical considerations on the negative impact of employment protection on employment and the deduced recommendations to deregulate could not be based on the empirical evidence of investigations. This has been shown by Büchtemann (1990, p. 399f.). The change of legal requirements and the observation and investigation of ensuing changes on the labour market are one option for finding empirical evidence. The Employment Promotion Law from 1985 extended the possibilities for arranging fixed-term contracts. When this law was in force, no special reasons had to be indicated for a first completion of a temporary contract of a maximum length of 18 months. Those who initiated the reform expected positive effects of additional recruitment. The evaluation carried out by Büchtemann could not confirm the positive effects. Most of additional hiring of fixed-term employees were not directly influenced by the deregulation of fixed-term contracts (cf. Ragowski/Schönemann', 1996). The extended options for fixed-term contracts were used by a small minority of establishments. Those who applied the new law did it less for the reason of trouble-free adaptation of their personnel and more for other reasons. From these findings and from results of other studies Büchtemann drew his conclusion (Büchtemann, 1990, p. 400):

On the whole the available empirical evidence suggests the conclusion that an independent impact of employment protection rules on the recruitment behaviour and thereby on total employment development is - at least for western 'Germany' - from time to time overestimated by the current 'flexibility'-discussion. Against this background the recruitment expectations of a relaxing of employment protection rules shared by deregulation adherents seem to be rather uncertain.

The empirical investigations which form the background for the evaluation of the employment effects of protection requirements and for the quoted conclusion refer to the German economy of the 1980s. Meanwhile the post-unification recession has reinforced the call for stimulation of the market forces and for de-

regulation. In this context the minimum establishment size for the validity of the Dismissal Law has been extended. But for an evaluation of the effects of this relaxation, one has to wait several years.

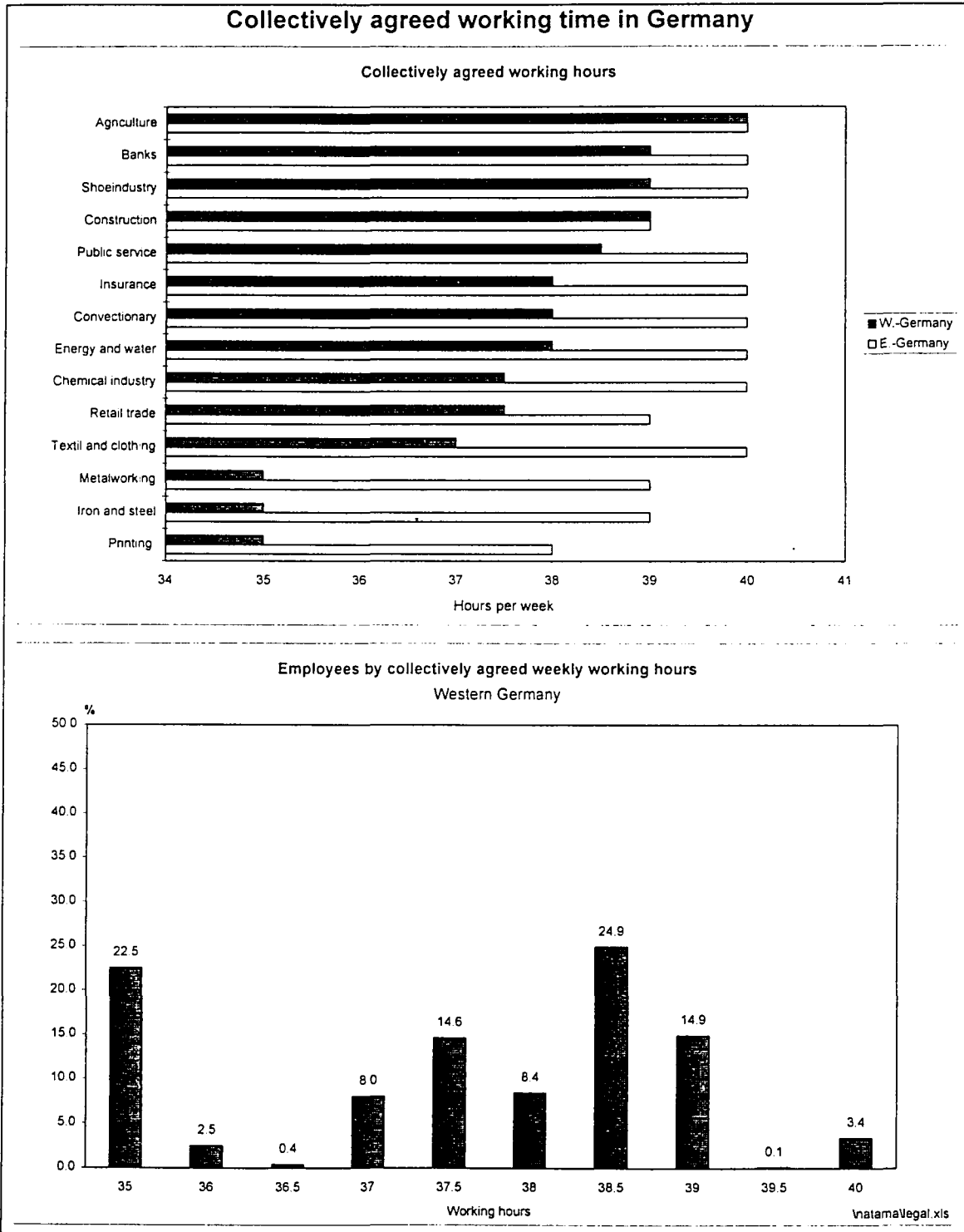
Recent investigations assume that stability and flexibility are linked. Interpretations of the German economic system suggest that dismissal protection, atypical forms of employment, and working time variations must be regarded as different elements of the same labour market regime. Stability requires flexibility. Relatively high standards of employment protection need the balance of flexible working arrangements (Walwei, 1996, p. 227) to maintain competitiveness

### **3.2 Regulation of working time**

The framework for working time regulations is provided by the Working Time Law. Regulations for special groups, e.g. for pregnant women or for juveniles are fixed by the maternity protection law and by statutory provisions regulating the employment of juveniles. The Working Time Law sets the frame for working time policy which is subject to collective bargaining:

- The standard daily working time is 8 hours. The possibility of extending daily working time to 10 hours while maintaining 8 hours on average over 6 months is provided.
- There are only a few restrictions placed on night work. An extension of the daily working time to 10 hours depends on maintaining 8 hours on average over 1 month. Employees can refuse to do night work if medical reasons are indicated, if they have to take care for children younger than 12 are or for relatives who need care.
- The paid annual leave is 18 days. (Collective agreements provide for longer periods of annual leave).
- Overtime exceeding the maximum working-time must be compensated by an additional 'appropriate' payment or additional free time.
- Work on Sundays is in principle forbidden. Employees in different sectors are excluded from this rule. For the industry Sunday work is allowed for technical reasons but exceptionally also for economic reasons

Chart 3.2.1



Source: Bispinck, WSI Tarifhandbuch 1996.

Working time policy, or the claim for a reduction in working hours, has been an objective of trade unions for a long time. A milestone for this policy was the gradual reduction of the 48-hours week and the introduction of the 5-day and 40-hour standard working week in the 1950s and 1960s. Working time reduction for the reallocation of not sufficient work among more employees was the union's strategy of the mid 1980s. The achievement of the 35-hour working week for the metal and printing industry which was negotiated in 1990 and came into force in 1995 was the (preliminary) end of the process of collective working time reduction. Against the background of a permanent unemployment crisis and a continuing debate about the German production location, the pressure on unions and works councils has increased to change the course.

The 35-hour week has only been achieved for the metal working industry, the iron and steel industry, and for the printing sector in western Germany (cf. Chart 3.2.1). In eastern Germany the 40-hour working week is the collectively agreed standard for most sectors. On average, the collectively agreed weekly working time was 37.4 hours in western and 39.5 hours in eastern Germany in 1995.

Around one quarter of the west German employees are working on the collectively agreed 35-hour per week basis. The 40-hour working week is in force for a little more than 3%.

The achievement of working time reduction was linked with agreements about working time flexibility. Collective agreements allow for a series of basic variants and a whole host of detailed variations. The basic variants are:

- The prolongation of working time and working time corridors.
- Collectively agreed seasonal working time standards (e.g. for the construction sector)
- Overtime in excess of statutory maximum working hours.
- Irregular distribution of collectively agreed working time which has to be reached within a period, on average.
- Fixed-term reduction of the regular working time has been introduced to maintain employment (e.g. the Volkswagen agreement of 1993).
- Exceptional weekend work is allowed by most tariff contracts.

Many agreements allow for a combination of the basic variants. An example for the working time flexibility is shown in Table 3.2.1 for the metal working industry.

**Table 3.2.1**

**Collectively agreed working time leeway in the metal working industry <sup>a)</sup>**

Regular weekly working hour	35 hours
Permanent prolongation for a maximum of 14% of employees up to	40 hours
Fixed-term reduction up to	35 hours
Irregular distribution over	12 months
Permitted overtime	10 hours/week 20 hours/month
Maximum permitted weekly working time	50 hours
a)Tariff area Nordwürttemberg-Nordbaden	

Source: Bispinck 1996, p. 415

In a situation of increasing international competition, the strategy of working-time reduction can only be pursued if it is compensated by high working-time flexibility. This link has been taken into consideration by the collective agreements of the recent past. Nevertheless, both sides of industry do not agree on the progress which has taken place. For the unions, flexibility has reached a considerable extent. They point out that the possibilities of arranging flexible working-hours are not really applied by the industry. As far as industry is concerned, Germany lacks institutional arrangements and collective agreements. They point out that machine operating hours are considerably lower than in other EU countries (cf. Kroker, 1996).

Although the metal workers union, IG Metal, in April 1997 proposed a 32-hours week to fight unemployment there seem to be low chances for an industry agreement. Across-the-board reductions of working time are a thing of the past. Reduction of overtime and a wide variety of working time patterns are elements of the present strategy for more employment and for the firm's operating requirements.

## 4 Labour market policies

### 4.1 Introduction

The German labour market policy approach is double-tracked:

- Employment policy in a broader sense is pursued within the sphere of the economic, fiscal, structural and regional policy. Investment grants and tax reliefs should stimulate the establishment of enterprises in structurally weak areas. These instruments are supplemented by low-interest loans directed to alleviate business start-ups.
- Employment policy in the narrow sense is aimed to insure employees against the risk of unemployment and to (re-)integrate target groups in the labour market.

This chapter deals with employment policy in the latter sense. The legal basis for the labour market policy is provided by the Labour Promotion Law (*Arbeitsförderungsgesetz* = AFG). The declared aims of the Labour Promotion Law are

- to achieve and maintain a high level of employment,
- to improve the quality of labour supply and
- to maintain income.

The Federal Employment Service is responsible for the realisation of labour market policy. It is a self-governing institution<sup>1</sup>. The different tasks of the Federal Employment Service are financed by

- the unemployment insurance contributions which are paid equally by employers and employees as a proportion of the gross wage bill,
- special contributions of employers which are restricted to some instruments,
- grants provided by the Federal Government.

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<sup>1</sup> Compare Chapter 2

The labour market policy of the Federal Employment Service can be subdivided into a passive and an active part. The passive part comprises earnings-replacement benefits (unemployment benefits, unemployment assistance, early retirement benefits and bridging pension). The instruments of an active labour market policy by the Federal Employment Service can be subdivided into three groups:

- Information and advice
  - Vocational guidance
  - Placement-service
- Promotion of vocational training
  - Further education
  - Retraining
- Maintenance and creation of jobs
  - Short-term allowances
  - Wage subsidies
  - Job creation schemes

**Table 4.1.1**

**Revenues and expenditure of the Federal Employment Service**

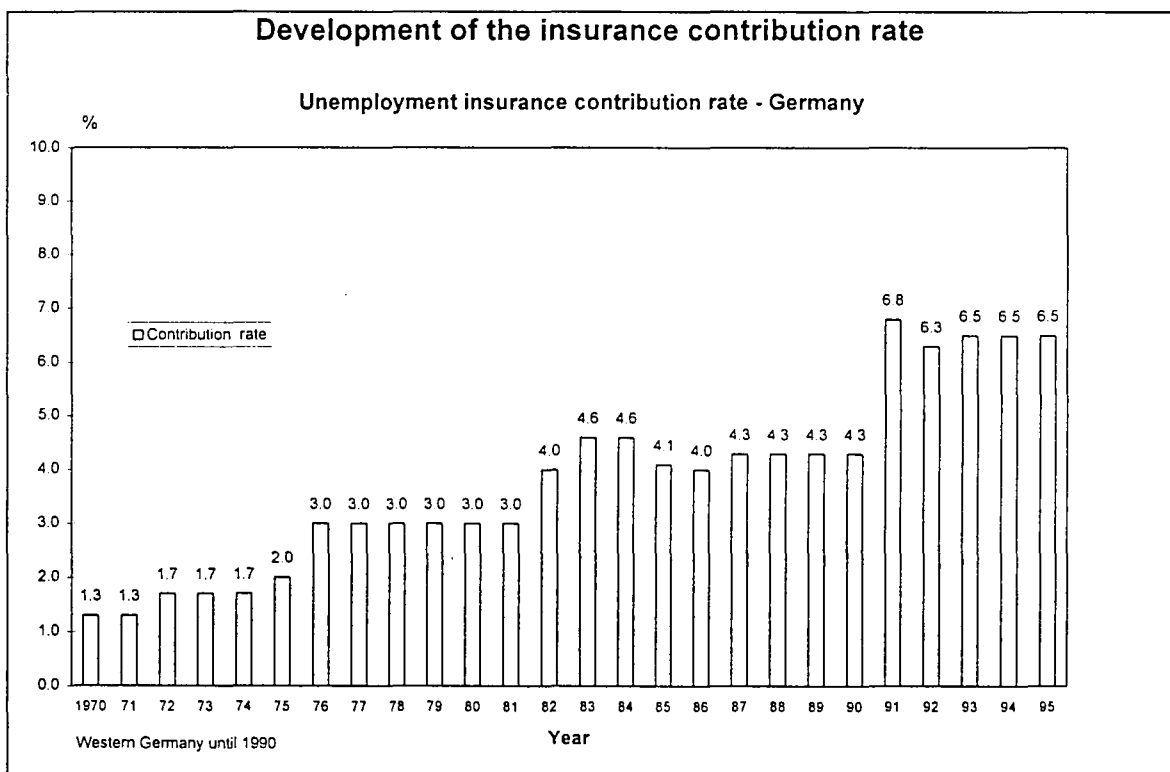
	Western Germany		Eastern Germany	
	Revenues	Expenditures	Revenue	Expenditures
	Thousand million DM			
1991	65.6	42.0	4.6	29.9
1992	72.1	47.5	7.5	46.0
1993	74.1	59.0	11.1	50.6
1994	77.6	58.2	12.1	41.6
1995	77.5	61.3	12.7	35.8

Source: Council of Economic Advisors, Annual report 1996.

By far the largest revenue of the unemployment insurance is provided by the contributions of employers and employees. The contribution rate has changed considerably in the course of the past few decades (Chart 4.1.1). The rate, which is a proportion of the gross wage limited by a contribution assessment ceiling, was 1.3% in 1970, 4.3% in the late eighties and 6.5% in 1995. The incremental growth of the contribution rate resulted in an increase in insurance revenues necessary to finance the growing passive (benefits) and active labour

market measures. Nevertheless, the expenditures of the Federal Employment Service have markedly exceeded contribution revenues as well as total revenues (see Chart 4.1.2). The revenues created by unemployment insurance have not covered total expenditures for labour market policies since the mid-1970s. But at the beginning of the 1990s total expenditures for labour market policies (incl. Government grants) have accelerated and outstrip revenues all the more. Table 4.1.1 shows that the deficit is due to an unfavourable revenue/expenditure relation in the new Länder. The collapse of the eastern German economy has forced expenditures for passive and active labour market policies to go up and has impeded the increase in revenues resulting from unemployment insurance. At the same time the revenue/expenditure relation has become worse in western Germany.

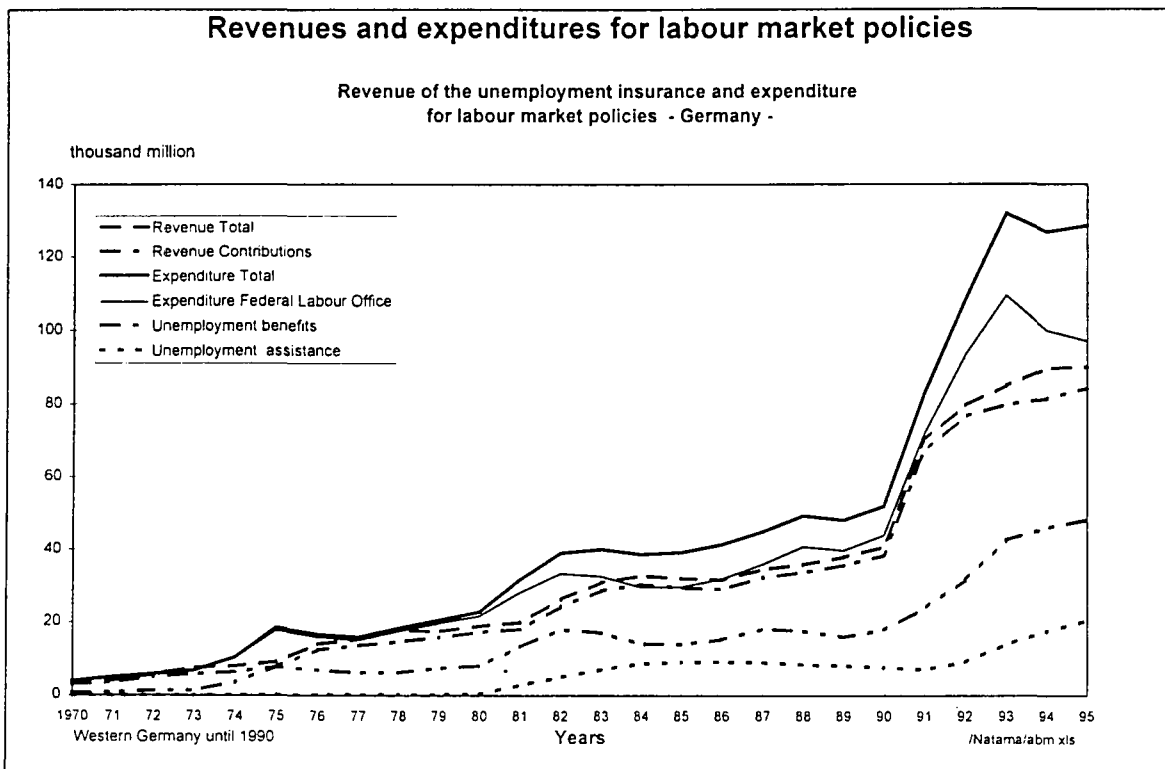
**Chart 4.1.1**



Source: Council of Economic Advisors; Annual report 1996.



Chart 4.1.2



Source: Council of Economic Advisors; Annual report 1996.

## 4.2 Reform of the Labour Promotion Law

The history of the Labour Promotion Law is a chronology of changes. It was enacted in 1969, superseding a law of 1927, and was amended in 1957. Its genesis can be seen in the context of a Keynesian economic policy which assumed the possibility and necessity of planning and steering economic growth and employment. After 5 years the first reform of the law took place and up to today 10 amendments and 90 changes have followed. The newest reform passed through the legislation process in March 1997<sup>1</sup>.

The Labour Promotion Reform Law reduces the target dimension, dampens expectations for the creation of jobs by the state and underscores the responsibility of employers and employees.

The reform strives to discourage benefit fraud. The reintegration of the unemployed should be accelerated by higher sanctions and disincentives.

- The 'suitable work' criteria have been loosened. After three months the acceptable wage is diminished by 20% and after six months by another 30%. After half a year a job cannot be rejected because of net wage which is not higher than the unemployment assistance benefit.
- The prevention of benefit abuse is improved by the obligation of active job search. Unemployed persons can be required to prove their active searching. The registration is valid for only three months, then it has to be personally renewed.
- New and appropriate training methods should be used to test the ability to work and the willingness to work. Application training and advice should support the job search. Unemployment benefit or assistance are paid during this training. An 'integration plan' has to be worked out after a six month period of unemployment to avoid long-term-unemployment.
- A fixed-term job of at most three months is supported by a 25 DM daily top-up for unemployment assistance receivers if the wages are low or very low .

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<sup>1</sup> Parts of the original reform law have been separated from the AFRG to avoid a delay by the upper house of the German Parliament. It concerns mainly parts which treat the controlling of illegal employment.

But the reintegration of unemployed persons is also supported by incentives.

- The entitlement for a full-time unemployment benefit is preserved if the unemployed takes up a part-time job for a period of three years. Thereby the incentive to work part-time is not restricted by the shortening of insurance claims for the lower income.
- The promotion of settling-in is improved by the Labour Promotion Reform Law. Settling-in grants corresponding to the unemployment benefit, or assistance is paid over six months even if no longer unemployment period is preceding.

The reform also aims to improve employment chances for the unemployed by altering organisational processes. To extend the efficiency and effectiveness of the Federal Employment Service a decentralisation of decision-making was introduced which delegates more responsibility to regional employment services. They can allocate 10% of resources for integration measures.

In broad terms the Labour Promotion Reform Law is a simplification of instruments of active and passive labour market policy. It shows the shift from active and passive labour market to a policy of activating passive labour market policy by reducing benefits and stronger sanctions but also by some supportive measures. An evaluation of this policy is not possible before it has run for a longer period.

### 4.3 Passive measures

Passive labour market policy intends to ensure the subsistence of unemployed persons. The basic instrument is unemployment insurance, which is a branch of the statutory social security system. Those employees who are (temporarily) not employed or self-employed (an employment of less than 18 hours per week is permitted) are entitled to benefits. If the labour office cannot place the registered unemployed person on the labour market, unemployment benefits or unemployment assistance are paid according to the Labour Promotion Law.

#### 4.3.1 Earnings-replacement benefits

##### *Unemployment benefit and assistance*

A claim for unemployment insurance benefits can be made by someone who is unemployed, capable of work and available and who was covered by employment insurance for at least 360 calendar days in the three years preceding unemployment. The unemployment benefit depends on the amount of the last wage or salary (gross wage/salary minus taxes, social insurance contributions and so on = estimated on a flat rate net wage/salary) and on personal circumstances. The unemployment benefit for claimants with at least one child is 67% of the net wage/salary and 60% for those without children. Benefits are awarded for 156 days. This period can be extended depending on the length of employment liable for contributions and on the age of the claimant (Table 4.3.1.1).

Unemployment assistance is a welfare-compatible tax-financed benefit for those who register themselves as unemployed, but do not receive unemployment benefits or have exhausted their entitlement to benefits. In addition there must be evidence of need, and the claimant's income and possessions are taken into account. The benefits have to be claimed at the employment office but the unemployment assistance payments are financed by Federal Government resources. The assistance payment rates are lower than the benefit payment rates: 57% of the net wage/salary for the unemployed with at least one

child and 53% for the unemployed without children. According to a new regulation the net wage/salary which forms the basis for the calculation of the assistance is to be diminished by 3% after each year of receipt. In contrast to unemployment benefits unemployment assistance is not limited to a fixed time (except for special groups).

The recipient of unemployment benefits or of unemployment assistance can be excluded from benefits (up to three months). E.g. the payment of unemployment benefits may temporarily be suspended for persons who left their last job without good reasons.

**Table 4.3.1.1**

**Receipt period of unemployment benefits**

After ... days of employment liable for contributions	Age of the claimant ... years	Length of receipt ... days
480		208
600		260
720		312
840	42	364
960	42	416
1080	42	468
1200	44	520
1320	44	572
1440	49	624
1560	49	676
1680	54	728
1800	54	780
1920	54	832

Source: Labour Promotion Law, § 106, 1996.

The average duration of unemployment<sup>1</sup> was 29 weeks in 1995 (Table 4.3.1.2), 3 weeks higher than in 1990. The duration of benefit periods has grown from 23 to 31 months. The unemployment benefit period increased after 1991 as did the unemployment assistance period (with a lag). These labour market indicators should be viewed with scepticism. They reflect the development of unemployment duration and structure as well as institutional changes. E.g. since 1993

<sup>1</sup> The calculation of unemployment duration reduces the real period because it does not take into consideration status changes like training participation periods or others.

resettlers of German origin receive „integration assistance“ instead of „integration grants“ which cannot be taken into account for the calculation of benefit periods.

**Table 4.3.1.2**

**Duration of unemployment and of benefit periods - western Germany**

Average duration <sup>a)</sup> ...	Weeks (annual average)					
	1990	1991	1992	1993	1994	1995
of an unemployment period	26.4	24.0	23.7	26.0	29.4	28.7
of a benefit period	22.9	22.8	22.9	27.1	31.8	31.1
for unemployment						
• benefit	17.7	16.8	17.3	20.2	22.7	22.1
• assistance	40.1	38.4	35.2	35.4	37.6	37.7
a) Average stocks x 52/inflow						

Source: Federal Employment Service, Labour Market 1995, p.42.

The shortening of the average duration of unemployment benefit periods from 1994 to 1995 may be due to stronger criteria for periods of exclusion. Since 1995 the benefit period has not been reduced by 12 weeks as before but by at least ¼ of the total entitlement duration<sup>1</sup>.

In 1991 the number of unemployment benefit recipients was 0.7 million in western Germany (see Table 4.3.1.3). Because of growing unemployment this number increased sharply after the year 1992 and reached the 1.3 million level in 1994. Correspondingly, the number of unemployment assistance recipients grew as well. It is primarily the shift to a longer duration of unemployment and the resulting of longer benefit periods as well as changing unemployment inflow structures that have resulted in an increasing number of assistance recipients.

Eastern Germany's number of benefit recipients reflects both the economic downturn (+) and the efforts of an active labour market policy (-).

<sup>1</sup> Additionally and under special circumstances it is also cut by redundancy payments.

**Table 4.3.1.3****Earnings replacement benefits and benefit recipients**

	Recipients of unemployment		Earnings replacement benefits		
	benefits	assistance	benefits	assistance	old age transition
	thousand persons		million DM		
	Western Germany				
1991	721	391	15940.5	6839.7	1.9
1992	841	412	19750.9	7617.7	18.2
1993	1174	523	29729.6	10317.3	49.1
1994	1276	627	33206.6	12374.2	27.2
1995	1216	661	35531.7	14782.6	18.3
	Eastern Germany				
1991	685	24	7810.0	295.1	2678.4
1992	841	117	11809.2	1488.5	9311.6
1993	713	236	12868.3	3657.8	13410.3
1994	637	323	12663.0	5056.9	9005.8
1995	564	321	12668.4	5725.9	2214.2

Source: Council of Economic Advisors, Annual report 1996.

### 4.3.2 Early retirement

A reduction in the labour supply is one labour market strategy which can deal with unemployment problems. In different countries this strategy is pursued by opening ways of early exit from active work participation for older employees. Compared with other OECD member-states Germany belongs to the group of countries showing the highest reduction in labour force participation by using one of the different pathways to early retirement. In the past the early exit from the labour force was not a major topic of debate. It was one of different measures to reduce mass unemployment but by the end of the eighties the picture changed. Now the financing of old-age security moved to the centre of discussions and reforms (without having found a solution for the unemployment problem).

According to the statutory public pension scheme the standard exit from employment at the age of 65 years is still the standard transition to retirement. Half of all women that retire are 65 years old, whereas the share for males is about

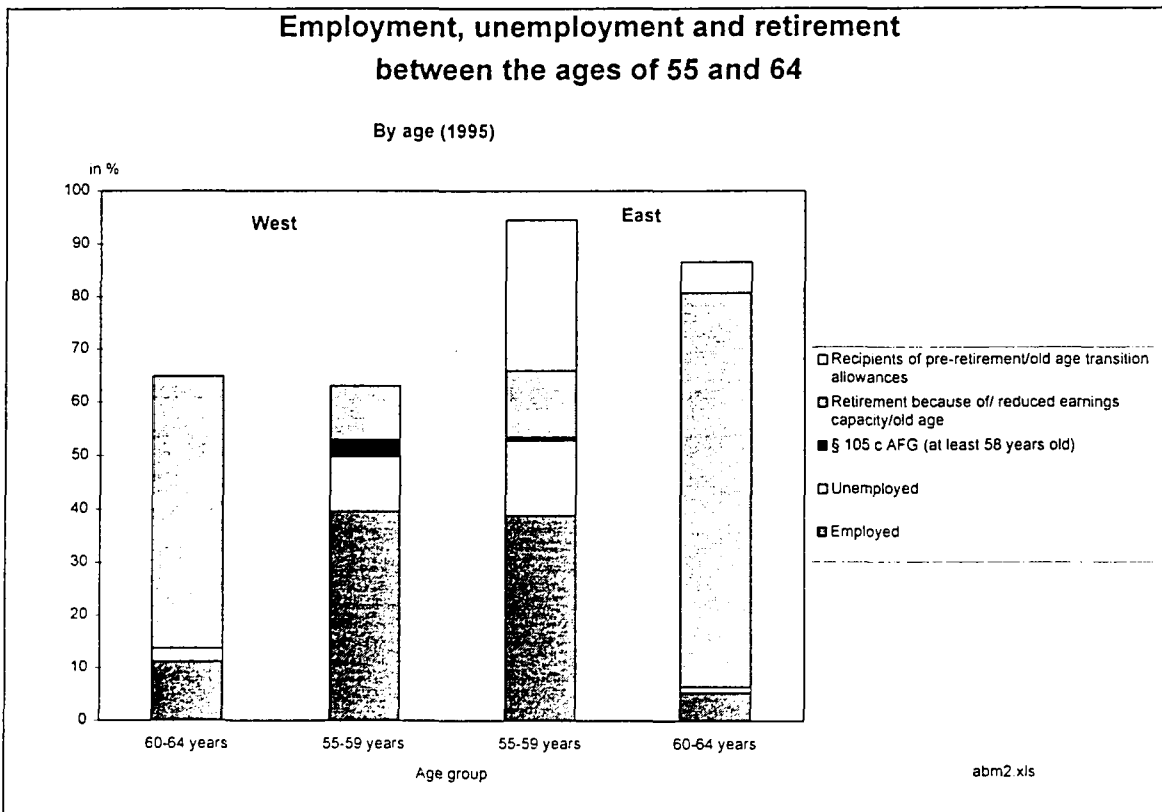
29% (cf. German Centre for Gerontology/Deutsches Zentrum für Altersfragen, 1993).

In addition to the „standard“ there are different types of retirement from gainful employment. The following types have become increasingly important in the last few years:

- Eligibility for pre-retirement at age 63 („flexible Altersgrenze“). It is linked to 35 years of contributions (there are special provisions for early retirement on the grounds of disability and invalidity).
- Pensions for severely handicapped or disabled persons having reached the age of 60 years. In the case of reduced earning capacity, eligibility for public pensions can be established after a year of unemployment. Persons aged 50 and over do not even have to fulfil this condition, as it is assumed that they will have no opportunities to find a new job. In 1990 over one third of males, and 17% of females who retired were beneficiaries of this special early retirement scheme.
- Pensions for long-term unemployment at age 60 (at least one year of unemployment prior to turning 60 and a pension insurance period of at least 15 years, 8 years of which occurred during the last 10 years). This programme applies to 14% (1995) of all retiring males (1978: 6%). In this context § 105c of the Labour Promotion Law is of importance. Unemployed persons older than 58 can refuse suitable work without being disqualified from benefits.
- Pensions for women at age 60 who have contributed at least for 15 years, 10 years of which after having reached the age of 40.
- After German unification an „old-age transition allowance“ („Altersübergangsgeld, § 249e AFG“) was introduced for the new Länder. It was eligible between 3.10.1990 and the 30.6.1992 for the unemployed 55 years old and older.



Chart 4.3.2.1



Source: IAB Kurzbericht Nr. 9, 13.8.1996, p. 1.

From 1984 to 1988 an Early Retirement Act („Vorruhestandsgesetz“) allowed employees to retire at age 58 without a reduction in benefits. Workers could draw a temporary pension of 65% of their last wage from the employers until they were entitled to claim an old-age pension (partly reimbursed by the Federal Employment Service if someone unemployed took over the job). Since the end of the 1980s the Government has been trying to lengthen working life, while previously incentives for early retirement were created to reduce unemployment. The pension reform law from 1992 was aimed at re-installing the „normal“ retirement age of 65 by abolishing step-by-step the above-mentioned schemes for pre-retirement by the year 2006 or 2012. The financing of public pensions has forced parliament to pass another reform. In 1996 the German parliament enacted a law by which the pre-retirement pension resulting from unemployment was changed to ‘a pension resulting from unemployment or after partial retirement’. According to this law the age for pre-retirement will rise stepwise from 60 to 63 years (1997-1999) and then to 65 years in 2009. If a worker opts for early retirement (at the age of 62) it will reduce his/her pension.

After the year 2000 early retirement for women at the age of 60 will no longer be possible without a reduction in pensions.

Chart 4.3.2.1 shows the extent of early retirements from gainful employment fostered by labour market and retirement policies. In both western and in eastern Germany this resulted in only around 40% of the 55- to 59- years-old population being in employment covered by the social security system (including job creation measures and wage subsidised employment). For the age group between 60 and 64 years old the number of employment, unemployment and pre-retirement/old age transition allowance recipients was rather low. In western Germany half of this age group had retired while in eastern Germany it was even three quarters.

#### 4.4 Active measures

Parallel to the growth of unemployment rates and the growth of long-term unemployment in Germany, active labour market policies moved to the centre of the labour market activities. German unification brought about a growing need for active intervention. The transformation of the former communist economy could not - and still cannot - be managed alone by „market forces“. Without the efforts of public intervention, unemployment would have worn down the resilience of the east German population - both materially and psychologically. Labour market policies had to and still have to serve as a bridge over the „troubled water“ of the transformation process until a sufficient number of new jobs can be created. Work-creation and retraining measures - the core of active labour market policy - are considered to be a better investment than passive wage replacement subsidies.

Active labour market policy is employment policy aimed at improving the quality of the work supply and creating jobs on the 'primary labour market' by training, wage subsidies and job creation measures carried out on a 'secondary labour market'. The „secondary“ labour market is distinguished from the 'primary' - the competitive labour market by

- the public promotion of employment,
- the predominance of labour market and social policy targets (e.g. promotion of long-term unemployed),
- fixed-term contracts,
- the character of work which is carried out (The work has to be additional and must not take the place of regular employment).

The traditional instruments of active labour market policy are:

- Short-time working funds. The aim of this measure is to maintain employment. Allowances are paid to compensate employees for the loss of earnings resulting from unavoidable, temporary reduction in working hours.
- Further training and retraining to extend and adapt skills to the labour market demand.

- Initial vocational training in external training centres.
- Wage subsidies for target groups within the regular primary labour market. They are given to firms recruiting the unemployed with the purpose of increasing employment by reducing labour costs.
- Job-creation measures for target groups within the public sector or in the non-profit-sector.

Some innovative instruments were created at the beginning of the nineties:

- Non-profit temporary employment projects for long-term unemployed (a German version of the Dutch START-project).
- Special programmes for the long-term unemployed which combine social care, training and employment.
- Firms providing protected employment, psycho-social care and qualification training for the severely handicapped.
- A three-year-protective period of unemployment benefits based on full-time employment for those unemployed persons who become employed part-time.

The variety of active labour market policies is shown in the box on the next page.

### Improvement of employment opportunities by individual support

The variety of labour market policy instruments (based on the AFG = Labour Promotion Law) facilitates problem orientated support and a target directed budget allocation:

- The Federal Employment Service supports *vocational training*, e.g. vocational preparation courses, by vocational training programmes in inter-company training centres. The training-employment transition of disadvantaged young people can be supported by social-education measures (§§ 37 pp., 40 pp. AFG).
- The promotion of vocational *further training* improves the qualification of the workforce and adapts it to the changing demand (§§ 33 pp., 41 pp. AFG).
- *Employment rehabilitation measures* improve the prospects for the physically, mentally or psychiatrically disabled to be integrated into the labour market (§§ 56 pp.).
- *German language courses* create the basic qualification for a vocational integration of „Spätaussiedler“ (late resettlers of German origin) (§§ 62a pp. AFG).
- Employment and self-employment is promoted by measures which include employment advice, settling-in allowances and bridging allowances (§§ 53 pp. AFG)
- *Employment creating measures* offer short-term jobs for hard-to-place unemployed persons and improve their chances for an occupational reintegration. They include the general job creation measures (§§ 91 pp. AFG) and productive wage subsidies (western Germany : § 242s AFG, eastern Germany: §249h AFG) for environmental work, social services and youth welfare services.
- Special *job creation measures for older unemployed persons* (wage subsidies § 97 AFG).
- The programme of the federal government entitled 'action employment aid for long-term unemployed' continues the integration of this group into the labour market over the period 1995-1999 by paying digressive wage subsidies. Promoters providing employment, vocational qualification and/or social care for very-hard-to-place unemployed persons can receive funds from the Federal Employment Service (until 1998, § 62d AFG).
- Seasonal unemployment in the construction sector was counterbalanced by *bad-weather allowances* (§§63 pp., 80, 83 pp. AFG).
- *Short-time-working allowances* stabilises employment and maintains qualified staff for enterprise suffering from temporary slack periods (§ § 63 pp. AFG).
- The labour market policy targets expressed by the Labour Promotion Law are supported by the *European Social Fund* (within the framework of a federal programme).

Source: Federal Employment Service, Labour Market 1995, p. 60.

In terms of spending and of beneficiaries, employment-creating measures and training measures are the most prominent labour market policy activities.

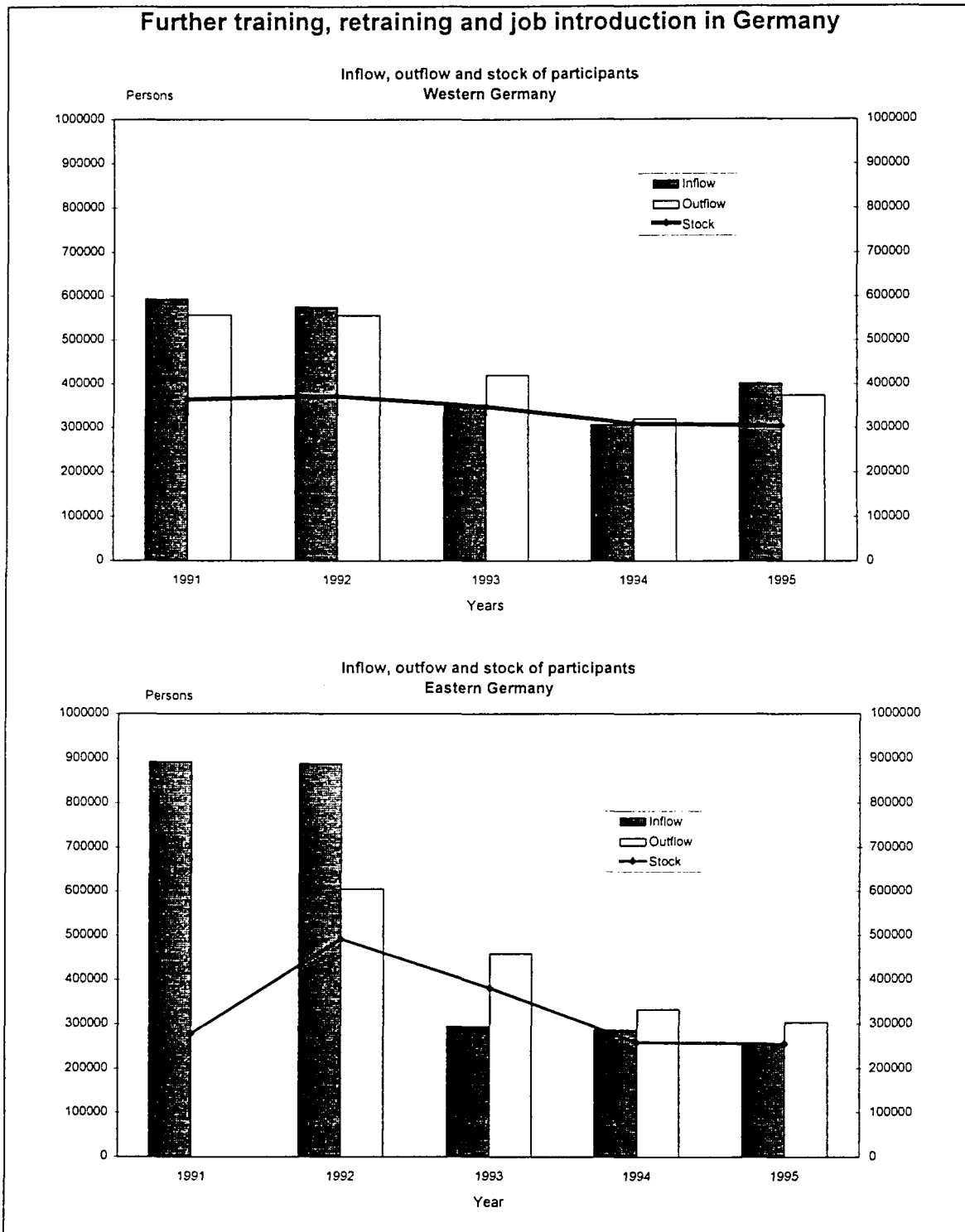
Job-creation measures have immediate employment effects. The target groups are above all the hard-to-place and the long-term unemployed. Job-creation measures have to be additional - i.e. they would not occur without promotion and do not take the place of regular work - and the work done by the job creation projects has to be of public interest. Promoted persons have to be registered as unemployed before starting a measure and they must have been unemployed over a period of six months during the previous year. The allowance

should be at least 50% but must not be more than 75% of the wage (assessment ceiling is 90% of the comparable non-promoted wage). A 90% subsidy is possible for structurally weak regions. The measures can be carried out by local communities or on behalf of the communities by non-governmental organisations (e.g. charitable organisations).

In 1992 a new type of publically promoted employment creation was introduced within the framework of the Labour Promotion Law. The labour promotion in § 249h (new Länder) and § 242s (old Länder introduced in 1995) is a wage subsidy programme. This allowance is paid for hard-to-place unemployed persons who are employed to do additional work in the field of environmental protection, social services and youth welfare services. Wages have to be lower than regular wages. The maximum wage subsidy is determined by the monthly average of unemployment benefits or assistance which would have had to be paid to the employee.

Training measures are carried out to improve the quality of the labour supply, to reduce the labour market mismatch and to compensate for the labour market. The Federal Employment Service promotes further training of the unemployed, of employees in danger of unemployment and of those without an initial vocational training certificate. Depending on the unemployment/employment status the measures are subdivided according to necessity (for the unemployed) and usefulness (for the employed). Since 1994 the 'useful' training has nearly stopped. Direct costs (fees and teaching materials) for further training and re-training are partly or totally granted by the labour office. For many persons taking part in training schemes the labour office pays subsistence allowances. The amount depends on the personal circumstances. The maximum is 67% of an assessment ceiling. Since the useful training measures have been stopped the payment of subsistence allowances has been restricted to recipients of unemployment benefits or assistance.

Chart 4.4.1



Source: Federal Employment Service, Berufliche Weiterbildung 1995.

Chart 4.4.1 shows the inflow, outflow and stock of further training. Inflows and outflows decreased since 1991 in western Germany. This is partly due to the discontinuation of 'useful' training programs. Around 20% of all persons who started training in 1995 entered a retraining measure, 3% job introduction and 77% further training. In eastern Germany strongest inflows were in 1992 and 1993. In succeeding years training measures were drastically reduced. Training measures are intended to create qualifications for continuous employment but they also ease the pressure on the labour market by reducing labour supply. The result was a reduction of around 550,000 persons in 1995, 300,000 of these in western Germany.

*Regional labour market policy supported by the structural funds, especially the European Social Fund (ESF)*

The European Structural Funds (ERDF, ESF, EAGGF, FIFG) and the Community Initiatives supported and continue to support the German regional and economic policy. Between 1994 and 1999 Germany will get around ECU 21.7 billion from the European Structural Funds. Around ECU 13,640 million<sup>1</sup> will be made available for Objective 1 regions (regions lagging most behind the rest of the Community, exclusively eastern German Länder), ECU 1,500 million for Objective 2 regions (those affected strongly by industrial decline), ECU 1,786 million for Objective 3 and 4 (combating long-term unemployment and occupational integration of those younger than 25 years), ECU 1,134 million for Objective 5a regions (strengthening of agricultural structures) and ECU 1,229 million for Objective 5b regions (rural development). Through this, Germany has become the third biggest recipient of Structural Funds resources after Spain and Italy.

The competitive weakness and the rapid decline in labour in the new Länder were reasons to include this regions in the financial assistance by the Structural Funds and other programmes (Objective 1 regions). During the first programming period from 1991 to 1993 the new Länder received around ECU 3,000 million out of the Structural Funds; around 50% came from the European Devel-

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<sup>1</sup> Constant prices of 1994.



opment Fund (EFRE) and 20% (ECU 600 million) from the ESF. The funds were distributed among the Länder by head of population (Toepel, 1996).

The ESF financed mainly training courses to provide the workforce with specific knowledge in new law, economics but also about new technologies, environment protection and new activities. Around 300,000 cases profited from the ESF promotion measures of Länder programmes and around 47,000 persons from the federal programme (see Toepel, 1996, p. 326).

In the period 1992 to 1995 the Federal Employment Service spent around DM 190 billion (including federal government funds) for labour market policy in eastern Germany (without eastern Berlin). The targeted volume for labour market policy financed by Länder resources was around DM 6.8 billion and around DM 2.4 billion by the ESF. The bulk of total resources is meant for passive labour market policy but a volume of DM 81 could be activated for active labour market policy which is a proportion of 41% (see Gladisch 1996, p. 11).

The proportion of Länder resources in the total volume for active labour market measures was on average 8.4% in eastern Germany. Including ESF resources the contribution of the new Länder to active labour market policy was 11.4% (see Gladisch 1996, p. 11).

#### *The support of the federal government programme by the European Social Fund (ESF)*

By far the greatest proportion of the German EFS is made available for the labour market policy in the federal Länder. But resources of the European Social Fund also strengthen the active labour market policy within the framework of an ESF federal government programme. The promotion comprises the period from 1994 to 1999.<sup>1</sup> Central areas of promotion are the reintegration of the long-term unemployed or persons threatened by long-term unemployment, the integration of young unemployed, the promotion of equal opportunities of men and women. Furthermore the ESF-government programme promotes short-time work to support the adaptation of jobs to structural change. In combination with the

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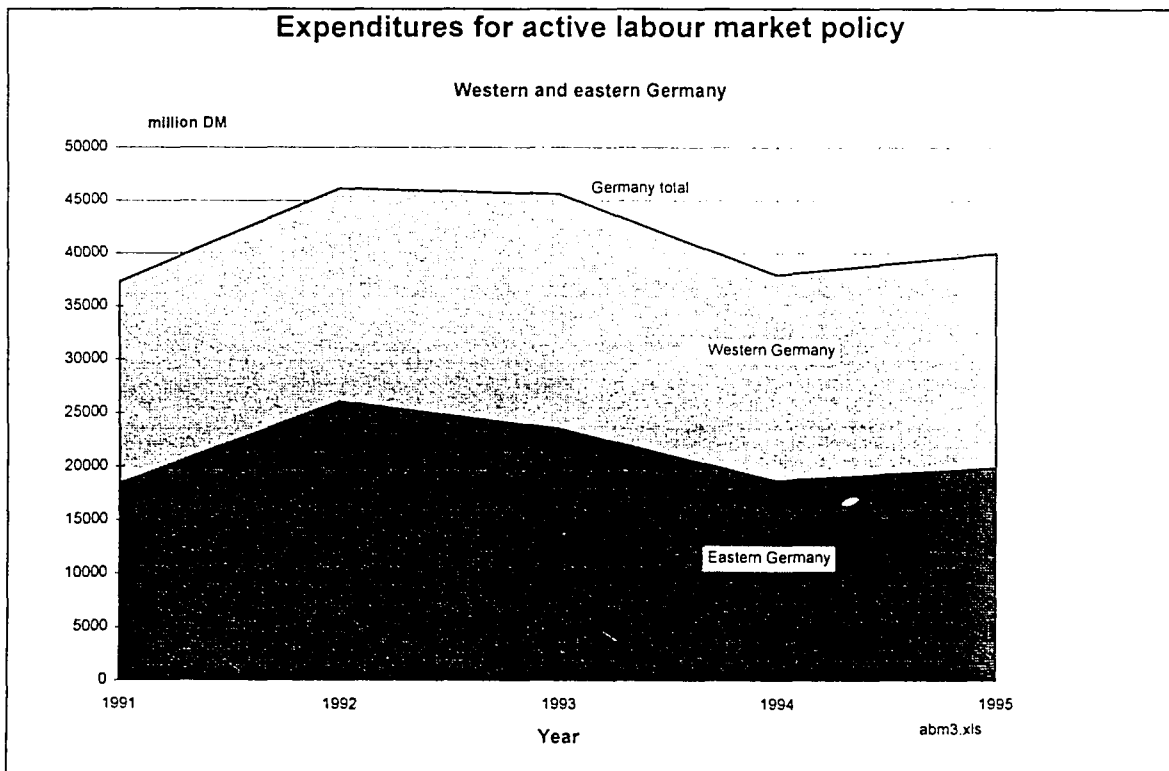
<sup>1</sup> For administrative reasons it could not start before 1995.

measures carried out according to the Labour Promotion Law (AFG), the ESF resources provide additional support for the mentioned groups (AFG-Plus). For the promotion of active labour market measures (AFG-Plus) DM 171 million was spent in 1995. In total around DM 3,660 million is available for the promotion period 1994 to 1999. Around D M 2,070 million of the grants are destined for eastern Germany.

*Expenditure for labour market policy and number of beneficiaries.*

The Federal Employment Service spent DM 97,100 million and the Federal government DM 31,600 million on labour market policies in Germany in 1995. Expenditures for active labour market policy measures amounted to DM 40,000 million. Around 50% of these expenditures for active measures were spent in eastern Germany. The share of active policy measures in the total labour market policy expenditures was 39% in 1995. The total expenditures for active labour market policy measures were highest in 1992/93 when they exceeded DM 45,000 million. After a decrease in 1994 spending increased again in 1995.

**Chart 4.4.2**



Source: Federal Employment Service, Labour Market div. years.

These crude ups and downs hide the more subtle shifts between the different instruments (see Table 4.4.1). The money spent on short-time worker dropped from DM 2,099 million to DM 1,030 million. On the other hand expenditures for vocational training increased by DM 1,273 million and for job creation measures by DM 1,045.3 million. Spending for vocational rehabilitation grew too.

Table 4.4.1

## Expenditures for labour market policies

Expenditures for	Germany		Western		Eastern	
	1994	1995	Germany		1994	1995
			1994	1995		
	million DM					
<b>Total earnings replacement</b>	80844.7	80718.4	46599.9	51430.2	34244.8	29288.2
including:						
• unemployment benefits	45869.6	48200.1	33206.6	35531.7	12663.0	12668.4
• unemployment allowances	17431.1	20508.5	12374.2	14782.6	5056.9	5725.9
• old-age transition allowances	13202.8	9574.8	74.0	69.9	13128.8	9504.9
• pre-retirement allowances	3047.4	718.1	-	-	3047.4	718.1
<b>Total active measures</b>	37963.5	40020.8	19246.7	20086.2	18716.8	19934.9
including:						
Promotion of better qualifications	15662.2	16935.0	7637.1	8890.9	8024.9	8045.2
including:						
• vocational training	2265.6	2122.8	1272.7	1391.5	992.9	731.3
• further training	13396.6	14813.2	6364.4	7499.4	7032.0	7313.9
Employment rehabilitation	4172.6	4387.1	3570.6	3605.1	602.0	782.0
Employment-creating measures	11333.7	12379.0	2646.2	3129.0	8687.5	9250.1
including:						
• § 91 /§ 97 AFG	9547.8	10057.7	2646.0	3083.3	6901.6	6974.4
• § 242s /§ 249h AFG	1785.9	2321.3	0.2	45.7	1785.9	2275.7
Short-time workers	2098.8	1030.4	1600.2	606.3	498.7	424.1
<b>Total expenditures</b>	126983.3	128751.3	72336.3	77819.3	54647.1	50932.0
• by the Federal Employment Service	99864.5	97103.1	58244.6	61322.5	41620.0	35780.6
• by the Federal Government	27118.8	31648.2	14091.7	16496.8	13027.1	15151.4

Source: Federal Employment Service, Labour Market 1995, p. 68.

The total earnings replacement benefits were lower in 1995 than in 1994 whilst spending for active measures grew. The decrease in the replacement benefits was the result of fewer old age transitions and pre-retirement allowances in eastern Germany. Replacement benefits grew in western Germany. Measures to train the unemployed and employment-creating measures were promoted by

increased spending in both regions. Of total expenditures 31.1% was spent on active replacement benefits in Germany, 25.8% in western and 39.1 in eastern Germany.

**Table 4.4.2**

**Labour force promoted by selected labour market policy measures**

	1989	1990	1991	1992	1993	1994	1995
	Average stock figure (promoted persons)						
	Western Germany						
Total further training	326994	349695	364474	372100	348439	308802	304323
Employment rehabilitation	100296	101640	107625	113080	109772	92948	91190
German language courses	88945	109973	75574	50992	55036	49583	52641
Employment creating measures							
• § 91 AFG	96911	83350	82960	78179	50518	57443	70110
• § 242s AFG	-	-	-	-	-	-	2083
Job creation for older persons	18000	20412	26611	30274	22098	18159	20250
Settling-in grants	18000	4914	4318	4969	3600	2913	4911
Employment aid for the long-term unemployed	-	25343	35774	28321	18734	10061	16982
Special those allowances for taking-up self-employment	11013	12742	13014	13142	11162	22189	46692
Short-time workers	107873	55808	145009	283019	766935	275458	128059
Recipients of allowances according to § 105c AFG 1)	64251	63074	63408	82139	126820	139349	145765
	Eastern Germany						
Total further training	-	-	-	491200	380609	258944	255795
Employment rehabilitation	-	-	-	13881	20833	24036	29919
German language courses	-	-	-	2958	6237	7309	6992
Employment creating measures							
• § 91 AFG	-	-	-	388056	237453	192492	205787
• § 249h AFG	-	-	-	-	22466	87680	106478
Job creation for older persons	-	-	-	1308	3137	5425	12535
Settling-in grants	-	-	-	4187	4257	2466	4840
Employment aid for the long-term unemployed	-	-	-	-	-	9207	12847
Special those allowances for taking-up self-employment	-	-	-	18445	14173	15108	23942
Short-time workers	-	-	-	396997	181428	96830	70521
Recipients of							
• early retirement benefits				291749	209963	122241	32181
• old age transition allowances				515798	639405	523628	340802
Recipients of allowances according to § 105c AFG 1)	-	-	-	601	913	2153	6582

1) § 105c AFG concerns unemployed persons older than 58 who cannot be placed.

Source: Federal Employment Service, Labour Market 1995, p. 59 and p. 144.

Table 4.4.2 shows the number of persons promoted by an active labour market policy. Employment creation measures in the form of the traditional job creation measures have been supplemented by wage subsidised employment. This new instrument was introduced to shift spending from consumptive replacement earnings to the investment orientated work creation (promotion of labour instead of unemployment). The rising number of participants in eastern Germany shows that this instrument is practicable. It also serves to improve the infrastructure and other measures of public interest.

The efforts to adapt labour market policies to the situation and prospects of the unemployed were intensified in previous years. This includes the attempts to develop integrated measures to aid the hard-to-place, long-term unemployed and increasingly to promote self-employment both in west and east Germany.

#### 4.5 Views and policies on job creation by government and social partners

As unemployment rates and long-term unemployment in Germany grew, active labour market policies moved to the centre of the labour market discussion. In principle the governing bodies, the trade unions and industry agreed that subsidised employment is better than subsidised unemployment. After German unification there was a growing need for an active labour market policy. Unification, which could be characterised as an adaptation of 16 Million people and ailing structures to 60 Million people and the institutions of a post-war success story, could not be managed alone by „market forces“. An active labour market policy - information and advice, further training and retraining, job-creation schemes - was to make the transition to the market economy possible.

Beyond the general agreement about the need for an active labour market policy between 'both sides of industry' a consensus of opinion on the extent, the organisation and the instruments of this policy is diminishing. The employers emphasise the costs of a 'secondary'<sup>1</sup> labour market (non-wage-labour costs!) and the distortion of competitiveness by subsidised jobs, whilst labour favours standard employment relationships and equal opportunities for all groups of long-term unemployed. Roughly outlined the unions position is

- The minimum standard of employment relationships in the secondary labour market should not be below the minimum standard of the primary labour market.
- Created jobs should be legal employment relationships with full validity of the labour law.
- Low income or payment should not be enforced by law (The same money for the same work!).

Labour wants to avoid an increase in the gap between the primary and the secondary labour market. Furthermore, the job creation schemes should not imitate

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<sup>1</sup> The secondary labour market is the labour market for jobs created by programmes. It is a subsidised labour market in contrast to the primary labour market which is created by market forces.

the segregation in the primary labour market (No „tertiary“ labour market for hopeless cases.).

In contrast, the employers' organisations prefer a clear distinction between a 'primary' and a 'secondary' labour market. They want clear wage differentials to keep up the incentive for change into the primary labour market. From their point of view the areas of activity have to be distinct from the primary labour market and should not compete with regular jobs. The employers prefer measures of a clearly different quality compared with the quality of employment provided by the primary labour market:

- The primary labour market is on a higher level. The remuneration on the secondary labour market should be lower.
- The jobs have to be short-term.
- The fields of activity have to be clearly distinguished from the primary labour market: Subsidised labour should not eliminate regular jobs.
- Job creation measures should offer 'real' labour. The jobs have to be evaluated in terms of efficiency and productivity and should not be therapeutic.

One of the main criticisms is that the unemployment-reduction effects of public job creation are compensated for by substitution effects. Orders are carried out by job creation projects and are thus possibly lost for local craftsmen. Therefore the creation of new regular jobs might be prevented or jobs might even be destroyed. Although job creation projects have to create 'additional' jobs of 'public interest' in practice it is hard to decide whether this criterion is really met.

#### 4.6 Good practices

Labour market policy based on the Labour Promotion Law is a combination of different passive and active, short-time and long-term measures. The law was not made to cope with constant high levels of unemployment. Labour market policy cannot be a substitute for economic policy whose aim is to foster the necessary private and public investment. Under the pressure of continuously high levels of unemployment, new approaches to labour market policies had to be found. These approaches are by far no miracle cure. As long as no new jobs are created by economic policies a labour market policy will be mandatory. The success of this policy depends on the ability of the regular labour market to absorb the labour supply. This simple fact cannot be altered by new programmes. Nevertheless, new approaches can alleviate the situation for some target groups. One new approach is introduced below.

##### *Measures for the hard- and very-hard-to-place long-term unemployed.*

In 1989 the German Federal Government began to pursue a new course in labour market policy for the hard-to-place and very hard-to-place, long-term unemployed by means of a special programme and model plan embedded within an action programme: 'the campaign to help the long-term unemployed to find work' (Schmid, A., Klems, W., Gaß, G. Angershausen 1992, S. 420).

The programme 'employment aid for long-term unemployed' comprises two parts: employment aid for the long-term unemployed<sup>1</sup> and measures for the hard- and very-hard-to-place long-term unemployed. The latter is again composed of two parts: the special programme and the model plan. A new course of employment policy should be pursued by the special programme. This special programme was supplemented by the establishment of 18 (originally 8) model labour offices. This was the model plan part (budget of DM 50 million increased to DM 200 million which is not included in the following description and summary of the evaluation results).

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<sup>1</sup> The employment aid programme is a wage-subsidy programme for long-term unemployed. Enterprises receive subsidies if they employ long-term unemployed on a non-temporary basis. The first programme was active from 1989 to 1994, the second started in 1995.



The traditional labour market policy turned out to be ineffective for problem groups. The special programme and the model plan offered a solution for the structural hardening of the hard-to-place and very-hard-to-place long-term unemployed.

The essential innovative elements of the programmes were:

- The programmes changed the emphasis from individual support to project support.
- It was an aim of the programme and model plan to set up 'holistic' measures. These measures were to strengthen the competitiveness of the target group on the labour market. The integration of problem groups into the labour market were to be achieved by support chains. These include social care and a target-group-specific combination of qualification and employment.

Because of the new character of this approach scientific research was carried out in support of the programme. The research included an evaluation of the target level of the programme, an impact analysis and an analysis of the implementation.

The financial volume of the programme was originally DM 250 million but it was increased and reached 790 million. The special programme was aimed to (re)integrate the hard- and very hard-to-place long-term unemployed into the labour market.

The target group were long term unemployed who were unemployed at least for a period of two years and showed an additional feature which made them hard to place. Unemployed are hard-to-place because of their age, health problems, and because of low qualification. The second target group were the very-hard-to-place which were burdened with at least three of the above mentioned features.

*Traditional job-creation programmes concentrate on qualification and employment. This special programme extended the measures to include social care and the combination of social care, training, and employment. This is the „holistic“ approach of the programme.*

### *Targets and target groups of the special programme*

The special programme was aimed to promote the sustainable employment of hard- and very-hard-to-place long-term unemployed. The funds were not intended to give financial support to the individuals but to the projects. The financial promotion of the original DM 250 million comprised investment subsidies (70 million), overhead expenses (50 million) and subsidies for trainers, teachers and other staff (130 million).

### *Measures and promoters of measures*

For traditional active labour market policies employment and qualification measures are the central. The special programme extended these traditional measures into two directions. It added social support and the combination of different measures. There were seven different combinations possible: (1) employment, (2) qualification, (3) social care, (4) employment and qualification, (5) employment and social care, (6) qualification and social care, (7) qualification, employment and social care.

The promoters could act as single organisations or jointly. The promoters could be:

- a public legal entity,
- private enterprises or institutions of the private law pursuing aims of benefit to the public,
- private enterprises or institutions which, because of the experience in previous measures are able to promote the reintegration of the target groups in the labour market (private non-charitable promoters).

### *The kind and duration of promotion*

Measures carried out within the framework of the special programme could be partly subsidised. Promoters had to use their own resources. 80% of defined expenditures could be paid by the programme. For investment a functional commitment of five years for the use by long-term unemployed existed. The subsidies for the project staff were paid for a 2-year period. The staff was paid according to regional contract negotiations.

*Financing of participants*

Projects were financed by the special programme but not by participants. In most of the cases the financing of beneficiaries was done by the job creation programme (ABM) or according to the Federal Law on Social Assistance/Welfare. The selection of beneficiaries promoted by the Social Assistance Law was motivated by the fact that communities were released from financial commitments when the beneficiaries either returned to the labour market or received government financed unemployment compensation after leaving job creation measures.

*Projects*

There were seven different measures possible for the projects. Most projects combined employment, qualification and social care (around 60%). Those project measures which included employment were active in a variety of work areas (see Table 4.6.1). Around 30% of work were connected with landscape gardening, horticultural or agricultural activities.

**Table 4.6.1****Measures including employment by activity areas and placement**

Activity areas	Employment	Placement
Horticulture and landscape gardening	28.2	8.0
Other services	26.1	13.0
Wood and wood products	26.0	2.5
Construction	23.2	10.0
Other manufacturing	20.6	8.2
Metalworking	18.4	17.5
Social services	12.7	5.4
Clerical work, administration	12.7	18.7
Catering trade and tourism	7.9	2.9
Agriculture	2.4	0.5
Others	-.-	13.2
* Multiple response Survey of promoters	N=164 measures	N=1,546 persons

Source: Schmid et al. (1994), p. 120.

Whether the activity areas matched the market demand or not can be roughly answered by looking at the statistics of placement success. In terms of placement clerical work, administration, metalworking activities, social services and construction were the most successful (see Table 4.6.2). Obviously job creation in 'traditional' activity fields offered low options for the future.

**Table 4.6.2****Structure of participants by selected characteristics**

	in per cent
Age groups (in years)	
less than 30	23.9
30 to 39	32.1
40 to 54	36.9
55 and older	7.1
Duration of last unemployment	
until 1 year	22.9
1 year to less than 2 years	14.5
2 years to less than 3 years	14.3
3 years to less than 4 years	9.9
4 years and over	38.4
Vocational training	
Apprenticeship	44.2
Fachschule	7.4
Polytechnic/ University	3.3
Uncompleted training	16.1
No vocational qualification	28.8
Compulsory school qualification:	
Hauptschule	59.2
Realschule	11.2
Abitur	4.9
Polytechnic entry qualification	4.9
Other university entry qualification	2.0
Special school	7.2
No leaving certificate	10.3
Gender	
Male	71.2
Female	28.6
Health problems	
No	63.9
Yes	36.1
Survey of participants (N = 814)	

Source: Schmid et al. (1994), p. 58.

*Description of participants*

The total number of participants amounted to more than 11,000 persons in late December 1990. In June 1992 the number had well doubled and was around 27,000. The participants did not represent more than 3% of the target groups in 1990.

The participants in projects of the special programme can be characterised as follows (see Table 4.6.2): Male persons handicapped by health problems who either had an apprenticeship or no finished vocational training, were younger than 55 years and finished compulsory education with a Hauptschule certificate. Women and elderly persons were underrepresented.

*Results of the scheme*

The results of the 'new paths in labour market policies' is summarised by the evaluators Schmid et al. (1993) as follows:

... A turning away from purely qualifying or employment measures in the special programme can be observed in the kinds of measures offered. Measures are now being carried out in which a combination of working and learning is being closely linked with social care. Hence, a gradual occupational and personal stabilisation as well as a broader base of abilities, skills and authority to act can be created. In fact, chains of support measures with a 'holistic' orientation can be established within the special program. [...] According to the most recent information, the goal of the special program to reintegrate difficult- and most-difficult-to-place unemployed persons within working life has been achieved to a considerable degree. However, this is also associated with a certain pre-selection of participants. Namely, women, older persons and persons with health problems and most-difficult -to-place unemployed person are underrepresented in this special program. The most positive influence factors on the placement rate are the social care, conflict-free internal and external co-operation amongst the agents and the conceptional balancing of qualification measures and employment (Schmid et al 1993 p. 256).

The evaluators conclude: „ Seen from a labour market policy standpoint, the innovative elements of the special program can basically be evaluated quite positively (Schmid et al 1993 p. 256).

## 5 Other policies having an impact on the labour market

### 5.1 Education and vocational training

#### 5.1.1 Description of the education and training system

When the iron curtain fell at the beginning of the 90s the post-war period came to an end. Every western European country was concerned by the events which changed the world-wide political and economic situation. For the Federal Republic of Germany the events involved the unification with the German Democratic Republic. This unification could be better characterised as an adaptation of 16 m people and ailing structures to 60 m people and to the institutions of a post-war success story. The education and training system demonstrates this process. In 1991 the course was set for the adaptation of the structures and educational objectives in the five new Länder. The reorganisation of the system did not result in a complete copy of the western pattern but reform discussions in the old Länder were partly translated into new structures. One example is the reduction from thirteen to twelve years of schooling required for university entry in four of the five new Länder.

There are some peculiarities which distinguish the German educational system from the systems of other countries:

- There are three (four if Gesamtschulen are included) distinct school types at the secondary level following the Grundschule. In some Länder there are no Gesamtschulen and in some new Länder there are no Hauptschulen.
- There is a „dual“ system of vocational training. A large part of learning takes place in production facilities or service enterprises. In addition the apprentice attends a vocational school. Full-time vocational schools exist but this kind of training is less important than in other countries.
- Germany is the federal republic of 16 Länder. The Länder have kept their independence in matters of education and culture. Therefore, the education system is not centrally organised but multi-centrally.

- By far the largest number of pupils attend public school. Private schools are attended by a minority of young people.

### *General education*

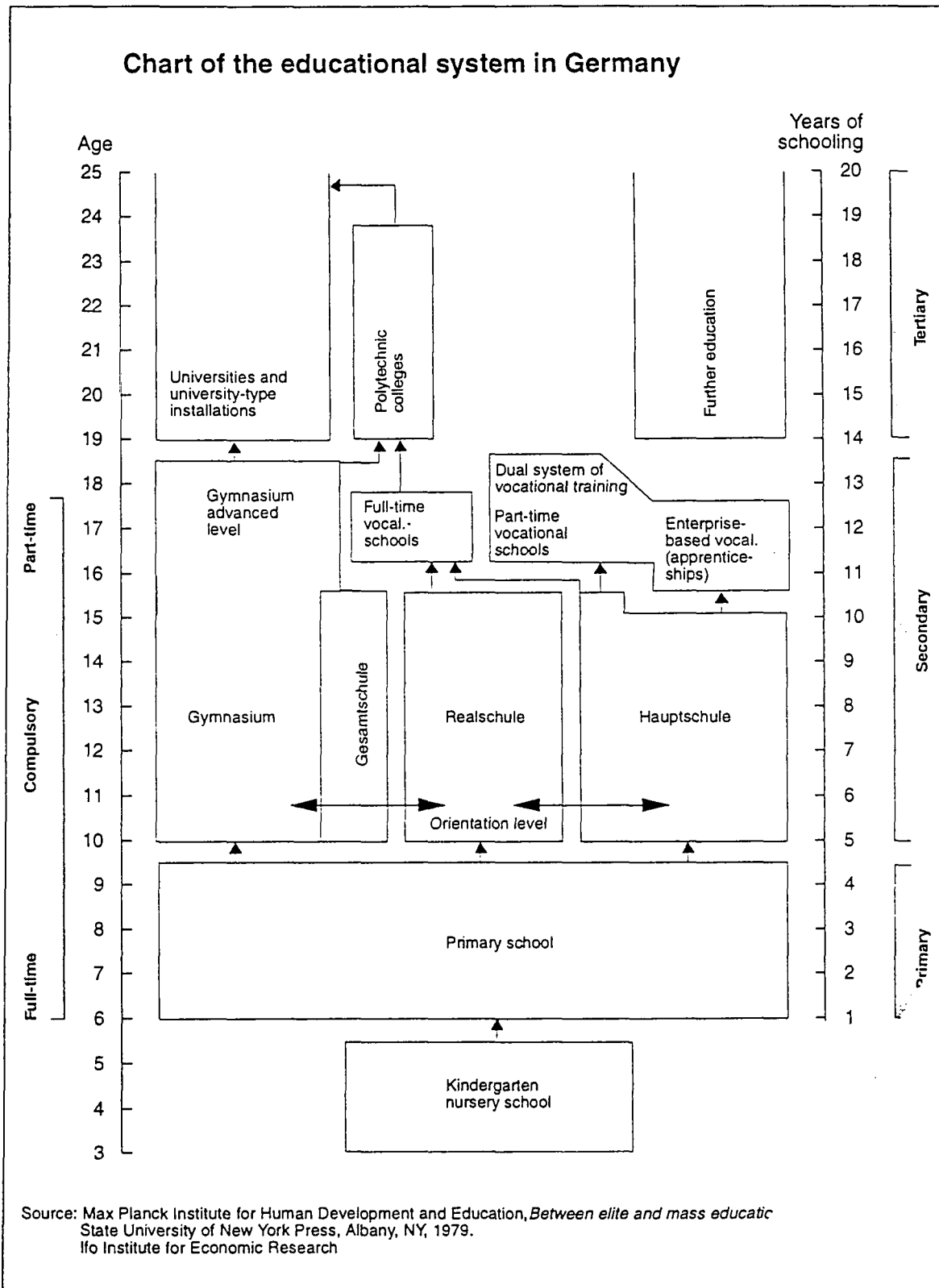
Despite some regional differences and even with the reform elements in the new German Länder the German school system is characterised by a common structure. This general structure which is given in Chart 5.1.1.1 is like an average of the Länder specific variations. All Länder operate basic primary schools (Grundschulen) and a triple system of secondary schools: Hauptschulen, Realschulen, Gymnasien. There are comprehensive schools in some Länder. Compulsory education begins at age 6 years and ends at age 18.

After finishing primary school - normally after 4 years - there is a choice between the three types of secondary school:

- The Hauptschule provides basic secondary education for those pupils who do not aim to go on to higher education. The certificate provided by the Hauptschule is earned during the 9<sup>th</sup> or 10<sup>th</sup> form. The qualified certificate provides a more qualified leaving certificate based on a special examination.
- The Realschule offers a higher level certificate after 4 or 6 years which leads normally to a dual system apprenticeship, or entry to a Fachoberschule ( a senior vocational school).
- The Gymnasium offers academic preparation for those aiming at higher education. After the 13<sup>th</sup> form (4 years primary school and 9 years Gymnasium) the Abitur - the entry qualification examination for universities - is taken. In four new Länder this qualification is taken after 12 years.



Chart 5.1.1.1

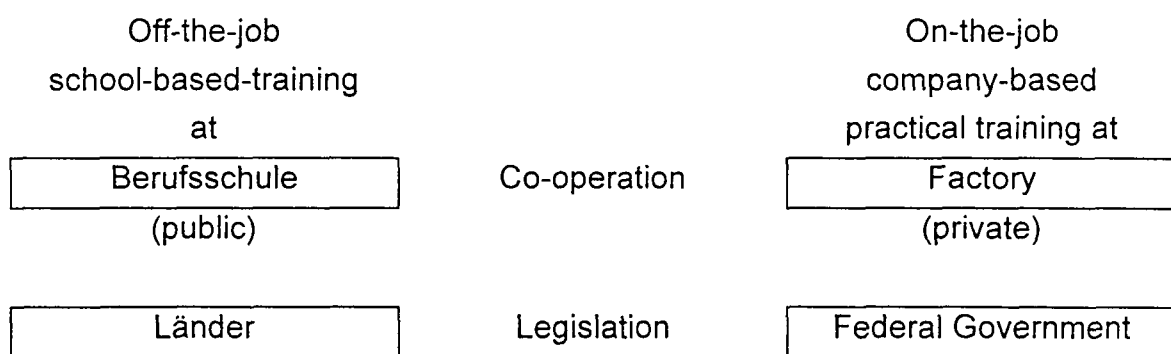


*Vocational training:*

The German system of elementary **vocational training** can be characterised as a dual system, balancing theoretical and practical training between public vocational schools and private companies (cp. Chart 5.1.1.2). It is a corporate tripartite system. Both employers and the workers organisations are included in the process of regulation, financing, administration and controlling of training in the dual system. The government delegates decision-making to the semi-private or private commercial organisations as far as possible. Only if private regulation fails does the government intervene.

Trainees are trained in State-recognised occupations requiring formal training. These are defined in accordance with the requirements of the employment market, in close co-operation with official bodies, management and labour. There are currently some 375 recognised occupations. The general structure of the training consist of a first year offering a wide-ranging basic training course, a second year with increasing specialisation and a third year culminating in qualification as a skilled worker.

Chart 5.1.1.2

**The Structure of the Dual System**

Source: Lipsmeier, A., Engler, W. (1989).

The Ministry for Education , Science and Technology is responsible for the vocational training policy. It is supported by the scientific advice of the Federal Institute for Vocational Training (BIBB, Bundesinstitut für Berufsbildung) The central committee of the Federal Institute is composed of representatives of employers, workers, the Länder and the Federal Government The members of

the committee follow the principle of consensus. A pivotal task of the Institute is to prepare the content of training regulations. The procedure of drawing up training regulations - which are necessary for any occupation - involves the participation of the employers' associations, the trade unions, the relevant Ministries and, as a rule the Federal Institute for Vocational Training.

The chambers play an important role in the preparation, administration and control of the on-the-job portion of the dual training system. (The Chambers are regional organisations of which all companies are compulsory members). They award training licenses, control the delivery of on-the-job training, release examination regulations, organise the examination of apprentices, and offer continuing training courses for instructors. Following the Vocational Training Act from 1969 the chambers set up a vocational training committee composed of six representatives each from three groups: employers, employees and teachers. Its main function is the organisation of apprenticeship examinations.

The school-based proportion of the Dual System training is controlled by the Länder. This covers both general as well as job-related special knowledge. Around 60% of the instruction given at school focuses on technical aspects, and approximately 40% on general education. Besides their educational function in the dual system the Länder also fund training for disabled or handicapped persons and schemes for continuing training.

At the enterprise level the influence and the responsibility of employers is predominant. The workers council and the unions have rights of co-determination but these are often not exercised fully in small or medium-sized companies. Employers are only allowed to provide training in recognised occupations listed by the Federal Institute for Vocational Training. It is the Chambers responsibility to supervise the delivery of training. A training license is only issued by a Chamber if the firm meets the training regulations, including a qualified trainer.

Employers have to complete a contract with the trainee. This contract has to be sent to the responsible chamber. After a three-month probationary period it can only be cancelled by the trainee. There is no obligation for the employer to hire the apprentice after s/he has finished his or her apprenticeship. The cost for the

on-the-job training is borne by the employers and the school-based training is financed by the public authorities.

In the mid 1970s new types of vocational schools were introduced to stem the rise in youth unemployment. The main types are the occupational preparation year and the basic occupational training year (Berufsvorbereitungs- und Berufsgrundschuljahr). The basic occupational year is accepted as part of the dual system. However, since there has been an excess supply of training places numbers in these schemes have declined.

Berufsfachschulen (training colleges) are full-time vocational schools at the upper level of secondary education. They are heterogeneous with regard to the duration, objectives and the leaving certificate. Some occupations can be only entered by attending a training college (eg. Children's nurse). As with basic occupational training the training colleges have seen falling pupil numbers since 1986. In East Germany the lack of company training places led to the establishment of public funded extra-company training centres. About 25% of apprentices are trained in those training centres.

Training within the German system is complemented by continuing adult vocational education and training within firms. This training is mostly firm directed, but other institutions, such as the Chambers of Industry and Commerce, the Chambers of Trades and training centres of the unions, are also involved.

#### *University training:*

The German higher education institutions which are rooted in the European university tradition are in principle subdivided into two different branches: Universities and Fachhochschulen. They are differentiated by the required entrance qualification and by the leaving certificate. There are 165 university level institutions (universities, colleges of art and music, theological colleges, independent colleges of education) and 153 Fachhochschulen including 24 Fachhochschulen of public administration) in Germany.

University level institutions traditionally enjoy the right to self-administration and considerable autonomy. All groups of university members - professors, stu-

dents, scientific and other staff - are represented in composite bodies and have voting rights.

The federal structure of Germany characterises the system of higher education as it does the system of general education and vocational training mentioned above. Planning and financing of higher education institutions is done jointly by the Länder and Federal Government although around 90% of financing comes from the Länder. There are different committees and institutions to co-ordinate higher education policies (the Science Council, the Bund-Länder Commission for Educational Planning and Research Promotion and the Planning Committee for the Construction of Higher Education Institutions).

In Germany there are several routes to higher education. More than 70% of new entrants to higher education institutions graduated from a Gymnasium. As the great majority of higher education institutions is public, study fees have to be paid only by a few students who attend private institutions.

### **5.1.2 Strengths and weaknesses of the system**

The alarm sounded in the mid-sixties (There is a German education catastrophe!) resulted in reforms of the education and training system and in extensions of the system. Albeit the growth of the participation rates in secondary schools, in universities and in dual training as well as the increase of the qualification level give evidence for the strengths of the reformed system there are still elements of weakness.

A structural weakness of the federal system and the independence of Länder in matters of education is the reduction in mobility for some professions. Teachers trained in one federal Land are not qualified to teach in another and the level of some formally equal certificates is regarded as incomparable.

The discussion about the length of the German schooling and academic training period has been going on for some time and will no doubt continue. Thirteen years of schooling and six additional years through university courses seem to be too long when compared internationally.

The German universities are overcrowded. Around 1.5 million students have to share around 800,000 study places and the drop-out-rate at some large universities is 50%. As result of the conversion to mass institutions the functional emphasis of universities has changed. The professional training function has come to the fore, elite study programs and research have weakened. To relieve the load on universities measures have been taken or are in discussion to delimit the normal length of the course of studies. The aim is to make studies exceeding a time limit disadvantageous for students. Another point in discussion is the introduction of fees to counteract budget restrictions. Because of the federal responsibility for universities and the need to find a collective agreement no fast decisions and abrupt changes are to be expected.

Neither the problems of the secondary educational level nor the university training can be fully understood independently from each other and from the apprenticeship training provided by the „dual system“. As long as a high formal certificate or degree is regarded as the necessary way to high income and high status the run on Gymnasien and universities will continue.

Internationally many practitioners and scientists hold the German dual system up as a model. In Germany, the system is regarded as a vital contribution to the success of the German economy. However, this hides the fact that the basis for the system has been questioned several times in the modern history of West Germany. The quality of vocational training, the mismatch between the training which was done, and the skills which were necessary for the economy, the slow adaptation to new technologies and the unequal opportunities for females and males was criticised. But in the past the system has demonstrated reasonable adaptability to demographic, social, technological and economic challenges. Nevertheless, the discussion of the neuralgic points of the dual training has never stopped.

A focal problem is the partial mismatch of professions being trained and the employment structure. Training is done for occupations which are not demanded by the employment system. In the skilled trades more young people are trained than this sector can absorb and there are also more people trained for industrial-technical professions than jobs are offered. In 1993 17% of West German and 25% of East German apprentices became unemployed after fin-

ishing their apprenticeship. 62% of those who were employed worked in the job they were trained for and 38% changed to another job.

At the end of the 20<sup>th</sup> century in Germany a new debate concerning the acceleration of technological and organisational change flared up (again), and it seemed necessary to qualify the praise heaped on the German dual training system. Questions have been raised as to the appropriateness of training for rigidly defined occupations in an era of rapid technological change. Acquired skills are highly specific to the training and particular occupation. This has led to an early skill obsolescence in the past, which is expected to proceed faster now that we are at the threshold of the „information society“. One option recommended for modern workers is a wider qualification profile and a more continued education (Pfeiffer/Blechinger 1995, p. 107).

The effectiveness of the German training system derives from the involvement of all players: government, employers, chambers and trade unions. But the strength of the corporate organisation might turn out to be a disadvantage in times of increased change. Considering the long period it took to work out the training rules for the new metal and electrical occupations - more than ten years - an element of inflexibility might be ascribed to the training system. But the Ministry for Education, Science and Technology has set the course for more flexibility by delimiting the duration to draw up new regulations to two years.

To counterbalance a lack of skilled workers (Facharbeiter) in the future, caused by demographic factors and diminishing attractiveness, measures have to be taken to promote the equality of practical training in the dual system and theoretical school-based training. Critics of the training system recommend extending the career opportunities for „Facharbeiter“ and making the options more transparent. But the problem facing this discussion is the same for many discussions: The agreement on the diagnosis is easier than on the therapy.

### **5.1.3 Rates of participation**

After a period of economic and social consolidation in the 1950s, the 1960s saw the expansion of the educational system and increasing participation in

education in Germany. A broader awareness of the importance of education as the key to social mobility, of the increasing technical demands of many occupations, and of governmental measures to improve the education system were all important factors.

The increasing demand for higher education in Germany and the shift in importance of school types can be seen in participation rates. The most concern centers around the Hauptschule. This school type is characterised by declining participation rates. Over 50% of the 12 -15-year-old population has changed to advanced school types (Table 5.1.3.1). The Realschule enjoys the highest popularity as indicated by single age attendance rates. It has become an entry qualification for many vocational training institutions. In terms of attendance rates the Gymnasium has also been successful. In 1992 28% attended this school type which is a preparatory course for university studies. Schooling at a Gymnasium is normally completed at the age of 18 years.

The participation rates of vocational training schools (mainly Berufsschulen for dual training) increase when the 15-year-old teenagers leave the Hauptschule and when 17-year-old Realschule-leavers start vocational training. An increasing proportion of Gymnasium-leavers complete vocational training before they proceed with university studies. This contributes to the extension of vocational training up to the age of 22.



Table 5.1.3.1

**Pupils and students in Germany  
in 1994**

Age of pupils/ students	Pupils/ students	Secondary education				
		Hauptschule	Realschule	Gymnasium	Berufsschule <sup>a</sup>	Fach-/ Hoch-schule
years	1,000	percentage of population				
10	878	17.7	5.3	11.2		
11	875	43.0	12.6	26.0		
12	899	32.4	17.7	29.1		
13	898	31.0	23.5	31.2		
14	898	31.2	24.1	29.5		
15	853	27.5	24.3	28.0	6.2	
16	833	14.2	16.5	27.8	28.8	
17	799	3.6	4.5	28.3	49.0	0.8
18	715		0.9	25.2	49.1	2.7
19	543		0.2	13.3	39.2	8.1
20	393		0.1	2.9	24.8	15.2
21	318		0.1	0.9	13.9	18.0
22	421		0.1	0.3	22.3	18.7
23	225		0.1	0.3	1.3	18.7
24	211		0.1	0.3	0.1	18.3
25	183			0.2		16.0
26	166			0.2		13.1
27	118			0.1		11.1
28	134			0.1		8.1
29	69			0.1		9.2
30			0.2	0.4		4.1

a Berufsschulen and Berufsfachschulen

Source: BMBW, Grund- und Strukturdaten 1995/96, p. 22 f.

The formal qualification level of school leavers has improved (Table 5.1.3.2). On leaving school in 1995 8% of West German and 10% of East German pupils have no certificate. Most leave with a Realschule certificate (34% and 49%). The Abitur - the university or polytechnic college entry qualification - is the route to higher education. It is completed by 30% West and 23% East Germans.

**Table 5.1.3.2****Qualification of school leavers**

Year	Germany			East
	1970	1980	1995	1995
Type of leaving certificate	per cent			
Compulsory education				
without Hauptschule certificate	17.5	10.1	7.7	10.4
with Hauptschule certificate	45.0	35.6	28.3	17.9
Realschule (or equivalent certificate)	26.0	34.5	33.9	48.7
(Fach-)Abitur	11.4	19.8	30.1	23.0
	1,000			
Persons	769	1105	675	180

Source: Berufsbildungsbericht 1995, p. 182 f.

**5.1.4 Capacity of the system to deliver the required skills**

On the basis of a historical and international comparison the German labour force is highly qualified. The formal qualifications have increased in the course of the last decades. The proportion of unskilled workers dropped by more than half from 40% in 1960 to 15% in 1995. Those in the labour force who have finished an apprenticeship training increased from 50% to 60% and the proportion of academics increased from 4% to around 14%. The qualification profile of eastern and western German labour forces does not differ significantly. However, the eastern German proportion of intermediate skills (Meister-, Fachschule-certificate) was higher and the proportion of academics (around 10%) lower than in West Germany.

The capacity of the German training system to deliver the required skills is favourably affected by the involvement of companies in the training system. Enterprises anticipate the quantity and quality of needed skills and orient their training efforts to this anticipation. But the matching of training places and desired qualifications is far from being perfect. 1/3 of young skilled workers (Facharbeiter) change the occupation they are trained for and do not formally continue to use their acquired skills. They are employed in jobs that are unskilled or semi-skilled. This structural mismatch between skills and job qualifications increased in the eighties. In 1989 15% male and 18% female skilled work-

ers were employed in jobs for the unskilled (Hennings, H.v., 1991, p. 96ff). Especially those workers who were trained in the sector of skilled trades failed to be employed adequately according to their completed vocational training competence. In addition to the partially wrong allocation of vocational training there is also a declining willingness amongst employers to carry out training. This is the consequence of the overall economic performance, the costs of training and the rationalisation strategies. The structural change from an industrial to a service economy has had a negative effect on the traditional dual training system. Dual training is less central for innovative service sectors. At the same time the chances for graduates from polytechnic colleges or universities are growing.

Against the background of technological innovation, economic restructuring and keener competition the improvement and renewal of skills and qualifications are critical to economic development and competitiveness. Therefore the extension and further development of continued vocational training is important. In Germany there are higher differentiated measures to promote further training. More than half of all measures in further training are provided and financed by companies. This training is supplemented and supported by a wide range of inter-company and independent providers.

### **5.1.5 The transition mechanism between education, training and work**

The teenage unemployment rate in West Germany has scarcely exceeded and sometimes been below the overall unemployment rate. This is in contrast to the situation in other European countries (Table 5.1.5.1) The involvement of training institutions and the signal function of acknowledged occupations has improved job perspectives and career possibilities as well as the match between the offered and sought-after qualifications, which has been more successful than in other countries.

Table 5.1.5.1

**Unemployment rate by age groups  
in 1995**

Age group	Germany	France	UK
15-19	7.6	30.8	17.3
20-24	8.8	26.5	14.5
Overall U.R.	8,2	11.9	8.7

Source: Eurostat, Labour Force Survey 1995.

Teenagers leave secondary schools at an average age of 18 years. According to the three types of schools this age varies between 16 (Hauptschule) and 19 ½ (Gymnasium). The proportion of school leavers without a certificate is around 6% , the proportion of those leaving school with a (Fach-) Abitur (University entry qualification) is around 35% (1991). One year after having left school 70% of teenagers are in school-based or dual-system-based vocational training (around 45% ) and 8% have started university studies. Around 5% begin regular work<sup>1</sup> without vocational training. 38% of new apprentices graduated from Hauptschule, 36% Realschule and 14% Gymnasium (14%)<sup>2</sup>.

Although the transition from education to training - the first threshold - is characterised by relatively low unemployment rates, it is not a process of perfect harmony between offered and sought-after training places. A balance of quantity is no balance of quality: In 1994 the applications made by young people for training places in the administration and office sector and for training in security jobs or in social and educational jobs exceeded the supply in West Germany. Applicants had to refrain from their first choice and to adapt to the training market. In East Germany even the quantity would not be in balance without massive state support. There, employment performance is still too weak to offer a sufficient number of training places.

At universities and technical colleges, the number of applicants in certain areas of study greatly exceeds the number of available study places, thus it has become necessary to impose local or country-wide entry restrictions. In the areas of study subject to country-wide entry restrictions, applications for German citi-

<sup>1</sup> Not including those who start military or social service.

<sup>2</sup> In 1993, the rest graduated from Berufsfachschulen, vocational training institutes, etc.

zens are processed by the Central Office for the Allocation of Study Places. The selection of applicants for restricted study courses is made largely on the basis of the Abitur grade and the „waiting period“. A special selection procedure governs allocation of places in medicine, dentistry and veterinary medicine.

**Table 5.1.5.2**

**The retention of apprentices after having completed training  
West Germany, first half of 1993**

Enterprises based on no. of em- ployed	Number of training enterprises	Completed appren- ticeships  no. of people	Apprentices not retained	
			no. of people	percentage
size-band				
less 10	323,000	91,000	14,000	15.4
10 - 49	190,000	123,000	11,000	8.9
50 - 199	41,000	77,000	7,000	9.1
200 - 999	13,000	80,000	14,000	17.5
1000 and over	2,000	69,000	12,000	17.4
including:				
2000 - 4999	600	23,000	4,5000	19.6
Total	568,000	440,000	58,000	13.3

Source: IAB-Betriebspanel.

The transition from training to work - the second threshold - is less regulated and receives less State support. After finishing a vocational training of three years<sup>1</sup> there is no obligation for the companies to hire the apprentices. Many enterprises do the training to fulfil their own needs. They choose the best trainees and leave the rest for the labour market. The retention rate depends on the size of the enterprises (Table 5.1.5.2). It is estimated that 17.1% (75,200 persons) of West German trainees became unemployed (in 1993) after finishing their training successfully. This proportion was higher for East Germany: Around 25% (20,000 persons) were registered without work after training (BMBF, Berufsbildungsbericht 1995, p. 102). The average length of unemployment (three months for males and five for females) was lower than the average for all unemployed (7 ½ months in East Germany).

<sup>1</sup> 3 ½ in the new metal and electrical professions.

### 5.1.6 Government programmes and their success

The German training policy aims to provide training for all. No company is obliged to provide training but the system is based on private initiative. Where the training market fails to offer enough training places the state intervenes. This is especially important for the economies of the new Länder. As in the years before in 1996 there appears to be a new mismatch between training places and applicants in eastern Germany. 140,000 young persons need qualified training. The private economy is not able to offer training places for all of them. Therefore, a skills-training programme of the Federal Government and the new Länder governments was established to create an additional 14,300 training places - most of them on an extra-firm training basis. The Federal Government provides half of the 26,500 DM, the cost for training one apprentice. As this programme will not suffice to offer training for every applicant, the government is appealing to the companies' social responsibility.

Both in West and East Germany there are some individuals for whom the normal transition from compulsory education to vocational training is burdened by particular difficulties. These difficulties are owing to gaps in their primary and secondary education or to a lack of motivation. The accessibility of qualified training courses is also lower for the young who are disabled and are not German citizens. It is the aim of the authorities to develop qualification programmes which are geared to suit the abilities of young people who fail to fulfil the demand of the recognised occupations. Young foreigners are less inclined to apply for vocational training than Germans. Promotional measures have substantially improved the training opportunities open for foreigners. However, only one in three foreigners between the age of 15 and 18 years have completed a training course in the dual system.

Vocational training promotion carried out by Länder schemes resulted in around 45,000 vocational training places in Germany. Including 26,000 apprentices in extra-company training centres, a total number of 700,000 training places were public promoted (in 1994) (cp. BMBF, Berufsbildungsbericht, p: 6). In the new Länder the proportion of public promotion of vocational training has reached 60%. Against this background it is evident that firms are not moving into the self-management of training courses. In the foreseeable future the financial

strength and experience, particularly of the small- and medium-sized companies, will not suffice to provide the necessary training places from their own capacities.

In terms of training contracts training policy has been successful. In 1993 only 2% and in 1994 1% of applicants (171,000 applicants) were unable to find trainee positions.

## **5.2 Taxes, social insurance contributions and employment**

### **5.2.1 Job creation from tax cuts**

#### *Unemployment halved in econometric model simulations*

It is a central thesis of the new labour market theory that a mechanism is necessary which prevents a working up of inflation by competing claims. Employment can function as the pivot of this mechanism because both the claims of employees and the price setting of enterprises are influenced by the labour market situation. Starting from these assumptions there is a level of unemployment which co-ordinates the claims to the domestic product in a way which keeps the inflation rate constant. This special rate of unemployment is the 'equilibrium unemployment' or, a bit less easy for the tongue, the 'non-accelerating-inflation rate of unemployment (NAIRU)'. The NAIRU is the equilibrium of claims to the distribution of the domestic product.

The concept of NAIRU of immediate political relevance. Only unemployment above the NAIRU can be traced back to low demand and therefore can be controlled by an expansive monetary policy. Is the unemployment rate lower than the non-accelerating-inflation rate of unemployment then inflation tends to rise.

**Table 5.2.1.1****Estimates for the non-accelerating- inflation rate of unemployment**

Estimated by	Period	NAIRU (%)
Franz (1987) <sup>a)</sup>	1970-1974	1.9
	1975-1979	4.2
	1986	5.7
Franz und Hofmann (1990) <sup>a)</sup>	1987	5.5
Lyard und Nickel (1985) <sup>a)</sup>	1979-1982	3.3
Layard et al. (1986) <sup>a)</sup>	1976-1980	3.7
	1981-1983	5.3
OECD (1986) <sup>b)</sup>	1971-1976	1.1
	1977-1982	3.1
	1983-1987	6.0
Ifo (1996) <sup>c)</sup>	1960-1969	1.2
	1970-1984	3.6
	1985-1996	7.3

a) Quoted by Franz ,1991, p. 362.  
b) OECD, 1986, p.30  
c) Langmantel, 1996, p. 11.

Source: Langmantel 1996.

The NAIRU is not something preordained beyond the reach of economic policy. It is not an unalterable constant but an economic variable. Among the determinants of the NAIRU tax and contribution rates can be directly influenced by economic policy. Furthermore, these rates are the most important determinants. The route to a lower NAIRU, therefore, is via lowering of taxes and contributions. To show the interrelation between measures and target realisation the Ifo Institute carried out econometric simulations (Langmantel, 1996).<sup>1</sup> Two scenarios were worked out. The first scenario was a status-quo scenario. It was assumed that the average tax and contribution proportion (wage tax and social insurance contributions) as percentage of the gross income from employment will remain constant at the present level of 48%. The second scenario, which is called an action-scenario, assumed a lowering of the tax and contribution burden until an unemployment rate of 5% is reached. In addition the Maastricht deficit criterion of 3% must be met.

<sup>1</sup> The econometric model used was the New Oxford Model (NOW) provided by Oxford Econometric Forecasting.



The status-quo scenario results in a notable average economic growth, but unemployment will not profit from this growth. Because the NAIRU remains at the level of 8% unemployment will not be cut back significantly.

The action-scenario includes measures to foster employment. Beginning with 1997 the social insurance contributions, the wage and company taxes are lowered. An increase of other taxes to finance falling tax or contribution revenues is not included in the scenario. Lower government revenues have to be compensated by lower expenditures. The result of the model simulation is that the average proportion of the wage tax and social insurance contributions in gross income from employment has to be lowered from 48% to 42.5% to reach an unemployment rate of 5%. The employment effect of the action-scenario results from a cheaper production factor labour. The most difficult problem which has to be solved on the way to lower unemployment is the reduction of government expenditures and benefit cuts. According to the model calculations these cuts are an unavoidable necessity.

One has to keep in mind that model results should not be confused with the real complex economy. Model results are always tied to the conditions which are provided by the model structure and organisation. There are other models which show that the deterioration of unemployment is not straightforward and that it is not a question of lower taxes and insurance contributions alone. But there is agreement that the preservation of status-quo conditions is no cure for unemployment.

An alternative modelling to investigate the possibilities of unemployment reduction (in western Germany) was carried out by the Institute for Employment Research (Klauder, Schnur, Zika, 1996). The envisaged target was - similar to the Ifo scenarios - the halving of unemployment numbers. The result was that a comprehensive set of measures could increase employment and lower unemployment. The elements are a reduction of annual working time, a continuously moderate wage policy, a lowering of social insurance contribution rates and a consolidation of government spending. The researchers from the Institute for Employment Research point out that different combinations of measures could achieve the desirable results. Which one is given preference depends on political decisions.

At present it is the political intention to stimulate economic growth by tax reform. A short description of this current debate is given by the following section.

#### *The debate on tax reform*

Reform proposals made by the tax reform commission aim at taxpayers relief and tax law simplification. The reform is meant to contribute to a policy of job creation. The lowering of the marginal tax rate bring taxpayers relief of around DM 82,000 million which is partly balance by an additional tax yield resulting from a broader basis for assessment. It is expected that income taxpayers would receive nearly DM 44,000 million in tax relief.

The reduction of the top marginal income tax rate from 53% to 39% and the higher transparency of a reformed tax law should have the effect of a stimulus of economic performance.

The cut of the corporation tax rate from 45% to 35% is regarded as a measure to improve economic growth and employment. Germany as a production location should be made more attractive by strengthening resident investments and providing higher incentives for investments of foreign companies.

The employment effects of a reform which is still in the process of discussion and bargaining cannot be evaluated. The growth effects of tax cuts depend critically on additional or ensuing measures. Obviously tax cuts have to be financed to balance government budgets. One of the options is to increase the value added tax rate and/or the tax on oil. Financing in return diminishes employment and economic growth. Therefore the effects of a tax reform depend on the set of measures chosen to reduce tax burdens and to avoid a decline of government revenues.

#### **5.2.2 Reduction of non-wage labour costs**

The consequences of rising non-wage labour costs for employment have been frequently discussed by economists (Vogler-Ludwig, 1996). But in the past the social-political decisions have failed to take sufficient account of these considerations. Social policy was regarded as a counterbalance against unintended

impacts of market processes, and the interaction of this policy with the general economic performance was not properly considered. In the recent reform discussion the reduction of non-wage labour cost has moved to centre stage. One proposal is to achieve this reduction by removing foreign elements from the social insurance system. The definition of foreign elements (benefits which do not reflect the insurance character of the public insurance system) versus typical insurance benefits is a matter of permanent dispute. However, a general definition of foreign elements can be gained by the application of three criteria:

- Benefits which are not covered by contributions (e.g. periods for which no contributions have to be made although they are included in the calculation of the pensions).
- Benefits which are not granted to contributors (e.g. family members are insured by the contribution of one working and insured person).
- Benefits which blur the borders between the social insurance agencies (e.g. pre-retirement payments by the unemployment insurance).

According to estimations provided by the Ifo Institute the foreign elements amounted to around DM112 billion in 1993 (Vogler-Ludwig, 1996).<sup>1</sup> This is around 15% of total expenditures of social insurance agencies. Financing these expenditures by taxes would allow permit lowering of contribution rates by around eight or nine percentage points.

Eliminating the elements which do not reflect the insurance character of the social insurance system aims at the re-establishment of the equivalence of contributions and benefits. Employers and employees should not be burdened by responsibilities of the society as a whole. An example for this case is the labour market policy in the new Länder after unification. Many argued that the transition to the market economy should be at the expense of all taxpayers and not alone of social insurance agencies or contributors to the insurance system.

The redistribution of welfare costs is regarded as a focal issue. Only a redistribution (or a reduction of welfare benefits) could unburden labour from these costs. The compensation of a financial volume of this quantity cannot be

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<sup>1</sup> The Federal Government allowance is taken into account.

reached by shifting the costs to one specific source. Possible sources for compensation are income tax, the value added tax or the introduction of an environment tax or energy tax.

Model calculations carried out by the Ifo Institute demonstrate that the reduction of social insurance contributions by 2 percentage points would result, in any case, in increasing employment and declining unemployment. The effects are nearly independent of the kind of alternative financing that has to be carried out. (According to the model positive employment effects result also from a reduction of social benefits.) The lowering of social insurance contributions by one percentage point would increase employment by 0.3%.

The variants of alternative financing have very different impacts in terms of structure and distribution. Employees have to bear the consequences of contribution reductions in the form of higher income taxes. They are more strongly burdened by higher income taxes than helped by lower contributions. Increasing value added tax rates would avoid these effects but they result in significant demand reactions on the markets for goods. There is no political consensus for measures which cause or continue a recession. The introduction of an environment or energy tax as well as the increase of the petrol tax would have even stronger effects on the markets. It would produce inflation but result in clear employment growth. The price is slower economic growth and selective sectoral impacts. To summarise, the compensation of reduced social insurance contributions by increasing tax is not straightforward. Measures have to be carried out cautiously if economic growth and employment are not to be jeopardised.

A compensation of lower insurance contributions by lowering benefits (instead of increasing taxes) does not destabilise the economy but it involves negative impacts on growth, although the impacts depend on the kind of social benefits which are reduced or saved. The more the reductions can be directed to higher income groups the less resulting negative effects occur.

The econometric model simulations of the Institute for Employment Research mentioned above were carried out to evaluate 'ways leading to higher employment' (Klauder, Schnur, Zika, 1996). The result is that a set of measures com-

prising annual working time, tariff policy, restructuring of government spending to public investment and a reduction of social insurance contributions can promote employment. Although the latter is only one factor of a strategy for more employment, the IAB simulation confirms the positive impact on employment growth. The reduction of social insurance contributions by one percentage points, would produce an expansion process. As a consequence employment would grow by 100,000 persons in the course of three years.

## 6 The national debate

### 6.1 Preliminary remarks

Germany has failed to reach the goal of full-employment for more than twenty years. For too long, conventional wisdom held that the problem of unemployment could be solved by reviving growth, improving competitiveness on international markets, and by the innovative strength of German enterprises. For too long many believed that unemployment could be cushioned by a stable social net. With a realistic appraisal of the future opportunities for the German economy, these solutions are no longer acceptable. We can neither expect that the necessary acceleration of growth will occur nor can society bear the social costs of unemployment and its consequences in the long term.

Moreover, the economic and politic conditions facing the German economy have changed significantly since the mid-1980s. The creation of the European Single Market is now also having repercussions on the labour market. Shifts in production sites to other countries and new competitors are forcing German firms to readjust their competitive positioning. The opening of Central and Eastern Europe and the formation of new gravitation centres in Southeast Asia have had major consequences. The German recipe for success – relying on technological innovation with a well-trained workforce – has found imitators world wide. Human capital is considered the new competitive factor, and it is offered in other countries at considerably lower wages than in Germany. This raises the question of how the German labour market will deal with this changed situation.

Reacting to the new conditions in the world economy, change is taking place in German employment policies. The conviction that a reduction of unemployment will require great efforts from all political forces is widely accepted. Unemployment is widely recognized as a long-term, structural problem. It can no longer be combated by Keynesian macroeconomic policies alone, as was done in past years under the heading of 'global comprehensive controls'. All experience indicates that unemployment has no mono-causal explanation. Its causes lie in the insufficient adjustment capacity of not only the employment and wage-scale systems but of the German economy as a whole. To combat unemployment, a

broad package of measures is needed that must be supported by all major groups in society. The numerous publications on the causes of unemployment and policy proposals have not yet led to a consistent employment-policy concept. Not until a broad analysis of causes and policy is made can proposals for a broadly based employment initiative be developed. In the following, the current policy proposals will be presented.

## 6.2 The unions' proposal: an alliance for jobs

In light of the strong workforce reduction in German manufacturing, the metal workers union, IG Metall, proposed forming an alliance for jobs with employers and the government. Their conditions were that enterprises in this sector

- promise not to layoff workers for business reasons in the next three years
- promise to create 300,000 additional jobs
- promise to hire 30,000 long-term unemployed
- promise to increase the number of trainee positions by 5% a year.

They also expected the federal government

- when reforming the Labour Promotion Law not to reduce unemployment compensation and unemployment assistance and not to worsen the criteria for social assistance, and
- to implement a regulation that would ensure that the supply of trainee positions meets the demand and to require compensation from companies which do not provide training at all or too few trainee positions.

If these conditions were fulfilled, IG Metall promised

- to agree to wage increases in 1997 that would not exceed the rate of inflation, and
- to enable time-limited pay reductions for long-term unemployed in the first phase of their re-employment.

With this proposal, IG Metall introduced an employment-policy initiative that received widespread attention and approval, but which brought few concrete results. It can be concluded that the attempt to form the alliance practically has failed, although it found majority acceptance in union circles. At the union's conference in November 1995 the goal of achieving a 30-hour work week was postponed. (But in April 1997 the Metall union made a new proposal to use labour time reduction for the fighting of unemployment. The introduction of a 32-hours week should redistribute available work and increase the number of job-owners. This new proposal is just at the beginning to be discussed. It's chances to be generally accepted are rather low).

Criticism directed at the union's proposal were:

1. Wage agreements in the metal-workers industry in 1994 contained wage increases of 5% for 1995 and 1996. The expectation that employment can be expanded in anticipation of constant real wages in 1997 is unrealistic in light of the cost situation and current economic conditions.
2. Employers federations cannot make legally binding employment guarantees. This can only be done by the companies themselves. Some firms have accepted IG Metall's and other unions' offers.
3. The demand that the government leave the social system unchanged evades the problem of high unit-labour costs. This, however, is a major cause of low growth in employment.

### **6.3 The Council of Economic Experts: fundamental correction needed**

For 1997 real growth in GDP of 2.5% is expected. The unemployment rate will remain at 11.7% for the year, unchanged vis-à-vis 1996. Businesses in the new federal states will be put to the test of demonstrating their market competence also in the long term.

In light of these factors, the Council of Economic Experts has urged fundamental changes in economic policy to include all areas. The wage policies of



the wage negotiating parties bear the prime responsibility for a high level of employment. Fiscal policy must show clear perspectives for a tolerable budget deficit in the long term. Misguided developments in social policy must be corrected. Innovation, technological progress and the opening of new markets is to be achieved by facilitating business start-ups. Labour-market policies and working-time policies are to be limited to their supporting roles.

The suggestions made by the Council in the area of wage policy were:

- Wage agreements must be concluded that go beyond the goal of safeguarding existing jobs to include additional job opportunities for the unemployed.
- The existing potential for flexibility in wage negotiations should be utilized, and companies should be given greater leeway in determining wages and working hours.
- Flexibility in working hours should be promoted by focusing on annual instead of weekly working hours.
- The timetable for the convergence of wages in eastern Germany with those in the west must be extended.

The Council also urged fundamental reform of the social system. Such a reform programme should be oriented around three basic principles of social order:

- The principle of the equivalence of contributions and insurance protection should be more strongly evident in the social insurance system.
- Self-responsibility and own old-age provisions should be encouraged.
- Social reallocation tasks should be carried out via taxation, outside of the social insurance system.

In general, social benefits for groups with medium and high incomes should be cut back to the benefit of the needy. A detailed description of the individual proposals is not possible here, but the main direction of the reform of the social system that the Council has proposed includes: increasing incentives for finding a job, reducing overall social spending, and making social policy more efficient. Behind this is the conviction that unit labour costs in Germany have reached a level that has brought about negative employment effects.

To achieve these goals, social spending cuts of between DM 30 billion to DM 40 billion will be necessary.

#### **6.4 Advisory Council at the Ministry of Economics: new paths for wage and social policies**

In January 1996, the Advisory Council at the Ministry of Economics presented its expertise on long-term unemployment, with new proposals for wage and social policies.

- On wage policy, the Council proposed corrections both in the level and in the structures of wages. Real labour costs are seen as too high, in general. The spread of job descriptions contained in collective bargaining contracts should be better adapted to the differentiated employment possibilities in regional and occupations labour markets. The Council recommends a loosening of the territorial collective wage agreements and the use of wage components that are linked to yields (profit sharing, participation wages). The authority for the fixing of working conditions should be shifted more to the enterprise level. This must be achieved by making the negotiated contracts more flexible by allowing businesses to use alternative or hardship provisions to fit their needs.
- A major cause for high unemployment among the less qualified members of the workforce is seen by the Council in the lack of incentives in the social system. Important corrections to social welfare laws, which have in part been realized, are an abandonment of uniform average welfare payments throughout Germany, keeping welfare payments at 15% below the wage level, and reducing welfare payments by 25% if the recipient fails to take on an acceptable job. Additional proposals are directed at how earnings are taken into account. Currently, a welfare recipient with as little as DM260 a month in income from employment is be subject to a marginal rate of taxation of nearly 100%. Such regulations make taking on a job very unattractive.

- The Council is very sceptical of the creation of a government subsidized labour market via wage subsidies and government job creation measures. The Council recognizes that such measures can help to reintegrate long-term unemployed into the labour market, but the subsidization of employment has a negative effect on product markets. Private, non-subsidized activities are displaced and the urgently needed reform of contract negotiation will be postponed. For these reasons, government funds for employment assistance must be limited to the unemployed who have great difficulties finding work..

### **6.5 The federal government: priority for employment**

According to the federal government, Germany currently lacks five million competitive jobs. Unemployment of this dimension is a problem for the whole society. Job creation is thus a central challenge for the coming years. To achieve this the conditions for production and investment in Germany must be radically improved. Especially the costs that burden business must be lowered and the innovative forces of enterprises must be strengthened. The necessary changes must be introduced by businesses, unions, the Länder, the local authorities and the federal government together.

In its annual economic report, the federal government proposed a programme of action for investment and jobs which contained three main points:

- an improved regulatory environment for investment
  - This will require a new culture of self-sufficiency and a broad initiative for more business start-ups: tax concessions for new businesses, making equity capital available, opening up new areas of activities in the service sector and with new industrial products.
  - The high government expenditure rate must be reduced. To achieve this a tax system is necessary that will promote growth and employment. Here the government follows most of the proposals of the Council of Economic Advisors. Also necessary is an acceleration of planning and approval procedures.

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- The ratio of social insurance contributions to total salary must be brought below 40% by the year 2000 (1996: 41.2%) in order to reduce statutory non-wage labour costs. To achieve this early retirement programmes must be cut back, the social security must not be made to pay for items that are foreign to its main principles, labour market policy must be decentralized, and cost increases in the health system must be limited. The targets of social spending financed by taxation must be more exact.
  - The labour environment must be conducive to investment and job creation
    - Collective bargaining must be designed so that it will safeguard and promote jobs. The instrument of collective bargaining for greater areas should be maintained.
    - More flexible working hours should contribute to cost reductions. Working hours calculated on a yearly basis should enable the more flexible deployment of labour and should reduce overtime supplements. Overtime should be reduced to a minimum. The supply of part-time positions should be expanded.
    - Absenteeism should be reduced
    - The employment opportunities for the long-term unemployed and other disadvantaged groups should be enhanced by means of wage reductions.
    - Employees' savings plans should be encouraged.
    - The Labour Promotion Law is to be reformed. High priority items are a new definition of acceptable jobs, the prevention of utilizing one government job creation programme after another, and the carefully targeted employment of training measures.
  - Promotion of research and innovation as well as education and further training
    - Government research aid must be made more efficient. The transfer between science and industry must be improved. Research results must be converted into products and production techniques more quickly.
    - The system of dual education must be safeguarded and strengthened. The length of university studies must be shortened.

In the Economic and Monetary Union and in political union, the German government sees the foundation for growth and employment and the global competitiveness of the European continent.

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